

Quality of life of children benefited by the Futsal Social/UJR-Feevale, according to age and sex

Qualidade de vida de crianças beneficiadas pelo Futsal Social/UJR-Feevale, segundo idade e sexo

Calidad de vida de los niños beneficiados por el Futsal Social/UJR-Feevale, según edad y sexo

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Keywords:

Kids;
Physical exercise;
Quality of life;
Football.

ABSTRACT

Sports as a tool for social transformation helps in the development of children, improving their quality of life. This study aimed to analyze, using the KIDSCREEN-52 tool, the HRQoL (Health Related Quality of Life) of 252 children aged between 8 and 12 years old, beneficiaries of the socio-sporting project Futsal Social, with a breakdown by sex and age. The results were tabulated in an SPSS spreadsheet, version 26.0. The Kolmogorov-Smirnov test was used to test normality, and ANOVA was used for variable association. The overall mean HRQoL score indicated a good perception of the quality of life. The lowest mean score was found in dimension 7 (financial aspects) with 63 ± 21 points. Conclusion: In general, the investigated children presented a good perception of HRQoL.

Palavras-chave:

Crianças;
Exercício físico;
Qualidade de vida;
Futebol.

RESUMO

O esporte como ferramenta de transformação social auxilia no desenvolvimento das crianças, melhorando sua qualidade de vida. Este estudo teve como objetivo analisar, através da ferramenta KIDSCREEN-52, a QVRS (Health Related Quality of Life) de 252 crianças com idades compreendidas entre os 8 e os 12 anos, beneficiárias do projeto sócio-desportivo Futsal Social, discriminadas por sexo e idade. Os resultados foram tabulados em planilha SPSS, versão 26.0. O teste de Kolmogorov-Smirnov foi utilizado para testar a normalidade e ANOVA para associação de variáveis. A média geral do escore de QVRS indicou uma boa percepção da qualidade de vida. A menor pontuação média foi encontrada na dimensão 7 (aspectos financeiros) com 63 ± 21 pontos. Conclusão: De maneira geral, as crianças investigadas apresentaram boa percepção de QVRS.

Palabras-clave:

Niños;
Ejercicio físico;
Calidad de vida;
Fútbol americano.

RESUMEN

El deporte como herramienta de transformación social ayuda en el desarrollo de los niños, mejorando su calidad de vida. Este estudio tuvo como objetivo analizar, mediante la herramienta KIDSCREEN-52, la CVRS (Calidad de Vida Relacionada con la Salud) de 252 niños con edades comprendidas entre 8 y 12 años, beneficiarios del proyecto sociodeportivo Futsal Social, con desglose por sexo y edad. Los resultados se tabularon en una hoja de cálculo SPSS, versión 26.0. Se utilizó la prueba de Kolmogorov-Smirnov para probar la normalidad y ANOVA para la asociación de variables. La puntuación media global de la CVRS indicó una buena percepción de la calidad de vida. La puntuación media más baja se encontró en la dimensión 7 (aspectos financieros) con 63 ± 21 puntos. Conclusión: En general, los niños investigados presentaron una buena percepción de la CVRS.

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INTRODUCTION

An important marker for knowing how a certain population feels about the conditions in which they live is the quality of life (QoL) (Almeida et al., 2012). The QoL concept according to Minayo et al. (2000), it is a biological-social hybrid, mediated by mental, environmental and cultural conditions. That is, there are several issues that can influence QoL, such as: current health condition (physical and mental), place where you live, meeting basic needs, social perceptions of what is important to yourself, etc (Sobral et al., 2015). When we think about children aged between 8 and 12, QoL can show us, in addition to an overview, which points are most sensitive in their lives and with that it is possible to develop public policies and social actions aimed at them having a better perception of their QoL.

In this way, socio-sports projects can sports use as a tool to assist in the development of children and thus provide a better quality of life for them. For Vianna and Lovisolo (2011), sports can develop skills and performance; professional qualification; health benefits and quality of life; friendship and socialization and development of personal qualities (overcoming, self-control, commitment, respect, trust and autonomy).

In view of what has been mentioned, an example of a socio-sports is Futsal Social UJR/Feevale. Started in June 2004 through a partnership between the União Jovem do Rincão (UJR) Futsal Club and the Feevale University, the project currently serves around 600 children, between boys and girls, from 7 to 17 years old in 6 different centers, all located in peripheral neighborhoods characterized as places of great social vulnerability, in Novo Hamburgo-RS

Since this is a project that has been carrying out its activities for 18 years uninterruptedly, serves a good number of students and has good financial support, it is important that it be the subject of studies. In the case of the present study, the objective was to analyze, through the KIDSCREEN-52 instrument, the HRQoL of beneficiaries of the Futsal Social with a cut by sex and age.

METHOD

The study is characterized by being of an applied, quantitative and descriptive nature. According to Prodanov and Freitas (2013), in descriptive research, the researcher only observes, records, analyzes, classifies and interprets the characteristics of a phenomenon without interfering or manipulating the observed facts. The sample consisted of all children (40 girls and 212 boys) aged between 8 and 12 years, who in 2021 were attending activities in the face-to-face format of the Futsal Social. For better distribution, sample adjustment was performed by sex and also by age groups, as follows: Group 1-(8 and 9 years old); Group 2- (10 years); Group3- (11 years old); Group 4- (12 years old).

In order to analyze the children's quality of life, the KIDSCREEN-52 was used for children and adolescents.

The KIDSCREEN-52 is a generic instrument for assessing HRQoL (Quality of Life Related to Health) that evokes memories of the last 7 days, consisting of 52 questions, which use a 5-point Likert scale, divided into 10 as responses. dimensions of the HRQoL (Gaspar and Matos, 2008; Guedes and Guedes, 2011).

The 10 constituent dimensions of the KIDSCREEN-52 extracted from The Kidscreen Group Europe (2006) are: (D1 SAF) Physical activities and health: explores the level of physical activity and physical fitness; (D2 SENT) Feelings: assesses the psychological well-being, including positive emotions and life satisfaction; (D3 EEMO) General mood or emotional state: addresses depressive and stressful feelings and emotions; (D4 APER) self-perception: self-perception: self-perception of body appearance; (D5 ATLIV) Autonomy and free time: opportunity to manage your social and leisure time; (D6 FAM) Family environment: evaluates the relationship with parents and the environment at home; (D7 FIN) Financial aspects: understanding of the child or adolescent about the quality of financial resources; (D8 APS) Friends or social support: examines the quality of onboarding, acceptance, and ease of keeping and making new friends; (D9 AESC) School environment: explores the cognitive ability to learn and their feelings about school; (D10 BUL) Bullying or Bullying: refers to feelings of denial by peers at school.

The scores for each dimension were computed using a Dimension Calculation Methodology syntax that considers the responses of the group of questions that make up each of the ten dimensions, with the questions being equally weighted, with questions 1.1, 3.1 to 3.7, 4.3 to 4.5 and 10.1 to 10.3 must have their scores inverted ($1 = 5, 2 = 4, 3 = 3, 4 = 2$ and $5 = 1$), as the scale is reversed. Questions 1.2 to 1.5, 2.1 to 2.6, 4.1 to 4.5, 5.1 to 5.5, 6.1 to 6.6, 7.1 to 7.3, 8.1 to 8.6 and 9.1 to 9.6 kept their original score (The Kidscreen Group Europe, 2006).

The sets of questions that make up each of the 10 domains were converted to a 0-100 point scale. The maximum possible score of the questionnaire is 260 points, and a variable is created with the sum of the scores of all questions for each participant, designated as Total Score % (TS%) of KIDSCREEN-52, through the following equation:

$$TS\% = TS \times 100 / 260 \quad (1)$$

Fonte: The Kidscreen Group Europe (2006).

So, that we could have access to all the results of the data collection, as well as some documents related to the Project, the Consent Term for the Use of Data (CTUD) was signed by one of the Project managers, and the free and informed consent form for minors, was signed by parents or guardians. The present study was approved by the ethics under CAAE number: 17201119.8.0000.5348 FEEVALE. For data analysis, the collected results were tabulated in a SPSS spreadsheet,

version 26.0. To test their normality, the Kolmogorov-Smirnov test was used and for its presentation the cross-reference table was the alternative. For the association of parametric variables, ANOVA was used.

RESULTS AND DISCUSSION

Analyzing the HRQoL of students in a socio-sports project can indicate how sport has contributed to the group in question. In this sense, Table 1 presents the general averages of the scores according to the investigated HRQoL dimensions.

It is possible to observe in Table 1 that the mean total HRQoL score of the investigated sample was 79 ± 8 , which represents a good perception of quality of life, since the maximum score is 100. It is also possible to notice that the highest mean scores found were in dimensions 4 (self-perception) with 86 ± 13 , and 2 (feelings) with 85 ± 12 . Next to them were dimensions 5 (autonomy and free time) and 6 (family and home life) with an average score of 84 ± 13 . Dimension 8 (friends and social support) appears with 82 ± 13 , dimension 9 (school environment) with 82 ± 15 and dimension 10 (provocation/bullying) with an average score of 82 ± 16 . The dimensions that were below the average overall score in the studied group were dimension 3 (emotional state) with 74 ± 14 , followed by dimension 1 (health and physical activity) with 72 ± 10 points. Finally, the lowest score found was in dimension 7 (financial aspects) with 63 ± 21 points.

In a similar context Costa et al. (2020) also found a good HRQoL perception in children benefiting from a socio-sports project, with an average total score of 83 points for boys and 82 points for girls. Martins et al. (2018) found an average total score of 77 points when evaluating 119 students with a mean age of 9 years, also participating in a socio-sports project, and the sport activity in question was swimming, indicating that the sport practiced does

not seem to be a fundamental point for a good perception of the HRQoL. However, it is possible to infer from these studies that sports practice in general seems to contribute to a good perception of HRQoL. Corroborating this statement Pacifico et al. (2019), in a study carried out with adolescents, divided the sample based on the general HRQoL score into tertiles (high, medium or low scores) and most adolescents in this study were classified as having a low perception of quality of life, however, most adolescents who practiced sports were in the highest tertile with good HRQoL perception. Although children and adolescents have their particularities regarding their development, this study corroborates the previous ones, indicating that sports practice can positively influence HRQoL.

In addition to the general perspective of HRQoL, the sample was redistributed according to sex and also in age groups. Seeking to focus the discussion on issues of sex and age groups, these results will be exposed and discussed in two sections.

SAMPLE DISTRIBUTION ACCORDING TO SEX

When the sample was distributed according to sex, it was possible to perceive a very heterogeneous N, with 212 male participants and only 40 female participants. As a result, no associations were made between the variables since the data show a representative dispersion in the number of beneficiaries. Table 2 shows the general mean scores of the HRQoL dimensions according to sex.

It is observed in Table 2 that dimension 7 (Financial aspect) remains with the lowest average score, being

Table 1. Overall averages of the scores of the health-related quality of life dimensions of the students investigated.

Variables	Average \pm SD
Dimension 1-Physical activities and health	72 ± 10
Dimension 2-Feelings	85 ± 12
Dimension 3-Emotional state	74 ± 14
Dimension 4-Selfperception	86 ± 13
Dimension 5-Autonomy and free time	84 ± 13
Dimension 6-Family and home life	84 ± 13
Dimension 7-Financial aspect	63 ± 21
Dimension 8-Friedns and social support	82 ± 13
Dimension 9- School environment	82 ± 15
Dimension 10-Bullying	82 ± 16
Total Score	79 ± 8

Where SD means Standart Devitation.

Source: Authors.

Table 2. Overall averages of the scores of the health-related quality of life dimensions according to sex.

Variables	Male (N=212)	Female (N=40)
	Average \pm SD	Average \pm SD
Dimension 1-Physical activities and health	71 ± 10	73 ± 10
Dimension 2-Feelings	85 ± 11	86 ± 11
Dimension 3-Emotional state	74 ± 14	71 ± 15
Dimension 4-Selfperception	86 ± 12	85 ± 14
Dimension 5-Autonomy and free time	84 ± 13	85 ± 13
Dimension 6-Family and home life	85 ± 13	82 ± 16
Dimension 7-Financial aspect	63 ± 21	65 ± 21
Dimension 8-Friedns and social support	82 ± 13	80 ± 12
Dimension 9- School environment	82 ± 15	83 ± 16
Dimension 10-Bullying	81 ± 16	82 ± 16
Total Score	79 ± 8	79 ± 7

Where: SD means standard deviation.

Source: Authors.

63±21 for boys and 65±21 for girls. This dimension is possibly related to the condition of social vulnerability, especially in the financial aspect. According to [Stacciarini \(2013\)](#), social vulnerability reflects social and income inequalities, which affects survival conditions and reduces the perception of quality of life.

For [Santofimio-Claro and Grisales-Romero \(2020\)](#) when determining the HRQoL in 77 children and 35 adolescents, in a situation of social vulnerability, in two municipalities of Tolima (Colombia), they showed that among the dimensions of KIDSCREEN-52, the one related to money was the one with the lowest score. [Macagnan \(2013\)](#) in his study also showed that the worst HRQoL perceptions were related to financial aspects, corroborating the results presented in Tables 1 and Table 2.

Other dimensions that presented mean scores below the mean total score of the respective groups were dimension 1 (health and physical activity) with a mean score of 71±10 for males and 73±10 for females and dimension 3 (emotional state) with 74±14 for boys and 71±15 for girls.

As for the discrepancy in the number of female participants in the present sample, it can be understood by the fact that for a long time, sports participation was more related to boys than to girls. It is enough to remember that the first participation of a female athlete in an Olympics was with the swimmer Maria Lenk, only in 1932. According to [Goellner \(2005\)](#), in the 20th century, many speeches circulated warning of the dangers that competitive sports could represent for women, among them the masculinization of their bodies. More recently, in school Physical Education we can also see such differences, as stated by [Brito \(2011\)](#), in many Physical Education classes distinct classes are still organized, in which boys and girls are educated separately

and in different ways, which tends to strengthen the inequalities. Fortunately, female participation in sports has generally increased, but it can be said that it is still far from achieving equality.

This context, in general, can also explain to us why the biggest difference in the average of the scores was found in dimension 6 (Family and life at home), which is a dimension related to family support, among other issues, to the practice sporty. Corroborating this statement, [Medeiros and Vianna \(2021\)](#) state that the main motivator for girls to participate in sports or cultural activities is family encouragement and they also mention that family support is greater for boys than for girls. This fact may be linked to several aspects such as the persistent ideology of sports practice being more favorable for men, insecurity on the part of parents when allowing their daughters to travel to the project, possible domestic tasks assigned only to girls and not to boys, among others. other cultural and social issues that indicate the predominance of males in participating in social sports projects. This difference may be even greater regarding the sports practice of futsal, since this practice is culturally associated with a male practice.

SAMPLE DISTRIBUTION ACCORDING TO AGE

After determining the HRQoL dimensions by sex and in order to balance the sample distribution by age, the following were considered: Group 1 (8 and 9 years old), Group 2 (10 years old), Group 3 (11 years old) and Group 4 (12 years old) years old). Table 3 shows the mean scores of the HRQoL dimensions of the investigated individuals according to the age groups.

It is observed in Table 3, when grouped by age, that the dimension with the lowest score corresponds to the financial dimension, followed by the health and physical activity dimension, and immediately after emotional

Table 3. Overall averages of the scores of the health-related quality of life dimensions according to age.

Variables	Group 1 - 8 to 9 years (n=65)	Group 2 - 10 years (n=62)	Group 3 - 11 years (n=58)	Group 4 - 12 years (n=69)	p≤0.05
	Average ± SD	Average ± SD	Average ± SD	Average ± SD	
Dimension 1-Physical activities and health	74±10	72±9	71±12	69±10	0.09
Dimension 2-Feelings	87±10	86±9	83±11	85±13	0.4
Dimension 3-Emotional state	77±15	71±12	73±15	74±15	0.2
Dimension 4-Selfperception	87±12	85±12	87±10	85±16	0.5
Dimension 5-Autonomy and free time	84±12	83±15	87±13	85±13	0.2
Dimension 6-Family and home life	86±12	83±13	85±12	84±15	0.6
Dimension 7-Financial aspect	64±20	60±20	65±20	65±23	0.4
Dimension 8-Friedns and social support	84±11	80±14	83±14	79±13	0.06
Dimension 9- School environment	84±16	82±14	70±16	82±14	0.3
Dimension 10-Bullying	85±14	80±17	81±19	81±14	0.3
Escore total	81±8	78±7	80±7	79±9	0.2

Where: SD means Standart Devitation and p≤0.05. Anova.

Source: Authors.

state. In this sense, it is understood that, regardless of the age of the investigated, the beneficiaries of the Futsal Social present similar averages in relation to the dimensions of quality of life, with no significant difference between the age groups.

No other studies were found with children that related HRQoL with age, however [Gaspar and Matos \(2008, p. 65\)](#) when comparing the perception of HRQoL of 3185 Portuguese youths in two age groups, G1 (10 to 11 years old-children) and G2 (12 years and over - adolescents), using the KIDSCREEN-52, observed that the group of children had a higher mean score than the group of adolescents in all dimensions, except for the provocation/bullying dimension. In that dimension, adolescents presented higher average scores, indicating that adolescents suffer less from bullying than children. Higher mean scores for children compared to adolescents were also found in two other studies, but with a statistically significant difference in only one dimension in each of the studies ([Abreu et al., 2016](#); [Gaspar and Matos, 2008](#)).

In the present study, as shown in Table 3, it is evident that, regardless of age, the perception of the economic issue implies a perception of a lower general quality of life. This statement can also be justified when we observe that in all dimensions the mean scores in each of the 4 age groups were higher than the mean scores found in dimension 7 (financial aspects). In other studies, carried out with children and/or adolescents, dimension 7 (financial aspect) was also shown to have lower mean scores, corroborating our results ([Costa et al., 2020](#); [Heinemann et al., 2018](#); [Martins et al., 2018](#); [Sobral et al., 2015](#)).

CONCLUSION

When analyzing, through the KIDSCREEN-52 tool, the HRQoL of beneficiaries of Futsal Social, it can be inferred that those investigated have a good general perception of health-related quality of life, which indicates that the experiences provided by Project contribute positively to this perception. When distributed by sex and age groups, the beneficiaries present similar mean scores for the investigated dimensions, indicating that even with advancing age and the natural development of a greater awareness of everything that surrounds them, there is a maintenance of the HRQoL perception. However, regardless of age and gender, the economic issue, represented by dimension 7 (financial aspects), had the lowest mean scores, implying a worse perception of HRQoL.

As a suggestion for future work, a more in-depth study could be conducted on the implications of the financial dimension on the HRQoL of beneficiaries of Futsal Social. This study could investigate which economic factors most affect the beneficiaries' perception of HRQoL and how the Project could intervene to improve their financial situation, thus increasing their perception of

HRQoL. In addition, it would be interesting to investigate if there are significant differences in the perception of HRQoL among beneficiaries from different geographic regions associated with their frequency of participation in the Project's activities. This information would be valuable to improve the work of Futsal Social and ensure that it is adequately meeting the needs of its beneficiaries.

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CONFLICTS OF INTEREST

Nothing to declare.

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