# The Influence of Importance in Self-Report of Quality of Life in Chilean Young People*

## El impacto de la valoración de la importancia en la evaluación de la calidad de vida en adolescentes chilenos

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### Abstract

While self-report of overall quality of life has been widely examined, there are no studies that explore the impact of the relative importance people give to the various categories of their quality of life. Therefore, with a quantitative methodology and a co-relational transverse design, we analyze differences in the assessment when the importance given to each category is evaluated. Participants were 530 students from the city of Antofagasta in the North of Chile, aged between 15 and 18 years. They were from subsidized, public secondary schools and private and state universities in the city who were assessed using the KIDSCREEN-27 questionnaire. Results: Differences were found in the assessment of categories when results were analyzed based on gender and age and when incorporating an assessment of importance. Even when the results were not conclusive, there was evidence of a need to incorporate an importance variable when assessing quality of life.
**Keywords**
quality of life; self-report; adolescence; Latin-America

### Resumen

Aunque el autoreporte ha sido ampliamente estudiado en calidad de vida, aún no se cuenta con estudios que permitan explorar el impacto que pudiese tener en la evaluación, la valoración de la importancia que los(as) jóvenes(as) otorgan a cada uno de los dominios que componen su calidad de vida. Por ello, con una metodología cuantitativa y bajo un diseño transversal correlacional, se analizaron las diferencias existentes en la evaluación, cuando en esta es evaluada la importancia que para cada joven tiene la dimensión sobre la que se inquiere. Participaron 530 estudiantes, entre un rango de edad entre los 15 y los 18 años de la ciudad de Antofagasta. Estos provenían de establecimientos públicos y subvencionados de educación secundaria y de universidades privadas y estatales de la ciudad. La evaluación se hizo mediante el cuestionario específico KIDSCREEN-27. Se encontraron diferencias en la evaluación de los dominios al estratificar el análisis por sexo y edad, al incorporar la valoración de la importancia. Aun cuando los resultados no son concluyentes, aportan evidencia a la necesidad de incorporar la variable importancia en la evaluación de la calidad de vida.
**Palabras claves**
calidad de vida; autoinforme; adolescencia, Latinoamerica

## Introduction

Quality of life (QoL) may be defined as an individual's perception of how his or her life objectives, expectations, standards and interests are being met, within the cultural context and value system in which he or she lives (WHOQOL, 1995). Operationally it may be understood as the perceived level of well-being derived from the assessment that each person makes of the objective and subjective features of his or her life (Urzúa & Caqueo-Urízar, 2012).

If we consider socio-evolutionary development as a modulating element of the perception of well-being, it is possible to develop a specific definition of QoL for an age group. QoL may be operationalized in children and adolescents as a perception of the physical, psychological, and social well-being of an individual within a specific cultural context in accordance with his or her evolutionary development and individual differences (Quinceno & Vinaccia, 2008).

Most studies conducted on both children and adolescents have focused on the development of age-specific instruments (Rajmil, Roizen, Urzúa, Hidalgo-Rasmussen, Fernández, & Dapueto, 2012; Rajmil, Roizen, & Urzúa, 2010; Rajmil, Estrada, Herdman, Serra-Sutton, & Alonso, 2001), as well as on describing and analyzing factors related to QoL that take into consideration adolescents' own perceptions (Urzúa & Mercado, 2008).

In terms of psychometric studies it is necessary for instruments to be adapted to the evolutionary traits of this population (Rajmil *et al.*, 2010), since studies have shown that adolescents' view of QoL differs from that of adults (Wee, Cima, & Li, 2009). Studies in Chile have highlighted the evolution of an adolescent's life satisfaction, with the aim of taking into account the process of socialization that occurs during this period of life with regard to behavior, influences, habits, etc. (Urzúa *et al.*, 2009b).

In terms of factors related to change in QoL, a number of variables have been studied: cultural context, social interactions (Quinceno & Vinaccia, 2008), socio-economic status, attendance of public, subsidized or private schools (Urzúa, et al., 2009a), level of perceived help (Avendaño & Barra, 2008), and gender (Vélez, López, & Rajmil, 2009), among others.

Studying QoL in adolescents involves distinct factors. These include social indicators (Michalos, 2004), which influence an individual's decision-making actions and behavior as well as subjective indicators related to feelings, opinions, and beliefs when making a judgment or comparison. Within the attitudes literature, a subject's cognitive processes are relevant when assessing QoL in adolescents, which include behavior and concerns, among others (Urzúa et al., 2009a; 2009b). Thus, the evaluation of the QoL depends on the relationship between two factors: the valuation of the domain as such, which implies the matching process, and the importance that the person gives to that domain (Skevington, et al., 2004). In the context of identifying underlying cognitive processes to the evaluation of the QoL, Skevington, O' Conell and WHOQoL Group (2004) developed four possible options that would have implied the process of comparison and evaluation by subjects. For these authors, a positive assess of the QoL will depend on the established relationship between two factors: first the assessment of the domain as such, which implies comparison, and on the other hand the importance of the person granted to this domain. Under this framework, the evaluation process would be a permanent and changing because of the standards or patterns of comparison used can vary over time, providing a dynamic character to the QoL (Urzúa & Caqueo-Urízar, 2012).

Cognitive processes may provide information on self-knowledge, which enables us to know what adolescents are thinking about or what they are influenced by at the time of assessing QoL. Based on a review of the literature it may be concluded that the assessment of QoL in adolescents is a much more recent area of investigation compared with its assessment in adults (which usually attach greater importance to health) (Rajmil *et al.*, 2012; Urzúa *et al.*, 2013a), and much remains to be discovered regarding QoL assessment in adolescents as well as the factors and processes that may influence its assessment.

Findings in children's studies, provide evidence that the results of the self-report of their QoL may vary when they pondering by themselves the importance of what are them been asking, especially when the analysis was stratified by gender and age (*Urzúa et al., 2013a*).

Studies that have been conducted on QoL in adolescents often ignore the socio-cognitive processes involved at the time of evaluation, given that these factors vary from subject to subject (Urzúa & Caqueo-Urízar, 2012).

One of these processes, though minimally explored, is the importance that individuals attribute to each of the categories involved in the perception of QoL (Ming, 2004). Given that individuals place differing values on each area of their daily life, this should result in differences in evaluations of QoL (Urzúa *et al.*, 2014; Urzúa, *et al.*, 2013a; Urzúa *et al.*, 2013b).

Therefore, this investigation aims to analyze differences in the assessment of QoL and its various categories, incorporating an assessment of the importance of each category.

As a general hypothesis, we expect that the final assessment of QoL and the various categories will be affected by an assessment of the importance of each category. As a specific hypothesis, we expect that differences in the perception of QoL between men and women or due to age will vary when an assessment of the importance of the category is included.

## Method

### Participants

The final sample comprised 530 adolescents aged between 15 and 18 years from the city of Antofa-gasta. The participants came from public, subsidized secondary schools and private and state universities in the city. The sample was intended to include similar proportions of participants of each gender and age group. Participants were 239 men (45.1%) and 291 women (54.9%).

Table 1 shows the distribution of participants according to gender and age. Adolescents aged 15 (27.5%), 16 (34.8%), 17 (20.4%) and 18 years (21.3%) were assessed. The mean age of the overall sample was 16.35 years (standard deviation [$SD$] = 1.10), of male participants was 16.41 years ($SD$ = 1.10), and of female participants was 16.31 years ($SD$ = 1.10).

### Instrument

To measure QoL in adolescents the self-reporting version of the KIDSCREEN-27 questionnaire was used. The questionnaire is designed to measure the health and subjective well-being of children and adolescents between 8 and 18 years of age. The version we used has 27 items grouped into five categories: *physical well-being*, which explores levels of physical activity, energy and physical condition; *psychological well-being*, which includes items concerning positive emotions, satisfaction with life, and feelings of emotional balance; *relationship with parents and autonomy*, which examines subjects' relationship with their parents, atmosphere in the home, feelings of being an appropriate age for independence, and level of satisfaction with economic resources; *social support and peers*, which examines relationships with other children and adolescents; and *school environment*, which participants' perceptions of their cognitive ability and learning and concentration and their feelings about school (Ravens-Sieberer, Gosch, Rajmil, Erhart, Bruil, Duer, … Kidscreen Group E,, 2005). This

**TABLE 1** *Participants according to gender and age*

| | Age in years | | | | |
|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | Total |
| Men | 60 | 73 | 53 | 53 | 239 |
| Women | 86 | 90 | 55 | 60 | 291 |
| Total | 146 | 163 | 108 | 103 | 530 |

Source: own work

questionnaire has suitable psychometric properties for use in the Chilean population, with Cronbach's alphas for the overall scale and the various categories higher than 0.70. Also, factor analyses provide evidence of a structure similar to the theoretical structure of five categories (Urzúa *et al.,* 2009b).

## Procedures

Following approval by the Ethics Committee of the Catholic University of the North and the National Committee for Science and Technology (CONICYT), various schools in the city were invited to take part. For participants in secondary education visits with parents and guardians were arranged at schools where the study was authorized in order to explain the project and obtain informed consent for minor children to participate. Once parental approval had been given, a schedule for the assessment was made. After participants signed a consent form, the assessment was administered for 45 minutes to 1 hour in groups of 20 to 35 students. For university students, who were not minors, only the signed consent form was requested, which was approved by 100% of those who were approached to participate.

Once the questionnaires were completed they were entered into a database and analyzed using the SPSS 17.0 statistical program.

In order to assess the level of importance participants assigned to each of the categories, a question was added to each of the items in the KID-SCREEN-27 questionnaire regarding the level of importance of each category on a scale of 1 to 5 points. To calculate the value of each question,

the response for each item (1–5) was multiplied by the value of importance assigned to it (1–5), thus obtaining values that were weighted by importance. The value of each category was calculated by summing the weighted values for all category questions. To improve interpretation of the data, category scores were standardized. Specifically values were obtained using the following calculation [$X = (A*B)/C$], where A is the sum of values weighted for importance corresponding to the category, B is the maximum value of 100, C is the maximum value for the category, and X is the final standardized score for the category weighted according to importance.

Data were first analyzed descriptively. The mean (*M*) and standard deviation (*SD*) were calculated for each QoL category both according to the normal scale and the weighted scale. Means were compared using Student's *t*-test for gender and ANOVA for the various age groups.

## Results

### QoL in the overall sample and according to gender

Based on unweighted category scores (Table 2), the category with the highest value in the overall sample and among both genders was that of *peers*, whereas the lowest value was for *psychological well-being* in men and *physical well-being* in women. In comparing category means for men and women, statistically significant differences were found in the category of *physical well-being* ($t_{(460.080)} = 7.219$; *p*=0.000).

**TABLE 2** *Means for QoL categories for the overall sample according to gender*

| Category | Total | | | Men | | | Women | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. | M | SD | No. | M | SD | No. | M | SD |
| Physical well-being | 523 | 42.84 | 6.76 | 235 | 45.14 | 7.01 | 288 | 40.98 | 5.95 |
| Psychological well-being | 523 | 40.82 | 3.92 | 237 | 40.60 | 4.04 | 286 | 41.01 | 3.81 |
| Parents | 525 | 45.97 | 7.60 | 237 | 46.67 | 8.10 | 288 | 45.39 | 7.12 |
| Peers | 526 | 51.52 | 8.81 | 238 | 51.03 | 9.19 | 288 | 51.94 | 8.47 |
| School | 524 | 49.12 | 7.32 | 237 | 48.96 | 7.67 | 287 | 49.26 | 7.03 |

Source: own work

**TABLE 3** *Means for QoL categories weighted for importance in the overall sample and according to gender*

| Category | Total | | | Men | | | Women | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. | M | SD | No. | M | SD | No. | M | SD |
| Physical well-being | 514 | 55.78 | 13.51 | 230 | 59.14 | 14.18 | 284 | 53.06 | 12.31 |
| Psychological well-being | 507 | 60.93 | 10.27 | 230 | 59.41 | 11.01 | 277 | 62.21 | 9.45 |
| Parents | 512 | 61.29 | 15.05 | 232 | 61.40 | 15.98 | 280 | 61.21 | 14.27 |
| Peers | 519 | 76.02 | 17.66 | 235 | 73.97 | 18.95 | 284 | 77.71 | 16.35 |
| School | 520 | 64.60 | 16.04 | 235 | 63.78 | 17.44 | 285 | 65.29 | 14.77 |

Source: own work

**TABLE 4** *Unweighted means for QoL categories according to age*

| Category | 15 | | | 16 | | | 17 | | | 18 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | M | SD | No. | M | SD | No. | M | SD | No. | M | SD |
| Physical well-being | 145 | 42.65 | 7.30 | 159 | 42.45 | 7.39 | 106 | 43.21 | 5.91 | 113 | 43.29 | 5.86 |
| Psychological well-being | 145 | 40.88 | 3.37 | 160 | 40.13 | 4.12 | 105 | 40.88 | 4.62 | 113 | 40.82 | 3.59 |
| Parents | 146 | 48.16 | 8.13 | 161 | 45.47 | 8.27 | 106 | 45.79 | 7.28 | 112 | 46.60 | 6.05 |
| Peers | 146 | 53.37 | 9.04 | 161 | 51.65 | 8.65 | 106 | 50.45 | 9.58 | 113 | 49.94 | 7.54 |
| School | 146 | 49.05 | 6.77 | 161 | 48.37 | 8.09 | 104 | 48.76 | 6.80 | 113 | 50.59 | 7.20 |

Source: own work

When considering values weighted by importance (Table 3), it was observed that in both the overall sample and in the male and female subsamples the highest-rated category was that of *peers*, while the worst was *physical well-being*, as well as *psychological well-being* among men. In comparing the category means reported by both genders, statistically significant differences were found in the *peers* category ($t_{(465.072)} = 2.384$; $p =0.018$) and *psychological well-being* category ($t_{(505)} = -3.072$; $p =0.002$), where the mean for women was greater than that for men, and in the *physical well-being* category ($t_{(456.312)} = 5.122$; $p = 0.000$), where the mean for men was significantly higher than for women.

## QoL and age

Table 4 shows the means for categories according to age group, considering the gross values. The highest assessed category was that of *peers* in most age groups except for 18-year-olds, who rated the *school* category highest. In all age groups the *psychological well-being* category was rated lowest.

When comparing means in different age groups, statistically significant differences were observed only in the *peers* category ($F_{(3,522)} = 3.952$; $p = 0.008$; $\eta^2 =0.022$). Subsequent comparisons show that the mean for 15-year-old participants in this category was significantly higher than the mean for 18-year-olds ($p = 0.011$).

In evaluating the values weighted for importance (Table 5), it is observed that in all age groups the highest-rated category was that of *peers*, and the lowest was *physical well-being*. When comparing means for each age group, only the *peers* category showed statistically significant differences ($F_{(3,515)} = 2.868$; $p = 0.036$; $\eta^2 =0.016$), whereas the mean for 15-year-old adolescents is significantly higher than for 18-year-olds ($p =0.026$).

## Discussion

Differences are shown in the results obtained according to gender. Specifically, the mean for women in the *psychological well-being* category was higher than that reported by men, while the mean reported by women for *physical well-being* was lower than that

*Table 5 Means for QoL categories weighted for importance and according to age*

|  | 15 | | | 16 | | | 17 | | | 18 | | |
| Category | No. | M | SD | No. | M | SD | No. | M | SD | No. | M | SD |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Physical well-being | 143 | 55.57 | 14.46 | 155 | 55.20 | 14.26 | 103 | 56.90 | 13.10 | 113 | 55.83 | 11.55 |
| Psychological well-being | 138 | 61.65 | 9.88 | 156 | 60.16 | 11.48 | 104 | 61.71 | 10.43 | 109 | 60.41 | 8.68 |
| Parents | 148 | 61.78 | 15.61 | 158 | 59.68 | 16.60 | 104 | 61.22 | 14.92 | 109 | 63.07 | 11.65 |
| Peers | 145 | 79.07 | 16.41 | 159 | 76.16 | 18.19 | 104 | 75.05 | 19.87 | 111 | 72.72 | 15.70 |
| School | 144 | 64.81 | 15.25 | 159 | 63.11 | 17.95 | 104 | 64.60 | 14.94 | 113 | 66.43 | 15.12 |

Source: own work

reported by men. These results are consistent with those reported in similar studies in which men demonstrated a higher QoL in the *physical well-being* category and women in the *social* category. This may be because women place more importance on activities focusing on socialization while men prioritize sport and physical activities (Urzúa *et al.*, 2009a). Vélez *et al.* (2009) discusses differences in QoL according to gender in the *health* category, in which women negatively perceive general, physical, and emotional health but are better at perceiving relationships with friends in the school environment, unlike men.

In terms of assessing QoL categories according to the importance accorded to each, the data indicate that weighting the categories has a minimal influence on QoL ratings and differences between the genders. However, differences have been found in assessing general QoL and weighted QoL in the *peers* category (which was the category with the highest importance rating). Thus our general hypothesis is confirmed. In terms of the specific hypothesis, the difference was corroborated when we included the assessment of importance. The importance that adolescents give to their peers is to be expected at this stage of their development, where belonging to a group and comparisons with peers are of vital significance. Both in assessing overall QoL and QoL according to importance, the highest assessed category was *peers*. This may be due to processes of the evolutionary stage of adolescents as friends play an important role in the life of young people (Casas, 2010).

In comparing means according to age group, among all groups the category with the highest rating was that of *peers*, except for 18-year-olds, for whom the highest-rated category was *school* and the worst was *psychological well-being*. When comparing means according to age, statistically significant differences were found only on *peers* category. A possible explanation for this may be that the 18-year-old age group included participants who were students at university who therefore had a different concept of "school" than adolescents attending high schools.

It is worth mentioning that when QoL was assessed according to importance, specifically among 15-year-olds, it was once again shown that the category with the highest assessment was *peers*. This may be attributed to the fact that at this stage adolescents wish to belong to a group and have greater social acceptance, thus they devote less attention to the psychological and physical categories.

In terms of both overall QoL and QoL according to importance, the category rated the highest in the overall sample, as well as in both genders separately, was *peers*, while that rated the lowest was *physical well-being*. Thus, throughout the study the results confirm both our general and specific hypotheses.

Future studies should also conduct comparisons according to the type of educational institution attended by adolescents, since previous investigations have shown that QoL is affected by the type of institution. Another recommendation is to consider the biological maturity of adolescents of the same age, since in recent studies it has been shown that this affects perceptions of QoL (Sean, Fiona, & Lauren, 2011).

## Conclusions

The importance that assign men, women or different ages to different areas of their life are not the same, difference are given by the gender and age and that are only detected when joins the self-report opinion of the evaluated focus issues. These results provide evidence to the need to incorporate the variable importance in the evaluation of the quality of life in the adolescent population.

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