

Impact of dental self-perception on the quality of life of students at the Catholic University of Cuenca, Azogues in 2018

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Abstract: Dental aesthetics is an important factor since it represents a determinant and influential physical stereotype on the individual in different age groups. Young people are particularly vulnerable due to the influence of social media. Thus, there is a greater collective interest in improving the appearance of their smiles, allowing them to improve their interpersonal relationships. Currently, there are several indices to assess quality of life and dental aesthetics. The aim of this study was to evaluate the impact of dental self-perception on the quality of life of students at the Catholic University of Cuenca, Azogues, in 2018. The study included a sample of 189 students; the Aesthetic Oral Health Impact Profile (A-OHIP14) questionnaire was applied. Inferential statistics used chi-squared tests ($p < 0.05$). No statistical significance was found between quality of life according to sex ($p = 0.246$) or age ($p = 0.132$). Regarding the domains, it was reported that psychological discomfort and physical pain has the highest scores (3.15-2.92), while they feeling disadvantaged and social disability had lower scores (1.5-1.56). Male students aged 18 to 21 showed the greatest impact of dental self-perception on quality of life associated with oral health.

Keywords: Dental self-perception, quality of life, A-OHIP14, aesthetic.

INTRODUCTION

Social media has imposed patterns that generate changes in the aesthetic consciousness of people. An attractive smile positively influences a person's life. Therefore, people with lost teeth, decay, trauma or altered positions of the teeth do not feel confident, thus altering their self-esteem and quality of life (Guzmán *et al.*, 2015; González *et al.*, 1999; Orrego *et al.*, 2016). Self-esteem is defined as "the way in which an individual sees himself and determines rejection or approval behaviors, self-assessing competence and value" (Rodríguez *et al.*, 2016). Quality of life is a very broad and complex concept, defined as "the way in which the individual assumes and perceives his own existence in relation to his material conditions" (Urzúa & Caqueo, 2010; Wong & Cheung, 2007).

During the 1990s, a new concept was developed, i.e. quality of life related to health (HRQoL) or perceived health, which integrates aspects of life with physical and mental functioning as well as welfare (Guzmán *et al.*, 2015; Preciado *et al.*, 2012). This topic constitutes a relevant factor in public health, since oral health should be considered as an integral concept; thus, there is a need to increase studies about quality of life and self-perception.

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The objective of this study was to evaluate the impact that dental self-perception on the quality of life of students at the Catholic University of Cuenca, Azogues.

MATERIALS AND METHODS

A study was conducted to evaluate the impact that dental self-perception has on the quality of life of students at the Catholic University of Cuenca, Azogues. Prior to the registration of data, authorization was obtained to carry out the investigation.

A total of 189 students participated, selected through a simple random probabilistic sampling. Students aged 18 to 24 years were included; exclusion criteria were not considered.

The data collection was done through a face-to-face survey. The Aesthetic Oral Health Impact Profile (A-OHIP14) questionnaire was used, which contains seven dimensions: functional limitation, physical pain, psychological affliction, physical disability, psychological incapacity, social disability and obstacles. The instrument has 14 questions, with

two questions for each dimension. The estimated time to answer the questionnaire was around 20 minutes.

The data were analyzed with SPSS v.23 for Windows (IBM, USA). Descriptive statistics were represented by absolute and relative frequencies, and averages with standard deviation. Inferential statistics used the chi-squared test ($p < 0.05$).

RESULTS

There were 189 students (94 men and 95 women); 120 were between 18 and 21 years old and 69 were between 22 and 24 years old.

Table 1 shows the distribution of responses of A-OHIP14. Table 2 shows the response averages of A-OHIP14 by age and sex. Table 3 shows the average values of the responses to the A-OHIP14 domains by age and sex.

No statistical significance was found between quality of life according to sex ($p=0.246$) or age ($p=0.132$).

TABLE 1. Distribution of responses of A-OHIP14.

	Never	Almost never	Sometimes	Frequently	Always
	n (%)	n (%)	n (%)	n (%)	n (%)
Noticed tooth that doesn't look right	27 (14.3)	40 (21.2)	73 (38.6)	23 (12.2)	26 (13.8)
Appearance affected	55 (29.1)	51 (27.0)	53 (28.0)	17 (9.0)	13 (6.9)
Sensitive teeth	23 (12.2)	33 (17.5)	79 (41.8)	33 (17.5)	21 (11.1)
Sore spots	30 (15.9)	66 (34.9)	69 (36.5)	18 (9.5)	6 (3.2)
Self-conscious	22 (11.6)	34 (18.0)	39 (20.6)	48 (25.4)	46 (24.3)
Appearance	49 (25.9)	56 (29.6)	46 (24.3)	25 (13.2)	13 (6.9)
Less favour in food	112 (59.3)	39 (20.6)	30 (15.9)	6 (3.2)	2 (1.1)
Avoid smiling	100 (52.9)	40 (21.2)	31 (16.4)	12 (6.3)	6 (3.2)
Difficult to relax	94 (49.7)	49 (25.9)	33 (17.5)	7 (3.7)	6 (3.2)
Been embarrassed	84 (44.4)	47 (24.9)	40 (21.2)	11 (5.8)	7 (3.7)
Less tolerant of others	110 (58.2)	38 (20.1)	24 (12.7)	11 (5.8)	6 (3.2)
Difficulty doing jobs	109 (57.7)	41 (21.7)	27 (14.3)	6 (3.2)	6 (3.2)
Unable to enjoy people's company	112 (59.3)	37 (19.6)	21 (11.1)	7 (3.7)	12 (7.3)
Life unsatisfying	118 (62.4)	36 (19.0)	20 (10.6)	7 (3.7)	8 (4.2)

TABLE 2. Response averages of A-OHIP14 by age and sex.

	18-21 years		22-24 years	
	Male Mean \pm SD	Female Mean \pm SD	Male Mean \pm SD	Female Mean \pm SD
Noticed tooth that doesn't look right	2.95 \pm 1.14	2.96 \pm 1.29	2.86 \pm 1.21	2.76 \pm 1.22
Appearance affected	2.39 \pm 1.19	2.41 \pm 1.27	2.14 \pm 1.08	2.46 \pm 1.19
Sensitive teeth	2.92 \pm 1.17	3.31 \pm 1.01	2.54 \pm 1.26	2.93 \pm 1.06
Sore spots	2.55 \pm 1.08	2.52 \pm 0.93	2.25 \pm 0.93	2.54 \pm 0.90
Self-conscious	3.30 \pm 1.25	3.67 \pm 1.20	2.46 \pm 1.35	3.51 \pm 1.40
Appearance	2.52 \pm 1.23	2.63 \pm 1.25	2.25 \pm 1.14	2.27 \pm 1.14
Less favour in food	1.94 \pm 1.09	1.56 \pm 0.86	1.57 \pm 0.74	1.41 \pm 0.74
Avoid smiling	2.00 \pm 1.11	1.70 \pm 1.13	2.00 \pm 1.28	1.73 \pm 0.92
Difficult to relax	2.03 \pm 1.07	1.63 \pm 0.92	2.18 \pm 1.16	1.61 \pm 1.00
Been embarrassed	2.12 \pm 1.14	1.83 \pm 1.06	2.21 \pm 1.20	1.85 \pm 1.04
Less tolerant of others	1.95 \pm 1.22	1.50 \pm 0.91	1.71 \pm 0.98	1.80 \pm 1.10
Difficulty doing jobs	1.82 \pm 1.11	1.61 \pm 1.02	1.79 \pm 0.99	1.68 \pm 0.96
Unable to enjoy people's company	1.89 \pm 1.23	1.72 \pm 1.22	2.04 \pm 1.29	1.51 \pm 0.90
Life unsatisfying	1.82 \pm 1.08	1.57 \pm 1.09	1.86 \pm 1.21	1.49 \pm 0.95

TABLE 3. Average values of the responses to the A-OHIP14 domains by age and sex

	18-21 years		22-24 years	
	Male Mean \pm SD	Female Mean \pm SD	Male Mean \pm SD	Female Mean \pm SD
Functional limitation	2.67 \pm 1.07	2.69 \pm 1.1	2.5 \pm 0.94	2.61 \pm 0.98
Physical pain	2.73 \pm 0.97	2.92 \pm 0.77	2.39 \pm 1.01	2.73 \pm 0.85
Psychological discomfort	2.91 \pm 0.91	3.15 \pm 0.86	2.36 \pm 1.07	2.89 \pm 0.93
Physical disability	2.65 \pm 1.06	2.60 \pm 0.90	2.00 \pm 1.00	2.80 \pm 0.89
Psychological disability	2.08 \pm 1.00	1.73 \pm 0.91	2.20 \pm 1.11	1.73 \pm 0.96
Social disability	1.89 \pm 1.10	1.56 \pm 0.87	1.75 \pm 0.94	1.74 \pm 0.97
Handicap	1.86 \pm 1.08	1.65 \pm 1.09	1.95 \pm 1.15	1.50 \pm 0.90

DISCUSIÓN

At present, it is important to evaluate the need for dental treatment in order to achieve an adequate clinical result. For this, self-assessment questionnaires can be used to assess dentofacial aesthetics (Nuñez, 2012; Díaz et al., 2017).

In this study, no differences were found in A-OHIP14 according to sex. This is in agreement with

previous studies by Chaucalá (2017) and Inda (2016). However, a study conducted by Márquez (2014) did find a statistically significant difference, and a study by Duque (2013) revealed that there is a greater impact on the quality of life in older individuals. This may be due to the fact that this study was carried out in university students dedicated solely to their education, without economic or work situations that could affect their

quality of life.

Previous studies have shown that, in terms of the domains of the A-OHIP-14, the most affected is psychological discomfort (Márquez, 2014; Rubio, 2016; Isiekwe et al., 2016), which agrees with the present study. The less affected domains have been shown to be general social disability and feeling disadvantaged (Márquez, 2014), which also agrees with the present study. The similarities between these results may be due to the fact that the observation population corresponds to young people, where the psychological domain is most sensitive, without affecting social interactions.

Self-perception directly influences the quality of life of people, especially in the aesthetic field (Nuñez, 2013; Goulart et al., 2016; Isiekwe et al., 2016). These studies indicate that there is a positive impact on the self-perception of patients after certain dental procedures such as tooth whitening. This emphasizes the importance of patient-centered assessments, particularly with respect to aesthetics. In the case of the present study, although it does not compare before and after dental procedures focused on the aesthetic component, an impact may be observed in young men on the grounds of social desirability (Rubio, 2016; Isiekwe et al., 2016).

CONCLUSION

Male students aged 18 to 21 had the greatest impact on their dental self-perception on their quality of life according with regard to oral health.

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