

# The importance of dental aesthetics among dental students assessment of knowledge

Sunayana Manipal, C. S. Anand Mohan<sup>1</sup>, D. Lokesh Kumar<sup>1</sup>, Priyanka K. Cholan<sup>1</sup>, Adil Ahmed, Preethi Adusumilli<sup>2</sup>

Departments of Public Health Dentistry, and <sup>1</sup>Periodontology, SRM Dental College, Ramapuram, Chennai, <sup>2</sup>Department of Public Health Dentistry, Asan Dental College, Chengalpet, Tamil Nadu, India

Corresponding author (email: <gsunayana@yahoo.com>)

Dr. Sunayana Manipal, 21, Chandra Banu Street, Pudupet, Chennai - 600 002, Tamil Nadu, India.

## Abstract

**Objective:** The aim of this study is to assess the dental esthetics awareness among dental students in a private university in Chennai as none is available in Chennai, Tamil Nadu. **Materials and Methods:** The dental esthetics awareness questionnaire consisting of a battery of 19 questions under five aspects that is, physical, functional, social, knowledge, and psychological aspects was administered to a sample of 100 dental college students aged between 18 and 27 years in a private college in Chennai, India. Gender variations on the responses of their effects and the impact on dental esthetics awareness had been analyzed using a Chi-square test. **Results:** With respect to physical aspects, pigmentation shows more significance as students want to get treated for their pigmentation of lips and gums. With respect to functional aspects, eating shows more significance as students have difficulty while eating. In social aspects, habits show more significance as it affects their esthetics. With respect to psychological aspects, mental depression shows more significance as students feel more deprived due to their unesthetic appearance. **Conclusion:** This study shows a high level of self-consciousness and the findings of the studies prove that even the slightest of variations have a greater impact on the above-mentioned dimensions in particular to psychological, functional, and physical aspects.

**Key words:** Awareness, dental esthetics, dental college students

## INTRODUCTION

### Dental esthetics and its awareness among dental students

In our modern competitive society, a pleasing appearance often means the difference between success and failure in both our personal and professional lives. There is globalization and modernization in the growing population in the world. Men and women are very conscious about their appearance. The present generation is giving importance to their esthetics in

every aspect to improve their personality. Due to the advancement in dentistry, people are eager to know about how the dentistry would help in enhancing their smiles. Esthetic or cosmetic dentistry strives to merge beauty and function with the values and individual needs of every patient. Esthetics is not only concerned with smile correction, but also the change in facial profile and jaw correction.<sup>[1]</sup> In total esthetics play a vital role in one's life in boosting their self-confidence. Esthetic dentistry is a boon to mankind; where a beast can be turned into a beauty. Everybody wants to get recognized by others, and dental esthetics is making it possible.<sup>[2]</sup> The following survey is an analysis to know about the dental esthetic awareness among dental students in a private university which has dental faculties. Esthetics is a branch of philosophy that deals with the questions of beauty and artistic taste. Esthetics also means concerned with beauty or the appreciation of beauty (or) a pleasant appearance (or) a set of principle behind the work of a particular artist or artistic movement.<sup>[3]</sup>

Access this article online	
Quick Response Code:	Website: www.jispcd.org
	DOI: 10.4103/2231-0762.131266

The physical, social, and psychological aspects play a vital role in a person's life.<sup>[2]</sup> Majority are undergoing orthodontic treatment to enhance their smile and facial appearance.<sup>[3,4]</sup> As dentist, it's essential to know about the awareness of dental esthetics. To preach what we practice is the essence of dental teaching hence in order to know how handles a patient we need to know the knowledge among students so that we train them in their field of lacunae. Hence, this study aims to access about the dental esthetics awareness among 100 dental students in a private university.

## MATERIALS AND METHODS

### Study population

The sample composed of students in the field of dentistry from the age group of 19-27 years. A convenience sampling method was used. The subjects who were present on the day of the study and who were willing to participate were enrolled. Of 250 students, a total of 100 students showed their interest and hence were enrolled into the study.

The students were given a set of questions and asked to give their opinion on dental esthetic awareness. Prior to the survey, the proper consent was obtained from the Department of Public Health Dentistry.

### Data collection

The survey is basically a questionnaire survey. A specially designed proforma was used as a reference from oral health-related quality-of-life questionnaire (McGrath and Bedi).<sup>[5]</sup> It consists of battery of 19 questions, which was based on dental esthetics awareness. The personal information was obtained from all the subjects. Questions were asked on physical, functional, social, and psychological and knowledge aspects.<sup>[6]</sup> The questionnaire was administered to all the students personally and collected on the following day. The students were asked to understand each and every question and asked to mark yes/no. The response was treated as satisfied and not satisfied. The questionnaire was pretested on a group of ten study subjects to validate the questionnaire to this study population and the variability was found to be 0.7 (fair agreement).

### Data analysis

Frequency descriptive was used. The alpha error was set at 5% and the *P* value at 0.05%. A Chi-square test was used to compute to analyze the statistical significance

with respect to gender and their response on dental esthetic awareness. As the number of females were greater than males and in such situations it will not be able to compare logarithmic transformations of the study variable was done to avoid bias.

## RESULTS

Table 1 shows the dental esthetics awareness among dental students. A total of 100 students participated in this study. Of which, 87 were females and 13 students were males.

Table 2 shows the physical aspects of dental esthetics and its awareness and shows the distribution response of the 100 participants. About 86.2% of females and 92.3% of males are satisfied with their smile. About 13.7% of females and 7.6% of males were not satisfied with their smile. Chi-square test shows that there is no association between male and female.

Nearly 86.2% of females and 76.9% of males are satisfied with their color. 13.7% of females and 3% of males are not satisfied with the color of their teeth and gums. Chi-square test shows that there is no association between males and females with color.

This study shows 86.2% of females and 69.2% of males were satisfied with the pigmentation and their gums and lips. 13.7% of females and 30.7% of males felt that

**Table 1: Dental esthetics awareness among dental students**

Age group	Sex/gender n (%)		Total n (%)
	Male	Female	
<19 years	-	20 (22.98)	20
20 years	1 (7.69)	14 (16.09)	15
21 years	8 (61.53)	23 (26.43)	31
22 years	1 (7.69)	10 (11.49)	11
23 years	1 (7.69)	13 (14.94)	14
>23 years (24-27)	2 (15.38)	7 (8.04)	9
Total	13	87	100

**Table 2: Physical aspects of dental esthetics awareness**

Responses	n (%)				P value
	Satisfied		Not satisfied		
	Male	Female	Male	Female	
Physical aspects					
Smile	12 (92.3)	75 (86.2)	1 (7.6)	12 (13.7)	0.542
Color	10 (76.9)	75 (86.2)	3 (23)	12 (13.7)	0.382
Pigmentation	9 (69.2)	75 (86.2)	4 (30.7)	12 (13.7)	0.000*

\**P*<0.05

pigmentation caused an unesthetic appearance. Hence, there is association between males and females with respect to pigmentation.

Table 3 shows the functional aspects of dental esthetics and its awareness. It shows the distributive response of the 100 participants. 91.9% and 53.8% of females and males, respectively are satisfied with their functional aspects of eating. 53.8% and 46.2% females and males found difficulty in eating. An association between males and females with respect to speech was found. 85% of females and 38.4% of males are satisfied with their functional aspects of speech. 14.9% of females and 61.1% of males are not satisfied with their functional aspects of speech. The Chi-square test shows that there is association between males and females.

Table 4 shows the social aspects of dental esthetics and its awareness. It shows the distributive response of the 100 participants. 91.1% of females and 61.5% of males are satisfied with their habits. 9.9% of females and 39.5% males were not satisfied with their functional aspects of habit. There is no difference in significance across the gender. 57.4% of females and 30.7% of males are satisfied with their career and believed that their appearance is not a hindrance to their career. Whereas 42.5% of females and 69.2% of males are not satisfied with their career and believed that their appearance is a hindrance to their career. There is no association between males and females.

20.6% of females and 15.3% of males are satisfied with their relationship and believed that appearance does not affect their relationship status. Whereas 29.3% of females and 84.6% of males were not satisfied with their relationship and believed that appearance affect their relationship status and their *P* value is 0.652 which is greater than (*P* value 0.05) so there is association between males and females.

Table 5 shows the social aspects of dental esthetics and its awareness.<sup>[7]</sup> It shows the distributive response of the 100 participants. 95.4% of females and 92.3% of males are aware of dental esthetics. 4.5% of females and 7.6% males were not aware of dental esthetics. There is no association across the gender.

Table 6 shows the psychological aspects of dental esthetics and its awareness. It shows the distribution response of the 100 participants. 25.2% of females and 53.8% of males are satisfied with others compliments.

74.7% of females and 46.1% males are not satisfied with others compliments. There is no association between males and females.

27.5% of females and 7.6% of males are satisfied with their appearance. 72.4% of females and 92.3% males have not been satisfied with their appearance. There is no association between males and females.

14.9% of females and 15.3% of males are happy after their dental treatment. 88.5% and 84.6% of females

**Table 3: Functional aspects of dental esthetics awareness**

Responses	n (%)				P value
	Satisfied		Not satisfied		
	Male	Female	Male	Female	
Functional aspects					
Eating	7 (53.8)	80 (91.9)	6 (46.2)	7 (9.1)	0.000*
Speech	5 (38.4)	74 (85)	8 (61.5)	13 (14.9)	0.005

\**P*<0.05

**Table 4: Social aspects of dental esthetics awareness**

Responses	n (%)				P value
	Satisfied		Not satisfied		
	Male	Female	Male	Female	
Social aspects					
Habit	8 (61.5)	79 (91.1)	5 (39.5)	8 (9.9)	0.000*
Career	4 (30.7)	50 (57.4)	9 (69.2)	87 (42.5)	0.72
Relationship	2 (15.3)	18 (20.6)	11 (84.6)	16 (29.3)	0.652

\**P*<0.065

**Table 5: Knowledge aspects of dental esthetics and its awareness**

Responses	n (%)				P value
	Satisfied		Not satisfied		
	Male	Female	Male	Female	
Knowledge aspects					
Awareness	12 (92.3)	83 (95.4)	1 (7.6)	4 (4.5)	0.633

\**P*<0.05

**Table 6: Psychological aspects of dental esthetics and its awareness**

Responses	n (%)				P value
	Satisfied		Not satisfied		
	Male	Female	Male	Female	
Psychological aspects					
Complaint	7 (53.8)	22 (25.2)	6 (46.1)	65 (74.7)	0.034
Carefree	2 (15.3)	17 (19.6)	11 (84.6)	70 (80.4)	0.722
Mental depression	9 (69.2)	17 (19.5)	4 (30.7)	70 (80.4)	0.000*
Appearance	1 (7.6)	24 (27.5)	12 (92.3)	63 (72.4)	0.122
Regrets	2 (15.3)	10 (14.9)	11 (84.6)	77 (88.5)	0.687

\**P*<0.05

and males were not happy after their dental treatment. There is no association across the gender.

98.3% and 15.3% of females and males, respectively, are carefree about their appearance. 80.4% and 84.6% of females and males were not carefree about their appearance. There is no association between males and females.

19.5% and 69.2% of females and males says that their appearance lead to mental depression and affects their quality of life. 80.4% and 30.7% females and males say that their appearance caused mental depression and affects their quality of life.<sup>[8]</sup> There is association between males and females.

## DISCUSSION

The females contributed to the majority. A lot of female participants were enrolled in comparison with their counterparts this is due to the fact that the college comprised of females which were accounted for by the logarithmic transformations. Similar studies were done by 1<sup>st</sup> grade college students of Davangere, India.<sup>[5]</sup>

With respect to the functional aspects of dental esthetic awareness the males felt that eating was an important parameter of interest whereas females felt that speech was an important aspect of dental. Similar studies were also highlighted the fact that malocclusion definitely influenced the adolescent's satisfaction with appearance.<sup>[9]</sup>

This study shows that majority of females and males are satisfied with their smile. Majority of males felt that pigmentation caused an unesthetic appearance. Majority of the females and males are not satisfied with their career and believed that their appearance is a hindrance to their career. Majority of males were not satisfied with their relationship and believed that appearance affect their relationship status.

This study clearly proves that esthetics play a very vital role in building ones career and maintaining relationship. Dynamics of satisfaction, this statement is clearly proved by similar studies.<sup>[10]</sup> This study shows that majority of females and males were aware of cosmetic dentistry and the fact that the dentist can intervene to change their smile. Similar results were seen in studies done by Peres *et al.*<sup>[9]</sup> This study shows that esthetics are in popular important for the psychological development in the individual. Majority of males feel that their appearance lead to mental

depression and this in turn affects their quality-of-life. Similar results were found by Klages *et al.*<sup>[11]</sup>

## CONCLUSION

This study shows that the study subjects showed a the high level of self-consciousness and the findings of the studies show that the males are more vulnerable to physiological consequences when compared to females. This study proves that even the slightest of all the variations have a greater impact on the above-mentioned dimensions in particular to psychological, functional, and physical aspects. Hence, there remains a need in the training towards the same end.

## REFERENCES

1. Akarslan ZZ, Sadik B, Erten H, Karabulut E. Dental esthetic satisfaction, received and desired dental treatments for improvement of esthetics. *Indian J Dent Res* 2009;20:195-200.
2. Spear FM, Kokich VG, Mathews DP. Interdisciplinary management of anterior dental esthetics. *J Am Dent Assoc* 2006;137:160-9.
3. Bos A, Hoogstraten J, Prahl-Andersen B. Expectations of treatment and satisfaction with dentofacial appearance in orthodontic patients. *Am J Orthod Dentofacial Orthop* 2003;123:127-32.
4. Goldstein RE. Study of need for esthetics in dentistry. *J Prosthet Dent* 1969;21:589-98.
5. McGrath C, Bedi R. An evaluation of a new measure for measuring oral health related quality of life. *Community Dent Health* 2001;18:138-43.
6. Odioso LL, Gibb RD, Gerlach RW. Impact of demographic, behavioral, and dental care utilization parameters on tooth color and personal satisfaction. *Compend Contin Educ Dent Suppl* 2000; 29:35-41.
7. Glade. Oral Health related Quality of Life, Grenada, 7-8 May 2004. [www.egohid.eu/.../Oral%20Health-related%20Quality%20of%20Life.pdf](http://www.egohid.eu/.../Oral%20Health-related%20Quality%20of%20Life.pdf). accessed on 27.9.12 at 12.30 PM.
8. Rosenoer LM, Sheiham A. Dental impacts on daily life and satisfaction with teeth in relation to dental status in adults. *J Oral Rehabil* 1995;22:469-80.
9. Peres KG, Barros AJ, Anselmi L, Peres MA, Barros FC. Does malocclusion influence the adolescent's satisfaction with appearance? A cross-sectional study nested in a Brazilian birth cohort. *Community Dent Oral Epidemiol* 2008;36:137-43.
10. Meng X, Gilbert GH, Litaker MS. Dynamics of satisfaction with dental appearance among dentate adults: 24-month incidence. *Community Dent Oral Epidemiol* 2008;36:370-81.
11. Klages U, Bruckner A, Zentner A. Dental aesthetics, self-awareness, and oral health-related quality of life in young adults. *Eur J Orthod* 2004;26:507-14.

**How to cite this article:** Manipal S, Anand Mohan CS, Kumar DL, Cholan PK, Ahmed A, Adusumilli P. The importance of dental aesthetics among dental students assessment of knowledge. *J Int Soc Prevent Communit Dent* 2014;4:48-51.

**Source of Support:** Nil, **Conflict of Interest:** None declared.