

# Positive Perception of Dental Medicine Students on Dental Aesthetics Based on the Semester Being Pursued

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## ABSTRACT

**Background:** Aesthetics is a concept referring to beauty. Nowadays, media often perpetuates the concept of beauty by showing faces with attractive looks and high aesthetic value. The appearance of teeth is one aspect determining the attractiveness of someone's face and playing an important role in social interaction. Variations in aesthetic standards lead to different perceptions about the aesthetics of the teeth between one person and another. **Objective:** This study was conducted with an aim for obtaining value from the self-perception of students of the Faculty of Dental Medicine at Airlangga University regarding their satisfaction with their dental aesthetics and its correlation with their level of education. **Methods:** The study used a descriptive study method towards the student of the Faculty of Dentistry at Airlangga University from the first, third, and fifth semester. **Results of the Study:** More than half of the total respondents had good perceptions of their dental aesthetics. The lowest percentage of respondents who had positive perceptions in this study was from the first semester because only 55.89% were satisfied with their dental aesthetics. Meanwhile, students from the third semester occupied the highest percentage of respondents who had positive perceptions (73.5%). **Conclusion:** Positive perceptions of Airlangga University Faculty of Dentistry's students increased from the first until the third semester and decreased in the third until the fifth semester.

**Keywords:** perception, dental aesthetics, education level.

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## INTRODUCTION

Talking about aesthetics, almost all women have their own characteristics for an ideal facial composition to be considered as beautiful. This perspective somehow impules the stereotype of the "beautiful" concept in society. Therefore, many people consider aesthetics as something to pay attention to. The aesthetic concept also represents things that are closely related to dental medicine as it is often involved in the dental and oral care of patients [1,2].

Aesthetics is something subjective. Therefore, everyone has their own perspective of their physical appearance. The most common reasons for patients seeing their dentists are regarding the aesthetic and affecting their satisfaction [3,4]. People tend to focus their attention on the mouth and the eyes of whom they speak with because the mouth is the center of communication on the face. One of the aesthetics produced by teeth and mouth is smile. A smile has a great appeal as a person's attractiveness and also can be used for expressing emotions. Through a smile, a person can also gain confidence when socializing with others. Certainly, the smile produced is different depends on the anatomy of the teeth and gums. Therefore, people especially women are eager to spend a lot of money to improve their smile through dental aesthetic treatment [5,6].

The ideal condition of dental and oral health does not merely rely on the absence of the oral disease and the dysfunctional, but it is expected to have a positive impact on the social life of every individual by increasing their confidence regarding the appearance of their teeth. A self-perception toward dental aesthetic is very significant to determine the satisfaction of their appearance. There

are several factors that can influence an individual's perception of dental aesthetics, such as age and education level. Therefore, the writers were interested in conducting a survey on self-esteem toward dental aesthetics among the students of the Faculty of Dental Medicine, Universitas Airlangga which consists of various ages and semester levels that are being pursued [7].

## METHOD

This study used a descriptive study aimed at pre-clinic students of the semester I, III, and V of Dental Medicine of Universitas Airlangga Sampling was carried out randomly by distributing questionnaires in the form of a "Google form" link in the chat group (LINE) of the pre-clinic students of the semester I, III, and semester V. The sample in this study was 108 female students who the inclusion criteria. Among the 108 samples, all of the female students agreed to complete a questionnaire by filling out the informed consent.

The questionnaire contained 8 questions and aimed at finding out the level of student satisfaction with dental aesthetics. In question number 1-6, in every "Yes" answer was given a score of 1 and the answer "No" was given a score of 0. Meanwhile, in questions number 7 and 8, each answer "No" was given a score of 1 and the answer "Yes" was given a score of 0. To determine whether the individual had positive or bad perceptions of his dental aesthetics, the scores of all questions were summed together. If the individual scores were 5-8, then the individual had a good perception of his dental aesthetics. Conversely, if the individual got a score of 0-4, then the individual had a bad perception of the aesthetics of his teeth.

*Positive Perception of Airlangga University FKG Students on Dental Aesthetics Based on the Semester Being Pursued*

This research was examined by the Ethics Committee of the Faculty of Dental Medicine, Universitas Airlangga. There are two research variables examined, namely the level of education divided into pre-clinic students of the semester I, III, and V, and female students perception of their dental aesthetics, namely good and bad, so that the data obtained were processed using the SPSS program for

the data analysis. The presentation of data was done in the form of tables showing the average.

**RESULTS OF THE STUDY**

In the study conducted, respondents were classified based on the education level of the respondents presented in tabular form as follows.

No	Level of Education	Number of Respondents	Percentage
1.	Semester I	34	31,48%
2.	Semester II	34	31,48%
3.	Semester III	40	37,04%
Total			100%

The level of education can be classified as in table 5.1. The result of the classification shows the same number (34 respondents) in the semester I and III, and 40 respondent in semester V.

Table 5.2 Evaluation of dental medicine students perceptions of dental aesthetics based on their level of education as measured by the semester being pursued.

No.	Questions	Semester	Yes		No		Total
			Total	%	Total	%	
1	Do you feel you have an attractive face?	I	17	50	17	50	34
		III	17	50	17	50	34
		V	24	60	16	40	40
2	Do you think your teeth affect your facial attraction?	I	29	85,3	5	14,7	34
		III	32	94,1	2	5,9	34
		V	36	90	4	10	40
3	Are you satisfied with the appearance of your gums?	I	24	70,6	10	29,4	34
		III	28	82,4	6	17,6	34
		V	30	75	10	25	40
4	Are you quite satisfied with the appearance of your teeth?	I	16	47,1	18	52,9	34
		III	22	64,7	12	35,3	34
		V	19	47,5	21	52,5	40
5	Do you feel quite satisfied with the color of your teeth?	I	20	58,8	14	41,2	34
		III	12	35,3	22	64,7	34
		V	22	55	18	45	40
6	Are you confident with your smile?	I	24	70,6	10	29,4	34
		III	26	76,5	8	23,5	34
		V	30	75	10	25	40
7	Do you	I	9	26,5	25	73,5	34

Positive Perception of Airlangga University FKG Students on Dental Aesthetics Based on the Semester Being Pursued

	try to hide your teeth when smiling?	III	7	20,6	27	79,4	34
		V	5	12,5	35	87,5	40
8	Do you often see celebrity teeth on TV and social media and wish you had such goodteeth?	I	24	70,6	10	29,4	34
		III	21	61,8	13	38,2	34
		V	25	62,5	15	37,5	40

Based on table 5.2, the first point showed that half of the number of female students in the first and third semesters felt that their faces were not attractive, while in the group of the fifth-semester student, the results were higher. Almost all female students stated that teeth had an important aspect of facial attraction, from the aspect of gum aesthetics all respondents stated they were satisfied with the aesthetics of their gums, but only in the third-semester students showed that more than half of the respondents were satisfied with their dental aesthetics. More than half of the respondents of the first and the fifth-semester students showed that they were

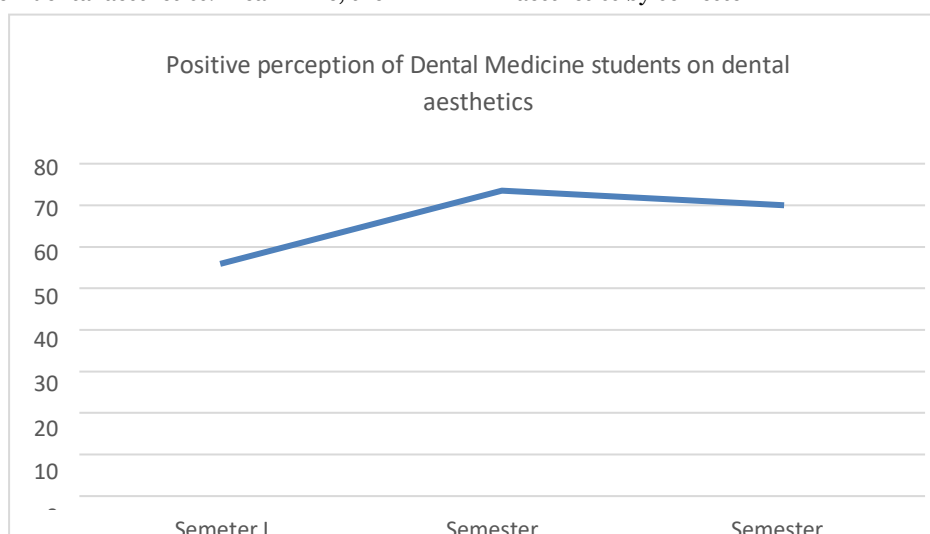
satisfied with the color of their teeth. In contrast, the third-semester students showed only a third of the sample who were satisfied. Most respondents also felt confident about their smile and did not hide their teeth when smiling. In addition, mass media and electronics also had a significant influence on dental perception and aesthetics. This can be seen in point eight that more than 50% of female students expected to have good teeth like those of celebrities.

Table 5.3 Perception of dental medicine students on dental aesthetics

No.	Semester	Predicate				Total
		Bad	%	Good	%	
1	I	15	44,11	19	55,89	34
2	III	9	26,5	25	73,5	34
3	V	12	30	28	70	40
	Total	36	33,33	72	66,67	

More than half of respondents had a good perception of the aesthetics of their teeth. The lowest percentage of respondents who had positive perceptions in this study was from the first semester because only 55.89% were satisfied with their dental aesthetics. Meanwhile, the

third semester was the group with the highest percentage of respondents who have positive perceptions (73.5%). Graphic 5.1 Positive perception of Dental Medicine Students of Universitas Airlangga towards dental aesthetics by semester



The graph above explains that the positive perception of dental medicine students has increased from

semester I to semester III, then the positive perception of

## Positive Perception of Airlangga University FKG Students on Dental Aesthetics Based on the Semester Being Pursued

female students has decreased in semester III to semester V.

### DISCUSSION

The face is one of the main attractions that directly affects the outward appearance and increases someone's confidence. One of the most important factors in determining an individual's physical appearance is the mouth and teeth as the main components in a smile. A smile is considered as a means of nonverbal social communication that has an appeal to the face. The aesthetic determination of a smile can be observed from the position, shape, size, and color of the teeth, texture, and gingival lines, as well as the shape of the jaw [8].

One important factor in the aesthetics of a smile is teeth. Based on the 2015 Harris Poll survey, it was stated that 82% of respondents agreed that they could live their lives more easily if they had good dental structure and clean and brilliant teeth [9]. Therefore, dentistry not only plays a role in managing the pain but also to improve and beautify the look of the face. The capacity of the dentist in improving aesthetics greatly impacts patient satisfaction [10,11].

Perceptions of aesthetic appearance differ from one person to another, this is influenced by different factors, depending on age, sex, and socioeconomic status, level of education, work, colleagues, cultural aspects and mass media. The influence of the mass media could also be seen in the results of this study, where more than 60% of respondents felt like having teeth like celebrities in the mass media [12,13].

The positive perception of dental aesthetics and smiles shown in the fifth-semester students was also not in accordance with research conducted by Jørnung J and Fardal O explaining that the level of education influences perceptions and attitudes about the aesthetics of their teeth and smiles, where this study explained that the higher the level of education, the higher the positive perceptions of students towards dental aesthetics [14]. In addition to the level of education, age and sex also affected one's satisfaction with the aesthetic appearance of their teeth.

The college students with higher levels of education had a better understanding of the color characteristics of tooth structure, physiological processes of discoloration, and natural teeth color so that they could affect satisfaction with teeth color [14]. Thus, by knowing the physiological processes of color changes and characteristics of natural teeth, dentistry students were eventually quite satisfied and accepted their dental profile related to confidence in smiling and the color of teeth [15]. However, our results were not in accordance with the theory because in semester V the level of satisfaction with their dental aesthetics was lower than semester III.

Besides education, other sociodemographic factors such as age had been shown to have an impact on individual perceptions of dental aesthetics. According to previous research explained younger age groups tend to pay more attention to their appearance compared to the older age group who were more indifferent to the appearance of their teeth [5]. This was consistent with the results of a study conducted, where 54 female students out of 108 total respondents as a young age group (18-21 years) felt less satisfied with the color of their teeth.

An attractive smile assessment did not only rely on the size of the teeth, the shape, color of the teeth, and the position of the teeth but could also be seen from a

person's gingival factors. Gingiva that appeared to be inflamed or unhealthy will interfere with dental aesthetics [16]. Teeth color itself was one of the factors that influence individual satisfaction with the appearance of their smile and was a major factor related to dental aesthetics [5]. This is supported by research results which showed that although more than three-quarters of respondents were satisfied with their smiles and did not try to hide their teeth, nearly half of them were less satisfied with the color of their teeth.

In addition, people's self-image and perceptions of their dental aesthetics affected their social and psychological well-being, and this was reflected in their behavior and self-confidence [17]. According to Bartolo [13], there were several psychological aspects related to dental aesthetics and can have negative effects on people's life quality, especially the impact on that person's self-esteem [18]. One such aspect was perfectionism. Perfectionism is a part of an individual's personality and is an important trait to pay attention to for its portions in life, to consider the consequences that will occur. Because, if the perfectionist nature was excessive in a person's soul, it will affect their mental health. Some studies also showed that psychological traits such as self-confidence are influenced by age [19]. The results of the study showed that as women get older, the higher confidence they will feel. This was consistent with the results of the study that the percentage of female students who felt they have an attractive face and feel quite satisfied with their teeth was higher in the fifth-semester student group.

The ultimate goal of aesthetics in dental medicine is to create a beautiful smile with proportioned teeth and the existence of dental relationships that are in harmony with the patient's gingiva and face. The difference between subjective (patient) and objective (dental) assessments of the aesthetic appearance of teeth and the level of satisfaction strongly represent an important aspect of aesthetic dentistry. Understanding the prevalence of satisfaction with the appearance of teeth and desired care as an effort to improve their aesthetics can guide dentists in planning intervention strategies. Therefore, when planning treatment and aesthetic therapy, dentists should consider the subjective evaluation of the patient to harmonize function, structure, and biology in an effort to achieve the highest level of patient satisfaction [20]. Most people did not seem to be sufficiently aware of the dental aesthetic, so it will require further educational efforts to improve their awareness of an ideal smile in achieving a good aesthetic level [21].

### CONCLUSION

The small number of samples and the limited choice of question answers were the limitations of this study. Future research is required to confirm this finding. Based on the results of research on self-perception of dental aesthetics in the Faculty of Dental Medicine, Universitas Airlangga, it can be concluded that the positive perception of Faculty of Dental Medicine, Universitas Airlangga students, increased in the semester I to semester III, and decreased in semester III to semester V.

### DAFTAR PUSTAKA

1. Zubaidah N. The aesthetic treatment for anterior teeth with lost crown by endorestitution. *Dent J (Majalah Kedokt Gigi)* 2009;42:99. <https://doi.org/10.20473/j.djmk.v42.i2.p99-103>.
2. Akarslan Z, Sadik B, Erten H, Karabulut E. Dental

*Positive Perception of Airlangga University FKG Students on Dental Aesthetics Based on the Semester Being Pursued*

- esthetic satisfaction, received and desired dental treatments for improvement of esthetics. *Indian J Dent Res* 2009;20:195. <https://doi.org/10.4103/0970-9290.52902>.
3. Febriastuti F. Complex aesthetic treatment on anterior maxillary teeth with malposition. *Dent J (Majalah Kedokt Gigi)* 2008;41:179. <https://doi.org/10.20473/j.djmg.v41.i4.p179-181>.
  4. Musskopf ML, Rocha JM da, Rosing CK. Perception of Smile Esthetics Varies Between Patients and Dental Professionals When Recession Defects are Present. *Braz Dent J* 2013;24:385–90. <https://doi.org/10.1590/0103-6440201302223>.
  5. Enabulele J., Omo JO. Self perceived satisfaction with dental appearance and desired treatment to improve aesthetics. *African J Oral Heal* 2017;7:1. <https://doi.org/10.4314/ajoh.v7i1.162230>.
  6. Lubis HF, Lubis MM, Bahirrah S. The facial profile analysis of adolescents in Medan. *J Int Dent Med Res* 2018;11:967–70.
  7. Usman H. Persepsi Diri terhadap Estetika Gigi dan Senyum pada Mahasiswa Fakultas Kedokteran Gigi Universitas Hasanudin. *Univ Hasanudin Makassar* 2014.
  8. Primasari A, Ria N, Sutadi H. Vertical cephalic index, dental arch and palatal depth measurement: A study in Batakese children. *Pesqui Bras Odontopediatria Clin Integr* 2019;19. <https://doi.org/10.4034/PBOCI.2019.191.72>.
  9. Baker RS, Fields HW, Beck FM, Firestone AR, Rosenstiel SF. Objective assessment of the contribution of dental esthetics and facial attractiveness in men via eye tracking. *Am J Orthod Dentofac Orthop* 2018;153:523–33. <https://doi.org/10.1016/j.ajodo.2017.08.016>.
  10. Al-Zarea BK. Satisfaction with Appearance and the Desired Treatment to Improve Aesthetics. *Int J Dent* 2013;2013:1–7. <https://doi.org/10.1155/2013/912368>.
  11. Huang M-T, Juan P-K, Chen S-Y, Wu C-J, Wen S-C, Cho Y-C, et al. The potential of the three-dimensional printed titanium mesh implant for cranioplasty surgery applications: Biomechanical behaviors and surface properties. *Mater Sci Eng C* 2019;97:412–9. <https://doi.org/10.1016/j.msec.2018.11.075>.
  12. Da Silva GDC, De Castilhos ED, Masotti AS, Rodrigues-Junior SA. Dental esthetic self-perception of Brazilian dental students. *RSBO Rev Sul-Brasileira Odontol* 2012;9:375–81.
  13. Asnidar, Arsunan AA, Suriah, Erika KA, Muriyati. Knowledge, food intake pattern, and body mass index of overweight and obese adolescent before and after giving social media health education in Bulukumba regency. *Indian J Public Heal Res Dev* 2018;9:160–5. <https://doi.org/10.5958/0976-5506.2018.00987.7>.
  14. Jørnung J, Fardal Ø. Perceptions of Patients' Smiles. *J Am Dent Assoc* 2007;138:1544–53. <https://doi.org/10.14219/jada.archive.2007.0103>.
  15. Bilal R. Self perception and satisfaction with dental esthetics in dental students of Qassim region of Saudi Arabia. *Pakistan Oral Dent J* 2016;36.
  16. DURIGON M, ALESSI BP, NEVES M, TRENTIN MS. Perception of dentists, dental students, and patients on dentogingival aesthetics. *Rev Odontol Da UNESP* 2018;47:92–7. <https://doi.org/10.1590/1807-2577.08917>.
  17. Afroz S, Rathi S, Rajput G, Rahman SA. Dental Esthetics and Its Impact on Psycho-Social Well-Being and Dental Self Confidence: A Campus Based Survey of North Indian University Students. *J Indian Prosthodont Soc* 2013;13:455–60. <https://doi.org/10.1007/s13191-012-0247-1>.
  18. DiBartolo PM, Li CY, Frost RO. How do the dimensions of perfectionism relate to mental health? *Cognit Ther Res* 2008;32:401–17.
  19. Gavric A, Mirceta D, Jakobovic M, Pavlic A, Zrinski MT, Spalj S. Craniodentofacial characteristics, dental esthetics–related quality of life, and self-esteem. *Am J Orthod Dentofac Orthop* 2015;147:711–8. <https://doi.org/10.1016/j.ajodo.2015.01.027>.
  20. Strajnić L, Bulatović D, Stančić I, Živković R. Self-perception and satisfaction with dental appearance and aesthetics with respect to patients' age, gender, and level of education. *Srp Arh Celok Lek* n.d.;144:580–9.
  21. Alamassi BY, Onazi MSAl, Zoman AAAl. Satisfaction of Adult Patients about Their Smile Aesthetics Compared to Dental Professionals Observation. *Open J Stomatol* 2016;06:236–44. <https://doi.org/10.4236/ojst.2016.611029>.