



The Relationship between the Level of Satisfaction of Dental Students in the Appearance of Anterior Teeth in Terms of Orthodontic Treatment at Universitas Prima Indonesia

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ABSTRACT

One aspect of appearance that increases self-confidence among students is having an aesthetic smile. To achieve this, it is important to pay attention to the anterior teeth because the appearance of the teeth determines aesthetic appeal. If the anterior teeth experience malocclusion, this has an impact on reducing the level of self-confidence, creating difficulty interacting socially, and creating dissatisfaction with the appearance of the anterior teeth for students. To fill the gap, this study aims to further investigate the relationship between the satisfaction level of the dental education undergraduate study program in the appearance of anterior teeth in terms of orthodontic treatment at Universitas Prima Indonesia. A total of 44 respondents were students of the dental education undergraduate study program who were sampled in the study using the online survey method. This study used univariate and bivariate analysis through SPSS v.24. There is a significant relationship between fixed orthodontic treatment and the satisfaction of the appearance of the anterior teeth of UNPRI dental education undergraduate students.

1. Introduction

The prevalence of dissatisfaction with the appearance of teeth among adolescents is 54%. Dissatisfaction with the appearance of teeth is associated with dissatisfaction with the color and alignment of bad teeth. Individuals who undergo orthodontic treatment are more satisfied with the appearance of their teeth. Older people tend to be more satisfied with the appearance of their teeth compared to teenagers and young adults (<19 years). This group tends to feel dissatisfied with the appearance of their teeth. Anterior teeth are an important aspect of

achieving an aesthetic smile. Malocclusion of the anterior teeth will have a psychosocial impact, causing a person to lack self-confidence, often being teased by peers, causing difficulties in interacting and adapting to the social environment. This impact is not only felt in the present but will carry over into the future, giving rise to abnormal psychosocial development.¹⁻³

Orthodontic treatment is one of the treatments in dentistry that improves the appearance of the face and teeth so that you get an ideal, harmonious, and aesthetic face. Some people come to the dentist not only to improve the occlusal relationship of teeth with

function but also to improve dentofacial characteristics so as to achieve a more attractive facial appearance and smile aesthetics. Most people believe that a good appearance will make it easier to achieve success.⁴⁻⁶ This study aims to determine the relationship between the level of satisfaction of dental students with the appearance of anterior teeth in terms of orthodontic treatment at Universitas Prima Indonesian.

2. Methods

This research uses analytical observational methods. This research was carried out at Universitas Prima Indonesia, Medan, North Sumatra Province. The research period was carried out for 7 months, namely from May to November 2023. A total of 44 research subjects followed, as well as in this study, where the subjects met the inclusion criteria. The inclusion criteria for this study are active students of the Faculty of Dentistry, UNPRI, students of FKG Stambuk 2022, 2021, and 2020, and students who are currently undergoing fixed orthodontic treatment. This research uses non-probability sampling with the technique of purposive sampling. The data analysis technique used in this research is univariate and bivariate analysis

software SPSS (statistical program for social science). This analysis examines the effect of the relationship between one independent variable (orthodontic treatment) and the dependent variable (satisfaction with the appearance of anterior teeth). Univariate analysis looks at data centering (minimum, maximum, mean, median, mode, and standard deviation), and bivariate analysis measures the relationship between two variables that are related to each other, $p < 0.05$.

3. Results and Discussion

This research obtained 44 respondents' responses collected through an online survey, which is presented in Table 1. All respondents who participated were 44 people (100%) who were active students of the UNPRI Faculty of Dentistry. Based on gender, 72.7% are women. The majority of respondents were 21 years old (36.4%) followed by 20 years old (34.1%) and 19 years old (18.2%). The stambuk level comes from the 2021 stambuk with 50% of respondents, the 2020 stambuk with 17 respondents (38.6%), and the 2022 stambuk with 5 respondents (11.4%). Consisting of 44 students undergoing fixed orthodontic treatment caused by aesthetics 61.4% and occlusion 36.4%.

Table 1. Baseline characteristics.

| Parameter | Item | Frequency (n) | Percentage (%) |
|--|--------------|---------------|----------------|
| Gender | Male | 12 | 27.3 % |
| | Female | 32 | 72.7% |
| Age (years) | 19 years old | 8 | 18,2% |
| | 20 years old | 15 | 34,1% |
| | 21 years old | 16 | 36,4% |
| | 22 years old | 2 | 4,5% |
| | 23 years old | 1 | 2,3% |
| | 25 years old | 2 | 4,5% |
| Are you an active student at the UNPRI Faculty of Dentistry? | Yes | 44 | 100% |
| As an FKG student, how many stambuk are you from? | 2020 | 17 | 38,6% |
| | 2021 | 22 | 50% |
| | 2022 | 5 | 11,4% |
| Are you undergoing fixed orthodontic treatment? | Yes | 44 | 100% |
| Why are you undergoing fixed orthodontic treatment? | Occlusion | 16 | 36,4% |
| | Aesthetic | 27 | 61,4% |
| | Prosthetics | 1 | 2,3% |

The results showed that the majority of respondents answered the question "Do you have non-esthetic fillings on your front teeth?" with 14 students answering the most and strongly agreeing with a percentage of 31.8%. On the other hand, 7 respondents, with a percentage of 15.9%, tended to strongly disagree with the question, "Are you happy with the current appearance of your teeth?". Regarding satisfaction with the appearance of anterior teeth, respondents who chose the answer strongly agree to the question "Are you satisfied with your orthodontic treatment?" received the first most answers, dominated by 13 respondents (34.1%). This was followed by the question, "Would you recommend to your friend that they undergo orthodontic treatment?" 13 respondents were the second most answered with a percentage of 29.5%. Meanwhile, only 1 respondent (2.3%) strongly disagreed with the question "Are you satisfied with your orthodontic treatment?". Based on statistical analysis and Chi-square test, there is a significant relationship between orthodontic treatment and satisfaction with the appearance of the anterior teeth of UNPRI dental education undergraduate study program students. This is due to the value of Asymp. Sig amounted to $0.004 < 0.005$, so the orthodontic treatment received by UNPRI dental education undergraduate study program students has a relationship with the level of satisfaction with the appearance of their anterior teeth.

There are several factors that can influence the level of satisfaction of dental students with the appearance of anterior teeth. These factors can be grouped into two, namely, internal factors and external factors. Internal factors are factors that originate from within the individual, while external factors are factors that originate from outside the individual.⁷⁻¹¹ Internal factors that can influence dental students' level of satisfaction with the appearance of anterior teeth include gender, age, and self-perception. External factors that can influence dental students' level of satisfaction with the appearance of anterior teeth include mass media and other factors, such as education level, socio-economic

status, and personality.¹²⁻¹⁴

Age is also a factor that can influence a person's perception of their appearance. Upper-class students have more experience and knowledge about dental health, so they have a better understanding of the ideal appearance of teeth. In addition, senior students have had more opportunities to interact with the general public, so they have a higher awareness of the importance of good dental appearance. Self-perception is how a person views himself. Positive self-perception can increase a person's satisfaction with their appearance. Dental students who have a positive self-perception of the appearance of their teeth tend to be more satisfied with the appearance of their teeth.¹⁵⁻¹⁸

The mass media often displays an unrealistic image of the ideal dental appearance. This can cause people, including dental students, to have unrealistic expectations about the appearance of their teeth. This can cause them to feel dissatisfied with the appearance of their teeth, even if their teeth are actually in good condition. Dental students have a higher level of education than the general population. This can cause them to have a better understanding of the importance of dental health, so they pay more attention to the appearance of their teeth. People with higher socioeconomic status tend to have better access to dental care. This can cause them to have better-looking teeth, so they are more satisfied with the appearance of their teeth. People with more perfectionist personalities tend to be more demanding about their appearance, including the appearance of their teeth. This can cause them to feel dissatisfied with the appearance of their teeth, even if their teeth are actually in good condition.¹⁹⁻²¹

4. Conclusion

There is a significant relationship between orthodontic treatment and satisfaction with the appearance of the anterior teeth of UNPRI dental education undergraduate students.

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