

Self-perception of personal dental appearance among students of King Khaled University Abha, Saudi Arabia

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ABSTRACT

Objectives: The need for treatment as assessed by the patients themselves is of utmost importance. Hence, the purpose of this study was to investigate the perception of personal dental appearance among students of King Khaled University (KKU), Saudi Arabia. **Materials and Methods:** A total of 391 students from KKU were recruited for the study. Information on awareness of malocclusion and satisfaction with personal dental appearance was obtained from a five-item closed ended questionnaire. Chi-square test was used to test the association of the study variables. **Results:** Statistically significant association of self-perceived dental appearance was found with respect to gender as well as the type of education ($P < 0.05$). **Conclusion:** Females were found to be more dissatisfied with their dental appearance. Dental education has significant influence on an individual's self-perception of dental appearance.

Key words

Dental appearance, dental students, survey, Saudi Arabia

INTRODUCTION

The demand for orthodontic treatment is on the rise among adolescents and young adult due the improved awareness regarding dental treatments as well as increased concern over the appearance.^[1-6] An orthodontist's ultimate aim is to enhance the function and aesthetics to patient satisfaction. Hence, patients' awareness of their appearance is of extreme interest to the clinician.^[1]

A "good dental appearance" has been shown to be related to a person's social and intellectual competence, peer group acceptance and hence related to a successful life outcomes than people with lower attractiveness.^[7-11] Gender, age, socioeconomic background, self-esteem, and peer group norms have been suggested as factors affecting the self-perception of dental appearance, malocclusion, and the uptake of orthodontic treatment.^[12]

The clinician, patient, parents, and the payment agency together decide about the start of orthodontic treatment.^[13] The patients perception of dental appearance cannot be undermined because it dictates the treatment need as well as the patient's acceptance and cooperation during the course of treatment.^[13,14] It is important to assess the relationship between normative and the self-perceived orthodontic treatment need to ensure success of the treatment. In general, the need for treatment as assessed by the clinician has been reported to be higher than that expressed by the patient's themselves.^[15-17] Hence, the purpose of this study was to investigate the perception of personal dental appearance among students of King Khaled University, Saudi Arabia.

MATERIALS AND METHODS

This study is a cross-sectional survey conducted at King Khaled University, Saudi Arabia. Prior approval for the study was obtained from the Institutional Review Board, Faculty of Dentistry. The study population was selected using simple random sampling and consisted of orthodontically untreated participants only. The study population was divided into groups according to the departments in which they were studying namely medical ($n = 147$), dental ($n = 121$), pharmacy ($n = 73$), and others ($n = 50$).

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A five-item closed-ended questionnaire was developed to information on awareness of malocclusion and satisfaction with personal dental appearance.^[18-21] The questionnaire was evaluated for its validity and reliability (Cronbach's alpha = 0.89). Adequate information about survey and confidentiality of responses was made clear to all the participants. The collected data were tabulated and analyzed using the SPSS 16.0. The Chi-square test was used to analyze the association of gender and type of education with the satisfaction with personal dental appearance.

RESULTS

Table 1 shows the distribution of perception scores related to the personal dental appearance according to the gender [Figure 1]. The satisfaction related to dental appearance did not differ significantly between male and female respondents ($P > 0.05$). The satisfaction related to occlusion differs significantly between male and female respondents ($P < 0.001$) (higher among females). The satisfaction-related to teeth color did not differ significantly between male and female respondents ($P > 0.05$). Relatively lesser satisfaction was noted for teeth color compared with other aspects among both male and female respondents. The satisfaction related to teeth size differs significantly between male and female respondents ($P < 0.001$) (higher among females).

Tables 2a and b depict the distribution of responses and comparison of perception related to the personal dental appearance according to the type of education. The satisfaction on dental appearance, occlusion and teeth color did not differ significantly between dental and medicine students ($P > 0.05$ for all). The satisfaction on teeth size and teeth shape differs significantly between dental and medicine students ($P < 0.001$ for all – higher

among dentistry students). The satisfaction on dental appearance and teeth color did not differ significantly between dental and pharmacy students ($P > 0.05$ for all). The satisfaction on occlusion, teeth size and teeth shape differs significantly between dental and pharmacy students ($P < 0.001$ for all – higher among dentistry students). The satisfaction on dental appearance and occlusion did not differ significantly between dental and other students ($P > 0.05$ for all). The satisfaction on teeth color, teeth size and teeth shape differs significantly between dental and other students ($P < 0.05$ for all – higher

Table 1: Distribution and comparison of perception related to the personal dental appearance according to the gender using Chi-square test

Satisfaction with	Male (n=203) n (%)	Female (n=188) n (%)	Total (n=391) n (%)	P value (male vs. female)
Dental appearance	125 (73.1)	100 (71.4)	225 (72.3)	0.743 (NS)
Occlusion	98 (59.8)	124 (76.5)	222 (68.1)	0.001 (S)
Teeth color	86 (55.8)	70 (45.8)	156 (50.8)	0.077 (NS)
Teeth size	109 (64.5)	139 (81.8)	248 (73.2)	0.001 (S)
Teeth shape	95 (60.5)	122 (75.3)	217 (68.0)	0.005 (S)

$P < 0.05$ – Statistically significant response between male and female groups, S – Significant, NS – Nonsignificant

Table 2a: Distribution of perception related to the personal dental appearance according to the type of education

Satisfaction with	Dentistry (121) n (%)	Medicine (147) n (%)	Pharmacy (73) n (%)	Others (50) n (%)
Dental appearance	62 (71.3)	94 (77.7)	43 (71.7)	26 (60.5)
Occlusion	79 (73.8)	73 (64.0)	38 (59.4)	32 (78.0)
Teeth color	58 (61.1)	55 (49.1)	26 (47.3)	17 (37.8)
Teeth size	98 (89.1)	85 (66.4)	42 (68.9)	23 (57.5)
Teeth shape	87 (82.9)	69 (60.5)	34 (57.6)	27 (65.9)

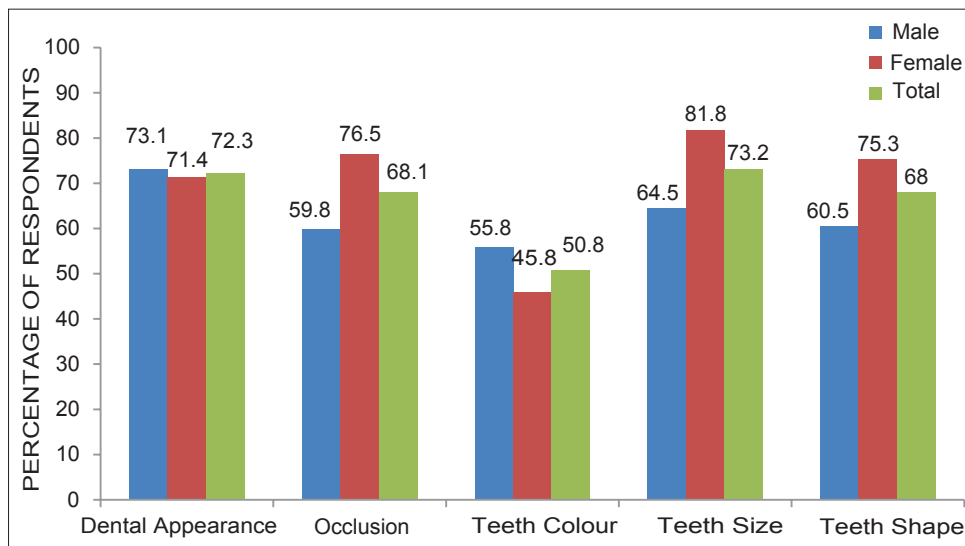


Figure 1: Distribution of perception-related to the personal dental appearance according to the gender

Table 2b: Statistical comparison of perception related to the personal dental appearance according to the type of education using Chi-square test

Satisfaction with	Inter-group comparisons					
	Dentistry versus medicine	Dentistry versus pharmacy	Dentistry versus others	Medicine versus pharmacy (NS)	Medicine versus others	Pharmacy versus others
Dental appearance	0.291 (NS)	0.958 (NS)	0.215 (NS)	0.374	0.029 (S)	0.233 (NS)
Occlusion	0.116 (NS)	0.049 (S)	0.596 (NS)	0.538	0.100 (NS)	0.048 (S)
Teeth color	0.085 (NS)	0.101 (NS)	0.010 (S)	0.824	0.198 (NS)	0.340 (NS)
Teeth size	0.001 (S)	0.001 (S)	0.001 (S)	0.738	0.305 (NS)	0.244 (NS)
Teeth shape	0.001 (S)	0.001 (S)	0.026 (S)	0.713	0.547 (NS)	0.407 (NS)

$P < 0.05$ – Statistically significant response between the study groups, S – Significant, NS – Nonsignificant

among dentistry students). The satisfaction on dental appearance, occlusion, teeth color, teeth size and teeth shape did not differ significantly between medicine and pharmacy students ($P > 0.05$ for all). The satisfaction on dental appearance differs significantly between medicine and other students ($P < 0.05$ for all—higher among medicine students). The satisfaction on occlusion, teeth color, teeth size and teeth shape did not differ significantly between medicine and other students ($P > 0.05$ for all). The satisfaction on occlusion differs significantly between pharmacy and other students ($P < 0.05$ —higher among other students). The satisfaction on dental appearance, teeth color, teeth size and teeth shape did not differ significantly between pharmacy and other students ($P > 0.05$ for all). The satisfaction related to teeth shape differs significantly between male and female respondents ($P < 0.01$) (higher among females).

DISCUSSION

The demand for orthodontic treatment as well as the patient's cooperation and motivation during the course of treatment is determined not only by the clinician's assessment but also by patients' self-perception of dental appearance. Several authors have also reported a significant difference between patients' self-perceived treatment need and the normative treatment need as decided by the orthodontists.^[15,22,23] Self-perceptions of orthodontic treatment need are dictated by a multitude of factors that may or may not be measurable by traditional indices.^[24] It seems that satisfaction with dental appearance and perception of treatment need is affected by age, gender, and urban/rural areas of living. This can be explained by the greater dental awareness and attractiveness concerns of older, female, and urban populations.^[22,25-27] In this study, the satisfaction to dental appearance was similar in males and females in aspects like teeth color, whereas females seemed to be less satisfied with their occlusion and teeth size. These findings are consistent with the contradictory findings as reported by various authors.^[28,29]

In this study the students seemed to be less satisfied with their dental appearance and this finding is supported

by Kerosuo *et al.*^[30] and Lilja-Karlander *et al.*^[24] The dental students appeared to be less satisfied with their dental appearance, which may be due to the fact that concepts of esthetics are influenced by the level of dental or specialty training. Dental students become more aware of esthetics during their dental education. This result is in agreement with previous studies that showed education and dental training can affect the individual's perception of facial attractiveness.^[31-34] It is important for clinicians to be aware of how patients perceive their own appearance because failure in communication may result in patient dissatisfaction despite well-intentioned treatment planning on the part of the clinician.

CONCLUSION

Females are more dissatisfied with their dental perception. Furthermore, dental education also affects an individual's self-perception of dental appearance. Hence, it is of utmost importance to a clinician to understand the patients' perceptions, desires and apprehensions to render successful treatment to the patients' satisfaction.

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