



**PERCEPTION OF FACIAL PROFILES, SELF AWARENESS OF AESTHETICS
AMONG UNDER GRADUATES AND POST GRADUATE DENTAL STUDENTS OF
INDIA**

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ABSTRACT:

Introduction: Assessment of profile in orthodontics aims to improve self esteem and satisfaction of the patient regarding how attractive and confident they feel. The dental student's perception towards self awareness of aesthetics and perception of facial profile of their own which helps in determine the better diagnosis and treatment planning in orthodontic treatment.

Materials and Methods: Total of 180 dental students (undergraduates and postgraduates) of Daswani Dental college and Research Center, Kota, Rajasthan will be taken. Profile photos of participants will be analyzed by two orthodontists who matched the individual profile photos to given silhouettes. Agreement between participants and orthodontists will be evaluated by using proper statistical Analysis. The differences among groups in identifying their own profiles and differences among profile types in satisfaction with their appearance will be compared using Chi-square test.

Results: The study showed that significant results in most of the questions of dental aesthetics suggesting that as the students progresses in academics, the degree of dental Knowledge and awareness about dental aesthetics increases. Along with questionnaires we got significant results when two orthodontists compared the results of comparison of facial



profiles of students with given silhouette and it confirmed that as the student started understanding the facial profile, the importance of profile and their role in facial beauty increased as the student progresses in academics .

Conclusion: A questionnaire study evaluated the awareness about aesthetics and knowledge about of facial profile among Interns and Postgraduate students were much more compared to students in first years to final years. Thus as the students progressed in academics, the positive attitude towards orthodontic treatment for better smile and knowledge for profile is increased.

Keywords: perception, self awareness, aesthetics

INTRODUCTION:

Facial profile attractiveness plays an important role in orthodontic treatment, orthognathic surgery, and plastic surgery. Most studies concerning the facial profile have used subjective questionnaires as the primary method. The region that people think they were focusing on may not be the place where their visual attention was fixed.⁽¹⁻³⁾

Despite the similarities, human faces differ, but beauty and harmony remain among the most desirable facial characteristics humans seek and long for.⁴ The facial profile and dental aesthetics is an important factor when determining facial attractiveness.

Furthermore, in most cases facial appearance is probably the most important factor contributing to overall physical attractiveness⁵.

Orthodontists assess the facial profile to clinically judge the facial harmony of orthodontic patients; but how aware is the public of their facial profiles?⁴

Esthetics is judgmental commodity, and the assumed variability in individual judgments (beauty lies in the eye of the beholder - Plato) makes it difficult to make generalized statements^(6,7,8).

Beauty is a subjective concept, and the perception with regard to the fact that which face is beautiful can be influenced by ethnicity and culture as well as individual opinion^(9,10).

People with attractive faces and good aesthetics are regarded socially as more competent, successful and likeable¹¹. It has been shown that facial profile and dental aesthetics are sufficient to affect a person's appearances and might put that person at a social disadvantage.



Orthodontic treatment is carried out to improve patient's overall facial appearance. Thus, individual's attitude to his or her own malocclusion is an important factor in determining whether patients need treatment or not¹².

Hence, the study conducted to determine how aware the dental students are of their own profile and to assess the self awareness of aesthetics and perception of facial profile among 1st year, 2nd year, 3rd year, 4th year, Interns and post graduate dental students.

MATERIALS AND METHODS:

The study comprised of a total of 180 students divided into Six groups of 30 students were taken irrespective of gender with age group of 17-35 years of Daswani dental college and research center, Kota, Rajasthan :

Group I: First-year dental students.

Group II: Second-year dental students.

Group III: Third -year dental students.

Group IV: Final-year dental students.

Group V: Interns.

Group VI: Post graduate dental students.

Every student had been given set of 10 self administered questions regarding self awareness of dental aesthetics, perception of profile. Students had to

choose from various silhouettes, the one that most resembled their own profile. Profile photos of participants will be analyzed by two orthodontists who matched the individual profile photos to given silhouettes.

Table 1 of Questionnaires:

NO.	Questionnaires	Yes	No	May Be
1	Do you feel confident while smiling?			
2	Are you happy and satisfied with your dental esthetics?			
3	Do you find any trouble while speaking, chewing or experience any facial muscle pain caused by malaligned teeth?			
4	Do you think your smile could be better if teeth were better aligned?			
5	Do you cover your mouth while smiling/ speaking because of malalignment and appearance of the teeth?			
6	When you look at mirror, do you find any defects in your smile, due to gums or due to teeth alignment?			
7	Do you photograph better from one side of your face?			
8	Do you think that your profile contributes to the facial beauty?			
9	Do you give importance to the profile (side view) of any person's face?			
10	Do you think that orthodontic treatment will make your smile and profile better?			

Students have to Compare their own profile (side view) with given silhouette profiles: (select by putting right tick mark):



Each participant profile photograph has been taken by experienced post graduate student. Profile photos of participants will be analyzed by two orthodontists who matched the individual profile photos to given silhouettes.

STATISTICAL ANALYSIS:

The statistical Analysis was done using MS EXCEL and SPSS (Statistical package for social sciences) Version 21.0 statistical analysis software. The questionnaires and the differences among groups in identifying their own profiles and differences among profile types in satisfaction with their appearance will be compared using Chi-square test. The statistical significance level was set up at $P < 0.05$ for statistical analysis.

RESULTS:

Results of questionnaires:

There was no significant association between these five questions and the different groups of the students :1) Do you feel confident while smiling?, 2)Do you find any trouble while speaking, chewing or experience any facial muscle pain caused by malaligned teeth ?,3) Do you cover your mouth while smiling/ speaking because of malalignment and appearance of the teeth ?, 4)When you look at mirror, do you find any defects in your smile, due to gums or due to teeth alignment ?, 5)Do you give importance to the profile (side view) of any person's face?

Other five questions were significant,

01. Are you happy and satisfied with your dental esthetics? P value =0.0429. ($P < 0.05$) and according to percentage first year , and second years were less satisfied (37% and 40%) ,third year (57%), final year (60 %),Interns and Post graduate were satisfied (63%).
02. Do you think your smile could be better if teeth were better aligned? Results showed us significant P value = 0.0010. ($P < 0.05$) and according to percentage undergraduate students were saying yes (43%) and post



graduate were saying yes with huge difference (87%).

03. Do you photograph better from one side of your face? Results showed us significant P value =0.00428. (P<0.05) and according to percentage positive results reduced sequentially first years (yes =67%), second year (53%), third year and final year (50%), interns (43%)and post graduate students(yes = 33%).

04. Do you think your profile contributes to the facial beauty? P value =0.0018. (P<0.05) and according to percentage positive results increased sequentially first years (yes =40%), second years (47%), third years, final years and interns (67%) and post graduate (90%).

05. Do you think orthodontic treatment will make your smile and profile better? P value =0.0002. (P<0.05) and according to percentage positive results increased sequentially from first years (yes =37%), second year (43%), third year and final year (47%), interns (60%)and post graduate were (yes = 87%).

Table 2: Results of facial profile photograph comparison with various silhouettes using Chi square(χ^2) test :

Groups:	Straight	Convex	Concave	Chi – sq test	P value
First years	12(40%)	10(33%)	8(27%)		
Second years	14(47%)	10(33%)	6(20%)		
Third years	11(37%)	15(50%)	4(13%)	11.892	0.2923
Final years	15(50%)	12(40%)	3(10%)		
Interns	20(67%)	8(27%)	2(6%)		
Post graduates	16(53%)	11(37%)	3(10%)		

Results obtained were not significant in association between silhouette profiles and year of Study (P>0.005).

Graph 1: Orthodontist Assessment

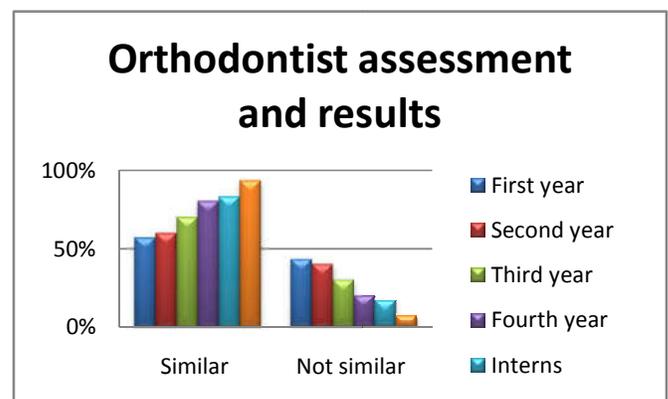




Table 3: Two orthodontists compared the results of comparison of facial profiles of students with given silhouette by different groups of students.

Groups:	Similar	Not similar	Total	Chi – sq test	P value
First years	17(57%)	13(43%)	30(100%)		
Second years	18(60%)	12(40%)	30(100%)		
Third years	21(70%)	9(30%)	30(100%)	15.69 93	0.007 7*
Final years	24(80%)	6(20%)	30(100%)		
Interns	25(83%)	5(17%)	30(100%)		
Post graduates	28(93%)	2(7%)	30(100%)		

Results obtained were significant P value =0.0077* (P<0.05) when two orthodontist compared of facial profiles of students with given silhouette by different groups of students.

DISCUSSIONS:

The importance of student's perception regarding their own profile and esthetics cannot be underestimated.

Beauty is over and above in the eye of the beholder; people do judge and treat others with whom they interact based on attractiveness; and, perhaps most surprisingly, beauty is more than just skin-deep¹³.

Psychological reports indicate that facial attractiveness is the most important feature for overall appearance. Realistic self-evaluation is a defining characteristic of the efficient health care professional.⁽¹⁴⁻¹⁶⁾

Thus our results revealed that the dental students became more aware of aesthetics and importance of facial profile during their dental education.

The study showed that significant results in question (2) Happy and satisfied with your dental esthetics?[P value =0.0429] .According to percentage from first year (37%) students to post graduates students (63%) satisfaction level increased gradually.

And other highly significant results were obtained in question (4) you think your smile could be better if teeth were better aligned? [P value =0.0010]. According to percentage undergraduate students were having less positive attitude (43%) while post graduate were positive with huge difference (87%).



Thus our results about dental aesthetics confirmed that as the student progresses in academics, the degree of dental Knowledge and awareness about dental aesthetics increases.

Perception of facial profile showed significant results in our study, in question (7) you have photograph better from one side of your face? [P value = 0.00428] and according to percentage positive results reduced sequentially from first years students (67%) to post graduate students (33%).

Highly significant results obtained in question (8) you think your profile contributes to the facial beauty? [P value = 0.0018] and in question (10) you think orthodontic treatment will make your smile and profile better? [P value = 0.0002]. according to percentage positive results increased respectively from first year students (40%) and (37%) till post graduate students (90%) and (87%).

Regarding self-satisfaction about their teeth, the study indicates that the subjects did make fairly accurate self-evaluation of their own teeth and malocclusion. The ungratified subjects with their dental aesthetics had a positive attitude toward orthodontic treatment. The satisfied subjects with their dental aesthetics were

aware of the attractiveness of their teeth. This is highly statistically significant. Similar results were obtained with Baswaraj et al study on dental students perception on orthodontic treatment¹⁹.

Thus our results about perception of facial profile by the different groups of dental students confirmed that as the student progresses in academics, the importance of profile and their role in facial beauty increases which had shown similar results with Jen soh et al¹⁷. who conducted a study on comparative assessment of perception of Chinese facial profile.

CONCLUSION:

The following conclusions were obtained:

1. Among all six groups, Interns and post graduate students were able to identify their profile as accurately as orthodontists, as compared to first years and second years.
2. A questionnaire study evaluated the awareness about aesthetics and knowledge about of facial profile among Interns and Postgraduate students were much more compared to students in first years to final years.
3. As the students progressed in academics, the positive attitude towards



orthodontic treatment for better smile and better profile increased.

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Conflicts of interest:

There are no conflicts of interest.

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