PSYCHOLOGICAL ANALYSIS OF DENTAL STUDENTS EXPOSURE TO FACIAL PHOTOGRAPHS

RUNNING TITLE: FACIAL PHOTOGRAPHS ANALYSIS BY DENTAL STUDENT

1Preethi Krishnan, 2Dr. Navaneethan
1Final year BDS, 2Senior Lecturer and Guide
Department of Orthodontics,
Saveetha Institute of Medical and Technical Science,
Saveetha Dental College,
Chennai, Tamil Nadu, India.

ABSTRACT:

AIM:
The aim of the study is to analyse the perception of students to their facial photographs.

OBJECTIVE:
To assess whether exposure to photographs of themselves influences willingness to undergo treatment.

MATERIALS AND METHODS:
50 students of age group from 18-20 are selected. Photographs of the frontal view of the face and the profile view of the face, both at rest and while smiling, were taken of each participant. Photo copy of their own images were given at T0 and T1. Each of the students in the study completed a questionnaire at T0 and T1 exploring happiness regarding their smiles and their facial profiles, as well as willingness to undergo treatment.

REASON:
The reason for this study is to find whether the photographs of their own images increase desire of orthodontic treatment.

Keywords: Dental attractiveness, face in profile, Orthognatic surgery, anteroposterior, transverse.

INTRODUCTION:

Modern society has placed a strong emphasis on physical appearance. The desire to improve dentofacial aesthetics has been found to be the primary motivation for patients seeking orthodontic care, regardless of structural or functional considerations[1]. Therefore, self-perception of their own dentofacial attractiveness is a key motivational factor for people seeking orthodontic evaluation and is an important factor in their expectation of treatment outcome[2]. However, this self-perception essentially is based on how individuals see themselves in the mirror, with frontal views of the face and smile typically representing their primary concerns[3].

Although orthodontic diagnosis is carried out in three dimensions (transverse, anteroposterior, and vertical), orthodontists place major treatment planning emphasis on the aesthetics of the face in profile. Because most people cannot characterise their own profile, a difference does exist between orthodontic professionals and the public regarding perceptions of facial profile aesthetics[4].

The aim of the current study, was to determine whether exposure to smile and profile photographs influenced dental student’s self-perception of dentofacial attractiveness and willingness to undergo treatment.

MATERIALS AND METHOD:

About 50 dental students in saveetha dental college were taken in the study. Both males and female dental students were taken in the study, their age group ranges between 18 to 22 years old. Photographs of the frontal view of the face and the profile view of the face, both at rest and while smiling, were taken of each students. Students were give a soft copy of their photographs and ask to examine the image in home. Students were also allowed to show and discuss about their facial photographs with their family members and neighbours. After viewing the photographs for few minutes, questionnaire were asked to the students at initial observation (T0) and after two weeks(T1). The questionnaire exploring happiness regarding their smiles and their facial profiles, as well as willingness to undergo treatment.

The questionnaire asked to patients were

1. Do you like your appearance of your smile?
   a) very much b) somewhat c) little bit d) not at all

2. Do you like appearance of your face in profile?
   a) very much b) somewhat c) little bit d) not at all
3. Which treatment option would you seek to change the appearance of your smile?
   a) removable orthodontic appliance
   b) fixed orthodontic appliance
   c) surgery
   d) none

4. Which treatment option would you seek to change the appearance of your face in profile?
   a) removable orthodontic appliance
   b) fixed orthodontic appliance
   c) surgery
   d) none

RESULT:

At first interval of observation (T0), about 32% of subjects said that they liked the appearance of their smile, at T1, there is mild decrease in the percentage of students who liked their appearance of smile “very much”, about 14% of student said that they liked the Appearance of smile at after interval of two weeks. This shows that the significant difference can be seen between two interval of time. Subjects were able to recognise the skeletal form through their facial photographs

About 40% of subject rated their smile as “somewhat” in the first observation which is at T0, at the second observation there is transient increase in the percentage of student who have rated their smile as some what , which increases by 10%, thus about 50% of subject rated their smile as somewhat at T1. Due to constant exposure to facial photographs, influences the students to increase the perception of their dental attractiveness. And 6% of students rated that the appearance of their smile as “little bit” at T1, similarly there is a increase in the result regarding the student rated their smile as little bit at the second observation. While at T1, there is about 10% patient said that they rated their smile as little bit. Many of the student were under this category, where 20% of student said that their smile was not liked by them, they had rated their smile as “Not at all”.

Regarding the appearance of the face, about 32% of student rated their face in profile as very much at T1, while there is increase in student who had rated their face in profile as very much, at T1, 38% of students had rated their face in profile as very much, that is there is a increased rate about 6%. The subject who rated their face in profile as some what involves about 30% at the initial observation (T0), and at T1, there is a decrease in the student rated their face in profile as some what about 26% of student rated their face in profile as some what. About 14% of student rated their appearance of face in profile as little bit at T0 and regarding the rating about the face in profile as little bit at T1, about 21% of student have rated their face in profile as little bit. 22% of student rated that the appearance of their face in profile as not at all, at initial observation. 14% of student rated that the face in profile as not at all at T1.

On the basis of treatment of face and smile, at T0, 64% of student were willing to removable orthodontic treatment for the face, while at T1, there is a gradual decrease in percentage of student in case of removable orthodontic treatment, the percentage of subject willing were 32% of students. In case of fixed orthodontic treatment at T0, 24% of subject were willingness, at T1, the percentage of students willing for fixed orthodontic treatment were about 38% of students. Regarding the surgical treatment for smile at T0, has lesser percentage of student when compared to T1, about only 4% of subjects were willing for surgery, but after exposure to facial photographs, at second observation T1, 8% of students were willing to surgery. Finally about 14% of students said that they requires none of the treatment at T0, at T1, 22% of subject said none of the treatment was required for their smile.

Similarly in case of treatment for face, the highest percentage of students seen in category of surgery, both at T0 and T1. About 45% of students were willing for surgery as the treatment of face at T0, while at T1, 52% of student were willing for surgery as the treatment of face after exposure of facial photographs after two weeks. At T0, none of the students were willing for removable orthodontic treatment. But at T1, about 6% of student were willing for removable orthodontic treatment. In case of fixed orthodontic treatment, there was about 10% of students were willing for fixed orthodontic treatment, at T1, 26% of student were willing for fixed orthodontic treatment. There is a prominent difference in case of students stated that none of the treatment is required for their face, at T0, 36% of student wear not willing for any treatment, and decrease in percentage of subject not willing for treatment of face , T1, 22% of student were not willing for treatment for face.

DISCUSSION:

Few previous studies have investigated the self-perception of the attractiveness of the face, especially in the profile view, of individuals seeking orthodontic evaluation. The ability of patients to recognise their profiles from among various silhouettes and photographs or to reproduce their own profiles had already been assessed[8,9]. And another study investigated whether subjects requiring orthognathic surgery had seen their own facial profiles, and investigators assessed, using a questionnaire, whether subjects were happy with the appearance of their profiles[10,7].

In the present study, a large sample of dental students was recruited. Exposure to the view of their facial profiles and smile photographs, as well as discussions with relatives and friends.
In previous study, it is said that there is no change in questionnaire rating between T0 and T1, reason behind that was given as that patients were not exposed to their facial photographs and does not change.

In addition, previous studies have already concluded that patients are somewhat inaccurate in evaluating themselves, particularly regarding their own profiles. Therefore, it is reasonable to assume that dental students do not usually see themselves from a lateral view and are thus unfamiliar with their own profiles unless exposed to photographs[11]. In the present study care was taken to avoid any esthetic judgments made by the clinician, and, for the same reason, no explanations of the goals of the study were given.

In previous study, it is stated that at the second interval that is T1, 11% of patients were willing to change their appearance of smile and 45% of subjects were wished to change appearance of face by undergoing more comprehensive procedures. In present study, at T1, there is a significant change in the students willingness for treatment, it can be seen in graph 2, that the 50% of subjects have changed their opinion to change their looks.

It can be seen that it is visible change in the perception of student between first and second interval of time, where they is a decline of students from the category of face and smile liked very much to some what liked their face and smile in previous study, it is said that there is no steady change between the two interval of time.

The reason given for no significant change as the patient may not viewed their facial photographs of themselves in their home or the patient may not feel different between the profile and smile. But in our case of study, may be the dental students can differentiate the lateral view and skeletal form, we could see a significant change in their opinion.

CONCLUSION:
Exposure to facial photographs would reduce the discrepancy between dental students actual and perceived levels of facial attractiveness. Prolonged Exposure to facial photographs increases the perception of facial attractiveness and also increases the willingness of students for treatment. It can be clearly shown that the facial photographs such lateral photographs, and also the time interval for exposure of photographs also influence the dental students for better understanding the skeletal form which increase the visual emphasise on dentofacial esthetics.

REFERENCES:


