

INSIGHT OF SMILE ATTRACTIVENESS AMONG COLLEGE STUDENTS IN CHENNAI CITY

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ABSTRACT

Introduction

This study aimed to identify factors that affect smile perception and attractiveness among the college students in Chennai city.

Materials and method

A cross sectional pilot study was conducted among 70 college students in Chennai city, among which 35 were dental students and 35 were non-dental students. The picture of an ideal smile was selected from the internet and the same smile was edited using photoshop to create other smile variations. The variations were gummy, diastema, midlineshift, and reverse smile. A questionnaire was prepared which included demographic data, and questions based on the smile and their attractiveness were asked

Results

In this study 50 students from both dental and non-dental background selected gummy smile to be the most aesthetic smile. However the students from dental background were able to identify that reverse smile is not aesthetic where as non-dental students found it appealing. ($p=0.023$) also more number of female students were able to identify if something was different in a smile.

Conclusion

From this study it can be concluded that students with dental background had better perspective towards an ideal smile. Students who had the knowledge of variation in smile logically had better insight about the smile.

Keywords: Smile attractive message, gummy smile, diastema, midline shift, reverse smile.

INTRODUCTION

The cultural definition of dental beauty differs, however, across different populations, regions, countries, and even continents. It is also dynamic, with parameters of dental beauty changing across time, for varying reasons.(1)

People are very cautious about their appearance. There is a high demand for cosmetic dentistry because people want to resemble their favorite celebrity. Because of this increase concern it is important to understand the factors that decide whether a smile is attractive or not.

The study of beauty norms and standards is done to come up with the "golden smile" that can be used in diagnostic methods and aesthetic treatment plans.(2)

An ideal smile may not be the right term instead a balanced smile can be achieved by proper positioning of teeth.(3) A smile which appears attractive in the first glance need not be so in the second, this explains the concept of threshold level of acceptable deviation. (3,4,5,6)

Facial attractiveness and smile attractiveness are closely connected to each other because in any social interaction attention of speaker is directed towards the mouth and eyes of the speaker.(7)

A attractive smile does not only depend on tooth position, shape, size or color of the teeth but also on the visible gingiva and frame of the lips.

Smile attractiveness plays a major role in the social life of a person. An individual evaluating their own smile in photographs are rare because they are mostly consciously posed. The mouth is the center of attraction and thus smile is the most important factor in designing the attractiveness of the face. (8)

Since the upcoming generation are more into the aesthetic appearance this study was conducted among the college students in Chennai city.

Thus this study aims to evaluate the insight of smile attractiveness among the college going students of Chennai city.

MATERIALS AND METHOD

A cross sectional pilot study was conducted among 70 college students in Chennai city, among which 35 were dental students and 35 were non-dental students. An ideal smile was selected from the internet and the same smile was edited using photoshop to create other smile variations. The variations were gummy, diastema, midlineshift, reverse smile. A questionnaire was prepared which included demographic data, and questions based on the smile and their attractiveness. It was then sent to the students via survey monkey and the data was tabulated and analyzed using SPSS software version.22.

RESULTS:

The sample size of n=70 (35 dental and 35 non-dental student) participated in this study.

The average of the participants was 20.31+_ years. 71.4% of the students found gummy smile to be the most aesthetic smile and 100% of the students found diastema to be the least aesthetic smile.17.1% of Non- dental students selected reverse smile to be the most aesthetic however none of the dental students selected it. The results after Chi- square test had a significant value of p=0.023. Also, females were able to identify if a smile was different than the ideal smile more than the males. Around 92% of the males found out something was different with a smile with diastema which was evident. However only 28% and 18% were able to identify that something was wrong with reverse and midline shift respectively.

Around 58.5% and 44.2% of the females were able to identify if something was wrong with reverse and smile with midline shift respectively.



Figure 1: IDEAL SMILE



Figure 2: 1.Diastema; 2.MidlineShift; 3.Gummy; 4.ReverseSmile



EDUCATION * MOSTESTHETIC Crosstabulation

Count		MOSTESTHETIC			Total
		MIDLINE SHIFT	GUMMY	REVERSE SMILE	
EDUCATION	1	9	26	0	35
	2	5	24	6	35
Total		14	50	6	70

Figure 3: Education vs mostesthetic smile crosstabulation. (1= Dental and 2= non-dental)

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.223 ^a	2	.027
Likelihood Ratio	9.557	2	.008
Linear-by-Linear Association	5.165	1	.023
N of Valid Cases	70		

Figure 4: Chi-square test for education vs most aesthetic smile.

DISCUSSION

In this study it was found out that students with dental background identified variation in smile from ideal smile better than the students without dental background.

A study conducted by Kihn WP et al suggests that tooth color is a major factor in deciding the attractiveness of the smile. (11) Hadeel A Mokhtar et al analyses the attractiveness of the smile among Saudi population based on smile line and form, gingival aesthetics, midline, symmetry and that study has a statistical difference in evaluation of gummy, diastema and reverse smiles. (1)

Geron et al concluded in their study that gingival exposure is unaesthetic and if it is more than 1mm in the lower arch it was considered very unaesthetic. This was contradictory to the results obtained in this study. However the perspective differs from person to person, the treatment plan for such cases should be based on the patient's need. (10)

Dong et al concluded that increased visibility of lower teeth and gingiva got the least score in their study cause it was considered as a sign of aging. (11) The treatment for gummy smile is emphasized based on age and sex differences. For example, Higher smile lines with substantial gingival display are regarded in the literature as a serious esthetic problem, especially in males, where lower smile lines are the norm; whereas higher smile lines are considered to be the norm for females. (12,13,14)

Pieter Van der Geld et al stated that The lips are the controlling factor in the smile. The higher the smile line, the more visible the teeth and gingiva are, and the more they will determine the appearance of the smile. Higher smile lines that fully display the teeth are associated with youth. Lower smile lines are associated more with old age, as the lips are supposed to sag when a person grows older. (15) Smiles with irregular gingival display was judged to be unaesthetic and was compared to personality of the person. (16)

Pinho et al conducted a study among layperson, orthodontist and prosthodontists and concluded that they had different perspective about gingival exposure and midline. (17) This is similar to the results obtained in this study.

Swetha sridharan et al concluded in their study that diastema and reverse smile are the least aesthetic among the other smiles. (18) This is in agreement to the findings in this study.

Sridharan et al in his study among orthodontists and other specialty dentists concluded that orthodontists criticized smile more than other specialty dentists and also diastema was regarded as the least aesthetic smile in their study. (19)

In this study, age did not affect the rating of smile attractiveness, whereas the profession and gender of the raters had an effect. This is in agreement with the findings of Gracco *et al.* (20)

CONCLUSION

From this study it can be concluded that students with dental background had better perspective towards an ideal smile. Students who had the knowledge of variation in smile logically had better insight about the smile.

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