
Importance of Dental Aesthetics Among Young Adults - A Survey

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Abstract: Smiling is one of the important factors of life that creates an impression on a person. Being dentally aesthetic and physically well presentable boosts your confidence on a higher level. Yet this might be affected by certain habits during the growth of permanent teeth. Prevalence of malocclusion and misalignment is higher in adolescent children, thereby the confidence might get hit. The aim of this study is to see how much importance is given to dental aesthetics by young adults. The study subjects were 165 young adults aged 12-20 years, where they answered a questionnaire of 11 questions dealing with dental aesthetics and its psychological impact. Statistical analysis (Chi-square) was run on the data collected using SPSS software version 23. The results showed that even in such a competitive world to stand out from the crowd most people still chose to flaunt their flaws and lead a happy life and be successful. The results of the survey showed that there is no significant relationship between misalignment and mental wellness on the respondents. It also showed that the respondents did not find any impact in their professional or personal success due to the incidence of misalignment. The future scope of this study is that it would create awareness among people on the effect of dental aesthetics on a person and change the behavior/ way of treating people.

Keywords: Malocclusion; Misalignment; Aesthetics; Smile; Confidence; Psychological impact; Adolescents.

INTRODUCTION

Smiling is a feature of the face that attracts a person immediately. A most noted feature of the face in the smile. It has the ability to boost one's mood and feel refreshing instantaneously. A nice confident wide smile increases the self-esteem of a person. Aesthetics have become a major reason to feel pleasant and warm (Bellot-Arcís *et al.*, 2015). An attractive and pleasing smile easily enhances the impression of an individual in society and strengthens interpersonal relationships. Often it also motivates to face issues confidently rather than laying low (Ajay *et al.*, 2017). Smile is also an important facial expression that has the ability to lighten/ smoothen any conflict/ unfriendly/ emotional situation (Jain *et al.*, 2018).

Malocclusion is a prevalent dental problem that most people suffer with. It is basically the crowding of the teeth which makes it impossible to close the mouth properly (Manipal *et al.*, 2014). Several intrinsic and extrinsic factors lead to malocclusion (Jyothi *et al.*, 2017). Malocclusion is most prevalent in adolescents as the permanent teeth start erupting. Certain habits lead to malocclusion since young age (Kragt *et al.*, 2016). This creates an impression on the child when he/she goes out to school/ play with friends etc. In this world, it is easy for a person to comment on another person based on their external appearance and don't think through how it would mentally and emotionally affect the other person irrespective of their efforts to keep them presentable (Yi *et al.*, 2016).

Misalignment is another commonly faced issue by many young and old people. It develops from childhood due to habits like thumb sucking etc. This is mainly prevalent when the tooth size is big in comparison to the jaw (Afroz *et al.*, 2013). This causes discomfort and difficulty while chewing. Misalignment of teeth stains the tooth, jaws and muscles and increases the risk of breaking single/ multiple teeth (Duraisamy *et al.*, 2019). It also affects the overall facial appearance of a person making them self-conscious and affects their self-esteem.

Misalignment can lead to serious oral health complications[(Dawoodbhoy, Delgado-Angulo and Bernabé, 2013).

Many researches show that people who consider their dental appearance as less attractive often feel discouraged in performing and presenting themselves and constantly put efforts to present themselves well[(Hassan, Hassan and Linjawi, 2014). They generally tend to avoid not only presenting themselves in public but also confront in front of the mirror[(Selvan and Ganapathy, 2016; Vijayalakshmi and Ganapathy, 2016). Studies show individuals with less attractive dental appearance have less concern on their oral hygiene comparatively[(Nicodemo, Pereira and Ferreira, 2008). Therefore it is proven that dental aesthetics has an important role in the overall enhancement of the physical, social, and psychological aspects of an individual[(Azuma *et al.*, 2008).Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Deogade, Gupta and Ariga, 2018; Ezhilarasan, 2018; Ezhilarasan, Sokal and Najimi, 2018; Jeevanandan and Govindaraju, 2018; J *et al.*, 2018; Menon *et al.*, 2018; Prabakar *et al.*, 2018; Rajeshkumar *et al.*, 2018, 2019; Vishnu Prasad *et al.*, 2018; Wahab *et al.*, 2018; Dua *et al.*, 2019; Duraisamy *et al.*, 2019; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Gheena and Ezhilarasan, 2019; Malli Sureshbabu *et al.*, 2019; Mehta *et al.*, 2019; Panchal, Jeevanandan and Subramanian, 2019; Rajendran *et al.*, 2019; Ramakrishnan, Dhanalakshmi and Subramanian, 2019; Sharma *et al.*, 2019; Varghese, Ramesh and Veeraiyan, 2019; Gomathi *et al.*, 2020; Samuel, Acharya and Rao, 2020)

The aim of this study is to see how much importance is given to dental aesthetics by young adults and to what extent it affects them and bring a relationship between the two.

MATERIALS AND METHODS

To analyse the importance given to dental aesthetics and its psychological impact on young adults a questionnaire of 11 questions was formulated and uploaded in google forms. This questionnaire was randomly circulated to various people making sure the respondents who took the survey aged between 12-20 years of age. 165 random participants' responses were collected. All the data were entered in an excel sheet and coded properly which was then entered in IBM SPSS Statistics 23 software. Descriptive analysis was run to find the frequency distribution of the relation between dental aesthetics appearance and its impact on the behavior of the respondents, mental wellness and confidence/ self esteem of the respondents and Chi-square test were run on the data to find the p value. Tables and graphs of the same were obtained and analysed.

Questionnaire

1. Do you have/had teeth alignment problems? **Yes/No**
2. Are you satisfied with your smile? **Yes/No**
3. Are you confident about your dental appearance? **Yes/No**
4. Have you ever visited a dentist regarding any misalignment or malocclusion in your oral cavity? **Yes/No**
5. Has anyone commented about your teeth that has made you uncomfortable or awkward? **Yes/No**
6. Do you know about veneers? **Yes/No**
7. Do you hold your smile back? **Yes/No**
8. Have you considered veneers as an option for your dental aesthetics? **Yes/No**
9. Do you envy other people's smiles? **Yes/No/Sometimes**
10. Does the concept of perfectly aligned teeth (like shown in advertisements) create a psychological impact on you? **Yes/No/Sometimes**

RESULTS AND DISCUSSION

All the responses were collected and entered into the Excel sheet. Then the data were analysed in SPSS software. Descriptive analysis and Chi-square test was performed. All the tables and charts were recorded and analysed. Out of 165 respondents, 55.8% had misalignment while 44.2% had no misalignment issues(Figure 1).

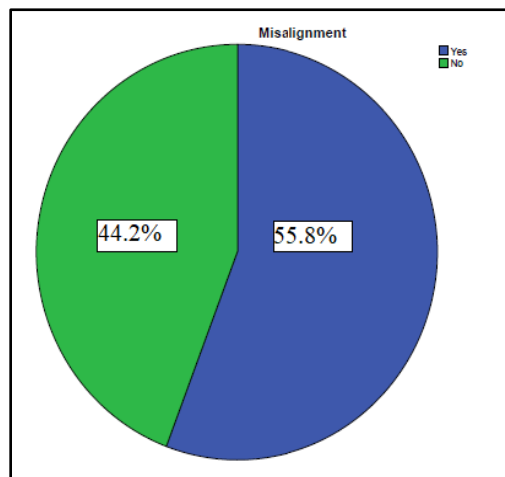


Fig.1: Pie chart shows that 55.8% of the respondents had misalignment (blue color) while 44.2% of the respondents did not have misalignment (green color).

Misalignment affects individuals psychologically. People avoid smiling often, isolate themselves, avoid public speaking, and develop social anxiety [Van Kirk, 1959]. People become so conscious about their smiles exposing irregular teeth and cut themselves down from socializing and stay at home instead. Their self-esteem also takes a massive hit and misses out many wonderful opportunities of life [Klages, Bruckner and Zentner, 2004]. The satisfaction of one's own smile is an important factor for confidence. Only 54.5% of the respondents were satisfied with their smiles, the remaining 45.5% invariable of any aesthetic issue present or absent were not satisfied with their smiles (Figure 2). Bernabe, E., et al 2009 has confirmed that satisfaction for one's own smile and misalignment is related in one dimension [Bernabé, Sheiham and de Oliveira, 2009].

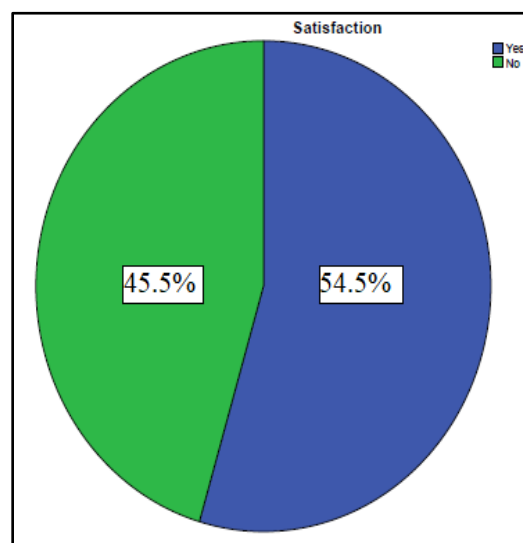


Fig.2: Pie chart shows that 54.5% of the respondents were satisfied with their smile (blue color) while 45.5% of the respondents were not satisfied with their smiles (green color).

Satisfaction on one's appearance gives them a confidence boost which helps them to stay positive in life. Many researches have concluded that appreciating one's own appearance is important to overall improve themselves in various aspects [Hankin et al., 1998].

Whether or not one is aesthetic in dental aspects he/she does have a responsibility of taking care of themselves and care about their appearance. Out of 165 respondents 56.4% seemed to care while 43.6% did not care about their appearance (Figure 3). Trulsson, Ulrika, et al 2002 said people who cared about their appearance were more socio-psychological participative [Trulsson et al., 2002].

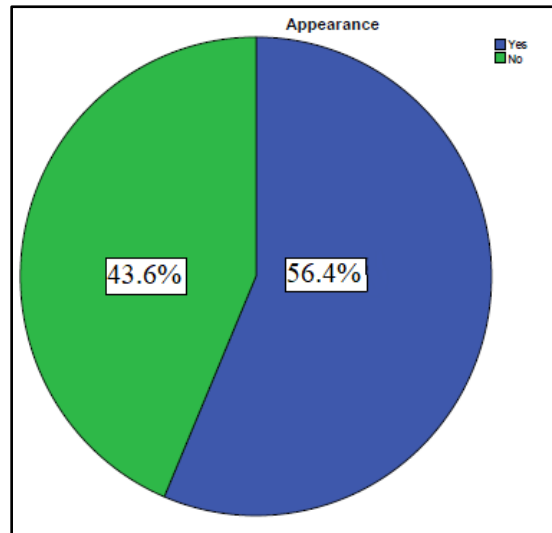


Fig.3: Pie chart shows that 56.4%of the respondents care about their dental appearance (blue color) while 43.6% of the respondents did not care about their appearance (green color).

All the people in the world seem to care about their physical appearance as it makes the first impression about oneself[Šidlauskas and Lopatienė, 2009]. 49.1% of the people consulted a dentist regarding their dental appearance while 50.9% did not consult and chose to flaunt their flaws(Figure 4). Locker D., et al 2007 concluded though it is sensitive one's own decision on appearance gives more confidence than an idea influenced by someone else[Locker *et al.*, 2007].

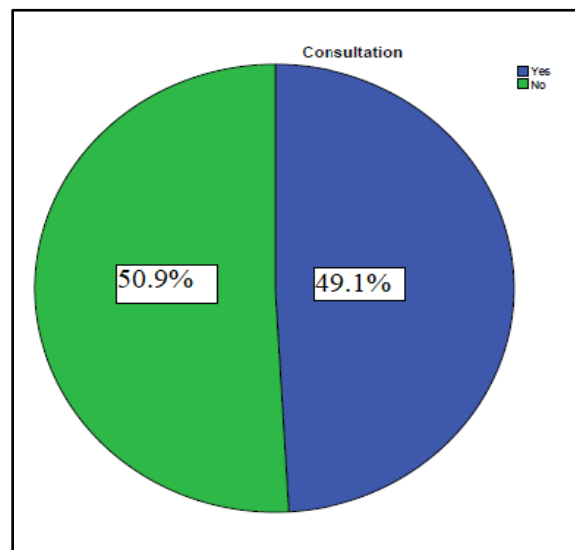


Fig.4: The pie chart shows that 49.1% of the respondents consulted a doctor regarding their dental appearance (blue color) while 50.9% of the respondents did not consult a doctor (green color).

Usually, everyone is prone to get hurt to the smallest thing others say about them as constantly fighting to prove oneself is exhausting[in Health Care and Others, 2005]. Though it is emotionally challenging 57.6% of the respondents did seem to care about any comments passed about their dental aesthetics while 42.4% did seem to get affected(Figure 5). This would affect a person emotionally and psychologically. Most people tend to seclude themselves from others in such situations[(Ganapathy *et al.*, 2016; Subasree, Murthykumar and Dhanraj, 2016; Ranganathan, Ganapathy and Jain, 2017).

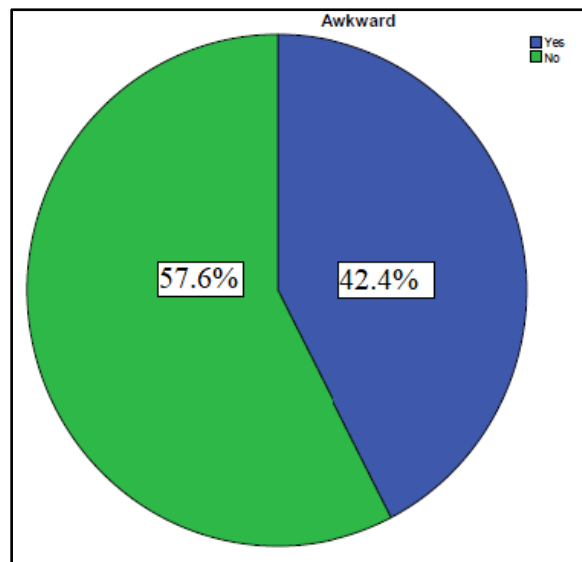


Fig.5: The pie chart shows that 42.4% of the respondents felt awkward when commenting on their dental appearance (blue color) while 57.6% of the respondents did not feel awkward (green color).

In this competitive world of constantly having to be your best, being physically attractive is also an important role player. Yet 63% of the total respondents did not know about veneers or other dental aesthetic corrective measures. Only 37% knew what veneers were and their purpose (Figure 6) (Ashok and Suvitha, 2016; Ganapathy, Kannan and Venugopalan, 2017)

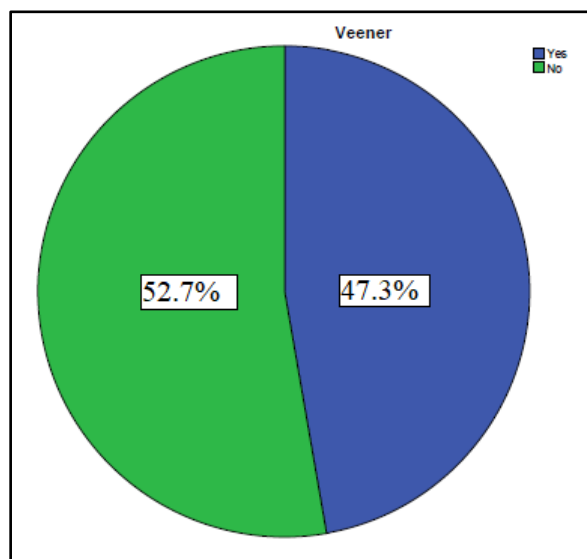


Fig.6: The pie chart shows that 47.3% of the respondents knew what a veneer is (blue color) while 52.7% of the respondents did not know what veneers are (green color).

Smiles are an easy feature to make an impression on oneself, it also attracts attention easily. Out of all the respondents 52.7% held their smile back due to various issues while 47.3% smiled happily and unconsciously (Figure 7). Ngom P et al 2005 found a linear relationship between a conscious smile and dental aesthetics (Ngom *et al.*, 2005). The research concluded that people who were confident about their dental appearance and aesthetics had a (Venugopalan *et al.*, 2014; Kannan and Venugopalan, 2018). confident smile always, while on the contrary people who were conscious about their dental aesthetics were not as confident as the previous and were very anxious by the fact that they had to smile (de Oliveira and Sheiham, 2004).

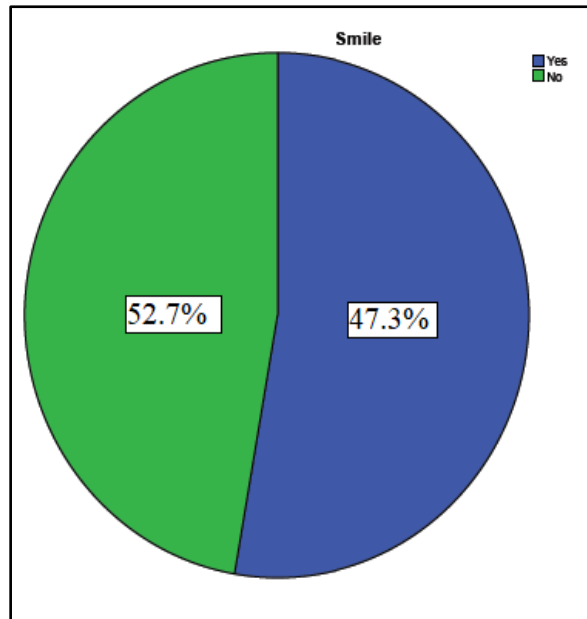


Fig.7: The pie chart shows that 47.3% of the respondents held their smile back (blue color) while 52.7% of the respondents did not hold their smile back (green color).

One thing that is the most common in everyone’s life invariably of what situation they are, is compared with someone else/ something better[(O’Brien, Benson and Marshman, 2007). Advertisements have brought a notion of perfectly aligned white teeth which is demeaning and offending many individuals. Even in such a condition 51.5% of the respondents did not envy over an advertisement while 21.8% always envied the fact and 26.7% of the respondents envied sometimes(Figure 8).

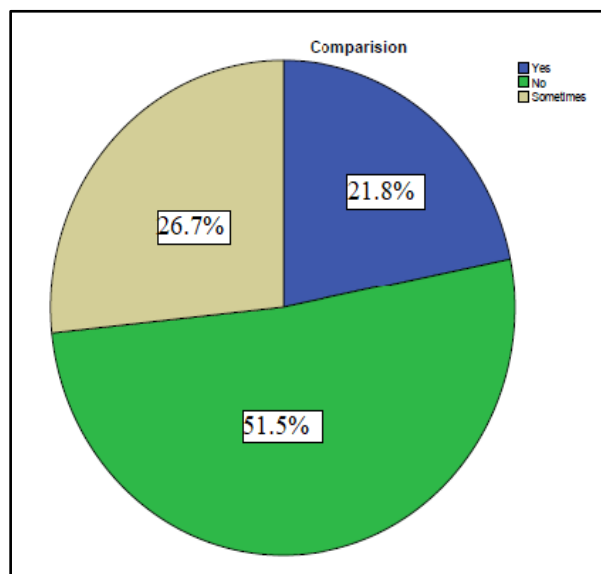


Fig.8: The pie chart shows that 21.8% of the respondents did envy others’ dental appearance (blue color), 51.5% did not envy others’ dental appearance (green color) while 26.7% of the respondents envied sometimes (pale brown color).

Though there are various methods to correct dental misalignment/ malocclusion veneer is one of the very close to natural options for dental aesthetics[(Shaw, Addy and Ray, 1980). It exactly replicates the originality of the teeth and also makes it difficult for a third person to identify that the person has undergone dental treatment. 37% of the respondents had considered veneers as an option for the correction of their dental appearance while 63% did not choose it as it also has quite disadvantages like the need to reduce adjacent teeth’ healthy structure in complicated cases(Figure 9)(Basha, Ganapathy and Venugopalan, 2018).

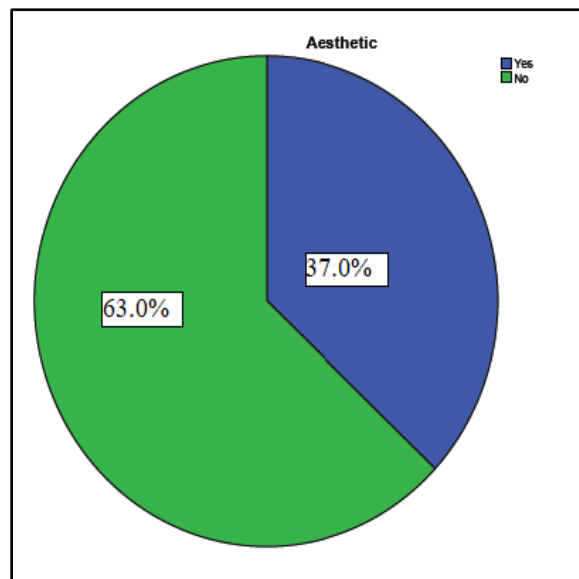


Fig.9: The pie chart shows that 37% of the respondents considered veneers as an option for dental aesthetics (blue color) while 63% of the respondents did not consider veneers as an option for dental aesthetics (green color).

Due to many emotional and psychological stress people tend to get affected easily in recent times[(Zhang, Mcgrath and Hägg, 2006; Zhang, McGrath and Hägg, 2007). Especially comments on one’s own appearance hits them on a different level. 29.7% of respondents got affected regularly while they were commented on. 19.4% of respondents got affected sometimes while 50.9% did not care about any comments passed on their appearance and still live motivated to achieve their dreams(Figure 10). Many researches show that people who are extremely confident about themselves in both appearance and knowledge have reached greater heights in terms of career and personal life[(Rusanen *et al.*, 2010).

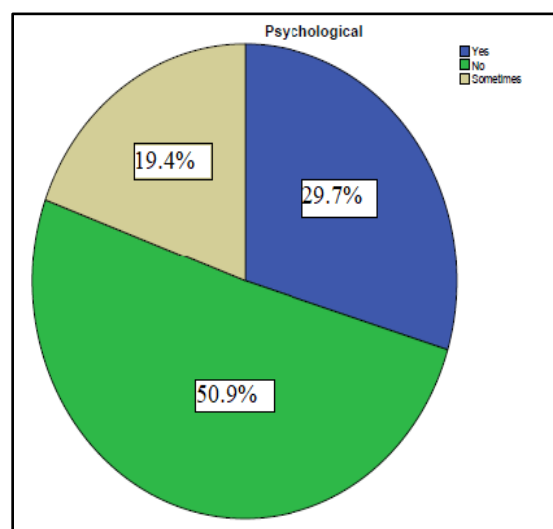


Fig.10: The pie chart shows that 29.7% of the respondents were affected psychologically (blue color), 50.9% of the respondents were not affected psychologically (green color), while 19.4% of the respondents were affected sometimes (pale brown color).

Though each aesthetic issue has an individual impact on the person’s psychological well being, one thought can influence the other. De Baets E, et al 2012 has studied the impact of dental aesthetics and appearance on one’s self-esteem and performance in life on social, psychological excellence[(De Baets *et al.*, 2012). Bernabe E, et al 2006 has concluded that individuals who liked the way they appear physically were more confident in how they present themselves and lacked any sort of anxiousness or anything when they had to present themselves in front of a crowd[(Bernabé and Flores-Mir, 2006). Taylor KR, et al 2009 studied that school-going children and adolescents face many psychological issues due to malocclusion and misalignment(Taylor *et al.*, 2009). They tend to get teased easily at school etc and are pushed into a shell where

they deny to put any efforts to improve themselves in various aspects of life. This also creates a fearfulness within them when they have to work for survival and end up not performing well in any curricular activities. Kenaely P, et al 1989 also found that aesthetics has become a necessity for people to live happily with their lives(Kenealy, Frude and Shaw, 1989). It creates an internal boost which also gives confidence in themselves to do any work. Though dental aesthetics does have an impact on one's life(Sardenberg *et al.*, 2013). People are now choosing to live their own life without any thought influences from others(Ashok *et al.*, 2014). Yet is it a necessity to know the possible effects of various actions towards a person with dental aesthetic issues and how we behave with them(Kenealy *et al.*, 2007).

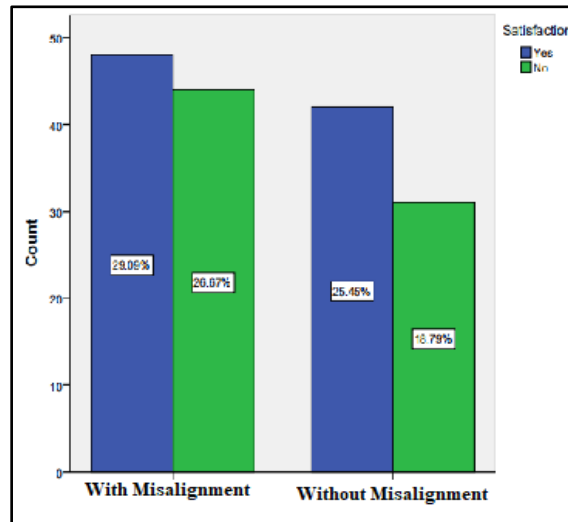


Fig.11: Bar graph represents the correlation between number of respondents satisfied (X axis) on their dental appearance and incidence of misalignment (Y axis) where blue color represents they are satisfied (respondents with misalignment - 29.05%, respondents without misalignment - 26.67%), and green color represents that they were not satisfied (respondents with misalignment - 25.45%, respondents without misalignment - 18.79%).

This shows that there is no significant difference in the satisfaction of dental appearance among the respondents with or without misalignment.

Pearson Chi square Value, P value = 0.558 (>0.05) hence statistically insignificant.

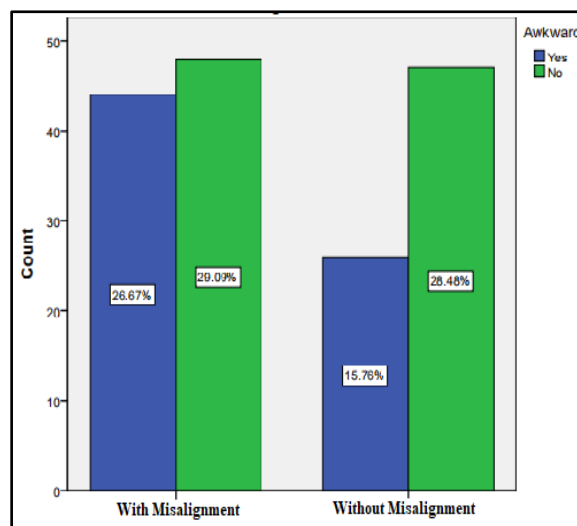


Fig.12: Bar graph represents the correlation between the number of respondents who felt awkward when commenting on their dental appearance (X axis) and the incidence of misaligned teeth (Y axis) where blue color represents that they felt awkward (respondents with misalignment - 26.67%, respondents without misalignment 15.76%), and green color represents that they don't feel awkward (respondents with misalignment - 29.09%, respondents without misalignment - 26.48%).

This shows that there is no significant difference in reaction of people with or without misalignment when commenting on their dental appearance.

Pearson Chi square value, P value = 0.115 (>0.05) hence statistically insignificant.

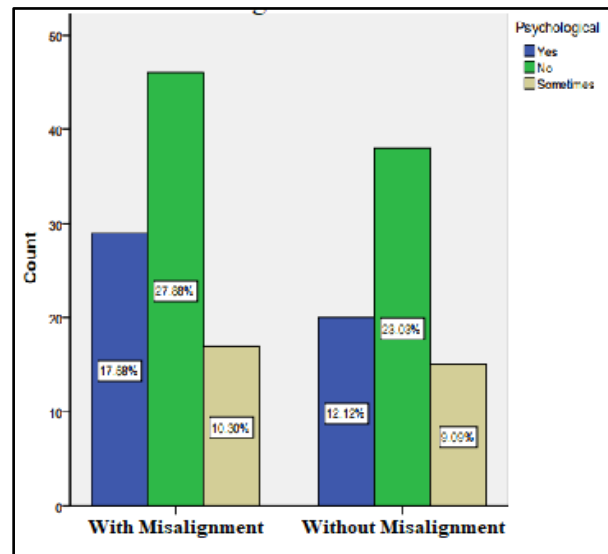


Fig.13: Bar graph represents the correlation between the number of respondents that experienced a psychological impact (X axis) and the incidence of misaligned teeth (Y axis) where blue color represents that the respondents were psychologically affected (respondents with misalignment - 17.58%, respondents without misalignment - 12.12%), green color represents that the respondents were not psychologically affected (respondents with misalignment - 27.68%, respondents without misalignment - 23.03%), and khaki color represents that they were psychologically affected sometimes (respondents with misalignment - 10.30%, respondents without misalignment - 9.09%).

This shows that there is no significant difference whether the respondents with and without are affected psychologically.

Pearson Chi square, P value = 0.837 (>0.05) hence statistically insignificant.

Our institution is passionate about high quality evidence based research and has excelled in various fields ((Pc, Marimuthu and Devadoss, 2018; Ramesh *et al.*, 2018; Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; Vijayashree Priyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021)

CONCLUSION

To be successful in life one should have confidence in themselves to confidently work and achieve in life. Self confidence builds when one is happy with they way they are and don't have comparative thoughts with others. Hence this study concludes that either one is happy or not about how they physically appear and whether they are attractive or not the self-confidence that on beholds makes a great impact on how they promote themselves and behave among people and how successful they are in life.

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79. Despite the limitations of this survey it would provide enough information on how to behave with other individuals and appreciate them for their strengths rather than talking ill about them based on their appearance. Physical appearance is never to be judged on. One's success and worth in life don't rely on their physical appearance, but rely on their knowledge and wisdom.