

# Evaluation of Knowledge and Attitude of Adults Towards Comprehensive Orthodontic Treatment Among Dakshina Kannada Population - A Questionnaire Based Study

Dr. Sharath kumar Shetty<sup>1</sup>, Dr. Shravya N<sup>2</sup>, Dr. Mahesh Kumar Y<sup>3</sup>, Dr. Devender Kumar<sup>4</sup>

<sup>1</sup>Professor and HOD KVGDCCH; <sup>2</sup>Postgraduate Student; <sup>3</sup>Professor; <sup>4</sup>Senior lecturer  
KVG Dental College & Hospital.

## Abstract:-

### ➤ *Aim and Objectives:*

To evaluate the knowledge and outlook of adult patients towards orthodontic treatment and identify the motivating factors behind their decision to seek such treatment, a study was conducted. The study also aimed to determine if increasing age posed a barrier to seeking orthodontic care and to gauge the overall attitude of patients towards adult orthodontics.

### ➤ *Methodology:*

A sample comprising 385 adult patients aged between 18 and 35 years, who were seeking orthodontic treatment, was surveyed. These patients completed a questionnaire prior to commencing treatment. Results revealed that the majority of adult patients recognized the necessity of orthodontic treatment during adulthood. Additionally, dissatisfaction with their dental appearance, particularly regarding their smile, was a significant motivator for seeking treatment at this stage of life.

**Keywords:-** Esthetics, Adults, Orthodontic Treatment.

## I. INTRODUCTION

Malocclusion, a common dental issue alongside caries, gingival disease, and fluorosis, refers to misalignment of teeth or improper jaw relationships. It often leads to discomfort and social insecurities. In adults, it may worsen due to periodontal issues. Orthodontic treatment, sought after for such cases, faces barriers like cost, treatment duration, and fear of failure. Treating adults requires considering psychological factors alongside physical ones. Adults typically seek treatment due to dissatisfaction with their smile and increased awareness of their dental needs. Educating middle-aged individuals about orthodontic options can boost acceptance. Despite initial concerns, patients generally persevere and are satisfied with the results, often recommending treatment to others. To assess attitudes toward adult orthodontic treatment and motivation levels, a questionnaire-based survey was developed.

### ➤ *Aim*

To assess the knowledge and attitude of Adult patients towards Orthodontic treatment.

### ➤ *Objectives of the Study*

- To assess the different motivational factors which lead to adults seeking orthodontic treatment.
- To assess if increased age is a barrier in seeking orthodontic treatment.
- To assess the positive or negative attitude of patients towards adult orthodontics.

## II. METHODOLOGY

This is a questionnaire based study conducted among sullia population who are willing to participate.

The study will be initiated after obtaining ethical committee clearance from kvg dental college where a interview based questionnaire document via google form.

### ➤ *Materials Required*

- Prevalidated questionnaire via google forms
- Google meet
- Smart phones
- Laptops

### ➤ *Inclusion Criteria*

- Adults in the age group above 20 years
- Adults with any kind of malocclusion

### ➤ *Exclusion Criteria*

- Patients with age group below 20 years
- Patients with cleft lip and palate
- Patients with other Craniofacial anomalies
- Patients with medical disorders

➤ *Methodology*

A Google form of the questionnaire will be created to assess the attitude of adults towards orthodontic treatment. The participants will be approached by the principal investigator and co-investigators via personal connections and Whatsapp groups. The aims and objectives of the study will be explained in a message accompanying the online questionnaire link. The questionnaire will be divided into two groups, those who had undergone orthodontic treatment in the past and those who had not. Each group will be exposed to a different set of questions. This division will be made to understand the difference in perception between those who had undergone orthodontic treatment in the past and those who had not. The people who have had treatment

in the past were asked about their initial motivation for the treatment and its effect on their self-esteem. The other group will be asked whether they feel that they should have undergone orthodontic treatment at a younger age. At the end of their questions, both the groups will be asked if they would be willing to undergo orthodontic treatment at their current age. Their answers will be analyzed based on their past treatment experience. The questions will be a mix of multiple choice, short answer and checkbox type questions. The participants will be directed to different sections of the questionnaire depending on their answer to the questions marked with a '\*'. This helped in ensuring that the participants were not unnecessarily exposed to questions that did not apply to them.

**III. STATISTICAL ANALYSIS**

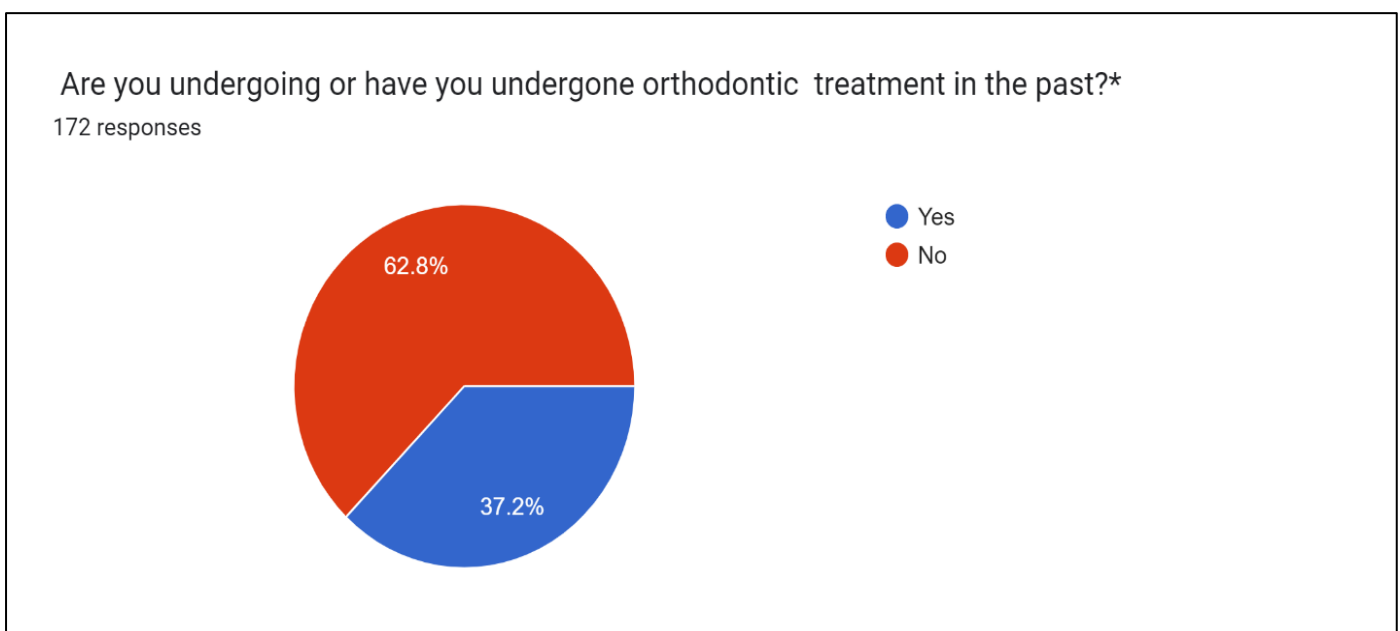


Fig 1 Are you Undergoing or have you Undergone Orthodontic Treatment in the Past?\*

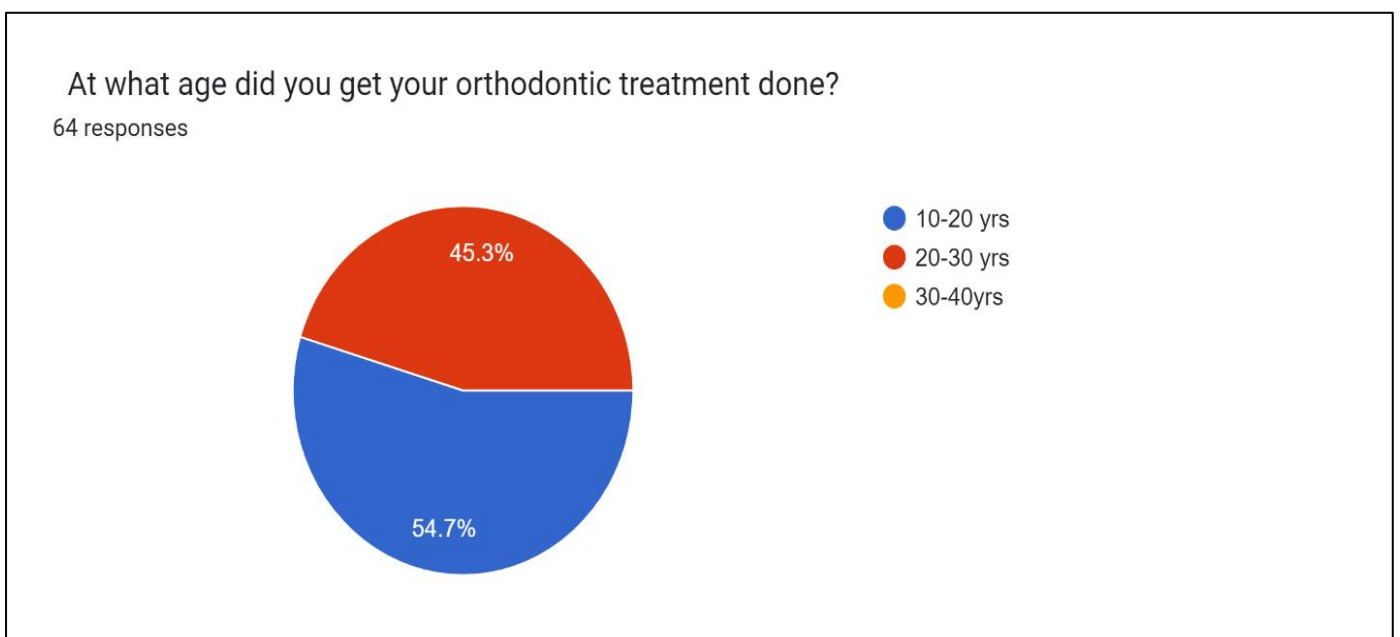


Fig 2 At what Age did you get your Orthodontic Treatment done?

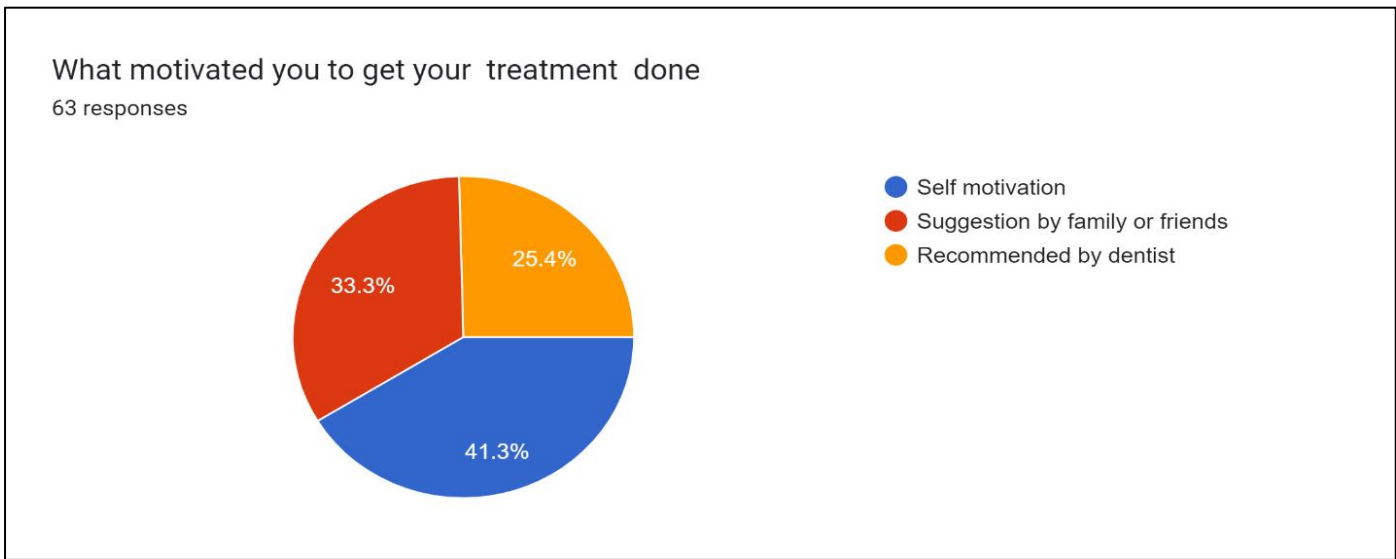


Fig 3 What Motivated you to get your Treatment done

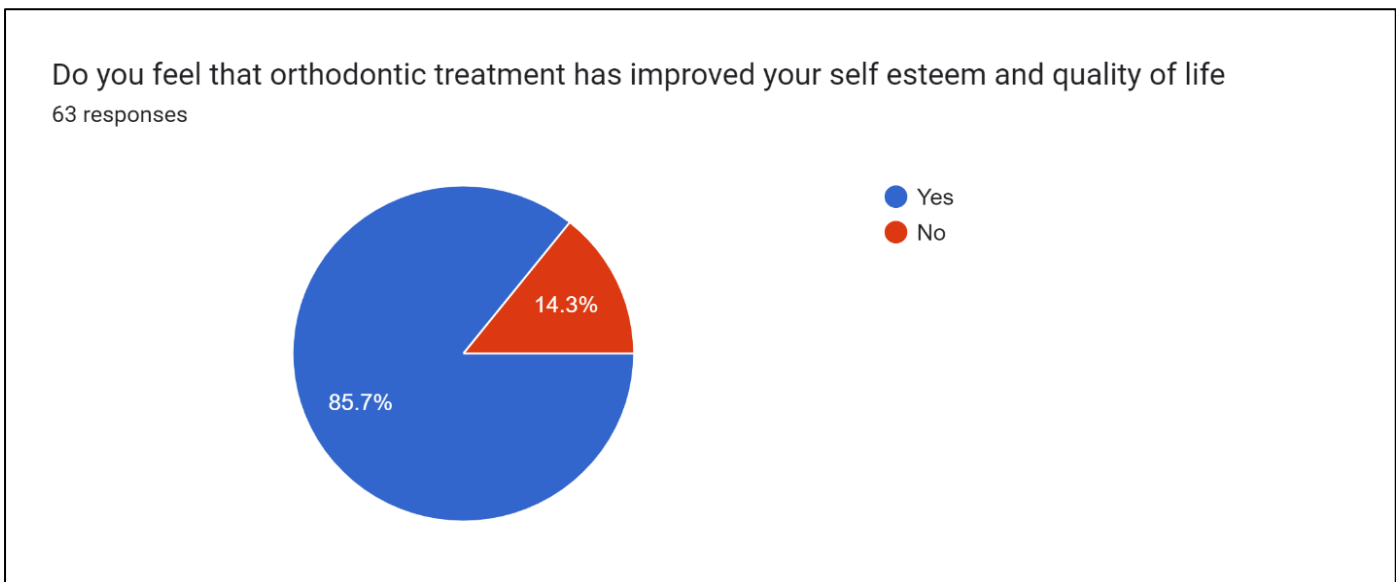


Fig 4 Do you Feel that Orthodontic Treatment has Improved your Self Esteem and Quality of Life

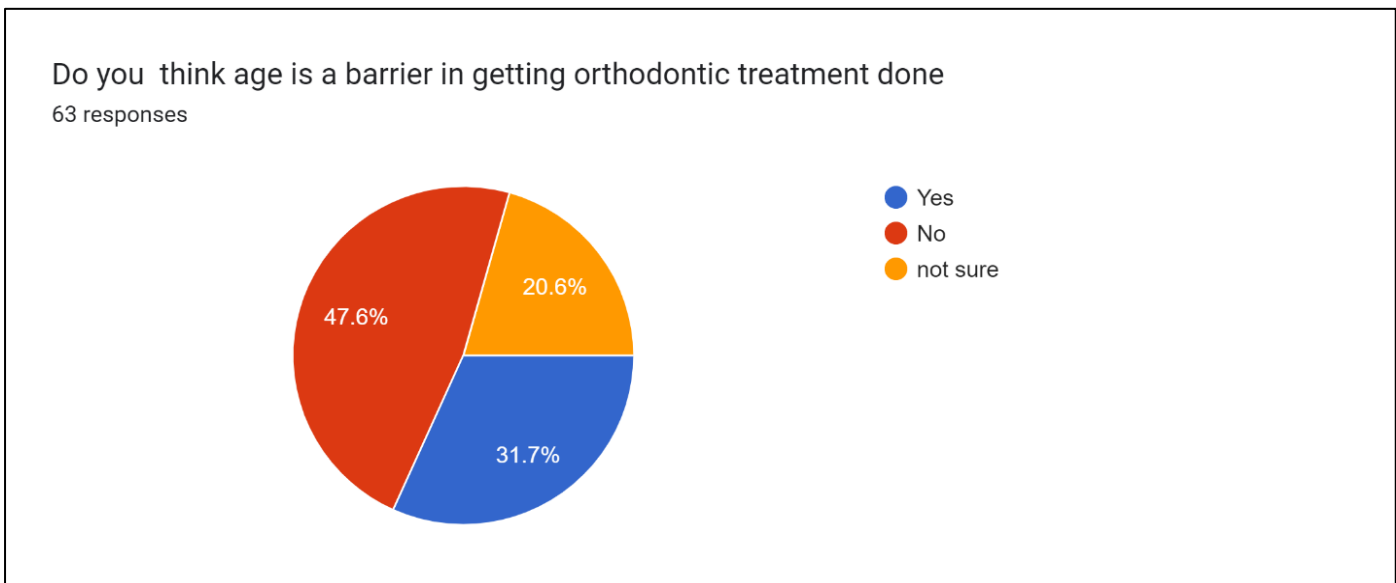


Fig 5 Do you Think Age is a Barrier in Getting Orthodontic Treatment done

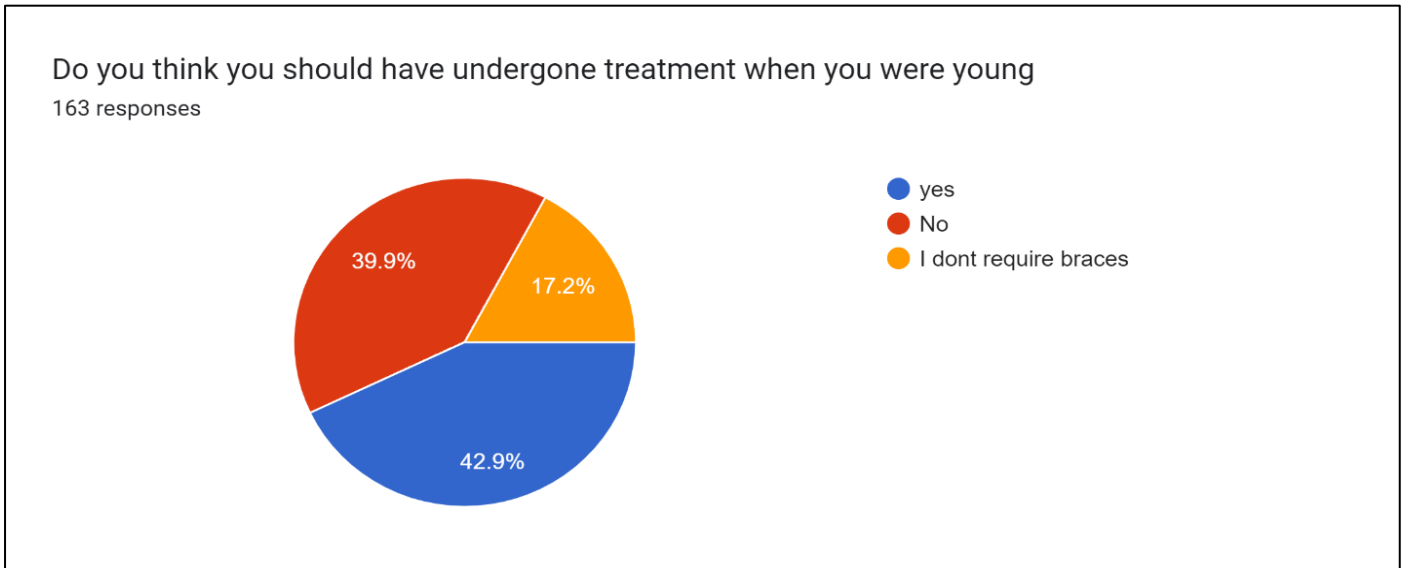


Fig 6 Do you Think you should have Undergone Treatment when you were Young

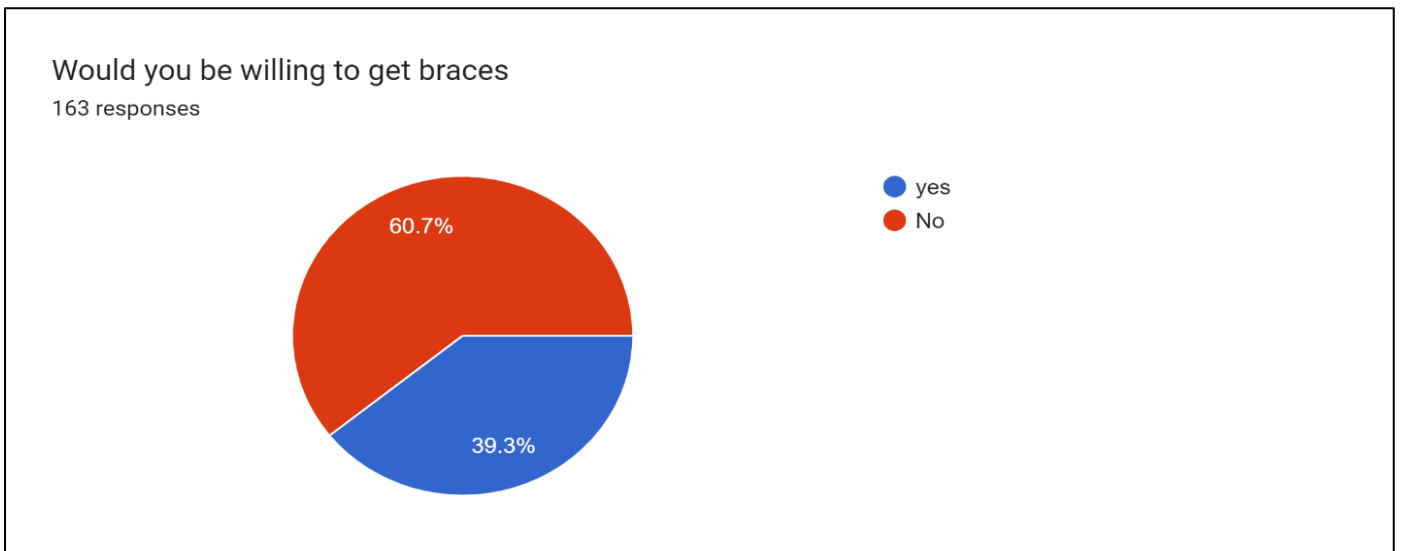


Fig 7 Would you be willing to get Braces

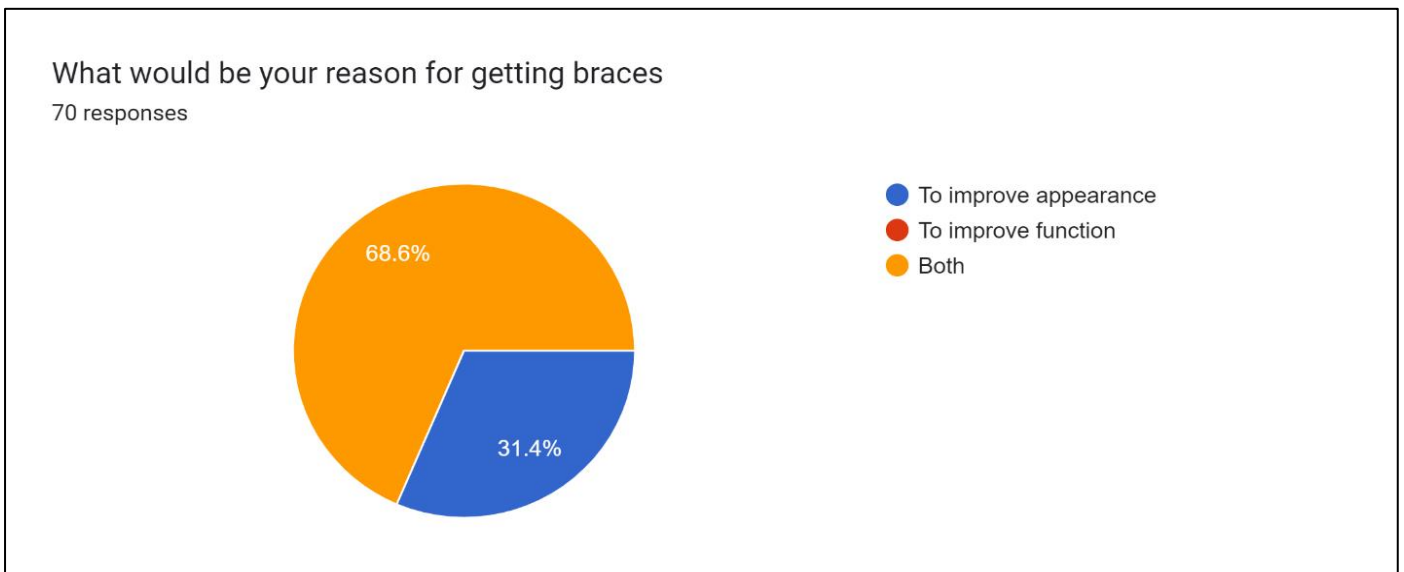


Fig 8 What would be your Reason for Getting braces

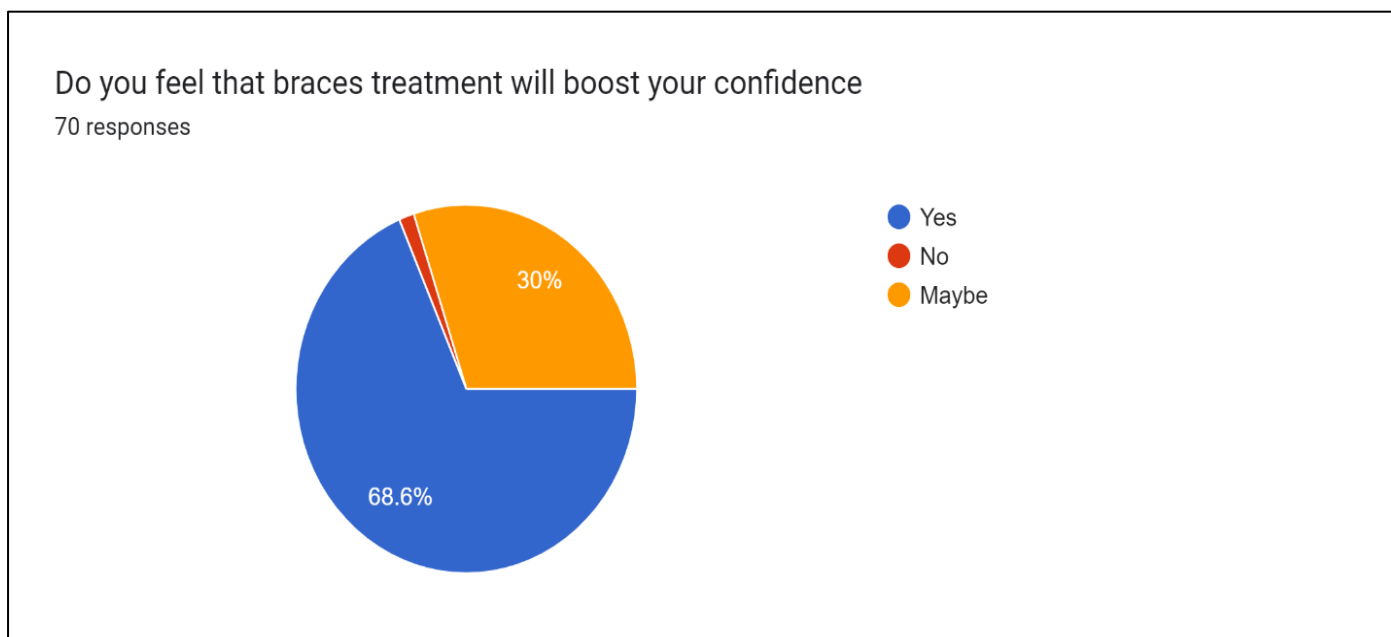


Fig 9 Do you Feel that Braces Treatment will Boost your Confidence

#### IV. RESULTS

Out of 385 responses 172 responses were considered remaining responses were excluded which did not meet the inclusion criteria. As per the above responses which we have got from the google form most of the participants were above 20 years. The past orthodontic treatment responses were recorded as yes or no 62.8% and 37.2% respectively.

Age of the treatment which was provided by responses were 54.7% who underwent orthodontic treatment between the age of 10-20 years and remaining 45.3% responded 20-30 years.

Regarding motivation of undergoing orthodontic treatment self motivation was 41.3% suggestion by parents were around 33.3% and recommendation by dentist were 25.4%. Self esteem and quality of life were improved for 85.7% and remaining 14.3% gave negative response. Age barrier in getting orthodontic treatment 31.7% responded age is a barrier, 47.8% responded there is no age barrier and remaining 20.8% were not sure. Importance of treatment during young age response was 42.9% and 30.9% responded negatively 17.2% responded that they don't require the treatment. About the willingness of the patient to undergo orthodontic treatment 30.3% responded positively others responded negatively which was 60.7%

Reason for undergoing orthodontic treatment 68.8% responded both appearance and to improve function remaining 31.4% responded only to improve appearance. Positive response was recorded for the confidence improved after braces treatment which is 68.6% Remaining 30% gave negative response. These were the results concluded by the analysis where p value was set <0.001

#### V. DISCUSSION

Tayer et al, Orthodontic treatment shouldn't be limited to children, as malocclusion affects both children and adults alike. The main aim of orthodontics is to correct dental misalignment to prevent issues like gum disease, cavities, and jaw joint problems. Improving aesthetics also boosts self-confidence.<sup>8</sup> Dentists and orthodontists should avoid discouraging adults from seeking treatment, as assumptions about patient preferences can be inaccurate. Patients deserve to be informed about all available dental solutions, and it's not uncommon for them to express surprise at not being informed about their malocclusion earlier<sup>9</sup>. Dentists must recognize the importance of orthodontic treatment in overall oral health to guide patients effectively toward therapy.<sup>10</sup>

In the present study, adults showed positive responses across several criteria. They were notably more concerned about both the aesthetics and functionality of their teeth. Additionally, their confidence levels increased following orthodontic treatment, along with improvements in self-esteem and overall quality of life. Due to decrease in the sample size of the study further more research studies should be carried to achieve better results.

#### VI. CONCLUSION

After evaluating various motivating factors for adults seeking orthodontic treatment, the study discovered that the majority of patients recognized the necessity for orthodontic intervention during adulthood. This realization was often preceded by dissatisfaction with their dental appearance, particularly in how they perceived their smile prior to treatment. This dissatisfaction served as a significant motivator for seeking treatment during adulthood.

**REFERENCES**

- [1]. Mane PN, Patil SD, Kadam K, Ganiger CR, Pawar RL, Phaphe SA, et al. Evaluation of the awareness and knowledge of orthodontics and orthodontic treatment in patients visiting School of Dental Sciences, Karad. *J Oral Res Rev* 2018;10:62-7
- [2]. Pandey M, Singh J, Mangal G, Yadav P. Evaluation of awareness regarding orthodontic procedures among a group of preadolescents in a cross-sectional study. *J Int Soc Prevent Communit Dent* 2014;4:44-7
- [3]. C. Natrass B.D.S., F.D.S., R.C.S. (ENG.) & J. R. Sandy PH.D., M.ORTH., F.D.S., R.C.S. (ENG.), F.D.S.R.C.S. (EDIN.) (1995) Adult Orthodontics—A Review, *British Journal of Orthodontics*, 22:4, 331-337, DOI: 10.1179/bjo.22.4.331
- [4]. Zanatta FB, Ardenghi TM, Andoniazzi RP, Pinto TMP. Association between gingivitis and anterior gingival enlargement in subjects undergoing fixed orthodontic treatment. *Dental Press J Orthod* 2014;19:59-66.
- [5]. Lishoy R, Priyal R, Jamenis SC, Jawale B, Mahajan N. A survey to assess the knowledge and attitude of adults from the age group of 18 to 35 Years towards comprehensive orthodontic treatment - A questionnaire based study on adult orthodontics. *IP Indian J Orthod Dentofacial Res* 2020;6(4):255-263
- [6]. Grippaudo C, Paolantonio EG, Antonini G, Saulle R, La Torre G, Deli R. Association between oral habits, mouth breathing and malocclusion associazione. *Acta Otorhinolaryngol Ital.* 2016;36(5):386– 394.
- [7]. Souza RA, Oliveira AF, Pinheiro SM, Cardoso JP, Magnani MB. Expectations of orthodontic treatment in adults: the conduct in orthodontist/patient relationship. *Dent Press J Orthod.* 2013;18:88– 94.
- [8]. Mahajan M. Are adults enough motivated for orthodontic treatment: A questionnaire study. *Indian J Multidiscip Dent.* 2017;7:87
- [9]. Kim Y. Study on the perception of orthodontic treatment according to age: A questionnaire survey. *Korean J Orthod.* 2017;47:215–21.
- [10]. Tayer BH, Burek MJ. A survey of adults' attitudes toward orthodontic therapy. *Am J Orthod.* 1981;79:305–15. doi:10.1016/0002- 9416(81)90078-6.
- [11]. Barbosa VS, Bossolan APC, Casati MZ, Nociti JFH, Sallum EA, rio KGS, et al. Clinical considerations for orthodontic treatment in periodontal patients. *PerioNews.* 2012;6:635–41.