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## Original Article

### Assessment of Perception of Children and Mother for Dental Esthetics and Orthodontic Treatment Needs

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#### ABSTRACT:

**Background:** An individual's self-esteem can depend largely on appropriate facial features, beautiful smile, and well-aligned teeth. The present study was conducted to assess perception of mother and children in dental esthetics and orthodontic treatment needs. **Materials & Methods:** The present study was conducted on 254 children in the department of Pedodontics. A questionnaire regarding awareness of the children's own occlusions, subjective need for treatment, satisfaction with the arrangement and appearance of their teeth, and the importance of well-aligned teeth was asked. The proforma also included the criteria for recording the IOTN, which consisted of both the DHC and the AC. **Results:** Out of 254 school children, boys were 144 and girls were 110. 40 revealed that yes there was non need of treatment, 32 replied yea there was need of treatment. 65 replied there is no need of treatment. 37 don't know whether there is need of treatment or not. Most of the children were very happy (48) that there was no need for treatment, 34 were happy, 25 were normal, 14 were unhappy, 11 were very unhappy. **Conclusion:** Authors found correlation between the subjective need for orthodontic treatment assessed using the index and the objective need perceived by the patient.

**Key words:** Malocclusion, Orthodontic, Perception

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#### INTRODUCTION

The concept and perception of malocclusion are more qualitative than quantitative when individuals are concerned. An individual's self-esteem can depend largely on appropriate facial features, beautiful smile, and well-aligned teeth.<sup>1</sup> Orthodontic treatment needs are mainly assessed based on the clinician's point of view neglecting the individual's subjective perceptions. A person's social needs cannot be neglected as the majority of the people seek orthodontic treatment to gain satisfaction from improved esthetics.<sup>2</sup>

Malocclusion has become a highly prevalent public health problem that influences the quality of life in different ways. Thus, understanding of the health disease process requires a more contextualized approach that involves issues related to access to health care and decision-making of all those participating in the treatment.<sup>3</sup>

The multifaceted of children and their parents' connotation of malocclusion makes orthodontic planning difficult; therefore, the formulation of a comprehension model should analyze socioeconomic, cultural, and psychosocial factors that might affect the self- perception and aesthetic appearance, as well as the desire for orthodontic treatment

need.<sup>4</sup> Therefore, studying the predictors of perceptions is important to enable the planning of health services and oral health promotion, particularly in countries where oral health care is provided by public funds. In addition, the mere clinical view of the disease limits the need for treatment and aesthetic expectations.<sup>5</sup> The present study was conducted to assess perception of mother and children in dental esthetics and orthodontic treatment needs.

**MATERIALS & METHODS**

The present study was conducted in the department of Pedodontics. It comprised of 254 school children age ranged 10-15 years of both genders. The study was explained to the parents and written consent was obtained. Ethical clearance was obtained prior to the institutional ethical committee.

Patient information such as name, age, gender etc. was recorded. In all patients, a through clinical examination was done by an expert orthodontist. A questionnaire regarding awareness of the children’s own occlusions, subjective need for treatment, satisfaction with the arrangement and appearance of their teeth, and the importance of well aligned teeth was asked. The questions were prevalidated and were scaled and scored with 3 or 5 points.

The proforma also included the criteria for recording the IOTN, which consisted of both the DHC and the AC. The DHC was registered based on five criteria (missing teeth, overjet, crossbite, displacement of contact points, and overbite) and the AC was recorded based intraoral photographs. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

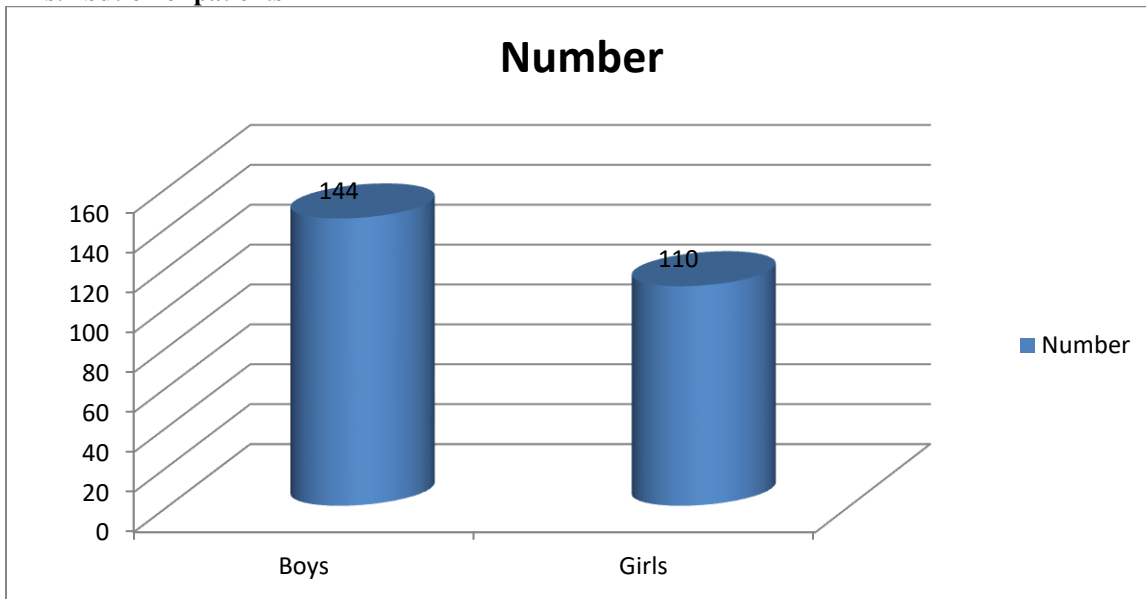
**RESULTS**

**Table I Distribution of patients**

Total- 254		
Gender	Boys	Girls
Number	144	110

Table I shows that out of 254 school children, boys were 144 and girls were 110.

**Graph I Distribution of patients**

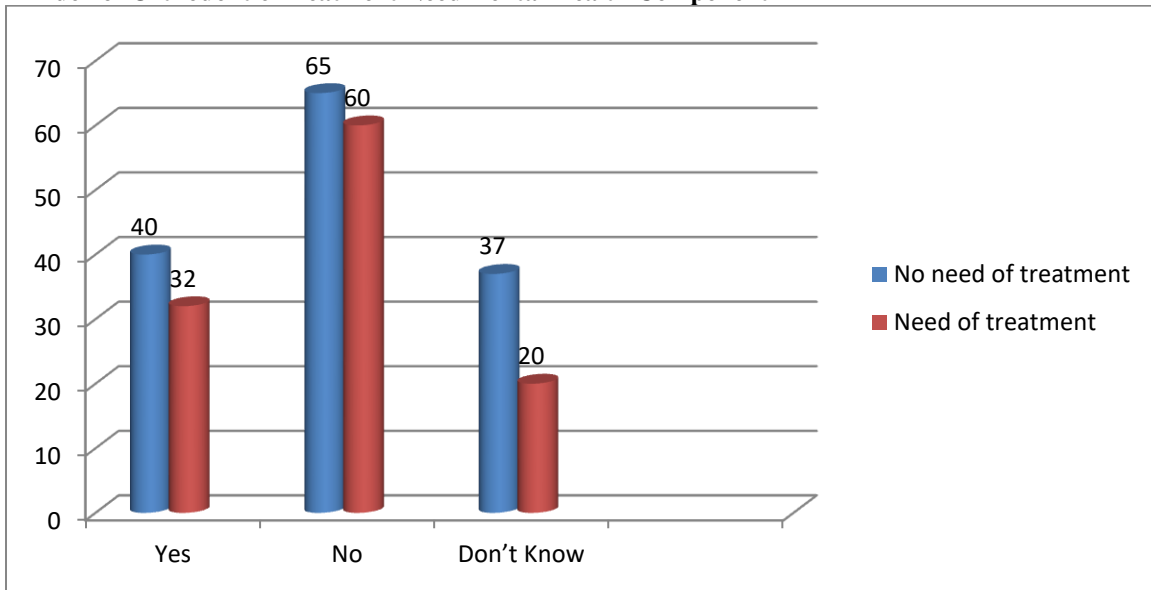


**Table II Index of Orthodontic Treatment Need Dental Health Component**

Response	No need for treatment	Need for treatment	Total
Yes	40	32	72
No	65	60	125
Don't Know	37	20	57

Table II, graph II shows that 40 revealed that yes there was non need of treatment, 32 replied yea there was need of treatment. 65 replied there is no need of treatment. 37 don't know whether there is need of treatment or not.

**Graph II Index of Orthodontic Treatment Need Dental Health Component**

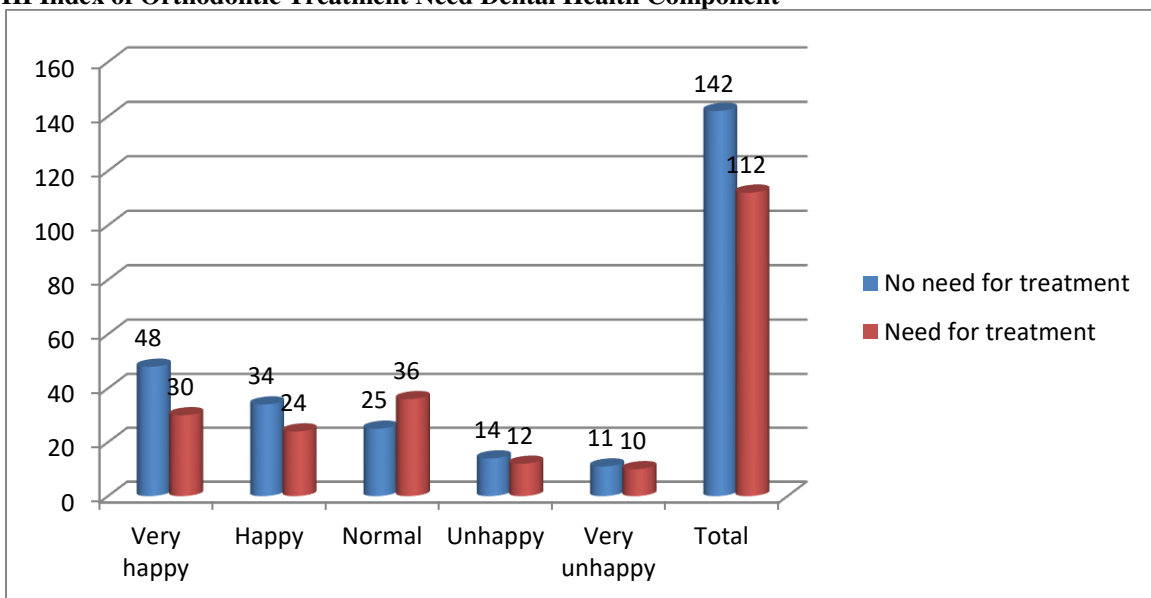


**Table III Responses to happiness with the arrangement of front teeth with Index of Orthodontic Treatment Need Dental Health Component**

Response	No need for treatment	Need for treatment	Total
Very happy	48	30	78
Happy	34	24	58
Normal	25	36	61
Unhappy	14	12	26
Very unhappy	11	10	21
Total	142	112	254

Table III, graph III shows that most of the children were very happy (48) that there was no need for treatment, 34 were happy, 25 were normal, 14 were unhappy, 11 were very unhappy.

**Graph III Index of Orthodontic Treatment Need Dental Health Component**



## DISCUSSION

Physical appearance can have an impact on the self esteem of every human being. Properly aligned teeth can have a positive impact, and irregular or protruded teeth can have a negative impact.<sup>6</sup> The main motivation for the demand for orthodontic care is the desire to improve esthetics, and dental esthetics is found to have a profound influence on oral health related quality of life. Although oral health related quality of life is given importance in all age groups, it is highly relevant among.<sup>7</sup> The relationship between parents/children and the orthodontic treatment need has been investigated, however, the literature is scarce as regards studies in which the children's perceptions are compared with those of their mothers.<sup>8</sup>

The perception of beauty is a highly subjective phenomenon. Perception is defined as the process by which patterns of environmental stimuli are organized and interpreted and can be influenced by a variety of physical, physiological, psychological, and social factors. Perception can vary among individuals, races, and sexes. Moreover, the perception of the clinician or orthodontist may not match with the perception of the patient.<sup>9</sup>

Athira et al<sup>10</sup> observed that many parents reported not knowing about issues related to their children's welfare. However, orthodontic treatment need might be directly connected to aesthetics, determined by cultural and social issues, suggesting that there should be consensus between parents' and children's perception of what is considered satisfactory. The present study was conducted to assess perception of mother and children in dental esthetics and orthodontic treatment needs

We found that out of 254 school children, boys were 144 and girls were 110. We found that 40 revealed that yes there was no need of treatment, 32 replied yes there was need of treatment. 65 replied there is no need of treatment. 37 don't know whether there is need of treatment or not.

Lindsay et al<sup>11</sup> conducted a cross-sectional study on 308 children aged 12 years, and their mothers were randomly selected by cluster sampling (primary schools). The results of the clinical evaluation (DAI) were statistically associated with the perception of orthodontic treatment need and satisfaction with dental appearance in children ( $p \leq 0.01$ ). However, no association was observed with regard to satisfaction with chewing and DAI ( $p = 0.10$ ). The children's perception of orthodontic treatment need and satisfaction with the appearance of their teeth was statistically associated with their mothers' perception. Maxillary overjet, maxillary and mandibular misalignment, and dental crowding were associated with the orthodontic treatment need by children and their mothers. Maxillary overjet was a significant predictor for the perception of orthodontic treatment need in children and mothers.

We found that most of the children were very happy (48) that there was no need for treatment, 34 were happy, 25 were normal, 14 were unhappy, 11 were very unhappy. Singh et al<sup>12</sup> conducted a study to assess the perceptions of

orthodontic treatment needs of school children and to find out the correlation, if any, between the subjective treatment need perceived by children and the objective need. Among the participated children, 21% needed orthodontic treatment and among 79% of children there was no need for treatment according to the Dental Health Component (DHC) of the IOTN. There was a significant correlation between the subjective need for treatment and the IOTN-DHC.

## CONCLUSION

Authors found correlation between the subjective need for orthodontic treatment assessed using the index and the objective need perceived by the patient.

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