

**Impact of dentist’s appearance and gender in creating a child friendly environment- A cross sectional study**

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**Abstract**

**Background**

**Aim:** To assess children’s preferences among four different kinds of male & female attires and to investigate and relate the influence of gender, socioeconomic status and the previous dental experience on children’s preferences.

**Materials and Methods:** A group of 300 children from government and private school aged 8-12 years were given a questionnaire and they were asked to choose among a male or a female dentist and to look at anonymized photographs of male and female dentist in 4

different attires each and assign the most preferred, along with this data regarding their past dental history was also collected.

**Results:** A total of 300 children aged 8-12 years out of which there were 46% males and 53% females took part in the study. Of the 150 children belonging to government school, 92.8% males preferred a male dentist and 96.2% of girls preferred a female dentist(P=0.001). Of the 150 children belonging to private school, 91.4% males preferred a male dentist and 100% of girls preferred a female dentist(P=0.001). Most preferred (52%) female attire was the child friendly

attire (tweety shirt), while semiformal attire (T- shirt) was the most preferred male attire (58%) among private school children. Most preferred (51%) female and male (54%) attire among government school children was white coat. Children with past dental history (22%) had a higher preference towards informal attires (70%) with  $P < 0.001$ .

**Conclusion:** Child friendly attire and semiformal attire was preferred over white coat for higher socioeconomic group whereas there was a strong preference for white coat for lower socioeconomic group. Majority of the children preferred to be treated by dentist of the same gender. Children with past dental history showed a high preference for informal attire. However, implementation of this concept in a clinical setting is necessary.

**Keywords:** Dentists attire, Child friendly attire, White coat, Female dentist, Male dentist, socioeconomic status, past dental history.

### Introduction

Pediatric dentistry is constantly improving and evolving to make sure the child has a pleasant experience when undergoing dental treatment. There has been a shift from the conventional way to a more child friendly approach.<sup>1</sup> Positive interaction is of prime importance for work efficiency and motivation. The biggest impediment therefore in reaching out to a child is anxiety. It is therefore impertinent to develop a good rapport with the child<sup>2</sup>. This can be accomplished by establishing good communication with children<sup>3</sup>.

Appearance is an unquestioned part of non-verbal communication. It can either convey professionalism, competency, comfort or it can trigger anxiety, fear and other unpleasant emotions. Psychologists have emphasized that appearance plays a major role in building a good interpersonal relationship. Traditionally dentists were dressed most often in formal attires but

now it is not uncommon to see them dress in informal attires<sup>1,4</sup>

The original reason why physicians chose to wear a white laboratory coat in the late 19th century could have been to help produce a sense of scientific validity for their medical practice while at the same time representing cleanliness and purity. Little is known on the barriers in building doctor patient partnership. White coat might be one of such barriers in building good relationships. The popular statement “white coats scare children” is a reality or a perception is unclear.<sup>5,6</sup>

With an increasing number of women in the field of dentistry, dentists should be aware whether any gender stereotypes exist and also its influence on patients’ expectations. It is important to understand if such notion plays any part in child’s preference for either a male or a female dentist. Gender stereotypes can lead to a variety of generalizations that affect the perceptions of patients.<sup>7</sup> Therefore the present study was conducted to assess children’s preferences among four different kinds of male & female attires and to investigate and relate the influence of gender, socioeconomic status and the previous dental experience on children’s preferences.

### Materials and methods.

A simple random convenient sample of 300 school children from government and private schools in Bangalore participated in this study. All the children who participated in the study had an informed assent form signed. Children between 8-12 years of age who were able to understand and communicate in an efficient way were included in the study. Those who were not willing to participate and those children who were unable to complete the research independently were excluded from the study. Questionnaires with missing information were also excluded from the study.

A questionnaire (annexure 1) was prepared in both English and Kannada to allow better understanding for the child. The first part consisted of demographic questions along with past dental history and the second part included questions pertaining to their preference of attire while undergoing treatment. The photographs included were with same background and with same stance of the models. All the other factors were kept similar in photographs except for the attire. After a brief introduction and instructions about how to answer the questionnaire, a child was given the questionnaire with photographs of male and female dental surgeons in different dental attires. They were asked to select any one of the four attires which they prefer most for their dentist. Children who had direct experience of being treated by a dentist were considered to be a child with dental experience. The results were tabulated and statistically analyzed using Chi-square test.

### Results

A total of 300 children aged 8-12 years out of which there were 46% males and 53% females took part in the study. Of the 150 children belonging to government school, 92.8% males preferred a male dentist and 96.2% of girls preferred a female dentist (P=0.001) (Table 1). Of the 150 children belonging to private school, 91.4% males preferred a male dentist and 100% of girls preferred a female dentist (P=0.001) (Table 2). Most preferred (52%) female attire was the child friendly attire (tweety shirt), while semiformal attire (T- shirt) was the most preferred male attire (58%) among private school children (Graph 2). Most preferred (51%) female and male (54%) attire among government school children was white coat (Graph 1). Children with past dental history (22%) (Table 3) had a higher preference towards informal attires (70%) with P<0.001 (Table 4).

Table 1: Government school children's preferences for dentists with references to gender

	Preference of Dentist		Total	P value
	Male	Female		
Male Students	65 (95.6)	5 (6.1)	70	P = 0.001*
Female students	3 (4.4)	77 (93.9)	80	
Total	68 (100)	82 (100)	150	

Level of significance at P < 0.05

A significant association was found between gender of government school students and their preference of dentists. Male students predominantly preferred male dentists and majority of the female students preferred female dentists (P = 0.001). Male preference for female dentists was observed only in 6.1 % and 4.4% of female students preferred male dentist.

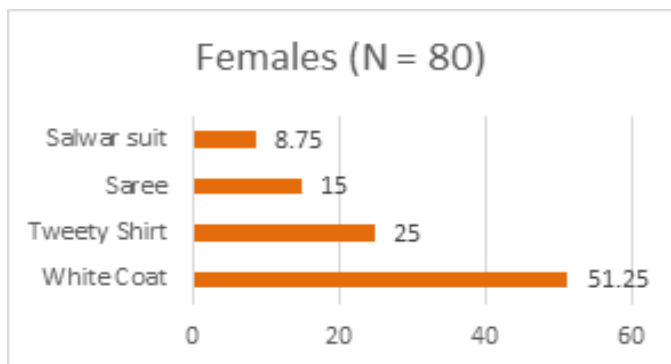
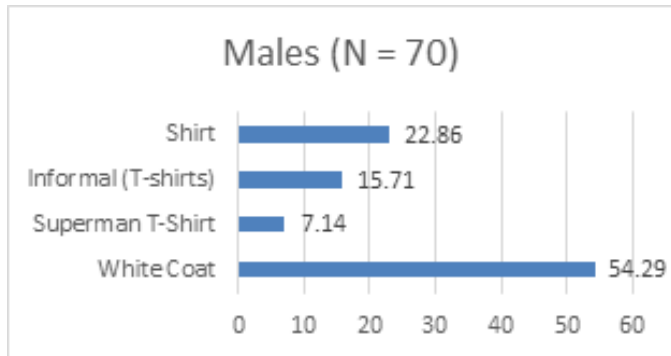
Table 2: Private school children's preferences for dentists with reference to gender

	Preference of dentist		Total	P value
	Male	Female		
Male Students	64 (100)	6 (6.98)	70	P = 0.001*
Female Students	0	80 (93.02)	80	
	64 (100)	86 (100)	150	

Level of significance at P < 0.05

A statistically significant association was found between gender of private school students and their preference of dentists. All female students preferred female dentists and majority of male students preferred male dentists respectively (P = 0.001).

Graph 1: Children’s preference of different kinds of dentist’s attire among male and female students of government school



Graph 2: Children’s preference of different kinds of dentist’s attire among male and female students of Private school

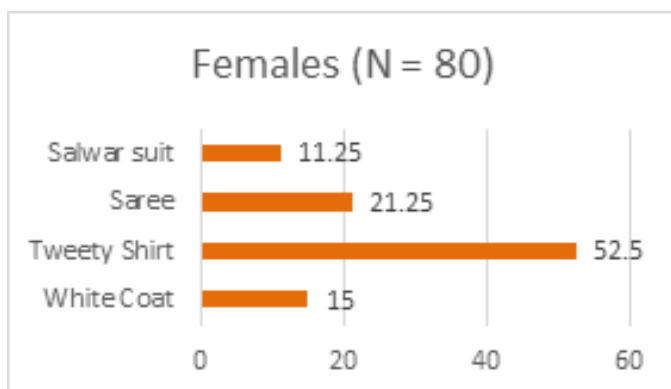
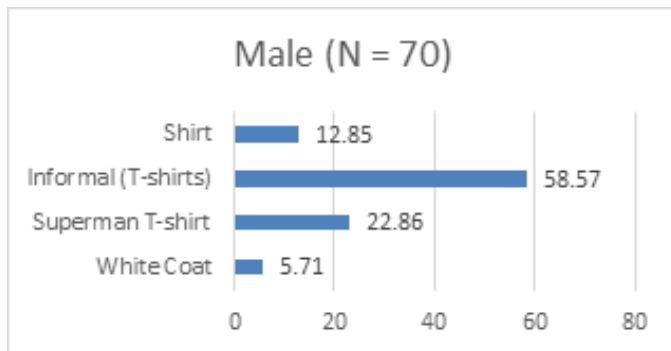


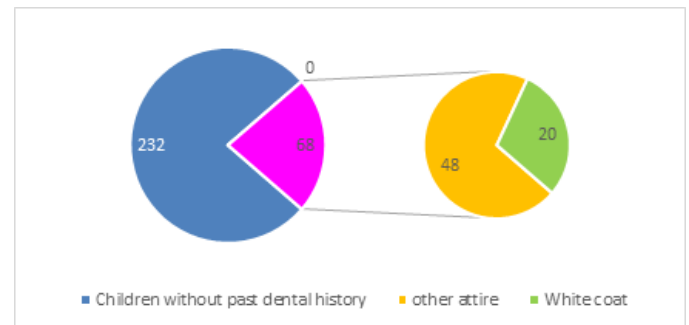
Table 3: Children with past dental history (government and private school)

With past history	68
Without past dental history	232

Table 4: Children’s preference of attire with past dental history

	White coat	Other attire
N=68	20	48

Graph 3: Children’s preference of attire with past dental history



### Discussion

In the recent era pediatric dentistry has been growing in leaps and bounds. With much of its attention shifting towards child friendly approach, many newer techniques and modifications are being done to the conventional approach so as to render the treatment efficiently and reduce the anxiety that the child feels during the treatment. This is important as it has been shown to affect how they relate to dental treatment and dentist when they transition to adulthood.

The first impression of the dentist may be formed even before verbal communication and it could be based on the attire, grooming and cleanliness<sup>1</sup>. The dentist attire has also changed from the conventional formal wear to informal attires in the recent years. The present study tried to assess the children’s preferences among four different kinds of male & female attires and to investigate and relate the influence of gender,

socioeconomic status and the previous dental experience on children's preferences.

Child friendly attire (tweety shirt) was the most preferred female attire (52%). It was followed by saree (21%), salwar suit (15%) & white coat (11%) for private school children. Informal attire, T- shirt (58%) was the most preferred male attire followed by Superman shirt (22%), Shirt (12%) & White coat (5%) for private school children. Therefore, students belonging to higher socioeconomic group preferred informal attire over white coat. This was similar to the findings of a study done by Asokan et al, which suggested that use of child-friendly colors in attires may help in relieving dental anxiety and aid in better communication<sup>3</sup>. Another study done by Babaji et al, results reported that the younger age group preferred colored attire and the cartoon one rather than the regular white attire. Older age group preferred the professional attire which is the white coat. This in contrast to a recent study done by Menon et al where majority of the children preferred the dentist to dress in traditional attire, wearing a white coat<sup>4,8</sup>

In case of government school children there was a strong preference for traditional attire and white coat for both male (54%) and female dentists (51%). This is similar to the findings of the study done by Haridas et al, where there was a strong negative response towards informal attire<sup>1</sup>. The reason could be that belonging to lower socio-economic strata can have a definite influence on the psychology and their perception towards the changes in the culture.

Majority of the children preferred to be treated by dentist of the same gender. This is similar to the findings of the study done by Mistry and Tahmassebi, Alsarheed et al., Mistry D et al., Ell ore VPK et al where the children preferred dentist from the same gender<sup>9,10,11,12</sup>. However studies done by Sanguida<sup>13</sup> et al and Münevveroğlu<sup>14</sup>

showed high preference for female dentist. In a study conducted by Smith et al over 50 percent of respondents viewed female dentists as significantly more likely to make patients feel relaxed and to take time to discuss ailments with them, perceptions found most frequently among those respondents who expressed a preference for a female dentist<sup>7</sup>. Knowing patient preferences is important to deliver efficient health care to children in a way that is more comfortable and relatively less anxiety inducing for them.

It was also noted in our study that children with past dental history preferred child friendly attire over white coat (70%). Zwart and Kim pen, studied the effect of medical experience on children's preferences and concluded that a child preferred informal attire when the medical experience was extensive.<sup>15</sup>

The present study is subject to several limitations. First, this study was carried out in few schools, in an urban area of Bangalore. Consequently, respondents' preferences may not be representative of all children and further studies in a variety of healthcare environments and among various socioeconomic strata and influence of media are needed.

### **Conclusion**

Respondents overwhelmingly favored child friendly attire and semiformal attire in female and male dentists respectively over other attires in private schools whereas there was a strong preference for white coat for government school children. It was observed that children preferred being treated by the dentist of same gender. Children with past dental history showed a high preference for informal attire. However, implementation of child friendly attire in the clinical setting is required to elucidate appropriate response.

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Questionnaire (annexure 1)

Part A

- Age
- Gender
- Date
- School









Have you been to a dentist before?

- Yes
- No

Part B

**"IF YOU HAD BEEN TO A DENTAL CLINIC/ HOSPITAL"**

**D) WHICH DENTIST DO YOU PREFER?**

A) FEMALE		B) MALE	
1 	2 	1 	2 
3 	4 	3 	4 

**E) HOW DO YOU PREFER YOUR DENTIST TO BE DRESSED?**  
(Name it in Order of Your Preference)

1) Salwar	2) Saree	1) Shirt	2) T-Shirt
3) Tweety Shirt	4) White Coat	3) Superman Shirt	4) White Coat