

**Preferences of teenagers toward dentist attire and dental clinic.**

Almahroos Hassan A, Alabbad Mohammed H, Alabdulreda Maitham, Aldjani Ali M, Alkarri Bander Y

**Corresponding Author:** Almahroos Hassan A, Address: Dahran P.O Box 62 Eastern Province, Saudi Arabia

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**Abstract**

This study conducted to assess the importance of dental attire toward teenagers and the degree of impact on their choices as they can help the dentist to understand the psychology of the them, better shape their practice and improve the delivery of health care. A cross-sectional descriptive study using questionnaire had been used. The study showed that dental attire has significant influence on teenagers. Most teenagers preferred dentist to wear lab coat over scrub with wearing name badge and wristwatch. Also preferring that the color of clinic's wall to be white.

**Key words:** Dental attire. Attire, teenagers, Clinic, Dental clinic

**Introduction**

An important part of the dentist-patient relationship is based on the comfort level that the patient has with the dentist and the degree of professionalism conveyed to the patient. A dentist must attain the patient trust to effectively collect information and perform appropriate dental treatment (1). Psychologists have often stressed the importance of physical appearance and its impact upon first impression and personal relationship (2). The dentist's attire is a vital part of the first impression the patient will develop with the dentist (3). Dentist's attire can impact the patient-dentist relationship as much as dentist's behavior and quality of care (1). Human Behaviorist stressed that it is impossible to wear clothes without transmitting social signals (4).

Expected and acceptable appearance make the patient more comfortable and less anxious which improve health care (4). Yamada Etal reported that approximately 70% of the study participants considered that the dental attire influenced their confidence in their dentist (5). However, other reported that the patient satisfaction is unaffected by the way in which the dentist dresses (6, 3). Other factors such as age, gender and the way the dentist speaks have been reported as they Influence patient trust (7, 8). Children were found to prefer their dentist to wear traditional formal attire with a white coat and name badge, plain masks and white gloves but disliked protective eyewear or head caps. Most children liked their dentist to wear closed shoes and no jewelry but preferred the use of a wrist watch (4). Another study showed that patients were less in favor of white coat (9), while the casual attire had the least acceptance in some studies (10).

Not only the attire of the dentist can affect the fear of children, but also the dental clinic has great effect. One study showed strong preference regarding the appearance of the dental clinic and its effect in reducing fear where the highest percentage liked decorated clinics over plain ones (11).

Sometimes, we underestimate children mental ability and growth at this age stage as they can characterize previous experiences and compare between them. The question arises, do children draw specific stereotype about the dentist because of their previous dealing with dentist or

physician in their respective families? And how does a previous dental visit make a mental image about the dental clinic and its contents? No previous study addressed factors that could affect the children preference regard certain contents in the dental clinic. This can help identify what makes the patient comfortable from the time of entering the dental clinic until he leaves the dental chair after the completion of dental treatment.

The perception of teenagers regarding dentist have not been previously assessed in Saudi Arabia. The main orientations of this study were to assess the general view of the teenagers toward dental attire and dental clinic atmosphere including for example, preferred dental attire, preferred walls color, patient preference to see their dentist wearing name badge, wrist watch and music listening while waiting in the dental office throw a cross sectional survey that had been distributed in teenagers' school in Al-khobar, Eastern Provence, Kingdom of Saudi Arabia. This study addressed some factors to assess their degree of impact on the child's choices as they can help the dentist to understand the psychology of the children, better shape their practice and improve the delivery of health care.

### **Material and Method**

**Study design:** A cross-sectional descriptive study using questionnaire to be answered by school students.

**Sample:** The sample was composed of male students of intermediate school aged between 13-15 years.

A sample size of 90 from a population of 3000 was estimated to produce a 95% confidence interval equal to the sample proportion plus or minus 0.10 when the estimated proportion is 60% (12).

**Setting:** The sample was recruited from "Iskan" intermediate school in Al-khobar in the Eastern Province, Kingdom of Saudi Arabia. This school had been chosen through personal communication and connections between

administrators in the school and study team. Approval for the study to be conducted in this school was obtained (Appendix A). The school has sufficient number of students that can cover the sample size.

**Data collection tools:** A questionnaire was developed for the assessment of teenagers' preference among various dental attires and dental clinic features based on the previous studies (4, 11, 13). During a pilot study, 15 students were asked to complete the questionnaire and comment on overall structure, to access the difficulty of the questions and no changes had been made.

The questionnaire was distributed to 100 male students in February 2014 and collected the same day after they filled it. The questionnaire was administered to the students including several items designed to assess their perception toward dentist's attire and clinics. Questionnaire started by asking the students some personal information regarding the education of their mother and father, whether they had visited a dentist before or not and whether they have a relative working as a physician or dentist in their families (4). The questionnaire assessed the importance of dentist's attire and whether the students preferred the dentist to wear ID card and wrist watch or not (11). The questionnaire also included questions about their preference of dental clinic, regarding walls color, presence of pictures and explanatory dental posters on the walls. Another question assessed whether they like listening to music while waiting in the dentist's office, whether they like to see certificates of qualification in the clinic and in addition to whether they like the dentist's desk to be present in the clinic or not. Students were given pictures numbered from (1-8) showing various attires and asked which one represents the attire they preferred the most (13) (Appendix B).

**Methods**

Permission from Ministry of Education to access to the respective school was obtained prior to starting the survey. The study was explained to the principal and teachers prior to distributing the questionnaire. Permission was taken from that principal of school for the questionnaire to be circulated in his school.

**Statistical analysis:** Team members had analyzed the completed questionnaire. Univariate numbers and frequencies performed including numeric and graphic methods for the dependant variables that include the following:

- Preferred dental attire.
- Preferred walls color.
- Preference to see their dentist wearing name badge and wrist watch.
- Preference of music listening while waiting in the dental office.
- Preference of the presence of certificate of qualifications.
- Preference of the dentist’s desk to be present in the clinic or not.

Independent variables include the following:

- Parents’ education.
- Previous dental visit.
- Presence of physician or dentist in the family.
- Importance of dental attire.

Descriptive statistics and chi-squared analysis for nonparametric data was performed to assess responses to the questionnaire items across the preferred dental attire, father and mother education, previous dental visit, presence of physician or dentist in family and the importance of dental attire. In order to avoid the empty cells that were produced during analysis, the attires had been collapsed into two categories as dentist wearing lab

coat including attires (#2,#4,#6,#8) and dentist without lab coat including attires (#1,#3,#5,#7). Similarly, parents’ education levels had been collapsed into two main categories. Parents with education level lower than high school had been collapsed into one group, while parents with education of high school and university made the other category. Statistical significance was determined at  $P < 0.05$

The data from the questionnaire was coded and entered into the SPSS version 12.0 (SPSS Inc., Chicago, IL, USA) for the statistical analysis).

**Results**

A total of 100 male children completed the questionnaire out of 103 (response rate = 97%) Their age ranged from 13-15 years. The majority of students had fathers with secondary school education (46.9%) and mothers with intermediate school education (24.2%) (Table1).

N (%)					
	Uneducated	Elementary	Intermediate	Secondary	University
Father education	2 (2)	10 (10.2)	23 (23.5)	46 (46.9)	17 (17.3)
Mother education	14 (14.1)	19 (19.2)	24 (24.2)	23 (23.2)	19 (19.2)

Most children had previous dental visits (79.6%). The vast majority of children reported it was important for them how their dentist dressed (80.8%). Analysis showed that (14%) children have a physician in their families, (7%) have a dentist relative and the majority have no healthcare professional in their families (79%). The majority of children liked their dentist to wear name badge (92.2%) and wrist watch (56%).

Most children did not like listening to music while waiting in the dentist’s office (70%) but preferred having educational posters hung on the walls in the clinic (83%) and qualifications certificate to be posted in the dental clinic (83.5%). Half the children (53%) preferred the clinic to have white walls and 47% preferred colored

walls. A high percentage of children (91.6%) preferred the dentist's desk to be located in the clinic.

The greatest percentage of children (57.2%) preferred dentist to wear lab coat over scrubs (attire #6) followed by 13.5% preferring lab coat over official suite (attire #2). Overall, 82.3% preferred dentist with lab coat (attire #2, #4, #6 and #8 combined) (Figure1).

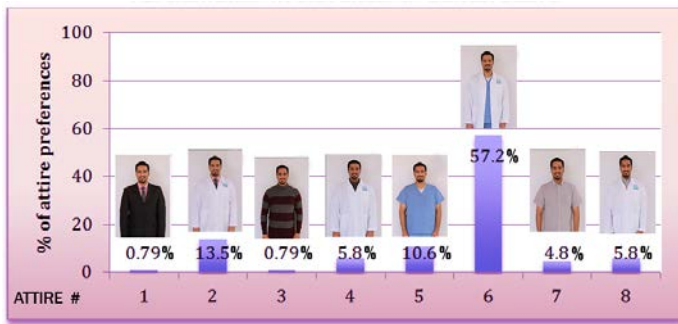


Figure 1: Participants' preferences of dentist attire.

Parents' education showed no significant relation in the preference of dentist attire ( $P = 0.55$  and  $0.08$  for fathers' and mothers' education respectively). Similarly, there was no relation between mothers' education and preference of listening to music while waiting in dentist office ( $P = 0.10$ ). On the other hand, a significant relation was found between fathers' education and preference of listening to music. As fathers get more educated, children acceptance of listening to music while waiting in dentist office decreases ( $P = 0.02$ ). (Table 2 and 3)

N(%)		Dentist with lab coat	Dentist without lab coat	X <sup>2</sup> P value
Father education	Uneducated, Primary and intermediate	30(85.7)	5(14.3)	0.36 0.55
	High school and University	51(81)	12(19)	
Mother education	Uneducated, Primary and intermediate	50(87.7)	7(12.3)	3.15 0.08
	High school and University	31(73.8)	11(26.2)	

N(%)		Listen to music while waiting in the dentist office		X <sup>2</sup> P value
		Yes	No	
Father education	Uneducated, Primary and intermediate	16(45.71)	19(54.29)	5.85 0.02*
	High school and University	14(22.23)	49(77.78)	
Mother education	Uneducated, Primary and intermediate	13(22.81)	44(77.20)	2.73 0.10
	High school and University	16(38.10)	26(61.90)	

\* Statically significant at  $P \leq 0.05$

Previous dental visits did not affect the children preference in regard to dentist attire, as high percentage of children preferred dentist with lab coat ( $P = 0.37$ , Table 4).

N(%)		Dentist without lab coat		Dentist with lab coat		X <sup>2</sup> P value
Previous visit to dentist						
Yes	13(16.67)	65(83.34)			0.12	0.37
No	4(20)	16(80)				

Most children preferred dentist with lab coat regardless of the presence or absence of healthcare professionals in their families ( $P = 0.43$ , Table 5)

N (%)		Without lab coat		With lab coat		X <sup>2</sup> P value
Has physician in the family	1 (7.1)	13 (92.9)			1.70	0.43
Has dentist in the family	2 (28.6)	5 (71.4)				
No health care professionals in the family	15 (19)	64 (81)				

Regardless of attire importance, most participants preferred dentist with lab coat and name badge ( $P = 0.31$  and  $0.72$  Tables 6 and 7)

N(%)		Attire without lab coat		Attire with lab coat		X <sup>2</sup> P value
Is attire important?						
Yes	13(16.2)	67(83.8)			1.05	0.31
No	5(26.3)	14(73.7)				

Table 7: Attire importance in relation to name badge			
	N (%)		X <sup>2</sup> P value
Is attire important?	Name badge preference		
	Yes	No	
Yes	73(92.4)	6(7.6)	0.13
No	18(94.7)	1(5.3)	0.72

More children who thought that the attire is important preferred the dentist to wear wrist watch compared to those who thought the attire is not important (P=0.02 Table 8).

Table 8: Attire importance in relation to wrist watch preference			
N(%)			
Is attire important?	Wrest watch Preference		X <sup>2</sup> P value
	Yes	No	
Yes	50(62.5)	30(37.5)	5.98
No	6(31.6)	13(68.4)	0.02*

\*Statically significant at P ≤ 0.05

**Discussion**

The purpose of the study was to assess the perception of teenagers toward dentist attire and dental clinic to better shape their practice and improve the delivery of health care.

The limitations of the present study that it focused only on male teenagers and no private school students were included due to difficulty in getting Ministry of education approval. There are some factors that distinguish the study, the fact that it is the only study addressing teenager’s preference toward dental attire and dental clinic in the eastern region in Saudi Arabia and it reported to the factors effecting of some variables on one relation.

Most teenagers preferred dentist to wear lab coat over scrub. These results affected by some factors like previous dental visit and not affected by some factors like parents’

education level, presence or absence of healthcare professionals in family and attire importance.

The result indicates that most teenagers reported that dentist attire is important for them which confirms some studies (3,5). Most of them prefer their dentist to wear a lab coat which agrees with some studies (6.15,14,11).

The result indicates that most teenagers preferred that their dentist wears a name badge which is consistent with others studies (4,10). The result showed that most teenagers prefer their dentist to wear a hand watch, which is consistent with Panda Et al study (4)

The result indicates that almost half (53%) of teenagers preferred that the color of clinic’s wall to be white, which agree with Alsarheed study (11).

There was no relation between mothers’ education and preference of listening to music while waiting in dentist office. On the other hand, a significant relation was found between fathers’ education and preference of listening to music. As fathers get more educated, children acceptance of music listening decreases, this may be due to the social desirability as music has less acceptance in this community.

More children who thought that the attire is important preferred the dentist to wear wrist watch compared to those who thought the attire is not important. It is due to that the accessories e.g. wrist watch, pin and name badge is considered as essential things that may improve the appearance.

Most children preferred dentist with lab coat regardless of the presence or absence of healthcare professionals in their families, it is due to the effect of the media and the stereotype of the dentist to appear usually with a white coat.

This study has implications for all branches of dentistry where dental professionals endeavor to improve the delivery of healthcare service to the patient. Future

research could focus on female patient opinions towards dentist attire and dental environment, another age groups could be assessed, also the patient opinion toward dental health team.

### Conclusion

Appearance is thought to be one of the factors that affect patient's attitude. More attention should be considered toward dental clinic and dentist attire as they can impact on the patient's anxiety and behavior. Teenager's demonstrated positive preference toward dentist wearing lab coat in general and highest preference toward lab coat over scrub also preference toward wearing name badge and wristwatch. Teenager's showed negative preference toward official suit and casual attire.

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