



## Management Techniques on Children in Mansoura Dental Clinics and their Psychological Effects

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### ABSTRACT

**Background:** The goals of behavior guidance are to establish communication, alleviate fear, deliver quality dental care, build a trusting relationship among dentist, child and parents, that promoting children's positive attitude toward oral dental health and oral health care.

**Keywords:** Management Techniques - Children - Psychological Effects.

#### الملخص العربي

ينتاب معظم الأطفال الشعور بالخوف عند ذهابه مع والديه لعيادة طبيب الأسنان و أحياناً يكون من الصعب جدا على طبيب الأسنان ومن يعاونه في التعامل مع هذه المشاعر لذلك أن معظم الأطفال يشعرون بالخوف بمجرد دخولهم العيادة وحتى قبل الجلوس على كرسي الأسنان .

وقد يبدوون في الإتيان بتصرفات تعوق عمل طبيب الأسنان.

أهداف التوجيه السلوكي هي إنشاء التواصل، تقليل الخوف، تقديم الرعاية الجيدة للأسنان، بناء علاقة ثقة بين طبيب الأسنان، الطفل وتعزيز الموقف الإيجابي للأطفال.

وقد أجريت هذه الدراسة على عينة من الأطفال المصريين الذين قاموا بزيارة عيادات الأسنان الخاصة في مدينة المنصورة، جمهورية مصر العربية (هذه كانت زيارات متكررة لطبيب الأسنان) وتراوح أعمارهم من 4-12 سنة، تم اختيار الأطفال من عيادات الأسنان الخاصة بحيث لا يكون لدى الأطفال أي أمراض عقلية تتداخل مع متغيرات الدراسة وبالطبع يتم التأكد من هذا من خلال الأب أو الأم مرافقي الطفل.

يسأل طبيب الأسنان هل يستخدم تقنيات السلوكية بشكل متكرر أو بشكل غير متكرر وكيفية نجاحها على الطفل أثناء العلاج ومن هد التقنيات هي (العرض، التحكم في نبرة الصوت، التكتيف جسدي، صرف الانتباه، التواصل الغير شفهي، الإخبار، الهدايا بعد العلاج، فصل الوالدين ووضع اليد فوق الفم)، أيضا يختار طبيب الأسنان مدى نجاح إحدى هذه التقنيات السلوكية التي يستخدمها مع الأطفال أثناء العلاج وهي كالاتي:

(ضعيفة جدا، ضعيفة، جيدة، متوسطة وجيدة جدا).

وفي نهاية الاستبيان يطلب من كل طفل أن يشير إلى الوجه الذي يمثل حالة خوفه على حسب نوع العلاج الذي تلقاه في عيادة الأسنان وقد توصلت الدراسة:

1. استخدام التقنيات السلوكية يعمل على تسهيل التعامل مع الأساليب نفسية للأطفال

2. الإخبار، التواصل الغير شفهي، العرض، صرف الانتباه الطفل والهدايا هي تقنيات ناجحة في عيادات الأسنان.

الكلمات المفتاحية: الأساليب- الأطفال - طب الأسنان - الآثار النفسية.

### Introduction

Most children do not expose any cooperation during dental procedures, even sometimes it is extremely hard to manage a child in a dental clinic. These difficulties of management

are associated not only with the technical procedures, but also to the various emotional upsets faced by children. The most frequent emotional upsets realized in the course of dental treatment are anxiety and fear that may be initiated from a past traumatic experience in the dental clinic or during hospitalization for another reason.

Dental anxiety and fear of dental clinics among children are familiar in many countries as a public health problem. Using of terms dental fear and dental anxiety are often synonymously. They are considered to be the main cause for behavior management problems and escaping of dental care. Sometimes, these problems require replacing of traditional treatment with more advanced alternatives, such as general anesthesia or sedation. Several surveys revealed that 5-6% of people and 16% of school-age children have fears of dentists. The pediatric dental staff can play an important role in behavior guidance. In addition and the receptionist is usually the first staff member the child meets. The scheduling coordinator or receptionist will have the first contact with a prospective parent, usually through a telephone conversation. Information provided to the parent prior to an appointment will help set expectations for the initial visit. The manner in which the child is welcomed into the practice may influence future patient behavior.

Many measurement techniques were employed to examine the condition of children during dental procedures, including behavioral ratings, psychometric scales, and physiological measures. Dental fear is constantly met between children with age Less than 3 years, but it also clear in young children, enrollment a more frequency at about eleven years old and descending around adolescence.

The assessment , children may use: the Facial Image Scale (FIS), the Venham Picture Scale, the Fear Thermometer Scale (for younger children), the Children Fear Survey Dental Subscale for Teenagers and the Corah Dental Anxiety Scale (for teenagers and adults).

#### **Aims of the study**

1. Assess behavior techniques used in private clinics in Mansoura City.
2. Evaluate their effects and fear induced in children treated.

#### **Subject and method**

##### **1-Subjects:**

Thirty dental clinics in Mansoura city were selected from various different clinics in Mansoura city. From each clinic, we selected 10 children with total 300 children.

##### **Selection Criteria:**

**The Children were selected for the study if they were:**

1. Regularly attending to the same dental clinic.

2. Physically and mentally appeared well, normal and alert.
3. Accompanied their father or mother.

## **2-Materials and Method:**

Different dental clinics in Mansoura city were surveyed, counted, and recorded. We selected 30 clinics to participating in the study. Provided the clinics were equally and randomly distributed among Mansoura city neighborhood. In each clinic, the operating dentist received a brief description of the study purposes. Two questionnaires were designed to fulfill the study purposes.

1. The first questionnaire targeted the dentist in order to measure the satisfaction rate of different management techniques that used in dental clinics; the satisfaction scale composed a 5-point scale (very poor, poor, fair, good and very good). The dentists were asked to mark if they use a particular behavior management technique, what is the frequency usage and to rate the satisfaction of the technique in 5 - point scale.

2. The second questionnaire targeted both the treated child and the operating dentists. Ten children aged 4-12 years interviewed from each clinic (boys and girls). The children were asked to point their experience on FIS the scale component of 5-faces representing different emotional situation:

1. **Face (1):** Fear just a little bit.
2. **Face (2):** Fear a little more.
3. **Face (3):** Fear even more.
4. **Face (4):** Fear a whole lot.
5. **Face (5):** Fear as much as you can image, although you do not have to be crying to feel this bad.

The operating dentists were asked to point what dental operating that was performed to the child and to mention what technique for management did they used.

## **Results**

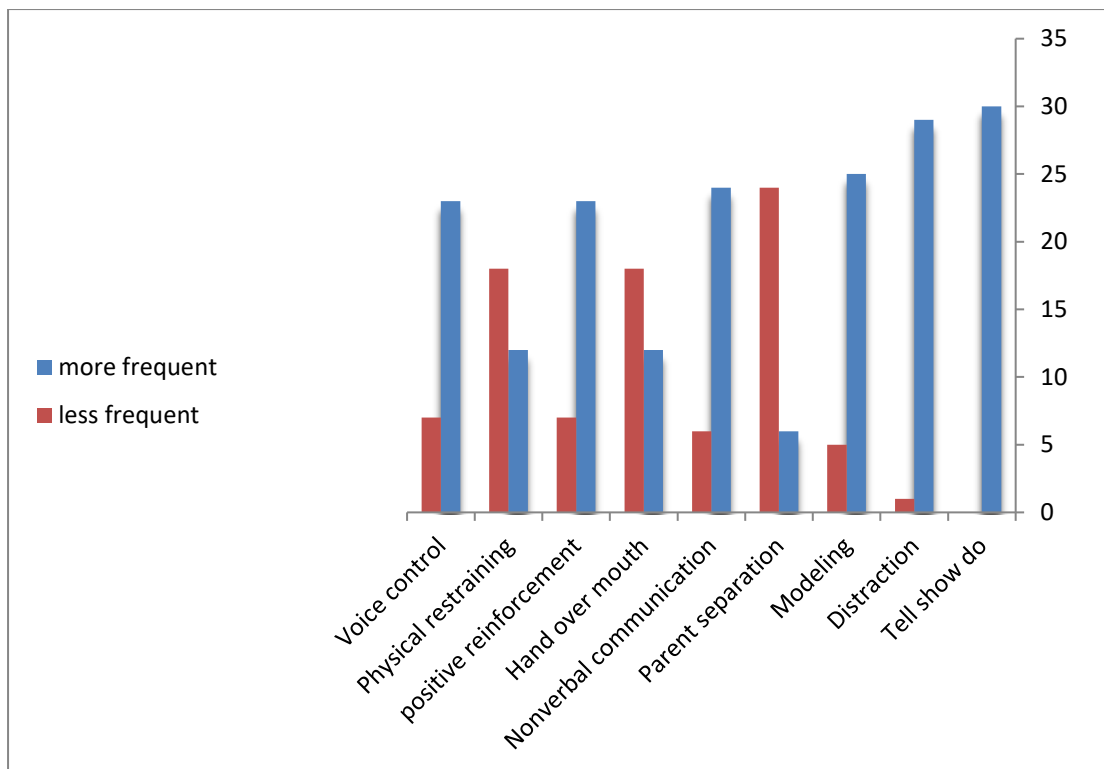


Figure (1) Bar chart show distribution of behavior management technique used by dentists

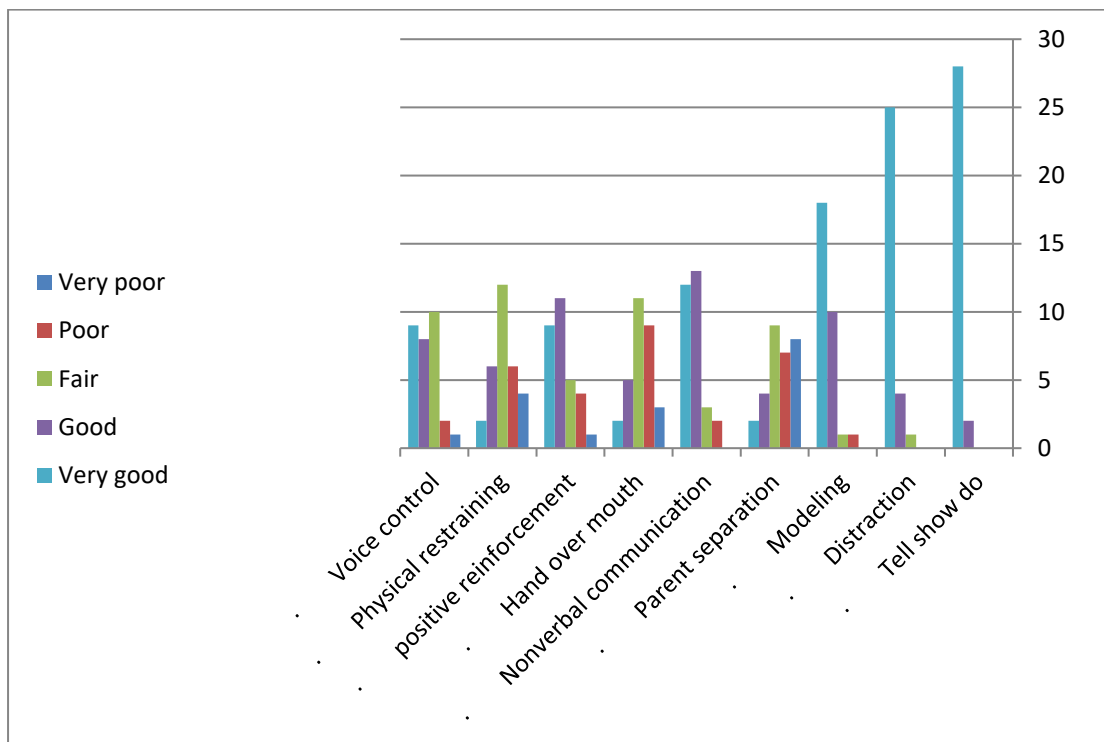


Figure (2): Bar chart show opinions of the dentists regarding success of the techniques used in behavior management

Table (6): Association between facial image scale (FIS) and dental treatment done.

Dental treatment	Facial image scale	test of significance
	Median(Min-Max)	
Preventive	1.0 (1.0-2.0)	z=1.22 p<0.001**
Restorative	2.0 (1.0-4.0)	z=2.29 p<0.001**
Vital pulp therapy	2.0 (1.0-5.0)	z=3.15 p<0.001**
Non Vital pulp therapy	1.0 (1.0-3.0)	z=1.25 p<0.001**
Extraction	3.0 (1.0-5.0)	z=4.56 p<0.001**
Fixed appliance	1.0(1.0-1.0)	z=1.8 p<0.001**

Z: Mann Whitney U test      p: probability      \* p value significant <0.05

**Table (7): Association between facial image scale (FIS) and dentist practice of behavior management techniques.**

Behavior management techniques	Facial image scale	test of significance
	Median(Min-Max)	
Tell show do	1.0 (1.0-2.0)	z=2.78 p=0.05**
Distraction	1.0 (1.0-3.0)	z=1.94 p<0.05*
Modeling	2.0 (1.0-2.0)	z=3.03 p=0.002**
Parent separation	4.0 (2.0-5.0)	z=1.63 p=0.001**
Nonverbal communication	1.0 (1.0-3.0)	z=5.45 p=0.001**
Hand over mouth	3.0 (1.0-5.0)	z=1.63 p=0.001**
Positive reinforcement	1.0 (2.0-2.0)	z=3.59 p=0.001*
Physical restraining	4.0 (2.0-5.0)	z=1.22 p<0.001**
Voice control	1.0 (2.0-3.0)	z=3.46 p<0.001**

Z: Mann Whitney U test      p: probability      \* p value significant if <0.05

## Conclusion

1. Using behavior management techniques facilitated treating of children in dental clinics.
2. In Mansoura city Tell-show-do, Distraction and Modeling were the most successful techniques.

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