**Psychological aspects in paediatric dentistry: parental presence**

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**ABSTRACT.** Aim The scope of the present study has been the analysis of the main psychological approaches used during a first dental visit of a child to gain the necessary collaboration, focusing on the influence of parental presence during the visit. Methods The study was conducted on a group of 200 children divided into two sub-groups. In Group I the child was seen without the parent’s presence and in Group II the parent was present throughout the visit. Assessment of behaviour was by a simple ‘co-operative’ or ‘non-cooperative’ in achieving a dental examination and prophylaxis. Statistical analysis was made by $\chi^2$ and Fisher’s exact test. Results In Group I (parent out) 89% of children were fully co-operative compared with 63% in Group II (parent present) which was significantly different ($\chi^2 18.503, p<0.001$). In addition 8% of children in Group II failed to return for any further dental care compared with 1% in Group I, which was also significantly different (Fisher’s exact test $p=0.1231$). Conclusion Parental presence affects a child’s behaviour on an initial dental visit, which is better when the parent is excluded.

**KEYWORDS:** Psychology, Paediatric dentistry, Child behaviour.

**Introduction**

One of the main problems in paediatric dentistry is the approach to the young patient when he/she goes to the dentist for the first time. The first visit represents the focal point by which any future treatments’ success or failure is conditioned [Horst et al., 1987]. The old concept based on the image of the young patient as a small adult has been abandoned a long time ago thanks to a large number of philosophical theses based on the difference between adult and child behaviour [Celli et al., 1980]. Subsequently many theories have been suggested as to children’s psychological development, as it relates to behaviour management in dentistry. Nowadays most authors agree that environment plays a key role in the behavioural and psychological development of the young [Fisher and Gables, 1958].

Generally, a child’s behaviour is influenced by three main factors: grade of individual maturity, individual character and environment. Although there is a considerable wide variability, many studies highlight standard behavioural patterns linked to each paediatric age.

**Results In Group I (parent out) 89% of children were fully co-operative compared with 63% in Group II (parent present) which was significantly different ($\chi^2 18.503, p<0.001$). In addition 8% of children in Group II failed to return for any further dental care compared with 1% in Group I, which was also significantly different (Fisher’s exact test $p=0.1231$).**

**Conclusion** Parental presence affects a child’s behaviour on an initial dental visit, which is better when the parent is excluded.

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**Introduction**

Until two years of age, the young child strictly depends on their parents, showing difficulty in getting involved in environments different from their home [Magnusson et al., 1985]. At this age it is advisable, in our opinion, that the ‘little patient’ is always accompanied by their parent(s) during all visits [Fisher and Gables, 1958; Klein, 1967].

By three years of age, children demonstrate a vivid interest in their surroundings. This new curiosity has to be used to our advantage.

By four years of age there are rapid changes in behaviour, the child becomes more physically and behaviourally active so that it is possible to achieve cooperation by letting him/her play a role in the dental visit.

Once a child starts school, individual maturation is more affected by external factors, such as peer groups and decreases the importance for behavioural management [Rosengarten, 1961; Klein, 1967; Nidoli and Roffredi, 1989].

In our experience, notwithstanding the age of the child, it is critical to let them become familiar with the surroundings of the operator/surgery and to become fully conscious of the situation. A forced approach to therapies is adverse as it generates traumas in the child producing stresses and a non-cooperative and anxious future adult.
An unproductive approach is to deny the chance of pain, as part of the treatment; lying to the child leads not only to a lack of confidence in the clinician, but also does not decrease dental anxiousness [Fisher and Gables, 1958; Gallusi, 1985]. Faith in the clinician is the key for building an efficient and lasting relationship between patient and dentist. Therefore, it is necessary that the child is well informed and conscious. This might be obtained by using an appropriate language, often called ‘childrenese’ [Curzon et al., 1995], for example the probe can be called ‘tooth-counter’, a preformed metal crown a ‘Queen’s or King’s Crown’. At the same time the child should always be told what will be the treatment to be carried out and how long it will last.

Another important factor to be analyzed in the management of children in the dental environment is the filtering role of parents in the interaction of their children with the outside world [Gallusi, 1985; Ronchin et al., 1980]. In the case presented here this interaction is of particular interest as to whether the parent should be present in the operatory or not. This question has often been termed the argument of ‘parent in or out’ and has been the object of a number of research studies published over the past 40 years [Lewis and Law, 1958; Frankle et al., 1962; Croxton, 1967; Allen and Evans, 1968; Venham et al., 1978; Fenlon et al., 1993], with no clear consensus of opinion. There therefore remain differences as to the need of parental presence during dental treatment. Although the bulk of the previous studies have been conducted in North America, the results of the study by Fenlon et al. [1993] on a cohort of British children were inconclusive in that no statistically significant difference was found between the groups of children evaluated. It was suggested by these authors that the role of the paediatric dentist could override any effect of parental presence or lack of it. In addition, changing social attitudes in recent years may bring about differences in how parents themselves see the necessity or not for being present.

Because of continued questions on the advisability of parental presence and the lack of information on Italian children and their parents, it was decided to look again at this problem. The aim of this research was to evaluate the efficiency of our current approach, focusing on the variable of children’s attitude to the presence or not of parents in a dental practice.

### Materials and methods

The study was conducted on a group of 200 children aged 3-8 years, coming from different social classes. The children, all scheduled for their first visit, were randomly divided into two groups. Thus, the first child to be seen was assigned to Group I (parent out) and the next to Group II (parent in). The children in Group I were treated by using the “tell-show-do” technique [Curzon et al., 1995], but without the presence of their parents during the visit. Group II was treated in exactly the same way but with presence of the parents.

Visits were carried out in a strictly structured way, performed by a previously instructed dental team of paediatric dentists and dental assistants. All children were seen by the same team. The detailed sequence of events for each visit was as follows:

- the clinician called the children directly from the waiting room and brought them into the dental clinic;
- with the patient seated on the dental chair the clinician began to explain what would happen and show all instruments and procedures using a ‘childrenese’ language;
- having gained cooperation from the patient, the visit was completed by a full examination of the dentition and a prophylaxis, always explaining all the different phases and trying to obtain cooperation;
- in those cases where it was not possible to gain enough cooperation for an examination and prophylaxis, the child was sent back to the waiting room and reappointed to a later date.

Evaluation of the success of each visit was made by the examining dentist recording the behaviour by a simple assessment of ‘cooperative’ or ‘non-cooperative’. The study was ended when there were 100 children in each group. Statistical analysis of the data was made by \( \chi^2 \).

### Results

Out of the 100 children in Group I, 89 accepted the first visit without hesitation, 3 came back spontaneously on same day at a later time, 7 accepted treatment on a following second appointment and one child never returned. Out of the 100 children in Group II, 63 accepted the first visit without hesitation, 29 accepted treatment on a second appointment and 8 never came back.

The difference in response was statistically significant (\( \chi^2 \) test): it would appear that there was a better result from the group with the ‘parent out’ (89/100) compared with that of Group II ‘parent in’ (63/100). It was also noted that the failure to return rate was higher for the ‘parent in’ group, using the Fisher’s exact test (Table 1).
in treating children aged 3-12 years was related to separation of the child and parent. However, Allen and Evans [1968] found no difference whether the parent was in or out. Venham et al. [1978], using a variety of behavioural assessment techniques, also found no difference between groups.

This raises the question as to whether the background attitudes of Italian parents are possibly different to that reported elsewhere. In the study by Fenlon et al. [1993] there were three groups of British children. In one group the parents were present during treatment, in the second they were not present and in a third group the parent could observe the treatment through a one-way window. In this study there was no statistical difference in behaviour rating of the children as assessed by an independent panel of judges in a ‘blind’ viewing of video film of each patient between the three groups.

Wright et al. [1987] discussed very fully the question of whether the parent should be present or not. At the time his textbook on behaviour management of the child was being written, the climate of opinion in North America was to exclude the parent. Where a parent insisted on being present, Wright et al. felt that this could be allowed but the parent should only be a ‘silent observer’, taking no part in the conduct or communication of the visit. However, there are differences in cultural attitudes among countries. More recently views in some groups of paediatric dentists have changed and younger dentists are more at ease with parental presence. Nevertheless, in our study it was clear that the response of the children was not as good when their parents were present. While the number was very small, and not statistically significant, the children not returning in the ‘parent in’ group (8) were more than those in the ‘parent out’ group (1). It may be that the parents in Group II were more likely not to like the conduct of the visit and decided not to come back.

Where a mother is present, her behaviour can be important on the outcome of the visit. Maternal anxiety can be a factor in governing a child’s behaviour as shown by previous studies [Johnson and Baldwin, 1968; 1969]. Where a mother or a father have negative attitudes themselves, or they have had previous bad experiences of dentistry, then these anxieties can be readily transferred to their child. For these reasons it may be much better to exclude the parent during the dental visit.

Therefore, the majority of studies previously conducted on this matter were with North American child populations, and the present study appears to be the first with Italian children. A review of the existing

### Discussion

The young child is potentially always an ideal patient and it is possible to gain a perfect patient-doctor relationship that will positively affect their dental future. However, it is necessary that paediatric dentists, or any dentists treating children, are aware of the principles of paediatric psychology. Our study highlights the importance, for the cooperation of the patient, of an informal first visit with the goal of obtaining friendship and making the child feel at home in the dental office. It is useful that the clinician gives the idea of a friendly person to the young child, but at the same time very self-confident. The clinician must be able to impose his point of view when the patient is refusing treatment without any objective reason. The ideal way to introduce dentistry to children is through the “tell-show-do” technique, as to make the patients feel they have an active part in what is happening.

The controversy on whether the parent should be present or not during dental treatment should be further researched and discussed. While our results are not conclusive it was clear overall how negative was the presence of parents for the success of first visit in young patients. The result of 89% of children not accompanied by parents accepting immediately the visit was better than the 63% of those who were seen in presence of their parents. Even for those children who initially refused the visit, the percentage of those successively visiting at a second time was greater for the first group. It has been suggested that there is also an age effect. Thus the study by Frankle et al. [1962] was on very young children aged 41-49 months, and showed a negative effect of parental separation. Croxton [1967] reported that his success

<table>
<thead>
<tr>
<th>Group</th>
<th>Group II</th>
<th>Statistical analysis</th>
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<tbody>
<tr>
<td>Accepted visit at first appointment</td>
<td>89%</td>
<td>63%</td>
</tr>
<tr>
<td>Came back the same day</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Accepted visit at second appointment</td>
<td>7%</td>
<td>29%</td>
</tr>
<tr>
<td>Refused and did not return</td>
<td>1%</td>
<td>8%</td>
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**Table 1** - Distribution of children’s acceptance of initial visit treatment in a group of Italian children aged 3 to 8 years with and without parental presence.
data indicates no clear consensus of opinion on whether a parent should be present or not during the first phase of dental treatment. Pending the results of further studies our opinion is that for Italian children it is better to exclude the parental presence.

**Conclusion**

The application of the “tell-show-do” technique is ideal for children’s first dental visit. The results of this study indicate that elimination of the parental filter, by their not being in the operatory, leads to a greater success rate for cooperation. The role of the parent should be as a simple chaperon, as his/her presence would generate an unbalancing of the communication between dentist and child.

**References**


