Original research:

Association between parenting style and effectiveness of ‘Tell Show Do’ technique used for children in dental clinics: A pilot study

Kumar Kavita Krishna, Joby Peter, Bijimole Jose, Sreelakshmi V

Department of Pediatric and Preventive Dentistry, Annoor dental college, Muvattupuzha, Kerala, India

Corresponding Author: 007.kavita@gmail.com; +91 8125774535

Dr. Kavitha Kumar

Funding: NIL

Acknowledgments: NIL

Data Availability Statement: Upon request to the correspondence author

Conflicts of Interest: The authors declare no conflicts of interest.


Abstract
The objective of this study was to see how the parenting style of a child's parents affected the “tell-show-do” approach of behavior control during their first dental checkup and operation. Also, to determine how the behavior of the parents affects the behavior of the child, the study included 15 children aged 0 to 4 years old, as well as the people who cared for them and volunteered to participate. To determine how the parents raised their children, the Parenting Styles and Dimensions Questionnaire (PSDQ) was employed. The patients underwent a dental exam, followed by a class I restorative treatment, and their conduct was assessed using Frankel's behavior rating scale. The TSD behavior-shaping method was used on all of the patients, and its efficiency was observed. There was a statistically significant association (p = 0.044) between how a parent raised their child and how effectively a behavior modification method (BMT) was performed during the first dentist exam. The strategy was effective with children whose parents were in charge. The parents had to be present during the initial dental test, and how the parents acted affected how the child behaved in the dental operatory. The child's behavior in the dentist's office was influenced by how his parents felt. Regardless of how the parents felt about it, the BMT was an important element of getting the child to participate more during the dental procedure.

Keywords: Behaviour management technique, dental anxiety, tell-show-do, parenting style

Submitted: 04.04.22; Revised: 06.05.22; Accepted: 31.07.22; Published: 12.12.22
Introduction
A child's mental health, outlook, well-being, and social and cognitive development are profoundly influenced by their parents, both now and in the future. [1] Whether or not a child behaves well for the doctor or dentist depends heavily on the parents, especially if the kid has had terrible experiences in the past. A child's bad behavior at the dentist's office may be the result of their parents' anxiety or nervousness.[2,3] Children's coping mechanisms are profoundly influenced by their parents' parenting styles. How a child is taught to interact with grownups is a direct reflection of the parenting style at home. This alters their manner of conversation with the dentist going forward. Even at the dentist, a child's ability to cope with stress and excitement is influenced by their upbringing.[4]

Baumrind discovered three distinct parenting styles: strict, authoritative, and lenient. Hard techniques like beating, yelling, and giving commands characterize the authoritarian (high control, low warmth) parenting style. Children raised in households with strict restrictions tend to be reserved and wary as adults. [5] The authoritative parent (high warmth, high control) is the one who enforces rules while still being kind and caring. These households feature two-way communication. The indulgent parent adores their child but often lets him or her do anything they choose. A lenient parent may spoil and coddle their child. As "co-owners" of the home, children have no duties in a permissive household. [5] The "Tell-Show-Do" approach is widely used when instructing young learners. The theory of learning serves as its conceptual foundation. The youngster must be fully informed of the treatment plan and shown how it will operate on a simulator before any procedures are performed. It's important to know exactly what's going to happen before beginning any surgery. [8]

This research aimed to answer the question
1. The influence of parenting styles on the "tell-show-do" technique used to manage children's conduct during their first dental visit.
2. To examine the links between parental behavior and offspring outcomes.

Materials and methods:

Ethical approval
After being informed of the study, the participant's parents granted their consent and it had been approved by the institution's ethical board (IEC No. 021-B/02).

Study population
The study included 15 children between the ages of 4-6 and their parents who went to the Department of Pediatric and Preventive Dentistry at the Annoor Dental College in Muvattupuzha. They were asked if they were ready to take part in the study, and their understanding of the questionnaire was checked. Parents of children with special health care needs or who had to go to the dentist right away were left out.

Design:
The PSDQ is a 32-item assessment of a parent's authoritativeness, dominance, and tolerance. In each case, the options were "yes" or "no." The tight parenting style was measured by a set of 12 questions, each of which may yield a score between 0 and 60. There were 15 points assigned to the prevailing style, which might range from 0 to 75. The open format allowed for five variables, all of which ranged from 0 to 25. [9] The average score in each category of parenting was used to identify the parent's approach. The optimal parenting style group was determined by the parent with the highest mean score. To determine their parenting styles, the parents completed a modified version of the Parenting Styles and Dimensions Questionnaire (PSDQ). Two specialists double-checked the Malayalam-language questionnaire's accuracy. The patients were given a dental examination and a class I restorative procedure. Frankel's behavior rating scale was used to keep track of the child's actions. All of the cases were treated using the TSD technique for shaping behavior, and it was found to be effective. The inspector was unable to view the patient's parents' clothing. The TSD method was successful if the child was cooperative during the examination and treatment. A "negative response" was recorded if the TSD approach was unsuccessful because the child refused to cooperate with a medical examination or treatment. The study's authors hypothesized that children would behave better in dental offices if their parents exercised more control.

Statistical analysis
Microsoft Excel was used to store the data, while IBM SPSS Statistics Version 24 was used for the analysis. Armonk, NY: IBM Corp., 2015. IBM SPSS Statistics for Windows, Version 24.0. Statistics were used to summarize the relationship between parenting methods and child behavior. Using the Chi-Square Test, we looked at whether there was a correlation between parenting approaches and the success of the Tell-Show-Do method. Using the Chi-Square test, we compared the percentages of the child's behavior with the different types of parental attitudes.
**Results**

The study was done with 15 kids and their parents. All of the parents who were asked to fill out the survey did so freely. Six were boys and nine were girls, and their ages ranged from 4 to 12 (Figure 1). Table 1 shows that ten of the parents who answered were authoritative (66.7% of the total) and five were permissive (33.3%).

There wasn’t a single parent who was too strict in the group. A statistically significant ($p = 0.044$) link was found between parenting style and the success of a behavior modification method (BMT) during a child’s first visit to the dentist. Table 2 shows that fir parenting helps TSD work. Again, children who had parents who were strict did better than those whose parents let them do whatever they wanted. This was true during the first visit. No matter how their parents handled things at home, though, all of the kids did well during the dental treatment. TSD’s way of changing behavior worked, and it didn't matter how the parents did it. Table 3 shows that there was no statistically significant link between the way people raised their kids and whether or not they used the BMT method ($p = 0.095$).

![Gender distribution of study participants](image-url)

**Table 1: Frequency of parenting type based on PSDQ scale among study participants**

<table>
<thead>
<tr>
<th>Parenting Type</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritative</td>
<td>10 (66.7)</td>
</tr>
<tr>
<td>Permissive</td>
<td>5 (33.3)</td>
</tr>
</tbody>
</table>

**Table 2: Association between parenting style and success of the tell-show-do technique after the dental examination**

<table>
<thead>
<tr>
<th>Parenting Type</th>
<th>TSD Success</th>
<th>$\chi^2$</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes n(%)</td>
<td>No n(%)</td>
<td></td>
</tr>
<tr>
<td>Authoritative</td>
<td>6 (60)</td>
<td>4 (40)</td>
<td>5.0</td>
</tr>
<tr>
<td>Permissive</td>
<td>0 (0)</td>
<td>5 (100)</td>
<td></td>
</tr>
</tbody>
</table>

* Fisher’s Exact test; s=significant

**Table 3: Association between parenting style and success of the tell-show-do technique after the dental procedure**

<table>
<thead>
<tr>
<th>Parenting Type</th>
<th>TSD Success</th>
<th>$\chi^2$</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes n(%)</td>
<td>No n(%)</td>
<td></td>
</tr>
<tr>
<td>Authoritative</td>
<td>10 (100)</td>
<td>0 (0)</td>
<td>4.62</td>
</tr>
<tr>
<td>Permissive</td>
<td>3 (60)</td>
<td>2 (40)</td>
<td></td>
</tr>
</tbody>
</table>

* Fisher’s Exact test; ns=non-significant
Discussion
A few parents in the group were more casual than the majority. Aminabadi et al. [10] discovered that strong parenting styles resulted in improved behavior in children than authoritarian and permissive parenting styles. Children with authoritative parents experience greater happiness and mental growth. Additionally, they behave and interact better in dental offices. [11] During the initial clinical examination, approximately 60% of children with stringent parents were cooperative, while only 40% of those with lax parents were. The results of this study demonstrated a strong relationship between parenting style, as measured by the Parenting Style and Discipline Questionnaire (PSDQ), and the efficacy of the TSD behavior modification method used with children on their first visit to the dentist. According to a study conducted by Howenstein et al. [1] children whose parents were in command tended to behave better at the dentist.

In this investigation, TSD was used to influence people's behavior. It is still the most prevalent technique used in pediatric dentistry. Parents and dentists are still most at ease with this approach, so it makes sense to use it as the primary method for teaching children and helping them behave during their first visit. [8, 12, 13, 14] This method can be utilized as a standard practice. Most of the time, pediatric dentists use made-up words and phrases to make their messages clearer and easier for children to comprehend. This alternative language is similar to a second language, and it is used to communicate between the pediatric dentist and the child. [15]

TSD is one of the most popular dental procedures because it is painless and simple to apply. [16] But research has focused on the active participation of parents in effective behavior guidance, as parents can play an essential role in reducing a child’s anxiety and assisting the dentist in building a treatment coalition. [17] How a child handles the tension and stimulation of a trip to the dentist can depend greatly on the actions of his or her parents. [18]

Virupaxi [19] established that the TSD behavior management technique was effective in reducing a child's fear and anxiety because the majority of children in their study were cooperative at the conclusion of treatment. Therefore, behavior management techniques should be implemented so that the child eagerly returns for treatment, receives regular follow-ups throughout his lifespan, and has a favorable attitude toward dentistry. Approximately one hundred percent of children whose parents were authoritatively cooperated with the TSD behavior modification technique during dental procedures.

This indicates that the technique worked regardless of the parents’ characteristics. Depending on the technique employed, the results can vary. In this instance, the dental treatment was a class I restorative procedure, which was painless and could have improved the children’s behavior. The TSD technique would have been more effective in our study if it had been more invasive. However, the answer would have been different if we had considered extraction. This study suggests that parenting style impacts the efficacy of TSD, but only for the initial dental visit. To gain a better understanding of how parenting style affects the efficacy of the TSD technique, additional research is required to evaluate this method on various dental treatments and compare the results.

Conclusion
The majority of the parents in our group were firm in how they reared their children. During the child’s first dental checkup, he required assistance from his parents, and how the parents acted affected how the youngster acted in the dentist’s office. So forth the parents thought, the BMT was an important aspect of getting the youngster to cooperate more with the dentist throughout the procedure. A possible caveat to the findings is that this is a pilot study with a relatively small sample size. The sample size can be increased to support the findings of this study.

The Authors

[Images of authors: Dr. Joby Peter, Dr. Bijinole Jose, Dr. Srerakshani V]
Reference


