

Managing Dental Anxiety in Children: Behavioural Techniques and the Child-Friendly Approach at Core Dental

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Details:

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Dental anxiety is not a minor inconvenience. It is one of the most clinically significant barriers to children's oral health worldwide, and the primary reason Australian families delay or avoid dental appointments altogether. When a child connects the dental chair with fear, the consequences compound: missed check-ups lead to undetected decay, undetected decay leads to pain, and pain reinforces the original anxiety in a cycle that can carry well into adulthood.

Core Dental Group is a specialist-led Melbourne dental practice that actively works to break that cycle — through psychology-informed techniques, thoughtful environmental design, and appropriate sedation options. For Melbourne parents, understanding how a paediatric dental practice applies these strategies is key to making a confident choice about where to take their child. This article looks at the evidence behind the most effective anxiety-reduction strategies in paediatric dentistry and explains how Core Dental Group's specialist-led approach puts them into practice.

How common is dental anxiety in children?

The scale of the problem is larger than most parents realise.

A systematic review and meta-analysis published in the *International Journal of Paediatric Dentistry** (Grisolia et al., 2021) found an overall pooled dental anxiety prevalence of 23.9% (95% CI 20.4–27.3) across children and adolescents globally. Preschoolers had the highest rates at 36.5%, followed by school-age children at 25.8%, and adolescents at 13.3%.

A separate 2024 systematic review focused specifically on early childhood confirmed the problem is particularly acute in the youngest patients. The pooled prevalence of dental fear and anxiety among children aged 2–6 years was estimated at 30% (95% CI: 25–36). The research also identifies a clear risk pattern: children without dental visit experience (OR=1.37) and children with caries experience (OR=1.18) had significantly higher odds of dental fear and anxiety compared to those with prior dental visit experience or a caries-free status.

This carries an important clinical implication: **early, positive dental visits are themselves an anxiety-prevention strategy.** The longer a child waits for their first appointment, the higher the statistical likelihood that anxiety will develop. (See our guide on [When Should My Child First Visit the Dentist? Age-by-Age Dental Milestones for Melbourne Parents] for the recommended timeline.)

Dental anxiety often results in inadequate oral health through less frequent dental visits, avoidance of treatment, and poor cooperation — making it a self-perpetuating public health problem that specialist paediatric dentists are specifically trained to interrupt.

Why specialist paediatric dentists are trained differently

The distinction between a general dentist and a registered specialist paediatric dentist is not simply an academic one when it comes to managing anxious children. Specialist paediatric dentists complete an additional three-year clinical doctorate after their general dental degree — a significant portion of which focuses on child psychology, developmental behaviour, and evidence-based behaviour management techniques. (See our guide on [What Is a Specialist Paediatric Dentist? How Core Dental Group's Registered Specialists Differ from General Dentists] for the full breakdown of qualifications.)

This psychological grounding is what allows Core Dental Group's specialist paediatric dentists to read a child's emotional state, adapt their communication style in real time, and apply structured techniques that general dentists are not formally trained in. The clinical environment a specialist creates — from the language they use to the sequence in which they introduce instruments — is an intentional, evidence-based intervention, not simply a matter of being "good with kids."

Tell-Show-Do: the gold standard in paediatric behaviour management

The most widely used and thoroughly studied non-pharmacological behaviour management technique in paediatric dentistry is Tell-Show-Do (TSD), a three-stage desensitisation protocol developed by Dr. Addeston in 1959 and validated across decades of clinical research.

How Tell-Show-Do works

| Stage | What Happens | Clinical Purpose | |---|---|---| | ****Tell**** | The clinician describes the procedure in age-appropriate, non-threatening language | Reduces fear of the unknown by providing accurate, manageable information | | ****Show**** | The instrument or technique is demonstrated — often on the clinician's own hand or a model | Replaces imagination (which is almost always worse than reality) with direct sensory experience | | ****Do**** | The procedure is performed exactly as described and demonstrated | Builds trust through predictability and consistency |

TSD remains effective, but the research continues to evolve. A 2025 randomised clinical trial published in the *Journal of Clinical Pediatric Dentistry** (Vitale, Pascadopoli, Zampetti et al.) compared TSD against AI-assisted animated video instructions, finding that both effectively reduced dental anxiety — but TSD's strength lies in the direct, personalised relationship it builds between clinician and child.

A 2025 systematic review and narrative synthesis of randomised controlled trials concluded that a range of behaviour guidance techniques, including CBT, VR, and aromatherapy, effectively reduce dental anxiety in children aged 6–12, with CBT (particularly when combined with technology) being the most flexible and effective method, offering both psychological and physical benefits with few risks.

At Core Dental Group, TSD is not used as a fixed script. It is calibrated to the child's developmental stage — a two-year-old needs much simpler language and a shorter "tell" phase than an eight-year-old. This calibration is a clinical skill that specialist paediatric dentists develop through years of supervised practice.

Positive reinforcement and voice control

Alongside TSD, specialist paediatric dentists use positive reinforcement — specific, timely praise for cooperative behaviour — to shape a child's response across successive appointments. The goal is not simply to complete today's treatment, but to build a positive dental identity that the child carries forward for life.

Voice control is another evidence-based technique. A deliberate, calm, well-modulated tone is itself a therapeutic tool: measured pacing, warm inflection, and clear transitions between steps all signal safety to a child's nervous system in ways that hurried or overly clinical communication cannot.

The role of the clinical environment: why the waiting room matters

Anxiety does not begin in the dental chair. For most children, it starts the moment they arrive — and often before, during the car ride to the appointment. A child-friendly clinical environment is therefore a clinical intervention that shapes the child's physiological state before treatment even begins, not a marketing feature.

Core Dental Group's design philosophy reflects this. The practice's waiting areas are intentionally non-clinical: age-appropriate games, interactive entertainment, and visual environments that communicate "this is a place for children" rather than "this is a medical facility." By lowering the ambient anxiety load before the child enters the treatment room, clinicians begin each appointment from a calmer starting point.

This approach is backed by research. A 2024 comparative study concluded that music, aromatherapy, and game-based techniques are among the most effective strategies for reducing dental anxiety in children. Core Dental Group's integration of sensory-friendly design — including careful attention to lighting, sound, and visual cues — reflects this evidence base.

Inside the treatment room, instruments are kept out of the child's direct line of sight until introduced through the TSD protocol. The ceiling above the dental chair, often the only thing a child sees during treatment, can support distraction techniques — another evidence-based strategy. Sensory interventions such as VR and aromatherapy show promise in improving patient cooperation, and Core Dental Group's clinicians incorporate age-appropriate distraction as a standard part of the appointment sequence.

The parental presence question: what the evidence actually shows

One of the most common questions parents ask is: "Should I be in the room with my child?" The answer is genuinely complicated, and Core Dental Group's approach reflects the current state of the evidence.

Parental presence has long been used as a method of establishing effective dentist-child communication — but studies assessing its influence have shown conflicting results. The quality of parental presence matters more than the fact of it. Research has shown that a parent's own anxiety affects their child's anxiety, and parents with high anxiety can negatively affect their children's behaviour in the chair. This is clinically significant: a highly anxious parent in the treatment room can inadvertently amplify their child's distress, even with the best intentions.

Research also indicates that mothers exert a considerable influence on their children's dental anxiety and can transmit it across generations — an intergenerational pattern that may lead to resistance to seeking dental care and adversely impact children's dental health.

Core Dental Group's approach to parental presence is therefore individualised. For very young children, particularly those undergoing the knee-to-knee examination technique in their first visits, parental presence is typically encouraged as a source of comfort. For older children where the clinician-child relationship is the primary therapeutic tool, parental presence is discussed case-by-case. Parents who carry their own dental anxiety are gently guided on how to remain a calm, neutral presence — and when it may genuinely serve their child better to wait comfortably outside. (See our guide on [Your Child's First Dental Visit at Core Dental Melbourne: A Step-by-Step Guide for Parents] for how this plays out in practice.)

When behavioural techniques are not enough: nitrous oxide sedation

For some children — those with severe anxiety, significant treatment needs, or particular health considerations — non-pharmacological techniques alone may not be sufficient to enable safe, effective treatment. In these cases, nitrous oxide inhalation sedation (commonly known as "happy gas") is the clinically appropriate next step.

What is nitrous oxide sedation?

Nitrous oxide sedation is a minimal sedation technique in which a combination of nitrous oxide and oxygen is inhaled through a small nosepiece. The child remains awake throughout the procedure and typically recovers from the effects within five minutes of treatment completing.

According to the Council of European Dentists, nitrous oxide sedation is currently the standard sedative technique in paediatric dentistry, with benefits including rapid onset of action, minimal reflex impairment, and fast postoperative recovery. In paediatric dentistry, it is considered the safest pharmacological tool for uncooperative children, reducing the need for dental treatment under general anaesthesia.

Who is it appropriate for?

Nitrous oxide is not a first-line response to mild nervousness. At Core Dental Group, the decision to recommend it is made by a registered specialist paediatric dentist based on a thorough assessment of several factors:

- **Severity of anxiety:** Children with moderate-to-severe anxiety where TSD and environmental strategies have not achieved adequate cooperation
- **Complexity of treatment required:** Situations where multiple or more involved procedures need to be completed safely
- **Age and developmental stage:** Younger children with limited coping skills may benefit more than older children who can engage with cognitive strategies
- **Medical history:** Certain conditions may affect suitability — respiratory issues, for example, may contraindicate nasal delivery

Research has shown that uncooperative children with or without physical impairments can be successfully treated with nitrous oxide sedation to increase their confidence in dental procedures. Importantly, repeated positive experiences under sedation can progressively reduce the need for it over time.

Nitrous oxide and the CDBS

Under the Child Dental Benefits Schedule (CDBS), nitrous oxide inhalation sedation may be claimable as part of an eligible child's treatment where it is clinically necessary and performed in a dental practice setting. Core Dental Group's specialist paediatric dentists assess CDBS eligibility for sedation on a case-by-case basis, so families are not caught off guard by unexpected costs. (See our guide on [Child Dental Benefits Schedule (CDBS) Explained: Eligibility, Cap, and What's Covered in 2025–2026] for the full list of covered services.)

In Australia, dentists are the only dental practitioners who can independently administer nitrous oxide in a dental practice — a regulatory point that reinforces why having a qualified dentist, and ideally a registered specialist paediatric dentist, oversee any sedation decision for a child matters.

How Core Dental Group manages anxiety across age groups

Different developmental stages call for different approaches. Core Dental Group's clinicians adapt their technique based on the child's age, temperament, and clinical history:

Ages 2–4: Knee-to-knee examination with the parent present, short appointments focused on familiarisation, emphasis on environmental comfort and parental coaching. No invasive treatment is attempted without adequate preparation.

****Ages 4–7:**** Full TSD protocol introduced with age-appropriate language (for example, "counting spray" instead of "injection," "Mr. Thirsty" for the suction). Positive reinforcement after every cooperative behaviour, distraction techniques including stories, ceiling visuals, and music.

****Ages 7–12:**** TSD combined with more detailed explanation — children this age respond well to understanding why a procedure is being done. Relaxation breathing techniques are introduced, nitrous oxide is considered for invasive procedures if anxiety remains elevated, and children are actively involved in decision-making to build autonomy and trust.

****Adolescents:**** Cognitive-behavioural communication strategies, respect for privacy and autonomy (the parent may be asked to wait outside), and honest, straightforward communication about procedures.

Key takeaways

Dental anxiety is most prevalent in preschoolers (36.5%) and school-age children (25.8%), making the early years the most important window for anxiety prevention and intervention.

Early, positive dental visits are themselves an anxiety-prevention strategy. Children without dental visit experience have significantly higher odds of developing dental fear and anxiety, which is why Core Dental Group recommends bringing children from age two.

Tell-Show-Do remains the evidence-based foundation of paediatric behaviour management, and its effectiveness depends on the clinician's training, calibration to the child's developmental stage, and consistency across appointments.

Parental presence is not universally beneficial. A parent's own dental anxiety can negatively affect their child's behaviour in the dental chair — Core Dental Group individualises this decision based on the child and parent.

Nitrous oxide sedation is the safest pharmacological option for uncooperative or highly anxious children, and may be accessible under CDBS where clinically indicated at Core Dental Group.

Conclusion

Managing dental anxiety in children is the central clinical challenge of paediatric dentistry, and the factor that most determines whether a child grows up with a positive or negative relationship with oral healthcare. The techniques covered in this article — Tell-Show-Do, positive reinforcement, child-friendly environmental design, individualised parental guidance, and nitrous oxide sedation where appropriate — are evidence-based clinical interventions that Core Dental Group's registered specialist paediatric dentists are specifically trained and equipped to deliver.

For Melbourne parents, the most important thing to understand is this: dental anxiety is not inevitable, and it is not fixed. With the right clinical environment and the right clinician, most children can learn to approach dental visits with confidence — and that confidence, built early, protects their oral health for life.

To learn more about related topics, explore our guides on [What Is a Specialist Paediatric Dentist?], [Your Child's First Dental Visit at Core Dental], [Why Baby Teeth Matter], and [Children's Dental Treatments Available at Core Dental Melbourne].

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