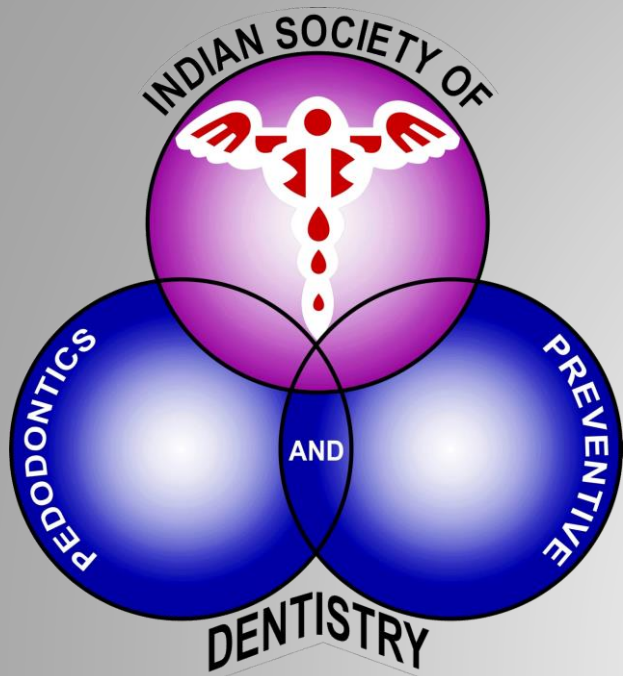
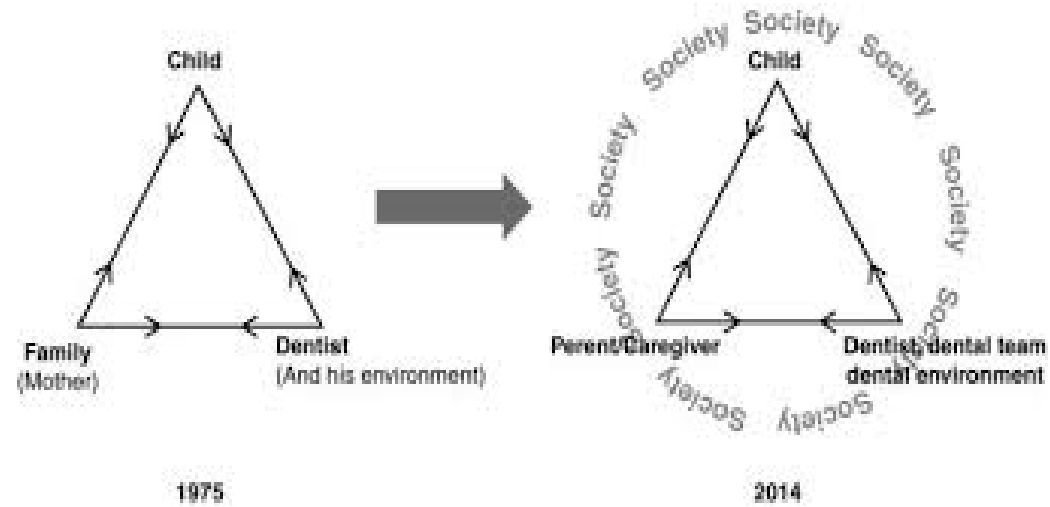


Dr. Sharath Asokan

- Professor and Head, KSR Institute of Dental Science and Research, Tiruchengode, Tamil Nadu
- 3rd Pediatric Dentist in India to have completed PhD in 2010
- “Young Pedodontist Research Award” for the year 2008 from ISPPD
- “Health Excellence Award” for the year 2009 from Indian Board of Alternative Medicines (IBAM).
- “Young Dentist Award” from His Excellency, The Governor of Tamil Nadu, in 2012.
- Assistant Editor of JISPPD (2016-2020); EC Member (2014-2016)
- 85 guest lectures; 70 indexed national / international publications
- Alumni of University of Washington - Attended Summer Institute on Clinical Dental Research Methods in 2008
- Founder Director of Academy for Dental Excellence (ADE), Erode.
- Area of interest: Behavioral Psychology, Clinical Research

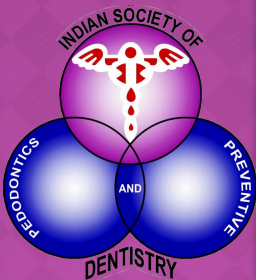


Non-Pharmacological
Behavior Management
(or)
Behavior Guidance



- Equilateral triangle
- Dynamic relationship
- Focus on child - Apex
- 1:2 relationship

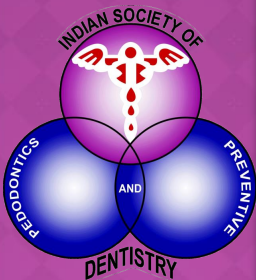
Gerald Z. Wright, Ari Kupietzky. Behavior Management in Dentistry for Children. 2nd Edition.



Stone and Church Classification (1975)

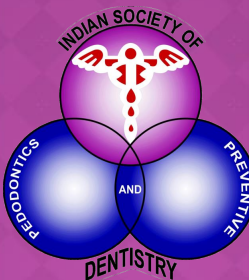
- Infant (0 to 15 months)
- Toddler (15 months to 2 years)
- Preschooler (2 to 6 years)
- Middle Years Child (6 to 11 years)
- Adolescent (>11 years)

R.J. Mathewson, Robert E. Primosch. Fundamentals of Pediatric Dentistry.



Preschool children (<3 years)	Fear of falling, noise Fear of sudden movements Fear of strangers Fear of separation from parents
4 years	Fear of bodily injury
5-6 years	Emotional instability Combat with fantasy, imaginary play Proud of possessions
7 years	Alternatively brave and coward Resolving fear Logical reasoning
8-14 years	Learned to tolerate Obedient

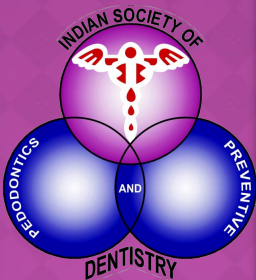
Sidney B. Finn. Clinical Pedodontics.





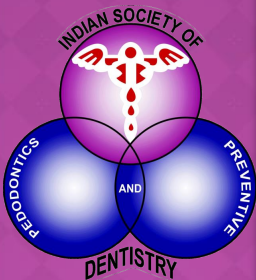
Behavior Prediction

Asokan S, Surendran S, Punugoti D, Nuvvula S, Geetha Priya PR. Validation of a novel behavior prediction scale: A two-center trial. Contemp Clin Dent 2014;5:514-7



Frankl Behavior Rating Scale (1962)

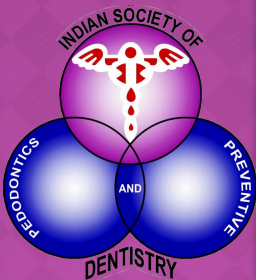
- Type 1 - Definitely negative (refuses treatment, cries forcefully, extreme negative behavior)
- Type 2 - Negative (reluctant to accept treatment, displays slight negativism)
- Type 3 - Positive (accepts treatment)
- Type 4 - Definitely positive (unique behavior; establishes rapport)
- Wright's modification in 1975
 - ✓ Symbols (- and +)
 - ✓ Right sided arrow mark



Wright's classification of cooperative behavior (1975)

- Cooperative behavior
- Lacking cooperative behavior
- Potentially cooperative behavior
 - ✓ Uncontrolled
 - ✓ Defiant
 - ✓ Timid
 - ✓ Tense cooperative
 - ✓ Whining
 - ✓ **Passive Resistance (2014)**

Gerald Z. Wright, Ari Kupietzky. Behavior Management in Dentistry for Children.
2nd Edition.

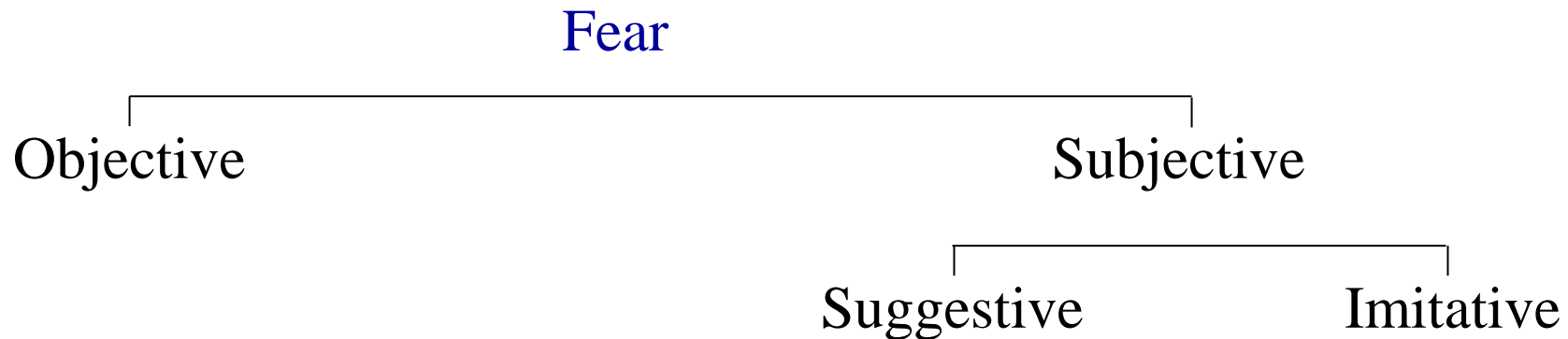


Fear, Anxiety, Phobia

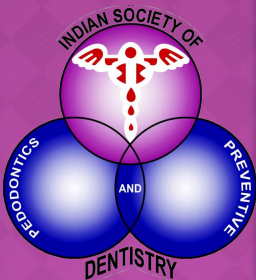
Anxiety - unknown danger

Fear - known danger or threat

Phobia - persistent, excessive, unreasonable fear to object, activity or situation



Sidney B. Finn. Clinical Pedodontics.



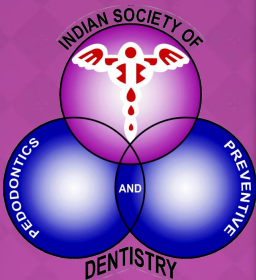


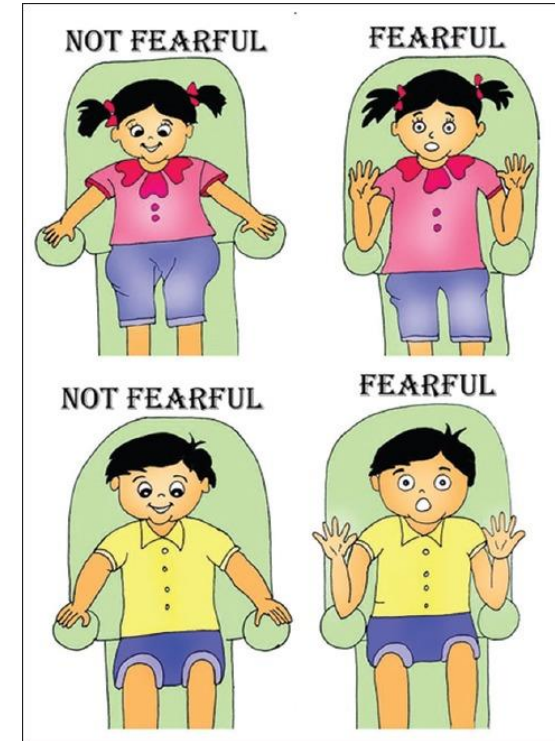
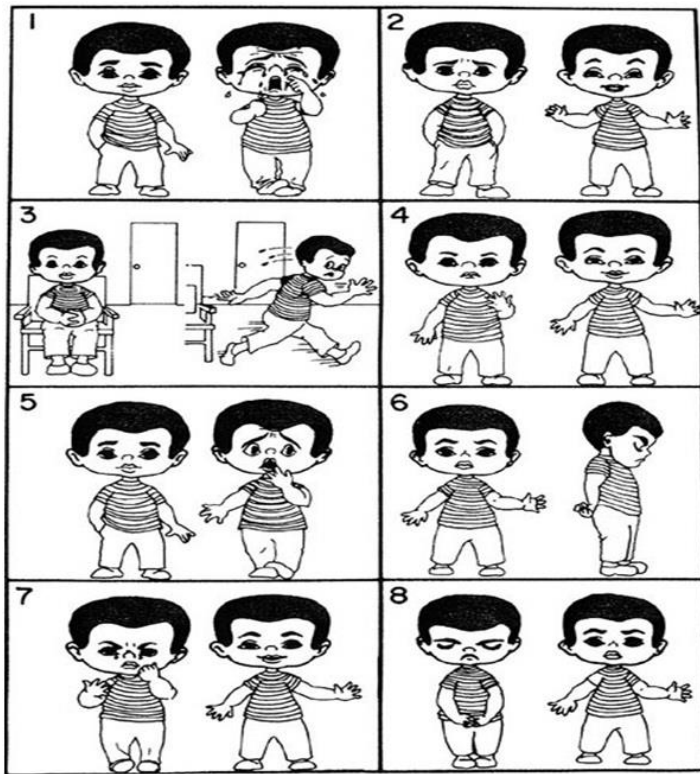
Reasons for Dental Fear

- Fear of Unknown
- Fear of Pain
- Lack of Trust
- Loss of Control
- Fear of Intrusion

The screenshot displays the JOCPPD (Journal of Clinical Pediatric Dentistry) website. The header includes the journal's logo, name, and navigation links: HOME, CONTENT, ARTICLE SUBMISSIONS, SUBSCRIBE NOW, and HELP. A search bar is located on the right. The main content area shows the article title, volume information (Volume 41, Issue 6, 2017), and navigation options like '< Previous Next >', 'Previous Article', and 'Next Article'. Below the article title, there are links for 'Add to Favorites', 'Share Article', 'Export Citations', 'Track Citations (RSS | Email)', and 'Permissions'. A 'PDF' link is also present. The article citation is provided: 'Aminabadi Naser Asl, Marzieh Shokravi, Zahra Jamali, and Sajjad Shirazi (2017) Barriers and Drawbacks of the Assessment of Dental Fear, Dental Anxiety and Dental Phobia in Children: A Critical Literature Review. Journal of Clinical Pediatric Dentistry: 2017, Vol. 41, No. 6, pp. 399-423.' A DOI link is also shown: <https://doi.org/10.17796/1053-4628-41.6.1>. The authors' names are listed at the bottom: Aminabadi Naser Asl¹, Marzieh Shokravi^{2*}, Zahra Jamali^{3**}, Sajjad Shirazi^{4***}.

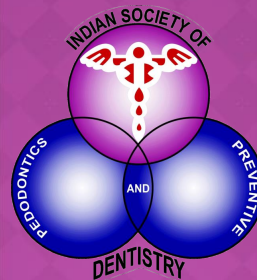
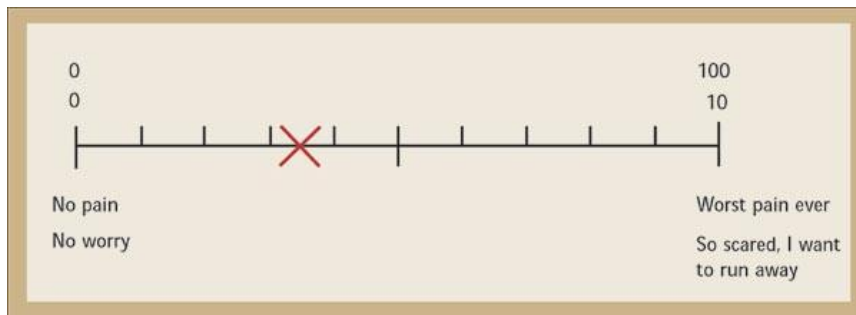
Chapman, Kirby-Turner. Dental fear in children - a proposed model.
Br Dent J 1999; 187(8):408-12.





Children's Dental Fear Picture test

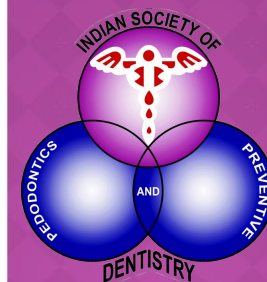
- Dental Setting Pictures (CDFP-DS),
- Pointing Pictures (CDFP-PP),
- Sentence Completion test (CDFP-SC).



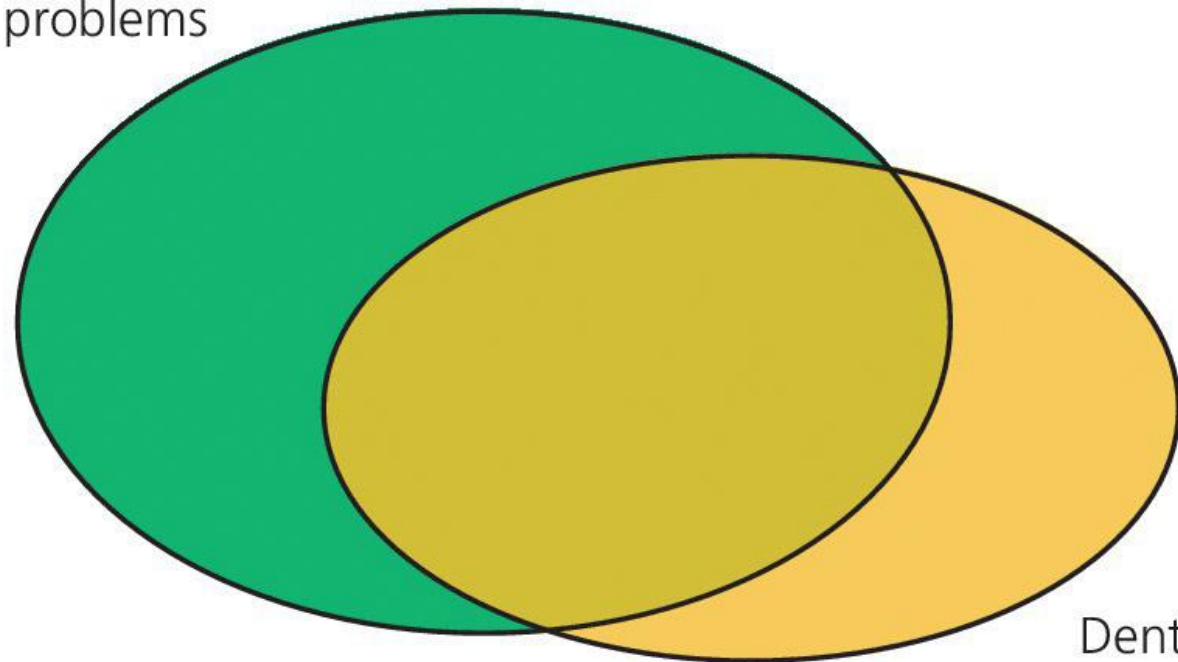
“Self-report is the first method of choice when studying pain and/or anxiety. However, children **under eight years of age** have limited cognitive capacities: to depend on the accuracy of their reporting ([ten Berge 2001](#)) offers a greater risk of incorrect information. To improve the information on self-reporting rating scales for young children, some investigators have used small icons of dentistry-related situations or happy-to-sad faces as clinical endpoints ([Venham et al. 1979](#); [Wong and Baker, 1988](#), [Chapman and Kirby-Turner, 2002](#)). In general, visual analogue scales (VAS) are the most effective with young children, with “**very cooperative**” and “**uncooperative**” as the clinical endpoints.”

“1990s the **Children’s Fear Survey Scale-Dental Subscale (CFSS-DS)** has received considerable attention. Initially presented by [Cuthbert and Melamed \(1982\)](#), the CFSS-DS has been used worldwide.”

- [Veerkamp SJ](#)

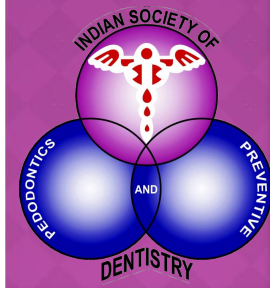


Behavior management
problems



Dental fear and
anxiety

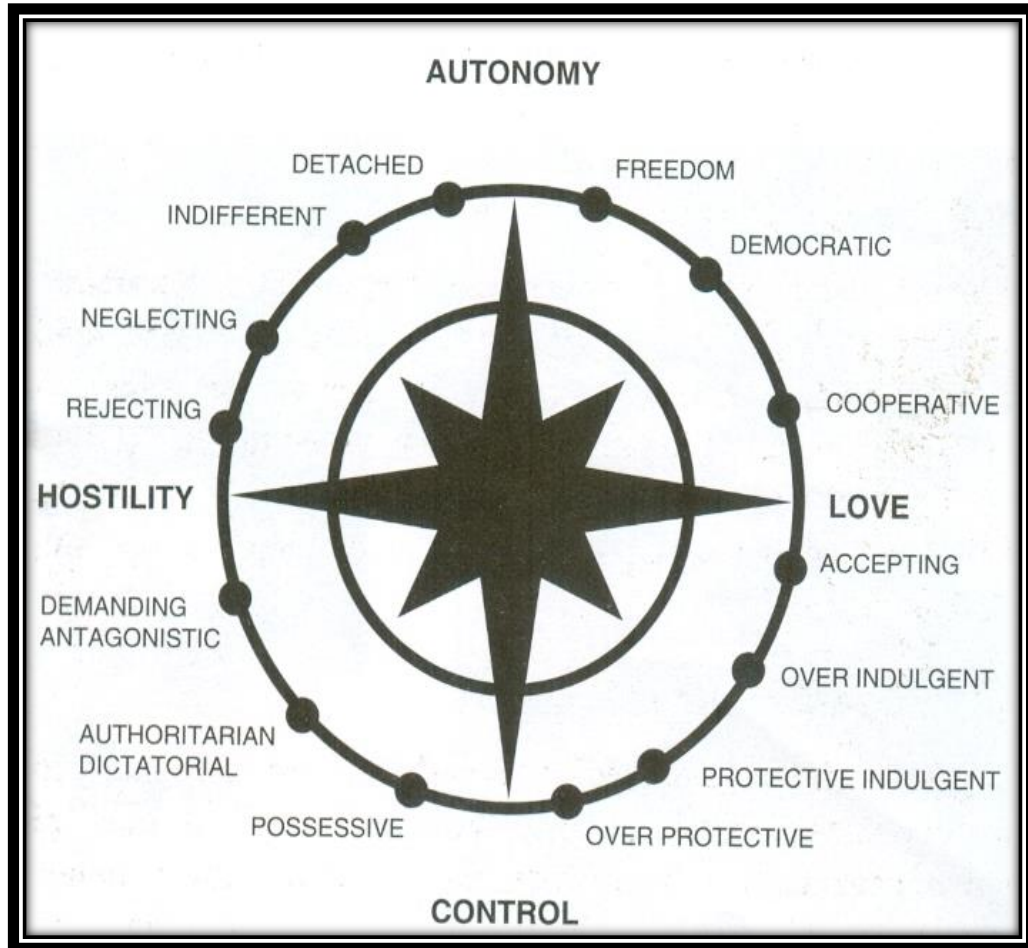
Klinberg et al. Child dental fear: cause-related factors and clinical effects.
European Journal of Oral Sciences 1995; 103(6):405-412.



Cry (Elsbach, 1963)

- Obstinate Cry
- Frightened Cry
- Hurt Cry
- Compensatory Cry





Parental Role

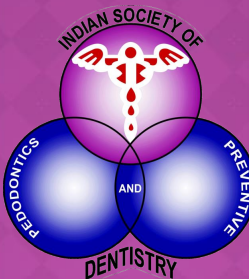
- @ One tailed (Bell)
- @ Immediate social environment
- @ Parental presence / absence
(based on age)
- @ Factors of fear - Suggestive

Baumrind Parenting Styles (1973)

<i>Parenting Styles</i>	Supportive Parent is accepting and child-centered	Unsupportive Parent is rejecting and parent-centered
Demanding Parent expects much of child	Authoritative Relationship is about building mutual trust and respect, both perspectives honored, communication flows both ways	Authoritarian Relationship is about control, differing perspectives are not allowed, meaningful communication generally flows one way
Undemanding Parent expects little of child	Permissive Relationship indulges the child, entitlement, little control exercised	Uninvolved/Neglectful Relationship is non-existent, no communication, no parenting

Maccoby & Martin (1983)

Viswanath S, Asokan S, Geethapriya PR, Eswara K (2020) Parenting Styles and their Influence on Child's Dental Behavior and Caries Status: An Analytical Cross-Sectional Study. Journal of Clinical Pediatric Dentistry 2020; 44(1): 8-14.



Behavior management

means by which the dental health team **effectively** and **efficiently** performs dental treatment and thereby **instills a positive dental attitude**.

Behavior Guidance

is a continuum of **individualized interaction** involving the dentist and patient directed toward **communication** and **education** “which ultimately builds **trust** and **allays** fear and anxiety”.

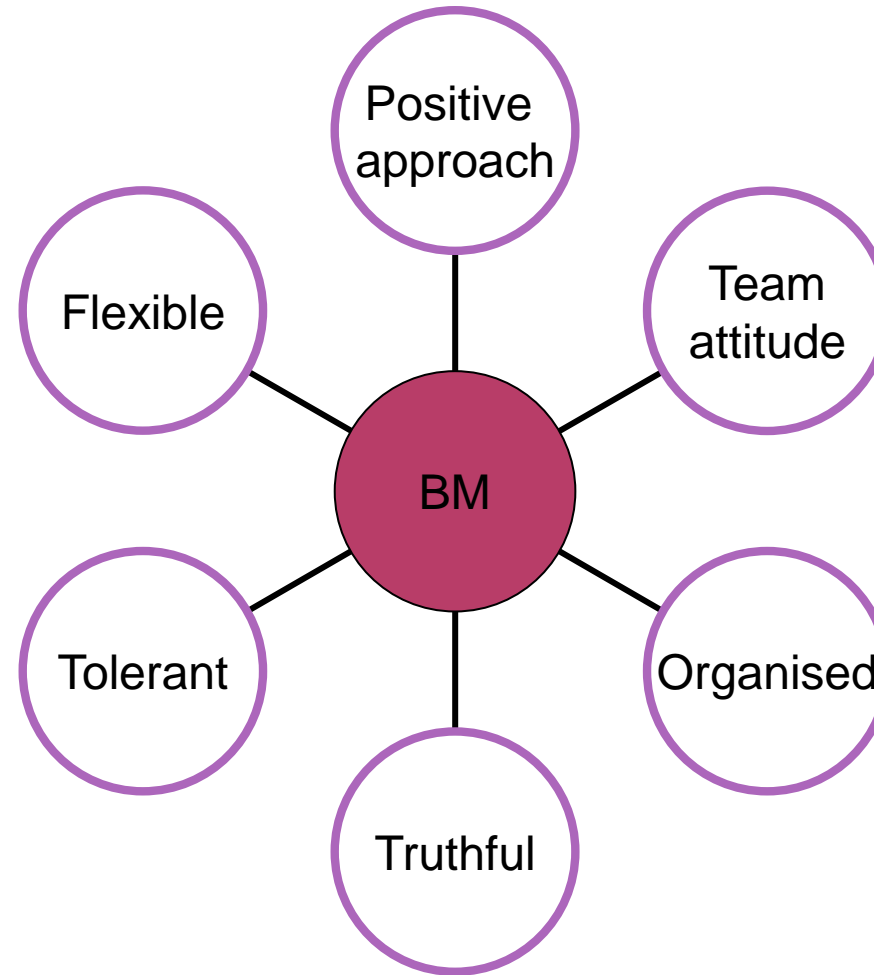
Behavior modification

an attempt to alter the human behavior and emotion in a beneficial way and in accordance with the **laws of learning**.

Behavior shaping

procedure which develops behavior by **reinforcing successive approximations** of the desired behavior until the desired behavior comes into being.

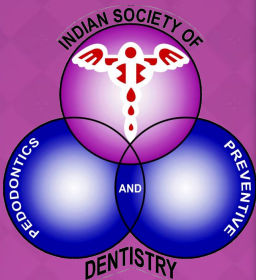
Fundamentals of behavior management



Domains in Behavior Management

- ❖ Linguistic Domain
- ❖ Reward-oriented Domain
- ❖ Aversive Domain
- ❖ Physical Domain
- ❖ Pharmacologic Domain

Jimmy Pinkham, Paul Casamassimo, Henry Fields, Dennis McTigue, Arthur Nowak.
Pediatric Dentistry - Infancy Through Adolescence. 4th Edition



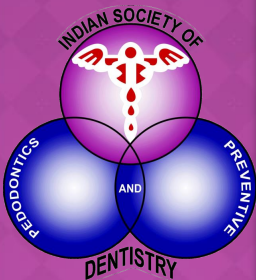
Basic BG

- ❖ Communication
- ❖ Positive pre-visit imagery
- ❖ TSD
- ❖ Positive reinforcement
- ❖ Distraction
- ❖ Parental presence / absence
- ❖ Memory restructuring
- ❖ Voice control
- ❖ Nitrous oxide inhalation

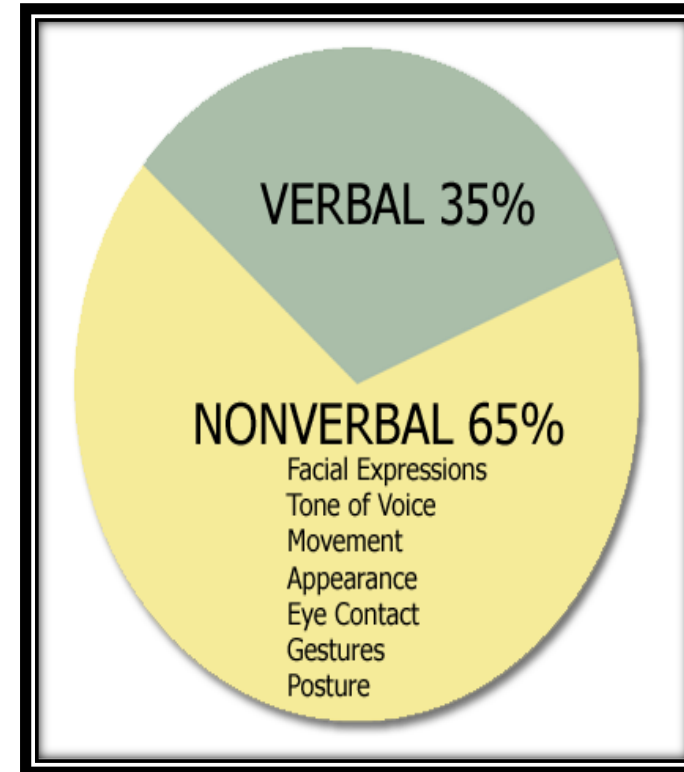
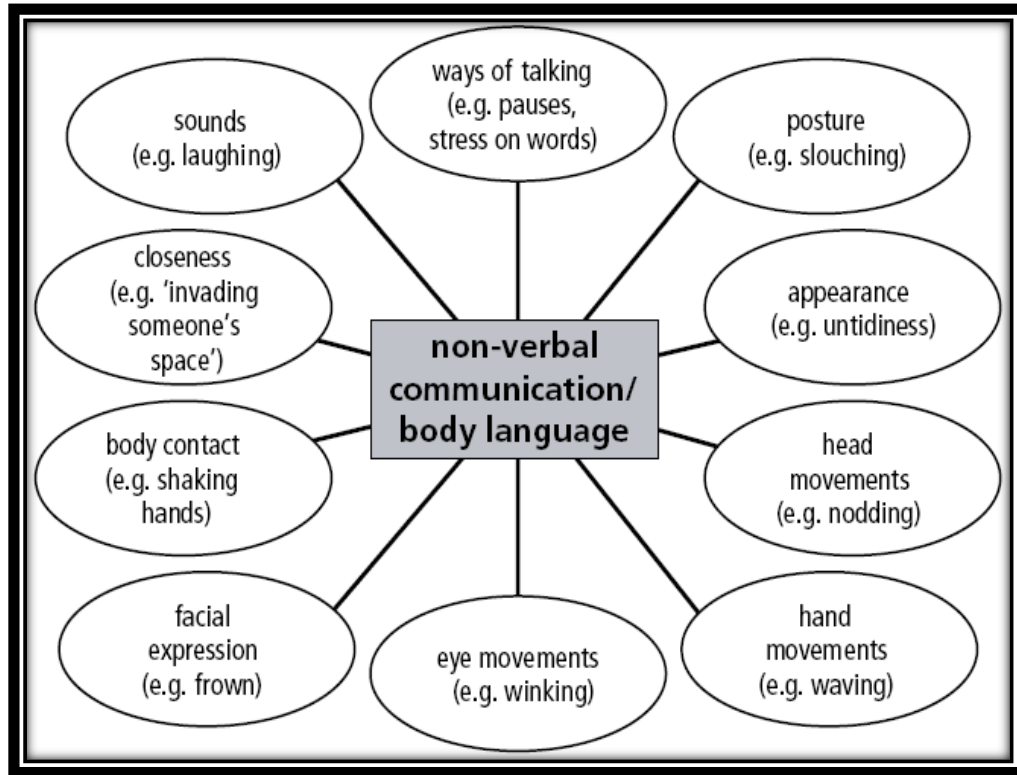
Advanced BG

- ✓ Protective stabilization
- ✓ Sedation
- ✓ General anesthesia

[AAPD](#). The reference manual of Pediatric Dentistry. 2015.



Communication



Mehrabian
(2009)

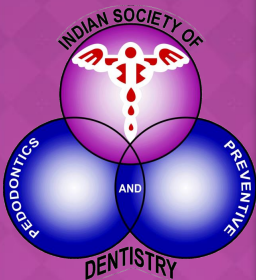
Sharath Asokan, Sivakumar Nuvvula. Pediatric Dentistese. JISPPD 2017; 35(1):2-5.

- ✓ Multisensory communication
- ✓ Message clarity
- ✓ Euphemism “Second language”
- ✓ Problem ownership
- ✓ Active listening
- ✓ Appropriate responses
- ✓ Scheduling appointment (time)

Tell-Show-Do (Addleston,1959)

- ✓ Cornerstone of behaviour management
- ✓ Based on desensitisation
- ✓ Step by step successive approximations
- ✓ Effective above 3 years of age
- ✓ First visit, introduction of new procedure
- ✓ Fearful, apprehensive children

Sharath Asokan et al. Children's Behavior Pattern and Behavior Management Techniques Used in a Structured Postgraduate Dental Program. JISPPD 2009;27(1):22-6.



Ask Tell Ask

- Inquire about visit / procedure
- Explain in non-threatening language
- Ask how child feels about it
- Avoid 'doctor babble' - TTT

Tell Play Do

Tender Loving Care (TLC)

Teach Back

- Low literacy patients
- Demonstrations can be checked
- Normal routine

Motivational Interviewing

- Uses person's own reason for change
- Increases confidence
- Brushing, flossing, reducing sugars
- Open-ended questions (O)
- Affirmations (A)
- Reflective listening (R)
- Summarizing (S)

Contingency Management

- ✓ Presentation or withdrawal of reinforcers
- ✓ Reinforcers - positive and negative
- ✓ 3 types of reinforcements
 - Social (praise, hand shake, pat, hug)
 - Material (gifts, toys not sweets)
 - Activity (watching TV show, cartoon)



James Coxon et al. What reward does a child prefer for behaving well at the dentist?
BDJ Open 2017.

Contingency Management

	Probability of response increases	Probability of response decreases
Pleasant Stimulus (S ₁)	S ₁ Presented Positive Reinforcement “Reward”	S ₁ Withdrawn Omission / Time out
Unpleasant Stimulus (S ₂)	S ₂ Withdrawn Negative Reinforcement “Escape”	S ₂ Presented Punishment

Distraction

Distraction is the technique of diverting the child patient's attention from what may be perceived as an unpleasant procedure.

Objectives

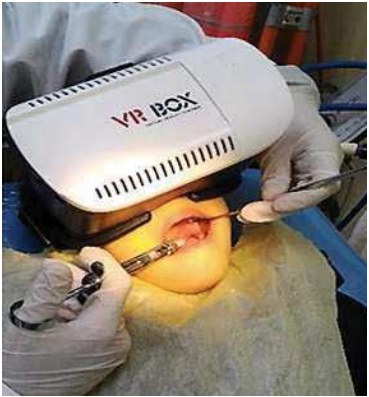
- decrease the perception of unpleasantness,
- avert negative or avoidance behavior.

Indications

May be used with any patient.

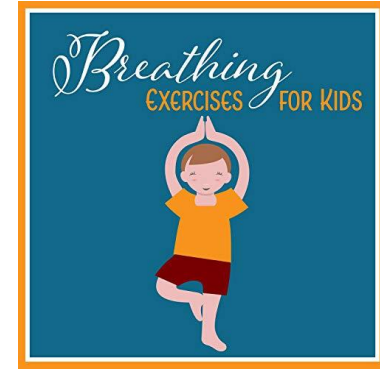
Contraindications

None!



Active Distraction

- Interactive toys
- Controlled breathing and relaxation
- Guided imagery
- Virtual reality



Nilsson S, Finnstrom B, Kokinsky E, Enskar K. The use of virtual reality for needle-related procedural pain and distress in children and adolescents in a paediatric oncology unit. *Eur J Oncol Nurs* 2009;13:102–9.



Passive Distraction

- Audio: listening to music
- Audio-visual: watching television



Marwah N, Prabhakar AR, Raju OS. Music distraction- its efficacy In management of anxious pediatric dental patients. J Indian Soc Pedod Prev Dent 2005;23:168–70.

Prabhakar AR, Marwah N, Raju OS. A comparison between audio and audiovisual distraction techniques in managing anxious pediatric dental patients. J Indian Soc Pedod Prev Dent 2007; 25:177–82.

Filcheck HA, Allen KD, Ogren HBA, Darby JB, Holstein B, Hupp S. The Use of Choice-Based Distraction to Decrease the Distress of Children at the Dentist, Child & Family Behavior Therapy 2005; 26(4): 59-68.

Audio Analgesia

- Gardner and Licklider [1959]
- White noise
- Loud waterfall or rushing air
- Choice of music through earphones

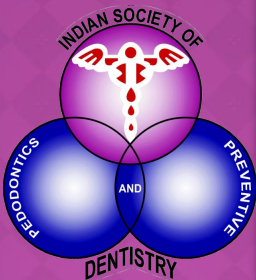
Retraining

- Avoidance
- De-emphasis or substitution
- Distraction

Pre-appointment BM (Pre-visit imagery)

- ✓ Modeling (siblings, parents)
- ✓ Direct observation
- ✓ Films, tapes, mails

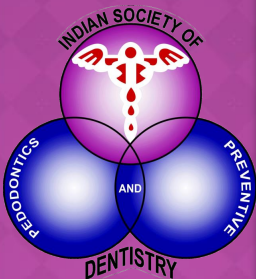
Jeffrey A. Dean. McDonald and Avery's Dentistry for the Child and Adolescent



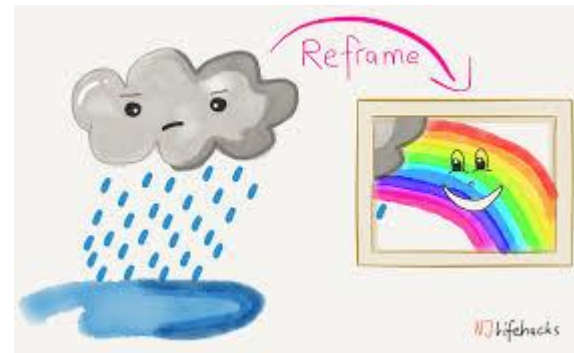
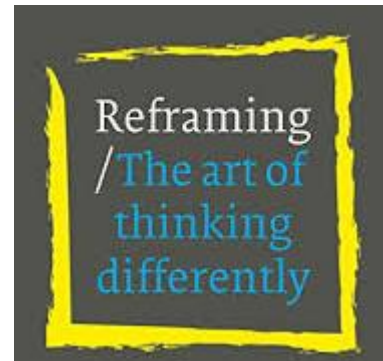
Memory restructuring

- Memories associated with a negative or difficult event (e.g., first dental visit, local anesthesia, extraction) are restructured into positive memories
- Restructuring involves four components:
 - (1) **visual reminders** - photo of child smiling at initial visit
 - (2) **positive reinforcement** through verbalization;
 - (3) **concrete examples** to encode sensory details; and
 - (4) **sense of accomplishment.**

AAPD. The reference manual of Pediatric Dentistry. 2015.



Reframing is defined as, “taking a situation outside the frame that up to that moment contained the individual in different conditions and visualize (reframe) it in a way acceptable to the person involved and with this reframing, both the original threat and the threatened “solution” can be safely abandoned.”

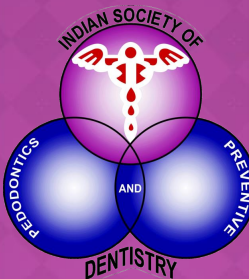


Sharath Asokan, Sivakumar Nuvvula.

Bringing out our inner child. *BDJ* 2013; 214(10):486-487

Nuvvula S, Kamatham R, Challa R, Asokan S.

Reframing in dentistry: Revisited. *JISPPD* 2013;31:165-8



Voice Control

- ✓ Modify intensity, pitch of voice
- ✓ Sudden, firm commands given
- ✓ Get child's attention and dominate interaction
- ✓ Once attention gained, modulate voice
- ✓ **Chambers**(1977) - effective in combinations



Hand Over Mouth Exercise (HOME)



- ✓ Evangeline Jordan (1920), Levitas (1974)
- ✓ Kramer (1974) - Aversive conditioning
- ✓ Not routinely used - controversy in usage
- ✓ Effective in 3 to 6 years old children
- ✓ Children with appropriate communicative abilities
- ✓ Technique - timing 20 to 30 seconds
- ✓ Variations in usage - HOMAR

Physical Restraints

(Medical immobilization / Protective stabilization)

- ✓ Restriction of freedom of movement with or without permission, to reduce risk of injury, safety.
- ✓ Used in hypermotive, stubborn, defiant, young immature, special children
- ✓ Apprehensive child / punishment / convenience **X**
- ✓ Documented consent is necessary
- ✓ 2 types of restraints
 - *Active* (by dentist, staff or parents)
 - *Passive* (with restraining aids)
- ✓ More than one assistant may be required

Behavior Management Techniques	Learning theories	Other names	Proposed by
<ul style="list-style-type: none"> • Desensitisation • Tell-show-do • Reframing 	Classical Conditioning	Associative learning (or) Stimulus-response theory	Ivan Pavlov
<ul style="list-style-type: none"> • Contingency management • Reinforcers • Presence of parents • Retraining • Voice control • Protective stabilisation • HOME 	Operant conditioning	Instrumental conditioning (or) Stimulus-response-consequence theory	B F Skinner
<ul style="list-style-type: none"> • Modeling (or) Imitation 	Observational Learning	Social (or) Vicarious learning	Albert Bandura

God's Own Children

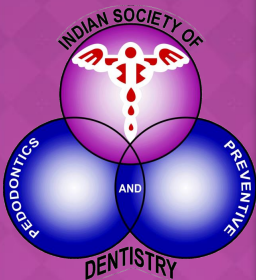
- CSHCN



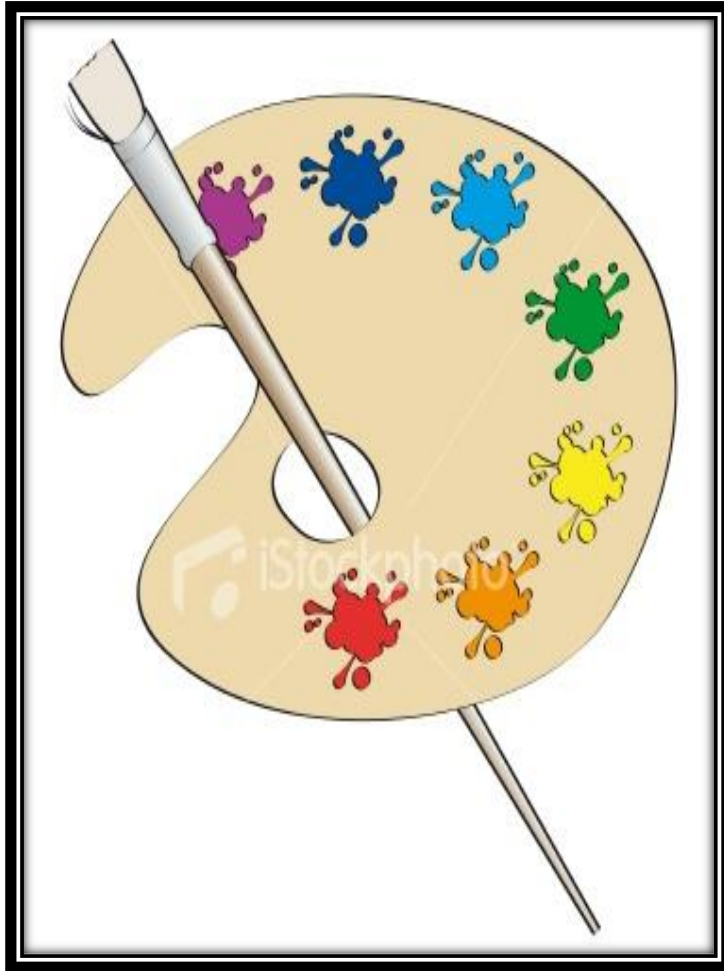
Behavior Support

is used to describe a collaborative philosophy that is **person-centered** in that it considers the **individual**, evaluates their **environment** and support sources and attempts to **plan** how **challenging behavior** can best be **moderated**.

Governor's commission on mental retardation.
The Commonwealth of Massachusetts. 2008.



Basic strategies for SHCN children



- No universal formula
- Respect and dignity
- Benign atmosphere
- Empty spacious room
- “Cooperative window”
- Post treatment - no pitying



- Rud & Kisling (1973) - delineating factor for acceptance of dental treatment
- Festa et al (1993) - mental age of 30 to 36 months
- CSHCN are in the process of developing coping skills to deal with stressful situations

FLEXIBILITY



Stretch your potential.

- Dental care - time
- Need additional staff
- Cant follow 'rituals'

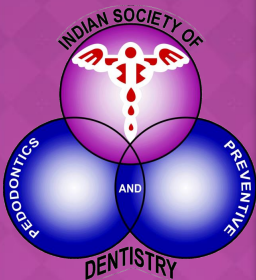


- Message repeated
- Situation repeated
- Reinforcers repeated

**petition Repe
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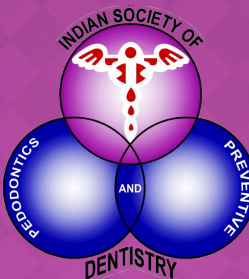
- 1) Discuss the transmission of emotions to the child and management of child who visits you with negative behavior to dental operator.
- 2) Measurement of anxiety and their practical applications in step by step handling of an emotionally disturbed child
- 3) Discuss the different problems and their management in treating physically and mentally disabled patients
- 4) Enumerate different scales and questionnaires developed to measure pain and anxiety in children
- 5) Define behavior management and discuss various non-pharmacological behavior modification techniques used in clinical practice.
- 6) Discuss the importance and methods of behavior rating scales used in pediatric dentistry. How will you manage a child psychologically who comes to your operator for first time influenced by overprotective parents.
- 7) Discuss the various behavioural learning theories and its clinical applications in child management
- 8) Describe the dental consideration and the management of various medically compromised children
- 9) Discuss step by step management of child during his first visit to dental operator, its importance and practical considerations
- 10) Discuss in detail the fundamentals of behaviour management and add a note on stoic behavior.

Questions



- 11) Define behaviour management, shaping modification. Describe management of pre-schooler throwing temper tantrums in dental office.
- 12) Discuss step by step management of 4 year old child who shows extreme negativism
- 13) Behaviour science and significance in children's dentistry
- 14) Physical restrains
- 15) HOME in pedodontics
- 16) Fear and anxiety and its management
- 17) 1st dental visit for child
- 18) Behaviour modification techniques.
- 19) TLC
- 20) Audioanalgesia

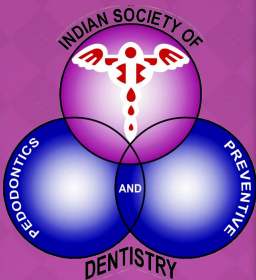
Questions



Must read



1. Ziad D Baghdadi. Principles and application of learning theory in child patient management. *QI* 2001.
2. Catherine Bo DS. Applying the social learning theory to children with dental anxiety. *J Contemp Dent Pract* 2004.
3. Adren Christen. Piagetian Psychology: Some principles as helpful in treating child dental patient. *JDC* 1977.
4. Craig D.Woods. The difficult patient: Psychodynamic perspective. *CDA Journal* 2007.





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