Improving Child Cooperation in the Dental Office....

It Can Be Done!

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- Many children are uncooperative for dental treatment
  - The dental environment is not a good fit with the normal behaviors and self control of young children
Traditional thinking:

- Make the child obey the dentist
change your mindset
Questions for Today…

- How can we understand human behavior?
- How can we use that knowledge to bring out the best in our child patients?
Agenda

- Automatic and deliberate human behaviors
- Aspects of child behavior
  - Temperament / personality
  - Fear / anxiety
- Facilitating cooperative behavior by the child dental patient
Behavior

- Response of an individual to their environment
  - Actions = efforts to get needs met
A Reminder…

- The only behavior you can control is your own
Behavior Components

1. Automatic / non-conscious
2. Deliberate / rational
   - Both systems are always working
Automatic Behaviors

- ~95% of behavior is a predictable response to stimuli by instinctive processes
- Have evolved to keep us alive and safe
  - Examples:
    - Bodily needs
    - Fight or flight
Automatic Behaviors

- Brain receives signals from sensory stimuli
I sense something's about to happen...something bad...and fat.
Automatic Behaviors

- Brain rapidly processes the information and determines response
- Brain pays sharp attention to potential threats
- Metaphorically - *the elephant*
  - Jonathan Haidt – social psychologist
Deliberate / Rational Behavior

- ~ 5% of behavior is a response that requires an act of volition
  - Examples:
    - Making choices and decisions
    - Taking responsibility
    - Initiating or inhibiting behavior
Deliberate / Rational Behavior

- Using the rational brain requires effort, skill, and practice
- Metaphorically - the rider guiding the elephant
Deliberate / Rational Behavior

- Using the rational brain has an energy cost
- People vary in their ability to choose and use rational behaviors over automatic behaviors
  - Temperament / personality quality of effortful control
  - A continuum analogous to strength
Reaching the Limit

- There are situations where the rider is unable to prevent the elephant from going where it wants to go.
- Each act of control decreases energy available for subsequent challenges.
How Does This Apply?
Child Behaviors & Dentistry

- It requires rational / deliberate behavior to cooperate for dental treatment
  - Holding still
  - Reclining on strange furniture
  - Accepting touch from an oddly dressed stranger wearing gloves
  - Tolerating sensory stimuli
Child Behaviors & Dentistry

- Don’t upset the elephant!
- Encourage and coach the rider
  - Arrange the setting and appointment to allow child to practice deliberate and rational behaviors
- Don’t push the child past their limit
Behavior of Children

- Children are normal until proven otherwise
  - Most behaviors explainable / adaptive
  - Behaviors change with development
    - In a typically developing child - age predicts behavior
    - In a child with special needs - functional level and medical status are better predictors of behavior
Behavior of Children

- Younger children exhibit more automatic behaviors than rational behaviors in the dental setting
Dentistry & Behavior

- The best dentistry is a cooperative interaction
Behavior Guidance

- The attempt to alter human behavior and emotion in a beneficial manner
  - Behavior of dentist, staff, parent, and child all have impact

It is always possible to make a difficult situation worse!
Determinants of Cooperation

- Demands of situation
- Patient factors
  - Maturity / intellectual development
  - Personality / temperament
  - Fear and anxiety
  - Previous experiences
  - Parent support
Temperament

- Constitutionally based individual differences in reactivity and self-regulation
  - Qualities appear early in life and are fairly stable
  - Influenced over time by heredity, maturation, and experience

"Behavior style"

Rothbart. *Child Development* 2001; 72:1394-1408
Describing Child Temperament

- Extraversion
- Negative affect
- Effortful control
Effortful Control

- Regulatory part of temperament
- To consciously modify behavior...
  - Automatic behaviors must be suppressed and choice made to act differently
Effortful Control

- Children first develop ability to control own behavior by 10-12 months
  - Frontal lobe function which develops into second decade
- Shaped by social experience including interaction with parents
  - Warm, supportive parenting fosters development of effortful control

Effortful Control Examples

- Focusing attention
- Using quiet “inside” voice
- Slowing down motor activity
- Delaying gratification
Dental Cooperation takes Effort

- Attention and control are required to:
  - Inhibit a dominant automatic response
  - Plan, make choice, detect errors
- Shift attention away from stress
- Direct attention to source of safety
Children with High Effortful Control

- Develop coping responses when encountering fear-producing stimuli
- Successfully self-regulate emotion
  - More readily calmed
  - More able to calm themselves
- Can cope with own and others’ distress
Children with High Effortful Control

- Have increased capacity to use rational brain
  - Born to be a rider!
- Are more cooperative for dental treatment
Why Does Effortful Control Fail?

- Temperamentally low capacity
- Situation puts child into automatic behavior mode
  - Unfamiliar environment
  - High stress
  - Multiple stimuli
  - Fatigue
  - Competing demands
  - Possible discomfort
Determinants of Cooperation

- Demands of situation
- Patient factors
  - Maturity / intellectual development
  - Personality / temperament
  - Fear and anxiety
  - Previous life experience
  - Parent support
Fear and Anxiety

- Fear: the emotional reaction to an environmental threat
  - The feeling you have when in danger or expect something bad to happen

- Anxiety: sense of distress over a real or imagined threat to one’s mental or physical well-being
Fear

- Ancient automatic response
  - Starts in primitive parts of brain
  - Not using rational system / frontal lobe
Fear Reaction

Sensory cues

↓

Increase in heart rate
  Pupils dilate

Blood sent to big muscles /
  away from skin

Sweat glands activated
  Adrenal glands release
  cortisol and epinephrine
Mild Fear and Anxiety

- Survival mechanism
  - Allows us to avoid harmful things
- Part of normal development
- Changes with age in developmentally meaningful ways
Toddler Fears

- Large, loud, overwhelming noises and things
- Strange objects - behaving in unexpected ways
- Adult strangers who approach quickly
- Separation from caregiver

Preschool Fears

- Real and imagined dangers
- Noisy, violent, uncontrolled things
- Imaginary creatures
- The dark
- Being alone
- Bodily injury
School Age Child Fears

- Being alone, left or lost
- Death of family member
- Natural events: fire, thunder storms
- Small injuries
- "Creepy" spaces / shadows
- School failures
  - Being late, missing answers
- Personal failure
- Ridicule by peers
Mild Fear and Anxiety

- Our system is designed to remember risk
  - *Avoid that part of the jungle*
- Avoidance keeps anxiety circuit active
Triggers of Fear and Anxiety

- Existential
  - Am I in danger? Will I be hurt?

- Surprise
  - Not being able to see where you are going

- Not understanding what is happening
  - Unfamiliar surroundings
Triggers of Fear and Anxiety

- Lack of control
  - Feeling helpless and trapped
- Memory of previous trauma
  - Known as *state depending learning*
- Being overwhelmed by sensory stimuli
  - Seeing, hearing, feeling, touching, tasting
Dental Fear and Anxiety

- Affect ~ 9 % of children ages 3 - 18

Dental Fear - Inducing Stimuli

- New smells
- Odd tastes
- Disturbing sounds
- Furniture that moves
- New people in masks, gloves, and glasses ⇒ DANGER!
Dental Fear - Inducing Stimuli

- Being touched by a stranger
- Choking
- Most feared
  - Injection of local anesthetic
  - Rubber dam application
  - Tooth preparation
Agenda

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- Facilitating cooperative behavior by the child dental patient
Interrupting Fear Reactions

- Fear reaction is circular process
  - Any stimulus can trigger
- Can’t stop whole circuit
  - Look for wedge to interrupt
- Readily available wedges strengthen parasympathetic system
  - Muscle relaxation
  - Breathing
  - Thoughts
Muscle Relaxation

- Body is loose
Breathing for Relaxation

- Full lung
  - Down to the belly
- 6 breaths per minute
- Time to exhale twice as long as time to inhale
Cognitive

- Counter negative thoughts with positive thoughts
- If past bad experience
  - This is NOT the same
  - Make a NEW story
- Decrease sensory load
- Allow opportunity to rehearse
Restroom Requests

- Urgency when nervous
- Can’t get calm if bladder is crying for attention
- Can be used by 3-5 year olds to control a situation
  - Gets adult attention
Restroom Requests

- Receptionist should suggest restroom stop when checking in
- Honor first request
- Make it easy for young children to relax
Those caring for children are almost always working with at least 2 people simultaneously – a child and a parent.
Parenting

- Parents teach their children about emotional expression and regulation
  - Which behaviors are effective for meeting the child’s goals
- Behavior standards
- Attitude towards authority
- How much discomfort justifies complaint
- How to show distress
Parenting

- A blend of affection and behavior controls
- Impact of parenting varies according to age of child
  - With a young child, parenting has high impact
Inter-disciplinary Lessons

- Parents are often with their child during painful medical procedures
  - Immunizations
  - Diagnostic procedures
    - Blood sampling
    - Bone marrow aspiration
    - Lumbar puncture
    - Cystourethrogram

Parent Behaviors & Child Coping

- Distress - promoting
  - Parent action or comment worsens child coping and cooperation
  - Triggers automatic behaviors

Blount RL, The Child-Adult Medical Procedure Interaction Scale (CAMPIS) and The Child Adult Medical Procedure Interaction Scale-Revised (CAMPIS-R)
Parent Behaviors & Child Coping

- **Coping - promoting**
  - Parent action or comments improve child coping and cooperation
  - Facilitates rational / deliberate behaviors

Blount RL, The Child-Adult Medical Procedure Interaction Scale (CAMPIS) and The Child Adult Medical Procedure Interaction Scale-Revised (CAMPIS-R)
Parent Behaviors & Child Coping

- There are more distress-promoting than coping-promoting parent behaviors.
- Parent “default setting” is primarily distress-promoting.
  - What comes naturally to many parents is unlikely to help the dentist-child interaction.
Distress-Promoting Parent Behaviors

- **Reassuring comments**
  - *I won’t let them hurt you*
  - *There’s nothing to worry about*

- **Giving control to child**
  - *Let me know when you are ready*
  - *Can you start now?*

Distress-Promoting Parent Behaviors

- **Criticism**
  - You’re acting like a baby
  - You should have brushed your teeth like I told you

- **Apology**
  - I don’t like being at the dentist either
  - I wish they didn’t have to hurt you

Distress-Promoting Parent Behaviors

- **Empathy**
  - *I know it hurts*
  - *You must be getting tired*

- **Suggestions or demands to provider**
  - *When he gets too upset, if you’ll just stop a few seconds, he’ll calm down*
  - *He does best with Dr. X (ie. not you !)*

Distress-Promoting Parent Behaviors

- Intimidation and threats
  - *I’m going to slap you*
  - *You’re going to seriously harm yourself*

- Statements that confuse or transmit uncertainty
  - *You can do anything but move*
  - *She’s going to try to not hurt you*

Coping-Promoting Parent Behaviors

- **Non-procedural talk to child**
  - Redirects attention to something pleasant
  - Conversation about pets, siblings, toys, food, movies, etc.
  - Conversation about child’s plans or desires
  - Familiar stories at child’s level
    - *Read by the parent!*

Coping-Promoting Parent Behaviors

- Command to use coping strategy
  - *Use your deep breathing now*
  - *Turn up the volume on your IPOD*
  - *Pretend you are Superman and this is a test of your strength*
  - *Squeeze my hand*

Coping—Promoting Parent Behaviors

- Humor directed to child
  - Silly jokes
    - *What is gray, weighs 2 tons, and puts people to sleep?*
    - A *Hypnopotamus*
  - Statements that suggest outrageous ideas or emphasize humorous aspects of a situation

Helping Parents Help Their Child

- Parents want to help their child cooperate but may not know how
- Many parents need and will accept coaching to change triggers of child’s automatic behavior
Tips for Coaching Parents

- Be respectful
  - Acknowledge their feelings, authority and competence
  - Express understanding

- Avoid perception that you are criticizing the child or judging the parent
Tips for Coaching Parents

- Identify common desired outcome
- Allow them a graceful way to save face

The art of allowing the other person to have it your way!
Example of Coaching Parents

- We try to make each dental visit positive and you have a part in that.
- You have a big influence in X’s reaction to the appointment.
  - If she sees you calm and happy, she’ll pick up on that.
  - If she senses you are tense or unsure, she’ll pick up on that too.
Example of Coaching Parents

- You are the expert on X
- How do you think X will respond today?
- For those with history of unsuccessful treatment:
  - Tell me what you think the main problem was...
  - Were you present? Did that help or not help?
Helping Parents Help Their Child

- Calm positive body language
  - Parent smiling

- Positive pre-appointment statements

- Parent is silent partner at chairside
  - Speaking only when invited by dentist
    - Using coping-promoting statements
Improving the dental office "fit" with the normal behavior of young children

- Child-friendly environment
- Minimize discomfort
- Share control
- Pleasant sensory load
- Friendly people

Put effort into creating good feelings!
Child - Friendly Dental Environment

- Reception area activities
  - Magazines, books, crayons / color pages
  - Entertainment – DVD

- Décor
  - Child size chairs
  - No “don’t touch” objects
  - Pleasing artwork
  - Aquarium
Child - Friendly Dental Environment

- Staff uniforms
  - Accessories: buttons, socks, earrings
Child - Friendly Dental Environment

- Dental operatory
  - Fuzzy soft toy for child to hold
  - Pleasant visual distraction on ceiling
  - Pillow under legs
  - Hand mirror for child to hold
  - Place for parent to sit
  - Fun glasses in child sizes