Distraction, mindfulness and pain: 
Acceptance-based approach to dental fear and anxiety.

OUTLINE AND PROGRAM & NOTES

Date: Thursday 16 April 2015 (Session 16) 13.00 – 16.00
Friday 17 April 2015 (Session 26) 09.00 – 12.00
Venue: Tandlægeforeningens Årskursus
Bella Center, København.

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Background and Conceptual Framework

Dental fear, anxiety and pain can be as intertwined as the fibers of a bowline. This workshop aims to loosen the threads by applying principles from Acceptance and Commitment Therapy (ACT) and Personal Construct Psychology (PCP). Rather than trying to avoid or control dental anxiety and fear, this workshop shifts the focus to acceptance and making room for unpleasant feelings and emotions. Participants will practice skills in mindful distraction and relaxation, which they can use immediately with patients.

Since 1979 pain has been defined in terms of an unpleasant sensory and emotional experience (IASP 1979). The implications regarding the perceived expertise and practice of health professionals including dentists, dental nurses and technicians have tended to follow this dichotomy, that is, ‘sensory’ and ‘psychological’. Given the lack of education on emotions for example, it is not surprising that many practitioners feel more comfortable managing the ‘sensory’ rather than emotional aspects of pain. In procedural pain however, ‘emotions’ especially fear are paramount. It is this lack of knowledge, skills and confidence in managing fear and preventing distress that these workshops aim to address.

In the workshops, pain, especially procedural pain is construed as an alarming sensory and cognitive experience, which everyone involved – child/parent, client and dental team can influence.

The workshops aim to improve the management of dental pain, fear and anxiety by introducing focused breathing, relaxation and mindful distraction (FBR) as routine techniques that any health professional or parent can teach and use with clients in painful or emotionally challenging situations.

In addition to the skills, the workshops combine two approaches in psychology Acceptance and Commitment Therapy (ACT) and Personal Construct Psychology (PCP) and bring these to the challenges in managing procedural pain. The focus in ACT is on acceptance rather than avoidance and the often-futile attempts to control our thoughts, feelings and emotions. Personal Construct Psychology is based on our view of the world within a framework of constructs with strong emphasis on the existence of alternatives rather than ‘givens’. Certainly, for some children and adults, a dental procedure can be
very frightening and distressing. What ACT brings to this is a shift from trying to avoid or control the feelings that come with the procedure to ‘making room’ for them. From PCP, the procedure can be very frightening and distressing however, it does not have to be frightening and distressing, there are alternatives.

Learning Objectives

• Discuss sensory and cognitive aspects of pain;
• Differentiate between avoidance and acceptance and discuss the role of mindfulness in managing emotions, especially fear and anxiety;
• Develop skills in assessing and measuring fear and pain;
• Use distraction and a mindful relaxation technique in clinical practice.

Programme

Participants choose to attend either Thursday (session 16) or Friday (session 26).

Session 16
13.00 – 16.00  Introduction to pain neurophysiology, cognitive theory and emotions in health care.

Two psychologies in pain management and change: Personal Construct Psychology (PCP) and Acceptance and Commitment Therapy (ACT).

Distraction, relaxation and mindfulness: techniques for pain, fear and anxiety in children, adolescents and adults.

Session 26
09.00 – 12.00  Introduction to pain neurophysiology, cognitive theory and emotions in health care.

Two psychologies in pain management and change: Personal Construct Psychology (PCP) and Acceptance and Commitment Therapy (ACT).

Distraction, relaxation and mindfulness: techniques for pain, fear and anxiety in children, adolescents and adults.

Online reading and support: Top-down Pain Control

It is recommended that participants read the material on PCP and ACT on the website at http://www.top-downpaincontrol.com

Participants are also advised to check out and welcome to contribute to ‘The Procedural Pain Blog’ at http://www.top-downpaincontrol.com/procedural-pain-blog/
**Focused Breathing, Relaxation with Mindful Distraction (FBR) Practice**

Each participant is encouraged to practice the ‘Focused breathing, relaxation with mindful distraction’ (FBR) technique with three different clients. It is recommended that the practices be undertaken as soon as possible following the conference. It is important to note that the client does not have to be undergoing a procedure to practice the skills. Indeed the idea is that these techniques are taught as a matter of routine.

For each of the three practices make notes on items 1 to 6. After completing the three practices, finish your journal with notes on items 7 and 8 together with any reflections on the Workshop and your experiences.

1. Describe the situation and setting or procedure.
2. How did you introduce the use of FBR?
3. How did the patient/client and colleagues react to FBR and how did you feel?
4. What you can build on from this case?
5. Level of engagement in FBR exercise: Good – Intermittent – Poor
6. What did you find that was easy and what was challenging?
7. Comment on your level of confidence in using FBR across the three practices.
8. What have you learned across the three practices and how will you apply what you have learned to your practice?

**Useful Links**

Top-down Pain Control [http://www.top-downpaincontrol.com](http://www.top-downpaincontrol.com)

Personal Construct Psychology in Europe, [http://www.pcp-net.org/europe/home.html](http://www.pcp-net.org/europe/home.html)

The PCP Portal [http://www.pcp-net.de](http://www.pcp-net.de)

Centre for PCP, University of Hertfordshire, [http://www.centrepcp.co.uk/](http://www.centrepcp.co.uk/)


Dansk Smerte Forum [http://dansksmerteforum.dk/](http://dansksmerteforum.dk/)

Association for Contextual Behavioral Science. [https://contextualscience.org/act](https://contextualscience.org/act)

Bibliography

Focused Breathing
Relaxation with Mindful Distraction for Dental Fear and Anxiety

You can print/translate this simple relaxation technique and teach it prior to dental examination; this will boost your confidence and your client’s and it can be practiced as ‘home-work’.

‘Just Relax’… And the BEST way to r-e-l-a-x is to take a nice BIG breath in - you breathe with the client, and breathe OUT with a slow releasing breath.

Breathing – one hand on your tummy, the other on your upper chest, slow deep breath in through the nose, upper hand still, lower hand moving out as you consciously push your diaphragm down - tummy out. Then gently blow out through pursed lips. Repeat this three or four times.

Then start with the following relaxation with mindful distraction sequence:

- Toes (wiggle) feet on the floor (or dangling), back to heels – top of feet, where laces would be… Ankles
- Lower legs, up to your knees… notice the sensations, touch, position…
- Upper legs… bottom… your weight on the chair
- Notice your breathing… the breath that goes in… and out (time this with the client’s breath)
- Lower back and back against the chair… (adjust according to client’s position)
- Up to your shoulders… let them drop a little… (that’s good…)
- Into your neck area, noticing sensations, maybe gently look to the left and right
- Up the back of your head and ears, up to your tallest point on top of your head
- Notice your breathing, the breath that goes in… and out (time this with the client’s breath) repeat any time
- Around the front to your forehead and eyes… (eyes can be open, closed or alternate, client’s choice)
- Down through your jaw and down your neck… notice the sensations… hair, clothing, pillow etc
- Across to shoulders… right out to the tips of your shoulders
- Now down both arms together… through elbows, wrists and fingers (can pause at elbows, then on down)

Variations:

- Left side, up and down then the right side. Reverse the order and work your way from fingers to toes.
- Breathing in a relaxing colour and ‘sending’ it around your body, ask your client where she/he is ‘sending it’ Mindful ‘Relaxing Tracing’ around fingers and thumb – first one hand then the other - let the client choose. Generally done with eyes open but can be done with eyes closed.

Finish with a deep breath in, and out and a stretch of arms and legs. If the client has closed eyes and drifted then a deep breath in and think backwards 4,3,2,1 then open eyes and all finished. Follow this with a stretch of arms and legs. Don’t stand up immediately, take a few moments to ‘collect and reorientate oneself’. You can use this technique with adults and children as young as 4yrs but they are unlikely to respond to ‘relaxation’, which is why we use the term ‘mindful distraction’.

This technique should only be used in a safe environment where the client could fall asleep without any risk of harm. It is one technique that can be added to other distraction techniques such as blowing bubbles, iPad, music, video, games etc. The client may feel sleepy or experience altered sensations… watery eyes (not crying), overall warmth or a cool feeling, light-headedness; emerging emotions in older adolescents and adults.

Talk with the client about his/her experience. If the client had a procedure, remember, in a client-centered approach the end of the procedure is not defined by technical aspects. The immediate post-procedural period is a crucial opportunity for building and reconstruction; don’t waste it by walking away. Remember, any gain is a gain. Lots of encouragement and ‘Achievement’ stickers and rewards rather than ‘Bravery’.

TDPC Workshops
- Pain and Guided Imagery
- Distraction and Pain
- ACT on Stress
- Paediatric Palliative Care

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Overview
• Expanded view of pain and cognition
• Two psychologies in Dentistry:
  – Personal Construct Psychology (PCP)
  – Acceptance and Commitment Therapy (ACT)
• Distraction: Theory and Practice
• Practice skills
• Development and Change

What is pain and how can we best manage it?

Pain = hurt = sensation = nociception
– Simplistic, narrow and outdated view
– Pain is complex
– Implications for practice?
  • Limited to pharmacology
  • Limits practice
  • Limited efficacy

Nociception and Pain … Or Not.

• Beecher* (1946)
  – extensive peripheral soft tissue injury,
  – compound fracture of a long bone,
  – a penetrated head,
  – a penetrated chest or
  – penetrated abdomen

*Anaesthetist forward hospital Italy WW2

If pain is more than sensation, what is it?

Moving beyond the IASP Definition of Pain:

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.

(IASTP, 1979: pp. 249-252)

PAIN = SENSATION + EMOTION 1980s – 1990s
PAIN = SENSATION + EMOTION + ‘THINKING’ 2000s
PAIN = SENSATION + COGNITION (2010-)

Pain is an alarming sensory and cognitive experience.
Pain = Sensation + Cognition (2010-)

Cognition includes:
- Memory
- Emotion
- Attention
- Language
- Learning
- Thought
- Consciousness

Crick & Koch, 2000; Mesulam, 1998; Roth, 2000

Pain and Cognition

• Memory
• Emotion
• Attention
• Language
• Learning
• Thought
• Consciousness

Adverse Dental Experience

• Memory
• Emotion
• Attention
• Language
• Learning
• Thought
• Consciousness

Preparation/Relaxation/ Distraction/Imagery/ACT

• Memory
• Emotion
• Attention
• Language
• Learning
• Thought
• Consciousness

Procedural Pain is not the same as acute pain, post-op pain, chronic pain, cancer pain.

- A badly injured patient who says he is having no wound pain will protest as vigorously as a normal individual at an inept venepuncture. (Beecher, 1946, p. 98, italics added)

  • extensive peripheral soft tissue injury,
  • compound fracture of a long bone,
  • a penetrated head,
  • a penetrated chest or
  • penetrated abdomen

*Anaesthetist forward hospital Italy WW2
Emotions: ‘The Big Five’

- Fear
- Anger
- Sadness
- Disgust
- Joy

Fear and Anxiety are not the same.

‘Needlephobia’

- Not an ‘irrational’ fear in children
- Maintains the notion of the ‘problem child/client’.
- Places the ‘problem of pain’ on the child/client

“I've got needlephobia”. (Fusion)

Some children (and grown-ups) have a debilitating fear of dental procedures.

Power and Status in Emotion

(Kemper, 1993)

- Power is a relational condition in which one person actually or potentially compels another person to do something he/she does not wish to do.
- How is the client construing* their Power and Status lying flat in the dentist’s chair?

*Personal Construct Psychology

Increase in other’s Power/Control has the same effect as a decrease in one’s own power and control => fear/anxiety.

Power/Control

Increase in other’s Power/Control results in the increase of one’s own power and control => security.

Emotion | Behaviour | Function
--- | --- | ---
Fear | Escape | Protection
Anger | Attack | Destroy
Sadness | Cry | Reintegration
Disgust | Vomit | Reject

Why is the person behaving in a particular way? What is the function?

Behaviour has a purpose.

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Combined Approach

• Personal Construct Psychology (PCP)¹
• Acceptance and Commitment Therapy² (ACT)

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Personal Construct Psychology
(Kelly, 1955)

• We (can) actively create the realities with which we interact.
• Our mind (can) take an active role in organizing and creating meaning to the constructed (construed) reality.
• Nothing in our sense of reality is a ‘given’.
• How we see the world depends on the glasses (constructs) through which we view (construe) it.
• We (can) change our view, our position on a construct = reconstrue.

Constructive Alternativism

• Example: The Monster Drill
  – Construing vs. Appraisal
  – Tight and loose construing

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Two Psychologies in Dentistry: PCP and ACT

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¹ George Kelly published his two-volume seminal work The Psychology of Personal Constructs in 1955. Interest in PCP has steadily developed since the 1960s. For more recent developments and applications see Butler (2009), Butt (2008), Fransella (2005); in the UK, Centre for Personal Construct Psychology, University of Hertfordshire. Also, Personal Construct Psychology in Europe and The PCP Portal from Germany. In Australia, University of Wollongong Personal Construct Psychology Research Group and Australian Psychological Society Member Group.

² Developed by Steven Hayes in 1986. First main text 1999. See refs especially Hayes et.al. Also, Russ Harris’ refs and in Australia his website http://www.actmindfully.com.au
“What we think we know is anchored in our assumptions, not in the bedrock of truth itself, and that world we seek to understand remains always on the horizons of our thoughts”.

(Kelly 1977, p. 6).

It’s obvious what the problem is…. The obvious is usually an assumption
- “Transcending the obvious” (Kelly, 1977)
- A trip to the dentist…
- This child/client is difficult, manipulative…
- In my opinion, this child/client is …

No one needs to paint himself (sic) into a corner; no one needs to be completely hemmed in by circumstances; no one needs to be the victim of his biography.

(Kelly 1955, p. 15)

Three useful practical gemstones from Kelly’s PCP
- If you want to know what is wrong… Ask
- Transcend the obvious
- … or not.

Consider the opposite pole for each of the following
- There is no way
- I’m not going to be able to
- I know that as soon as
- I can’t
- We can’t

Is it going to be scary? Is it going to hurt?
- A child/client undergoing dental treatment is frightened (or not) because of the way he or she construes the reality of the treatment…
- One’s construed reality (pain/fear) is not a ‘given’, it exists – or not, because it is construed that way.
- How I construe my situation can change…
Acceptance and Commitment Therapy (ACT)

- Cognitive Behavioural Therapy
- Cognitive Behavioural Theory
- Set of guiding psychological principles
- Numerous applications
  - Pain, Anxiety, Stress, PTSD, Phobias, Depression...
  - Living life according to our values.

Core Principles of ACT

- From Cognitive Fusion to Defusion
- Acceptance rather than Avoidance
- Contact with the present moment
- The Observing Self
- Values
- Committed action

Experiential Avoidance

- Process of trying to avoid unpleasant aspects of our own cognition: memories, thoughts, emotions.
- Doing everything to not feel, think, have, experience or be with something
  - especially because it causes pain or discomfort or worry, or anxiety etc

Experiential Avoidance and ACT

- Cognitive avoidance – trying to avoid thoughts
- Emotional avoidance – trying to avoid feelings
- Based on ‘Unwillingness’ and fear
- Workability?
- Consequences: Short term….. Long term
  - ‘The problem’ - A need to control, get rid of…
  - Suffering and poor quality of life

Cognitive Fusion

- Buying into (believing) our thoughts and feelings to the point that they are absolute, controlling and true.
- Being completely convinced, stuck, tied, glued to a thought or a feeling.
- Feeling threatened in the waiting room.

Threat… Trussel

- “Threat is the awareness (fusing with the thought*) of imminent comprehensive change in one’s core®
  structure” (Kelly, 1955, p.489, italics original).
  Safe -------- Unsafe
  Unharmed ------- Harmed

*From an ACT point of view
*Core constructs define the person
Fusion

- I am ... 
- I feel ... 
- This is going to be ... 
- I can’t ... 
- What if ... 
- If only ... 
- I am dreading ... 
- He, she, they ...

Defusion

Opposite of ‘fusion’. Loosening and letting go of a thought… dissolving the ‘thought glue’. 

- I am having the thought that... 
- I am having the feeling that ... 
- I am having the memory of ...

Developing the ability to look at a thought rather than from a thought.

Psychological

Inflexibility => Flexibility

FUSION

- I can’t ... 
- I feel helpless 
- This is impossible 
- Every time ...

DEFUSION

- I am having the thought that I can’t ... 
- I am having the feeling that I am helpless 
- I am having the thought that this is impossible 
- I am having the thought that ‘every time’...

Defusion: Exercises and Metaphors

- Leaves on a stream 
- Say it very slowly 
- Sing it to a tune 
- Titchener’s Repetition (1916) 
- Repeat the thoughts in a silly voice, cartoon character etc 
- Do I need to buy into this thought/feeling? 
- Noticing

Avoidance.................Acceptance

- Acceptance 
  - Receive 
  - Have around 
  - Being with 
  - Willing to have 
  - Openness 
  - Allowing yourself to... 
  - Being in the presence of... 
  - Without judgment 

Acceptance does not mean ‘resign to’, ‘put up with’ or ‘tolerate’.

Willingness

Acceptance - Openness

- Letting go of the struggle 
- Tug of war 
- Putting down the sword 
- This is not a means to an end 
  - As in, ‘Okay, if I do this then...’ 
  - Acceptance is being willing to have ... 
  - At the same time, knowing it will pass
Moving Ahead: PCP and ACT

- No one need paint themselves into a corner...
- Reconstrue: New glasses
- Winning through surrender
  - Tug of war
  - ‘Making room’ for that which is unpleasant and beyond control

Threat, Anxiety and Fear

- Threat: the ‘what ifs’
  - What if they put the needle in and all my blood runs out and I die?
  - What if I lose control and they hold me down and hurt me?
  - What if it hurts like hell and they don’t listen to me?
  - What if Mum leaves me in there alone?
- Anxiety
  - May be general or specific
  - Mild, moderate, severe (breath taking)
  - Characteristic feelings
- Fear
  - “This child, parent, patient… is anxious”.
  - “This child, parent, patient… is afraid”.

Threat and the ‘what ifs’

- Need to be spoken and heard.
- If you want to know what is wrong? … Ask
- Is there anything you are worried about...
- What is the worst part of all this?
- Do you have any ‘what ifs’?
  - Knowledge and information
  - Plan of action.

ACT on Anxiety and Fear

- First reaction is to control, get rid of, and avoid...
  - Workability?…… ACT
- Familiar feelings, predictable ‘here comes the old… feelings again’
- Do not try to control the feeling
  - Observe, Breathe, Expand, Allow
  - Sing the words that describe the feelings
  - Delusion techniques
- Make room for that which is unpleasant.
- Shift the focus
  - From a need to control the feeling, to ‘making room for’...
  - Focus on breath (distraction)

Mindfulness

- An active process of non-judgmentally being with one’s own cognition – memories, emotions, thoughts, feelings, pain...
  - Way of being in contact with a bigger picture
  - To take a step back from ...
  - To be with ...
  - To look at rather than from...
  - Not getting caught up in the wave… be the sea
  - Blue sky and the weather
- Mindful distraction – mindfully paying attention to a sequence of body areas, sensations and breathing.

Anxiety and Fear: What can we do?

- Approach and attitude
  - Anxiety and fear are normal feelings and okay
- Sit on a chair, preferably physically equal to or lower than the child.
- Hester’s Poker Chip Tool for Fear
- Check out and respond to “What ifs”.
- Waves of fear and anxiety
  - Waves go up, waves go down
- Language: direct or indirect
Dental Terms made ‘Child/Patient-friendly’
(adapted from Kuttner 2010 p. 308)

- Explorer – ‘tooth counter, tooth tickler, or pointer’
- Handpiece for cleaning – ‘the super electric toothbrush or Mr SuperDuper’
- X-rays – ‘pictures of your teeth’ try with mobile phone
  Hmm... ‘Special pictures’
- Local Anaesthetic – ‘sleepy water, magic water or sleepy medicine’.
- Injection of Local – ‘sleepy drops’ – everything they touch gets sleepy – why you wear gloves!

Getting the most out of distraction techniques.
Moving from a ‘distractor’ to ‘distraction’ and beyond with children during medical procedures

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Coping Styles

- ‘Attenders’ - may cope better by watching and having information about the procedure.
- ‘Distracters’ - may cope better by shifting attention away from the detail of the procedure.

Coping Construct

Coping Style

‘Attender’  ‘Distracter’

When does a distractor become distraction?

- A distractor becomes a distraction when it is actively construed.
- Live dog vs. stuffed dog (Nivis, 1998)

Dental Terms made ‘Child/Patient-friendly’
(adapted from Kuttner 2010 p. 308)

- Feeling of numbness – ‘like a pillow in the morning’ like a ‘half flat balloon’ or ‘play dough – pastry’.
- Rubber dam – raincoat, rubber mask or tooth raincoat, tooth umbrella.
- Drill – may be called ‘Mr/Mrs Whistle, tooth washer, sugarbug chaser or buzzer’.
- Suction – may be called ‘Mr/Mrs Thirsty’
- Extracting at tooth is ‘helping your tooth wiggle out’
- Clamp or matrix band – ‘tooth cuddler’.

Feeling of numbness – ‘like a pillow in the morning’ like a ‘half flat balloon’ or ‘play dough – pastry’.

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Extracting at tooth is ‘helping your tooth wiggle out’

Clamp or matrix band – ‘tooth cuddler’.
Construing as a ‘Passive – Active’ Construct

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<tr>
<th>Passive Pole</th>
<th>Active Pole</th>
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<tr>
<td>Drifting</td>
<td>Engaging</td>
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<td>Less effort</td>
<td>Demanding</td>
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<td>Low key</td>
<td>Intense</td>
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Surprise (Plutchik, 1990)

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<th>Low Intensity</th>
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Distraction: Levels and Processes

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Distraction: Actively construed

- Infants
  - light, sound and touch
- Pre-school
  - Bubbles, pop-up books, music books etc
- School age
  - iPod, iPad, games, toys, relaxation (mindful distraction), music, video, play...
- Adolescent
  - iPod, iPad, games, relaxation (mindful distraction), music, video – more advanced

Resources: Two Videos

Reduce the pain of vaccination in children
http://www.youtube.com/watch?v=TGGDLhmqH8I

Reduce the pain of vaccination in babies
http://www.youtube.com/watch?v=vqDZ8c9UnMfw

Produced by Dr Anna Taddio
University of Toronto and The Hospital for Sick Kids Toronto
http://www.aboutkidshealth.ca/En/HealthAZ/TestsAndTreatments/GivingMedication/Pages/Painfree-Injections-in-Children.aspx