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# Dental Decisions – An Emotional Experience?

**Abstract:** This article discusses the psychological literature on emotion, highlighting the effect of emotion on decision-making. This is applied to the example of dentistry.

**Clinical Relevance:** This article explores how the everyday decisions of both the patient and the dentist are influenced by their emotions. **Dent Update 2010; 37: 700–705**

Clinical dentistry has concentrated on developing the evidence base for clinical decisions. However, the decision process is in part an interpersonal decision between the dentist and the patient.

What motivates a dentist to carry out a particular treatment?

What influences a patient to change his/her behaviour from non-compliant to compliant?

When is a patient happy with a decision?

## Emotion

Evidence-based dentistry involves selecting techniques and methods that are proven to be the most clinically

effective. The process of clinical decision-making involves weighing up clinical facts in conjunction with an interaction between the dentist and the patient. In this paper, we have concentrated on dentist-patient interactions but recognize that emotions are also important in the interactions between other members of the dental team and patients. Emotions are also important in the interactions between the dental team. Interpersonal interactions between individuals are guided by the emotions of the participants. For both the dentist and the patient emotion, to a greater or lesser extent, plays an important role in dental care. Emotions can manifest explicitly in the fear of treatment, the joy of a successful result, 'loving the new teeth', the relief of good news and the element of surprise. Emotion can, however, be less obvious, for example the 'gut feeling' that guides the right decision or the feeling that something is not quite right. Despite the integral nature of emotion in dentistry, this subject has generated comparatively little attention compared to other aspects of dental care.

## What is emotion?

Emotion is notoriously difficult to define but Fehr and Russell suggested that *everyone knows what an emotion is*.<sup>1</sup> Scientific descriptions of emotion have

been identified as far back as Plato,<sup>1</sup> with terms such as platonic love derived from this ancient history. Aristotle described emotions as 'Pathos' and yet, despite the historic study of emotion, there remains no 'commonly acceptable definition for the concept of emotion'.<sup>1</sup> Instead of a specific definition, emotions can be considered in terms of what they are and what they do. Emotions are 'about or directed at something in the world'.<sup>2</sup> One theory is that emotions have evolved through natural selection.<sup>3</sup> There are many different theories on emotions, some consider the purpose of emotions to be adaptive,<sup>4</sup> allowing responsiveness to situations. Emotions are also considered to serve as motivational forces,<sup>5</sup> initiating action. Emotions are unique to an individual. They are commonly experienced as spontaneous, transitory responses lasting seconds and they serve to communicate an individual's experience of a stimulus through a feeling in the brain and body. Physiological processes have been identified in emotional behaviour,<sup>6</sup> but individuals interpret and express the emotional signals differently. Emotion serves to initiate or prepare an individual for action; to create a state of readiness. Emotional expression is also considered to have evolved to send out messages.

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	Basic Emotion	Examples of Emotions in Each Basic Category
Positive Emotions	Love	Adoration Affection Fondness
	Joy	Amusement Enthusiasm Contentment
	Surprise	Amazement Astonishment
Negative Emotions	Anger	Outrage Contempt Jealousy
	Sadness	Anguish Regret Displeasure
	Fear	Fright Apprehension Mortification

Figure 1. A model of the basic positive and negative emotions and some of the emotions categorized into the basic emotional domains (adapted from Parrott 2001).<sup>2</sup>

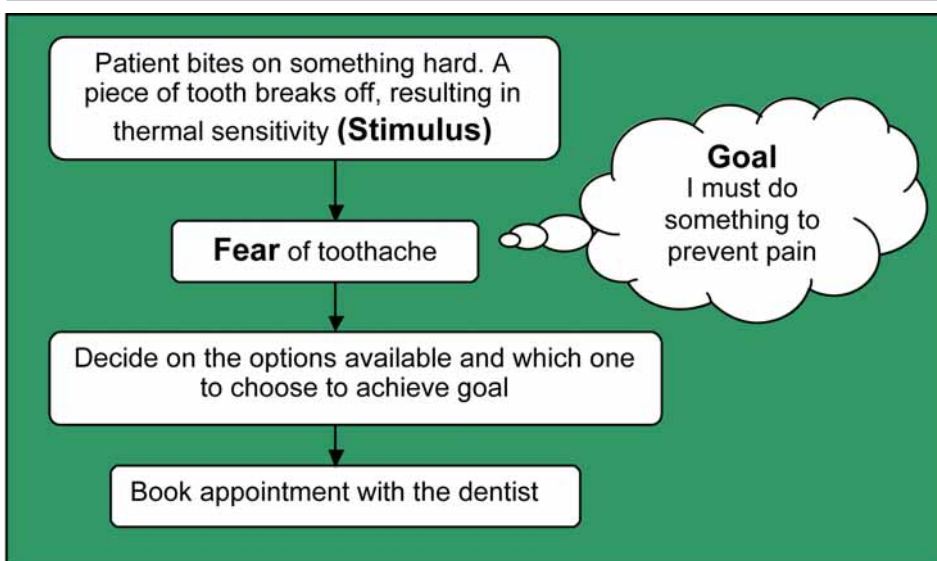


Figure 2. Clinical example of emotion in goal setting.

person has his/her own experiences of emotion. How individuals interpret their emotions is different for each person. These differences extend to the intensity of the emotion experienced, which has an influence on the extent of expression, and subsequent action.<sup>8</sup> Emotions can be positive or negative and categorized into emotional domains as outlined in Figure 1. Emotions are experienced by both dentists and their patients, communicating messages between the two parties. Therefore emotions may be a crucial element in the decisions and behaviours of patients and their dentists.

The term emotion is used to refer to a number of dimensions of emotional experience. In simplistic terms, the word emotion can be used in reference to the immediate feeling in response to emotional stimuli. It can also be attributed to the individual interpretation of the emotional sensation, to the outward expression generated in response to the emotional stimulus and to the interpretation of the outward expression by others.

People give external signals of their emotions, facial expression, vocal tone and hand gestures to name a few, which can send messages to others.<sup>9</sup> However, the expression of emotional communication between individuals and groups may have an adaptively developed, cultural or learned element.

### Decisions and emotion

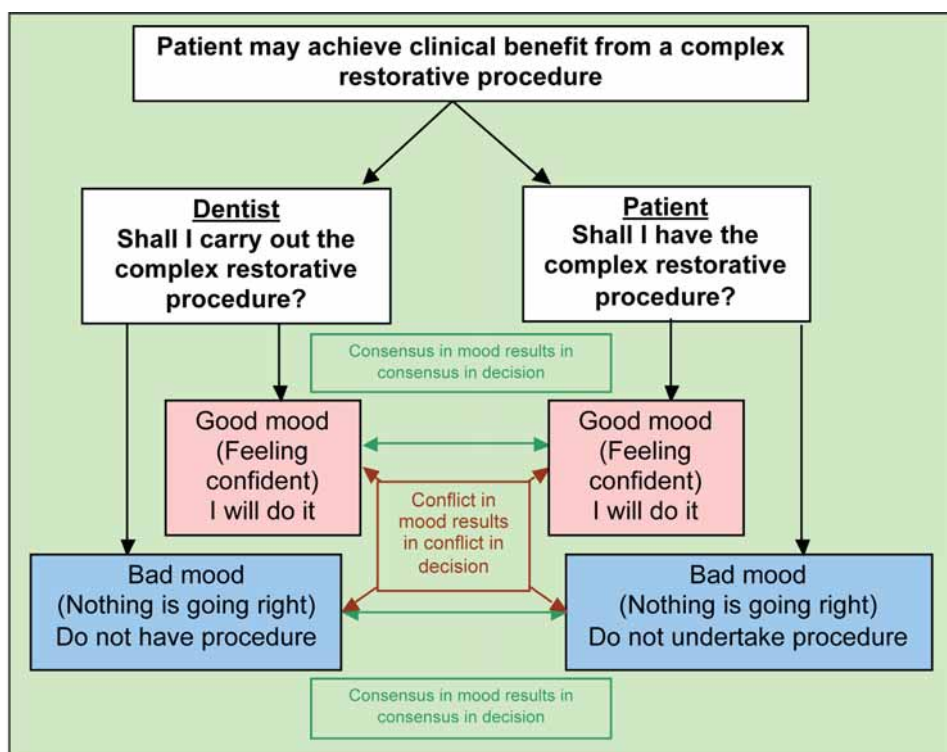
The goals (what am I trying to achieve?), judgement (what do I think about this?) and decisions (what shall I choose to do?) of individuals are implicitly affected by emotion,<sup>10</sup> either consciously or subconsciously. The goal is the intended outcome. Emotional feelings guide the process of setting goals, making the decision to act and do something. Emotion has a contribution to reasoning and, although reasoning and decisions are often conscious processes, how the information is evaluated is in part emotional. Take, for example, a new patient to the dental surgery (Figure 2), the stimulus of a fractured tooth triggers fear, the goal is therefore set at the avoidance and prevention of pain.

Whatever triggers the emotion,

Emotional signals send emotional communications to others, generating a response from the recipients that may

benefit the sender.<sup>7</sup>

The experience of emotion is different for different individuals and each



**Figure 3.** Example of how a clinical decision may be affected by mood.

it is emotion that initiates the patient to make a decision. It is also emotion that the patient uses to make an evaluation about what to do. The patient may choose to do nothing, or may choose to take action but, in essence, this decision will mostly be the one that feels right.

### In the mood to decide

The collective term for a mood and emotion together is affect. The absolute distinction between a mood and an emotion is difficult to achieve, as emotion itself cannot easily be defined but emotions are considered to be short-lived responses to something specific, while moods last for longer in response to something more general.<sup>11</sup> Moods influence how individuals manage information.<sup>10</sup> The decisions of both dentists and patients can be affected by the mood of both parties. Judgement can also be influenced positively or negatively by mood.<sup>10</sup> The potential therefore exists for both dentists and patients to make different clinical decisions, in different mood states, when using the same information (Figure 3). Moods are finite in duration and, from the perspective of making an informed

judgement, deciding on and taking consent for a procedure on a different day from treatment may be most appropriate. Just catching the patient on a good day and persuading him/her to have a daring new procedure would not necessarily reflect the patient's overall perspective on the subject. A decision made in a good or bad mood, without time to reflect, could therefore fail to achieve a consistent decision with which the patient is happy.

### Attention to emotion

Prioritization of goals, the attention given to any subject by individuals, is based on emotion, the right time; and the question of knowing is not a simple equation as feelings are inevitably involved. A patient asks for dental advice, but how much attention they give to the subject and which advice they choose to believe or follow is based on emotion. A subject eliciting an intense emotion may attract time and attention as an intense emotion can be interpreted as something that feels more important. Certainly, the element of knowledge is a factor but knowledge itself does not create action. It is

how the knowledge is evaluated, appraised and used by the individual that matters. The recall of previous emotional feelings and the intensity of current feelings about a subject may affect how important a subject is and how much attention it is given. The achievement of an aesthetically pleasing anterior dentition for wedding photographs may be of higher emotional importance to a patient than a filling in a posterior tooth, unless the potential for a wedding and honeymoon with toothache overrides this.

### Judgement

Making a decision does not necessarily mean following prescribed rules and, during the process of consent, dentists provide patients with the options for treatment, but how does a patient use this information? A patient may assess his/her feelings of treatment options by:

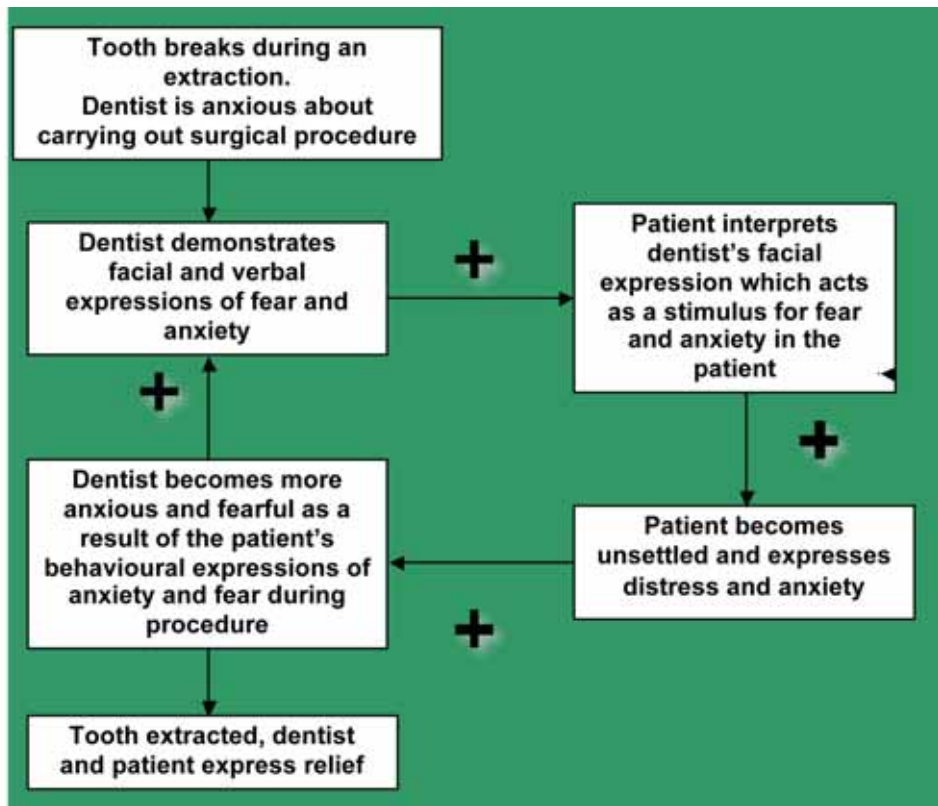
- Looking at and comparing familiar options;
- Appraising how easy each option may be; and
- Working through the advantages and disadvantages of each option.

A patient may be highly motivated by a specific goal, for example to improve a wedding smile as previously highlighted. The desire and importance related to this goal may be greater than for many other routine tasks, putting this task at the top of an agenda. A patient may also filter and ignore a number of options to make a decision easier.

Providing information in a clear and understandable way, explaining the clinical advantages and disadvantages to the individual, can help a patient make a judgement based on what is important to them. The dentist may make a clinical judgement about a clinical decision, but the patient will make a judgement based on his/her personal appraisal of a situation. It is therefore worth considering the information that a patient may need to make a judgement to ensure that patients maintain the feeling of being given all of the options and choices.

### Perceiving emotion

Despite the fact that emotion dictates the way decisions are made, different people have different levels of



**Figure 4.** Illustration of how the emotional expressions of the dentist could create an escalation of emotion during a procedure.

ability in the detection and perception of emotion. This awareness of emotions is considered to be an area of human intelligence. The part of human intelligence devoted to the perception of emotional experiences and to expression of emotion is termed emotional intelligence.<sup>12</sup> Highly emotionally intelligent individuals may be considered to be in touch with their own emotions, aware of the emotions of others and able to influence the emotions of those around them. This does not necessarily mean that they can accurately interpret the emotions of others, but a closer awareness of the feelings of others is a useful cue in responding to the emotions of others. Emotionally intelligent dental undergraduates are less stressed<sup>13</sup> and patients of more emotionally intelligent doctors have indicated some higher levels of satisfaction.<sup>14</sup> This suggests the potential benefits of developing training for dentists that contributes to emotional intelligence.

How the emotional intelligence of patients affects the dentist-patient relationship is unknown. Some emotional

signals given out in response to emotional stimuli are involuntary and a patient giving out signals may not be in touch with his/her feelings. Where low emotional intelligence does exist, the lack of an emotional cue may reduce the attention given to a subject that is important to the patient or result in a failure to identify key problems associated with undergoing dental care. Further work to understand those patients who are less aware of their feelings may contribute to overcoming barriers to patient care.

The emotional intelligence of not only the dentist but also the patient therefore potentially influences the decision-making process. For example, an emotionally intelligent dentist may more readily identify the anxieties of his/her patients and employ anxiety management strategies in a treatment plan. Similarly, an emotionally intelligent patient may recognize dental anxieties and request help for anxiety at an early stage, thereby improving the management of his/her condition.

## Dentists' experience of emotion

Emotion will influence dentists' decisions and their degree of emotional intelligence will influence how they perceive these feelings – but what do dentists do with their feelings? How does a dentist manage the emotion of agreeing to carry out and administer a painful procedure? Furthermore, if a physically unpleasant task is carried out, the task may become more unpleasant if the dentist's expressions provoke a negative reaction in the patient. A patient may react to a face of fear expressed by the dentist by becoming unsettled, anxious and upset, exacerbating the anxieties of the dentist and the expression (Figure 4).

Some individuals caring for others develop a 'work persona', where the work role involves labouring to bring about a meaningful encounter. This involves giving the patient the emotional signals that the sender thinks the patient needs.<sup>15</sup> This work of a healthcare professional to suppress the emotions he/she experiences and the expression of these emotions, expressing only selected emotions contributing to the interaction, is termed emotional labour. The switching off of emotions<sup>15</sup> is associated with burnout<sup>16</sup> and depersonalization of care.<sup>15</sup> Reflection and discussion about the emotions experienced during the process of caring for patients is important for dealing with emotional labour.<sup>15</sup> So, for the health and wellbeing of both patients and dentists, it is important for dentists to accept and even discuss their feelings about caring for others.

## Conclusion

In an interaction between two people, the interests of each individual may not necessarily coincide<sup>7</sup> and this will be true for the dentist-patient relationship. The goals of the patient and the dentist are unique to each individual, respectively, and hence the goals of each party will be essentially different. The dentist's role and the patient's role during a dental visit are fundamentally different and their emotional interactions will reflect this. Even if the goal is to get through the experience as 'painlessly as possible', this single statement has a different meaning for the dentist and the patient, respectively. The patient

may aim to avoid physical pain and the emotion of anxiety may guide the patient's interactions, while the dentist may be attempting to perform procedures in a way that is comfortable for the patient, driven by empathy. In the same way, the emotions of the dentist and patient will also differ and it is up to the dentist to appreciate that all patients experience emotions, and all dentists express emotions, but the signals are not always clear.

Whether it is desirable or undesirable, emotions are intrinsically part of the dentist-patient relationship, but the true extent of this emotional experience is not fully understood. However, appreciating that both dentists and patients have emotions, and understanding that these emotions influence thoughts<sup>17</sup> and dental decisions, is a small step towards understanding patients and creating a happy dental experience. Awareness of emotional skills training for doctors is gradually developing.<sup>18</sup> In view of the essential nature of emotion in care, creating evidence-based training for dentists in emotional skills may develop the quality of the dental experience and the decisions between dentists and patients.

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## Abstract

### WOULD YOU DRINK THE WATER FROM YOUR DENTAL UNIT?

Water quality in water lines of dental units in the Public Dental Health Service in Göteborg, Sweden. Dahlén G, Alenäs-Jarl E & Hjort G. *Swedish Dent J* 2009; **33**: 161–172.

The presence of bacteria in high levels in the water lines of dental units is well known, but the authors of this paper suggest that the problem is not well studied. The results certainly indicate a failing and should encourage all practitioners to monitor their own units. Samples were taken from the air-water syringe in 405 dental units in 35 National Health Service Clinics for analysis in the

laboratory for the presence of colony forming units per ml (CFU/ml). Seventy-five per cent of the units sampled were not found to have an acceptable water quality, and in fifteen per cent of units the micro-organism *Legionnaire pneumophila* was found, usually only in small CFU/ml numbers, but nevertheless a very disturbing finding.

There is much discussion in the paper as to the variation of acceptable CFU/ml across Europe, and what might be an acceptable level for a dental unit. Quite how the level for a dental unit can be other than that accepted for a public water supply I am not sure and I do hope my own dentist would agree!

The authors suggest that their findings are serious enough to warrant the introduction of immediate measures to assess and address this problem across Sweden. I hope that the same conclusion would be drawn in the UK.

Interestingly, a control sample was taken in each surgery from an adjacent cold water tap and this sample was not always found to conform to acceptable drinking water standards. It is postulated that the tap orifice and plastic washer may be contaminated by soiled fingers and this surface should become a routine part of anti-microbial wiping during surgery disinfection.

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