

## Music and Emotion, By Lyz Cooper, BAST

“...music occupies more areas of our brain than language does – humans are a musical species”

Oliver Sacks <http://www.oliversacks.com/books-by-oliver-sacks/musicophilia/>

### Introduction

Sound is such a powerful vehicle for eliciting and communicating human emotion. In this post I will talk about how, as a sound therapist and therapeutic music composer, I use sound and music to enhance mood state and help improve health and wellbeing.

### Music and Emotion

There is enormous interest in how music stimulates and evokes emotional responses. Justlin and Sloboda, prominent researchers in the field of music and emotion believe that the main reason that we listen to music is to influence our emotions.<sup>i</sup>

Listening to music involves so many different neural processes – many more than we give ourselves (or Mother Nature) credit for, we really are extremely clever biological machines! For starters, the sound stimuli (what we are hearing) has to be processed by the ear which means transforming pressure waves into neural signals. Then these signals are decoded, stimulating the release of many different neurotransmitters and hormones which can give rise to many different emotions, affect the sympathetic and parasympathetic nervous systems (raising and lowering heart, rate, blood pressure and stress responses) and even boost the immune system.<sup>ii</sup>

There are so many emotions that can be experienced when we listen to music but one of the most interesting responses is something known as ‘frisson’ (also known as ‘chills’ or ‘goosebumps’). When you experience frisson it feels like waves running up and down the arms – some people feel it as a whole body experience where the hairs on your body stand on end and waves of pleasure run up and down the body. This is a sign that Dopamine, a neurotransmitter associated with pleasure and reward, is being released.<sup>iii</sup> I talk about frisson in a lot more depth in [my blog post on Musical Expectation link to ‘Great Expectations’](#) but in a nutshell, when you are feeling low choose pieces of music give you the goosebumps which will give you a positive boost.

### Music to enhance mood state

Lyrical content – choosing tracks that have inspiring and uplifting lyrics

Tempo – choose a piece with a faster tempo – aim for 120 beats per minute (link to examples)

Mode – pieces in a major key tend to be thought of as uplifting (link to examples)

Range, pitch and volume (dynamics) – Choosing a piece that rises and falls in pitch and volume can be incredibly uplifting and encourage frisson. Modern dance music is just one example of the way dynamic range is used, but you can find many different pieces out there if you're not into dance music.<sup>iv</sup>

Examples

Locked out of Heaven by Bruno Mars

### **Application**

If a client comes to see me wanting a boost – they may have mild – moderate depression or just feeling a little low, there are many different ways I can use sound therapy to help improve their mood state. I may play a gong in a more dynamic way – moving from low volume to a higher volume in a wave-like way, or I could play a drum more quickly than I would during a relaxation session. I can also use certain musical intervals (combinations of tones) to create different mood spaces, such as a perfect 5<sup>th</sup> – the sonic anti-depressant. Himalayan singing bowls, voice and music are have very powerful mood enhancing abilities. The voice is one of the most emotionally moving instruments because it is really good at conveying emotion. Having a voice therapy session can be extremely uplifting and may involve laying down and relaxing whilst listening to a voice treatment, or being more involved and using movement and your own voice to improve your mood.

### **Bibliography**

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ii Koelsch. S (2011) Toward a neural basis of music perception – a review and updated model, *Frontiers in Psychology*, [www.frontiersin.org](http://www.frontiersin.org) Vol 2/110. pp 1-19.

iii (Huron & Margulis in Juslin & Sloboda (2011) p.598-600).

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iv (see Gabrielsson & Lindstrom, 2011, in Juslin & Sloboda, 2011).

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