

Daniel Bendersky

### Speakers That Bump Hearts Transcript

00:00:00 - 00:00:08

[Song “Selfless” by The Strokes plays.]

00:00:08 - 00:00:33

Daniel Bendersky: Music. Although we listen to it every day, we rarely stop to think about what makes it so entrancing. There’s a magic in songs that keeps us coming back for more. Whether we’re relaxing [tranquil sound], working [sound of people talking], studying [sound of writing on paper], or partying [dance music sound], our emotions are constantly shifting throughout the day.

00:00:33 - 00:00:58

Bendersky: Music is a useful tool for smoothing out these transitions. Have you ever had a song transport you to a memory? Songs can evoke nostalgia for past experiences and shift our perspective. Music has become more accessible than ever and holds a significant cultural presence, especially among teens. Not only does music occupy the public dialogue, but it also consistently influences our emotions and occupies the back of our minds.

00:00:58 - 00:01:17

Bendersky: This strong, underlying connection makes music a powerful tool that can be harnessed for positive impact by both mental health professionals and anyone without access to professional care. By combining emotion recognition and targeted listening treatment, we can use music to improve our mental health, and in the meanwhile develop healthy emotion regulation habits.

00:01:17 - 00:01:34

Bendersky: Music's powerful effects are achieved through a combination of lyrics and sound. While many efforts have been made to classify emotion in songs, music has become more complex with time. Modern songs often feature a wide gap between lyrical content and melodic tone.

00:01:34 - 00:01:54

Bendersky: Listen to this clip of "Not Today" by Twenty One Pilots, and pay attention to the contrast between lyrical tone and sound. ["Not Today" plays] The song even explicitly nods to this emotional irony: "This one's a contradiction because of how happy it sounds/But the lyrics are so down."

00:01:54 - 00:02:16

Bendersky: Different genres use sounds with distinct emotions and contexts, and the wide variety of experimental music currently being released makes tracking these patterns challenging. However, with the rise of machine learning, studies have begun classifying emotion in music using neural networks. These complex algorithms are able to adapt to rare music genres, but require an excellent set of data to work with.

00:02:16 - 00:02:54

Bendersky: These programs could help us find music to manage emotions - a process called emotional regulation. Although emotion regulation may be a term you've never heard before, we use it all the time to initiate a specific shift in mood. If we target certain emotions as good or bad, we can try to strengthen the good ones and diminish the bad ones. We engage in this process on a daily basis, both implicitly and explicitly. An implicit form of emotion regulation

would be daydreaming, which our brains automatically do to reduce boredom. An explicit example is meditation, which we often use to remain calm and reset our minds from negative thoughts.

00:02:54 - 00:03:24

Bendersky: Music is an extremely useful tool for emotion regulation practices because of its strong connection to how we feel. It directly associates with memories, and imagining a song can bring us back to a moment and the emotions tied to it. Music can also explicitly influence our emotions because of its content. Using a music search tool, we can find music that aligns with a target emotion, and explicitly manage emotions in the present. This would also create an implicit link between memory and music, which we could use later on to bring us back to a similar state of mind.

00:03:24 - 00:03:54

Bendersky: Even though we already consistently use music as a tool, we know very little about the long-term effects of this strategy. Adolescents have identified music listening as one of their most important coping strategies, including helping them to deal with life stress.

Emotion regulation development is most effective in the early years, so music plays a significant role in early childhood. Only one large study has ever been conducted on school children using active musicking, and the authors noted this problem in their study.

00:03:54 - 00:04:46

Bendersky: Even though more research on these long-term effects is needed, a meta-study on the current research proved that musicking does have a “moderate impact” on mental health.

Overall, studies fall into two intervention types: *primary* and *complementary*. Primary

interventions use music “as a standalone tool to address a mental health outcome,” emphasizing the “therapeutic capacity of sound, pitch, rhythm, and tempo as a tool to improve emotional wellness”. Complementary interventions, in contrast, “serve as an ‘add-on’ component to support...traditional treatment,” and “describe music as a tool to provide an additional outlet for self-expression, social support, and engagement”. While both are explicit methods for emotion regulation, *primary* studies focus on simple short-term emotions, whereas *complementary* studies focus on the abstract long-term mental health benefits of music.

00:04:46 - 00:05:15

Bendersky: Music has numerous possible benefits for mental health, including short-term emotion regulation, self-expression, engagement with treatment, and fostering implicit self-regulation habits. However, music is currently underutilized in actual treatment. Many studies underscore the need to build bridges between researchers, educators, and therapists, to propose applications for real-world contexts where music might be used as a resource for emotion regulation.

00:05:15 - 00:05:33

Bendersky: More studies are needed to examine the long-term effects of music, and improve understanding of *how* and *for whom* music-based interventions work. Creating a music search tool based on emotion would assist clinicians in providing goal-oriented emotion regulation musicking in an efficient, cost-effective, and accessible manner.

00:05:33 - 00:05:54

Bendersky: Such tools could also consider our previous listening habits to provide personalized recommendations and could benefit people without primary care access if they have a clear

emotional target. We're all aware there is currently a shortage of mental health care: many struggle to access it with issues of cost, availability of professionals, or time commitment.

00:05:54 - 00:06:30

Bendersky: Music offers a self-applied, flexible, affordable, and accessible mental health tool that could be integrated with telehealth applications. Mental health is a critical issue for our youth, and statistics reveal a troubling rise in suicide and depression rates over the past decade. Music already enriches our lives, and could become a key resource for emotional stability in the face of life's challenges. Let's make it happen.

## Works Cited

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