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Music and Health (MUSI20150)

Word Count: 2032

The Gift of Music and its Effects on the Human Emotion

INTRODUCTION:

When considering the purpose of my playlist, I thought about the true reasons of why I listen to music - experiencing the emotions expressed throughout the piece and ultimately enter a state of mindfulness. As such, its design was to take me on an emotional journey where I could experience through the power of music, various emotions - but without having to physically partake in it. Although the whole playlist consists of instrumental music only, music is a universal language (Fritz, Jentschke, Gosselin, Sammler, Peretz, Turner, D. Friederici & Koelsch, 2009) which has been reported to express every possible human emotion (Zentner, Grandjean & Scherer, 2008)(Juslin & Laukka, 2004) ranging from sadness, nostalgia, anger, calm, relaxation and joy. Thus, it can be said that an added benefit of this playlist is to also either invoke or reduce certain emotions for myself or any listener in what you call an emotional trip - preferably in a comfortable or safe space where you can dive deep into the music without worrying about the surroundings.

Musically, this playlist is designed to evoke a majority of these through the artist as well as the composer due to the unique gift that classical music has to offer - the story telling of both the composer and the era complimented by the artist's own interpretation and expression of the piece.

Scientifically, various neuroimaging studies have concluded music can activate the areas of the brain which correspond with emotions (Koelsch, 2014) - the amygdala and hippocampus as well as the dopaminergic pathway. The act of musicking or music listening combined with the dopaminergic pathway is what causes the "chills" experienced during music-listening. These physiological sensations are what accompany intense and overwhelming emotional experiences -

a complex phenomenon which work like many other emotion evoking phenomena although they are distinctively different. Then why is it that when we listen to sad music, the emotions evoked by it are still a pleasurable experience? This is due to the fact that the body releases endorphins in response to physical pain, resulting in the release of hormones including prolactin causing a sense of relaxation (Salimpoor, van den Bosch, Kovacevic, McIntosh, Dagher & Zatorre, 2013).

By exploiting this, the playlist allows myself to experience certain emotions without the heavy burden of having to experience the life events that lead to them. As well as this, it allows me to induce or reduce certain emotions within the piece or to create a long lasting mood effect (Tol & Edwards, 2014).

Hence, although many of the pieces I originally chose remained the same, I strived to enhance this experience over the course of the semester by listening to countless different artists and swapping them if I felt it fit in with the flow better.

The end product is a personalised playlist which begins with a mysterious yet inviting piece aiming to clean the emotional slate, followed by breathtaking and emotionally heavy pieces. As the playlist progresses, the tone shifts to a more nostalgic and soothing style. Finally, the playlist ends with a lighter and more energetic mood - a finale of sorts for the journey with a grand ending. By the end of the playlist, I have experienced a wonderful story covering a wide range of emotions and feel refreshed. An interesting note - throughout the creation of this playlist, I found for me, the artist was equally important as the actual pieces chosen as the Juslin BRECVEM model suggests (Juslin, 2013).

Jean-Rodolphe Kars (2004). *Preludes for Piano (Book 2), L 123: XII. Feux d'artifice (Fireworks): Moderement anime*. On Debussy: The Greatest Piano Pieces. [CD]

The first piece is an impressionistic piece which as the title suggest, aims to express fireworks - portrayed through the blurs of notes in the runs with short bursts of melodies in the right hand. Although the tone of the piece is confusing to most listeners, the piece's ability to paint fireworks without any visuals (Meister, Krings, Foltys, Boroojerdi, Muller, Topper & Thron, 2004) as well as Kars's impeccable performance fulfills the goal of this piece in the playlist - its mysterious yet immersing style allows me to have a taste of the impressionist era and enjoy Debussy's creation. By the end, I have entered a mindfulness state where stress and worry are of little concern (Steinfeld & Brewer, 2015), ready for the pieces that come next.

Sarah Chang and English Chamber Orchestra (1999). *Chaconne in G Minor*. On Sweet Sorrow. [CD]

An emotionally empowering piece, Vitali's Chaconne in G minor (arr. Fernand David) may appear sad at first glance but is really an emotionally seductive piece. A truly romantic era piece composed in the Baroque era, Chaconne was nothing short from blasphemy, a stark contrast to the rules that bound composers at the time. Specifically performed by Sarah Chang, her take on the sweet sorrow as the album name suggests, is an underlying theme predominant throughout the piece. Paired with my strong empathy, the sad yet sweet tone of her performance seduces me with sorrow whilst still being a pleasurable experience (Eerola & Peltola, 2016) - a high in an emotional state I can only achieve with this piece.

Sarah Chang and Berliner Philharmoniker (1998). *Sibelius: Violin Concerto in D Minor, Op. 47: I. Allegro moderato*. On Sibelius & Mendelssohn: Violin Concertos. [CD]

Following on is the violin concerto written in the heart of winter through the eyes of Sibelius, the widely recognized composer who was accredited with shaping Finland's identity through his music during its struggle for independence with Russia. The beginning is cold and blunt - a physical sensation of shivers down my spine, yet the finale is burning with passion and drive - the feelings of repression being released. With the incorporation of countless high level violin techniques like sol g and octaves - executed masterfully by Sarah Chang, the movement is always breathtaking and leaves me in awe as it reaches the peak. Without having to live through the struggles of two countries fighting for independence, a piece as empowering and heavy as this as suggested by the findings of Salimpoor, van den Bosch, Kovacevic, McIntosh, Dagher & Zatorre (2013), is enough to live through the experience without actually partaking in it.

Khatia Buniatishvili and Czech Philharmonic Orchestra (2017). *Piano Concerto No. 2 in C Minor, Op. 18: I. Moderato*. On Rachmaninoff: Piano Concerto No 2. In C Minor, Op. 18 & Piano Concerto No 3. In D Minor, Op. 30. [CD]

A piano concerto dedicated to his own physician, Rachmaninoff's Piano Concerto is his big break after a four year long depression caused by harsh criticism of his previous work, as well as the death of his role model Tchaikovsky. The gloomy and dark start is like Sibelius's cold and blunt beginning, but a distinct difference in story - the movement enters a grand and bold melody signifying his win against depression. Agreeing with the findings of Tol & Edwards (2014), the

change in story is what ultimately makes this song such a success in transitioning the playlist from what was emotionally heavy to a more bittersweet style.

Simone Lamsma and Yurie Miura (2006). *Violin Sonata in E Minor, Op. 82: I. Allegro*. On Elgar (The Very Best Of). [CD]

Elgar was the best the British romantic era had to offer, and the Violin Sonata was one of the major works he left behind as his legacy. As Elgar described this piece - “I fear it does not carry us any further but it's full of golden sounds and I like it, but you must not expect anything violently chromatic or cubist”, we can see it is different to the preceding pieces in the playlist. Although Clark and Tamplin (2016) suggest that the faster tempo first and last sections would classify the piece as stimulating, the middle section which consists of a beautiful and dreamy melody - the “golden sounds”, shifts the overall playlist tone to a more relaxing and nostalgic style.

Yo-Yo Ma and Patricia Zander (1982). *Songs My Mother Taught me from Gypsy Melodie, Op. 55*. On The Dvorak Album. [CD]

After the transition from heavy and empowering, I enter the nostalgic sensation of my mother. As the title suggests, it is a piece of reliving and remembering the pieces that my mother has taught me. Achieved through the warm and rich tone of a lower stringed instrument, the pitiful yet beautiful melody serves as a reminder to not take my mother for granted and is special experience in which not every piece can offer.

The real success of this piece is also Yo-Yo Man - the artist who is able to engrave these feelings of a nostalgia from both Dvorak and direct them into me - a truly wonderful bittersweet experience without going through it yet.

Tasmin Little and BBC Philharmonic (2013). *The Lark Ascending, composed by Vaughan Williams*. On The Lark Ascending. [CD]

After a sad, yet beautiful ending, we transition into a piece composed in the early days of World War I, depicting a pastoral scene of a lone signing bird ascending up to the sky. During a time of war, a peaceful piece like this would create a small break from the harsh realities. As Bergmann (2002) suggests, pieces written during the war time that signify a break or hope would help address the needs of children who have been traumatized by war. This pure and soft melody depicting a lone bird ascending into the sky may only be calming and soothing for myself, but signify hope and be life saving to those traumatized by the war. As one living in post war time, being able to experience such extreme emotions without the hardships is truly a gift unique to music.

Sarah Chang and Dresdner Philharmonic (2009). *Bruch: Violin Concerto No 1. In G minor, Op. 26: II. Adagio*. On Bruch/Brahms: Violin Concertos. [CD]

Continuing with the calm part of the playlist is one of the most famed 2nd movements of all violin concerto repertoire, the Bruch concerto. Whilst being both passive and soft, Sarah Chang can express the melody beautifully and allow for a relaxing experience. A study by Kendra Ray and Jan Maier in 2015 suggests that classical pieces including this may be beneficial at reducing

agitation for the elderly with dementia and ultimately, it may be me using this playlist down the track.

Sarah Chang and Dresdner Philharmonic (2009). *Bruch: Violin Concerto No 1. In G minor, Op. 26: III. Finale (Allegro energico)*. On Bruch/Brahms: Violin Concertos. [CD]

A smooth transition into the final part of the playlist is only enhanced by the actual transition of Bruch's 2nd movement to 3rd movement. With the song title literally translating to lively and cheerful, the 3rd movement succeeds in changing the mood into a happy and joyous one. The increased pace combined with exciting passages leads to a surge of motivation and inspiration (Salimpoor, Benovoy, Longo, Cooperstock and Zatorre, 2011) and by the end of the peak, I am already in a much brighter mood feeling refreshed and energized compared to a compared to the beginning of the playlist. For future references, pieces invoking strong motivation and inspiration will be beneficial to listen to at the beginning of each day.

Lorin Levee and Los Angeles Philharmonic (1976). *Rhapsody in Blue*. On Michael Tilson Thomas Conducts Gershwin. [CD]

The grand finale of the playlist is a take on jazz, combined with musical elements from both America and Europe. With the goal of the final piece to stimulate excitement, the faster pace and change in style from string, to brass and woodwind is what makes it such a success. In addition, the exhilarating peaks offered in the Gershwin compared to the anticipative peaks in the Sibelius still achieve the pleasurable dopamine releases as Salimpoor and Valorie (2011) find. After all the less positive emotions felt in the former part of the playlist, the buzz gained with the final

pieces leaves me refreshed, excited and motivated.

CONCLUSION:

Although this playlist is tailored towards my personal taste, the many gifts that music has to offer means that anyone else can create their own unique playlist and be able to experience emotions without the burden of living through the life events that lead up to it.

Within the greater community, they can also be specifically designed with secondary motives such as reducing agitation in dementia patients, providing relief to traumatised children of war and in my case - entering a state of mindfulness with the goal of feeling energized and refreshed afterwards.

Whilst this playlist tailors to several emotions, I did not always wish to enter such a deep emotional state every time and admittedly felt tired sometimes - a consequence found by Salimpoor, van den Bosch, Kovacevic, McIntosh, Dagher and Zatorre (2013) when there was too much empathy with sad music. This was the biggest challenge I faced when creating this playlist. In order to combat this, I made several other playlists with different goals set in mind - such as studying (monotonic and simple melodies- a more calming style), stress relief (trance or EDM style - a more physically stimulating playlist), sleep preparation (slow moving orchestral pieces or even just the sounds of nature) and exercising (trance - physically stimulating beats).

In the end, music offers a wonderful gift that is, the ability to share the emotions expressed throughout the piece. Combined with your personal taste, your playlist can be beneficial to both your mental and physical wellbeing, whether it be for enjoyment, personal gain or a method of coping.

References

- Clark, I., & Harding, K. (2012, 02). Psychosocial outcomes of active singing interventions for therapeutic purposes: A systematic review of the literature. *Nordic Journal of Music Therapy, 21*(1), 80-98. doi:10.1080/08098131.2010.545136
- Eerola, T., & Peltola, H. (2016, 06). Memorable Experiences with Sad Music—Reasons, Reactions and Mechanisms of Three Types of Experiences. *Plos One, 11*(6). doi:10.1371/journal.pone.0157444
- Fritz, T., Jentschke, S., Gosselin, N., Sammler, D., Peretz, I., Turner, R., . . . Koelsch, S. (2009, 04). Universal Recognition of Three Basic Emotions in Music. *Current Biology, 19*(7), 573-576. doi:10.1016/j.cub.2009.02.058
- Juslin, P. N., & Laukka, P. (2004, 09). Expression, Perception, and Induction of Musical Emotions: A Review and a Questionnaire Study of Everyday Listening. *Journal of New Music Research, 33*(3), 217-238. doi:10.1080/0929821042000317813
- Juslin, P. N., & Sloboda, J. A. (2013). Music and Emotion. *The Psychology of Music, 583*-645. doi:10.1016/b978-0-12-381460-9.00015-8
- Koelsch, S. (2014, 03). Brain correlates of music-evoked emotions. *Nature Reviews Neuroscience, 15*(3), 170-180. doi:10.1038/nrn3666
- Meister, I., Krings, T., Foltys, H., Boroojerdi, B., Müller, M., Töpper, R., & Thron, A. (2004, 05). Playing piano in the mind—an fMRI study on music imagery and performance in pianists. *Cognitive Brain Research, 19*(3), 219-228. doi:10.1016/j.cogbrainres.2003.12.005
- Ray, K., & Maier, J. (2015, 07). Agitation reduction by music therapists and cnas. *Alzheimer's & Dementia, 11*(7). doi:10.1016/j.jalz.2015.06.1601

Salimpoor, V. N., Bosch, I. V., Kovacevic, N., McIntosh, A. R., Dagher, A., & Zatorre, R. J.

(2013, 04). Interactions Between the Nucleus Accumbens and Auditory Cortices Predict

Music Reward Value. *Science*, 340(6129), 216-219. doi:10.1126/science.1231059

Salimpoor, V. N., Benovoy, M., Larcher, K., Dagher, A., & Zatorre, R. J. (2011, 01).

Anatomically distinct dopamine release during anticipation and experience of peak

emotion to music. *Nature Neuroscience*, 14(2), 257-262. doi:10.1038/nn.2726

Tol, A. J., & Edwards, J. (2014, 01). Listening to sad music in adverse situations: How music

selection strategies relate to self-regulatory goals, listening effects, and mood

enhancement. *Psychology of Music*, 43(4), 473-494. doi:10.1177/0305735613517410

Zentner, M., Grandjean, D., & Scherer, K. R. (2008). Emotions evoked by the sound of music:

Characterization, classification, and measurement. *Emotion*, 8(4), 494-521.

doi:10.1037/1528-3542.8.4.494