Science and research of anxiety app.

Research references:

--------------------------

On top of the links below and the images in this folder I have also met with a practicing therapist in the hlc centre to talk about the app and the science behind it and how to make it work etc.

I also met with davide susta in the sports science building for a brief meeting about the app but unfortunetly he was unavailable for a meeting to get detailed feedback on the app.

All the research below is the successful research. This document and folder does not include all the papers and websites I had to read to back up the science behind the app and to justify that this app does in fact work.

Medical Research papers prove that anxiety can be measured by sensors. The most effective way is through a combination of respiration and heart rate monitoring.

“A combination of heart rate monitoring and respiration is apparently the best

proven way to monitor stress. anxieties 2 biggest physical symptoms are

increased heart rate and hyperventilation so these are solid metric for anxiety detection but there are others.

''Standard deviations (SDs) of these measurements, as well as

other measurements of their variability, have been frequently used to characterize respiratory

variability, which seems to be negatively correlated to anxiety''

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4631393/?fbclid=IwAR0TOvWjGB_7wsy3fUumqtMlPF3qG8YiVoNdkdT4kEqM4dTBCXvNjNTtudg>

<https://scienceline.org/2007/06/ask-hsu-fightorflight/>

<https://www.ptdirect.com/training-design/anatomy-and-physiology/acute-cardio-heart-responses-to-exercise>

<https://www.health24.com/Fitness/Exercise/What-should-your-target-heart-rate-be-during-exercise-20120721>

<http://blogs.discovermagazine.com/neuroskeptic/2009/09/26/panic-in-the-fmri-scanner/#.XIIt2Sj7TIV>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4948779/>

<https://books.google.ie/books?id=OmZrCgAAQBAJ&pg=PA288&lpg=PA288&dq=rule+engine+heart+rate&source=bl&ots=GAh0r8pMuz&sig=ACfU3U1M_57PzMpRrHF6xw8Mtw5gJoB1Kw&hl=en&sa=X&ved=2ahUKEwjN3aah89TgAhXiQhUIHa1LCfAQ6AEwCXoECAcQAQ#v=onepage&q=rule%20engine%20heart%20rate&f=false>