

Research-Based Music Composition for Anxiety Reduction

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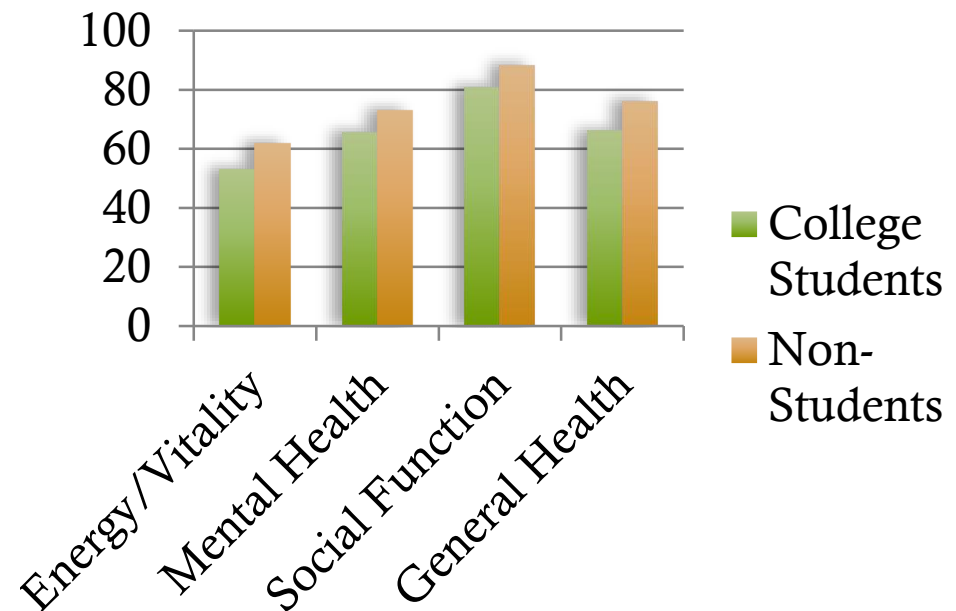
Prevalence & Impact of Anxiety

- ◆ Mean age: 15 years old
- ◆ 18.1% of the US above age 18 are affected by anxiety-related disorders
- ◆ 14 anxiety and anxiety-related disorders in DSM-V

(WHO, 2000)
(ADAA, 2018)

Prevalence & Impact of Anxiety

- College students vs. non-students
- Between the ages of 18-34



(Stewart-Brown et. al, 2000)

Comorbidity

- ◆ ACHA conducted National College Health Assessment
 - ◆ 1,500 undergraduate college students
 - ◆ 21.6% diagnosed with anxiety, 11.1% for panic attacks
 - ◆ 17.9% treated for depression
 - ◆ 14.4% comorbidity for anxiety and depression
- ◆ Due to variety of stress factors

(Aselton, 2012)
(ACHA, 2017)

Youth Culture & Music

- ◆ Youth show great interest in music
 - ◆ Part of their day-to-day lives
- ◆ Adolescents 10-19 years old
- ◆ Helps give sense of self (identity), regulate mood(s), process emotions, and promotes socialization and self-awareness

(Saarikallio & Erkkilä, 2007)
(Schäfer et al., 2013)

Therapeutic Function of Music Plan

- ◆ Worksheet for evaluating the therapeutic function of musical elements related to a specific goal area
- ◆ Table with four columns
 - ◆ Musical Element
 - ◆ Theoretical Framework
 - ◆ Purpose of Musical Element
 - ◆ Description of Musical Element

(Hanson-Abromeit, 2015)

Purpose

- ◆ Use music to reduce anxiety in college-aged students

- ◆ Musical Elements:

- ◆ Melody

- ◆ Pitch

- ◆ Harmony

- ◆ Tempo

- ◆ Dynamics

- ◆ Rhythm

- ◆ Timbre

- ◆ Meter

- ◆ Form

- ◆ Lyrics

- ◆ Style

Synthesis

- ◆ Key: C major (focus on C5)
- ◆ Melody: stepwise motion, repetition, consonant intervals – 4ths, 5ths, unison, 8ves
- ◆ Harmony: emphasis on I, IV, V, diatonic
- ◆ Tempo: between 60-80 beats per minute
- ◆ Rhythm: steady, predictable
- ◆ Meter: simple duple, quadruple, or triple (2/2, 4/4, 6/8, 3/4)

Synthesis, continued

- ◆ Form: ABA, AABA
- ◆ Style: legato phrasing, smooth, connected
- ◆ Dynamics: small changes (p-mp or mf-f), not over 60 dB
- ◆ Instruments: piano, flute, and string instruments
- ◆ Timbre: gentle, mild, nature sounds (waves, rain, bird calls)
- ◆ Lyrics: none

Songwriting Process

The screenshot displays a music notation software interface. At the top, there is a toolbar with various icons for file operations, zooming (set to 100%), page view, and playback controls. Below the toolbar, the score is titled "Refocus" and attributed to "Carly O'Rourke". The score is divided into two systems. The first system includes parts for Flute, Piano, and Violoncello. The Flute part has a dynamic marking of *mf* and a performance instruction: "Flute: 2nd line only". The Piano part has a dynamic marking of *mf*. The Violoncello part has a dynamic marking of *mf*. The second system includes parts for Flute, Piano, and Violoncello. The Flute part has a dynamic marking of *f*. The Piano part has a dynamic marking of *f*. The Violoncello part has a dynamic marking of *f*. The status bar at the bottom indicates: "Note: Pitch: C5; Duration: Quarter; Voice: 1; Measure: 1; Beat: 1; Staff 1". The bottom right corner shows the time signature "1:01:00".

Recording Process



“Refocus”

Original Recording



Recording with nature sounds:
rain, waves, bird calls



Conclusion/Discussion

- ◆ Process began in May, earlier this year
- ◆ Songwriting: unfamiliar territory, input from cellist and flautist
- ◆ Recording and editing
 - ◆ WMU MAT student
 - ◆ Human limitations
 - ◆ Time Constraints
- ◆ Finished product
- ◆ Questions?

References

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