

Introduction

Prior research associates listening to heavy music with reduced suicide risk, especially among teenage girls when utilized for vicarious release (Lacourse, Claes, & Villeneuve, 2001). Multiple studies confirm that those with disorders of adult personality and behavior often use music for the reduction of negative activation (RA) (Gebhardt, Kunkel, & von Georgi, 2014b; Gebhardt, Kunkel & von Georgi, 2016).

A 2010 study investigating the connections between music and self-destructive behavior and suicidality in adolescents further demonstrated that subjects with borderline personality disorder use music in affect regulation as a substitute for NSSI (non-suicidal self-injury) (Stegemann, Brüggemann-Etchart, Badorrek-Hinkelmann, & Romer, 2010). The study shows how music is associated with inhibiting auto-aggressive tendencies, anti-dissociation, and forging interpersonal influence (Stegemann et al., 2010). For young persons suffering from anger, depression, or suicidal ideation, research has shown that heavily emotive music can be a safe way for listeners to process negative emotions, regulate mood, and experience catharsis (Arnett, 1995; North & Hargreaves, 2006; Huron, 2011; Moore, 2013; Shafer, Smukalla & Oelker, 2013; Baker & Brown, 2014).

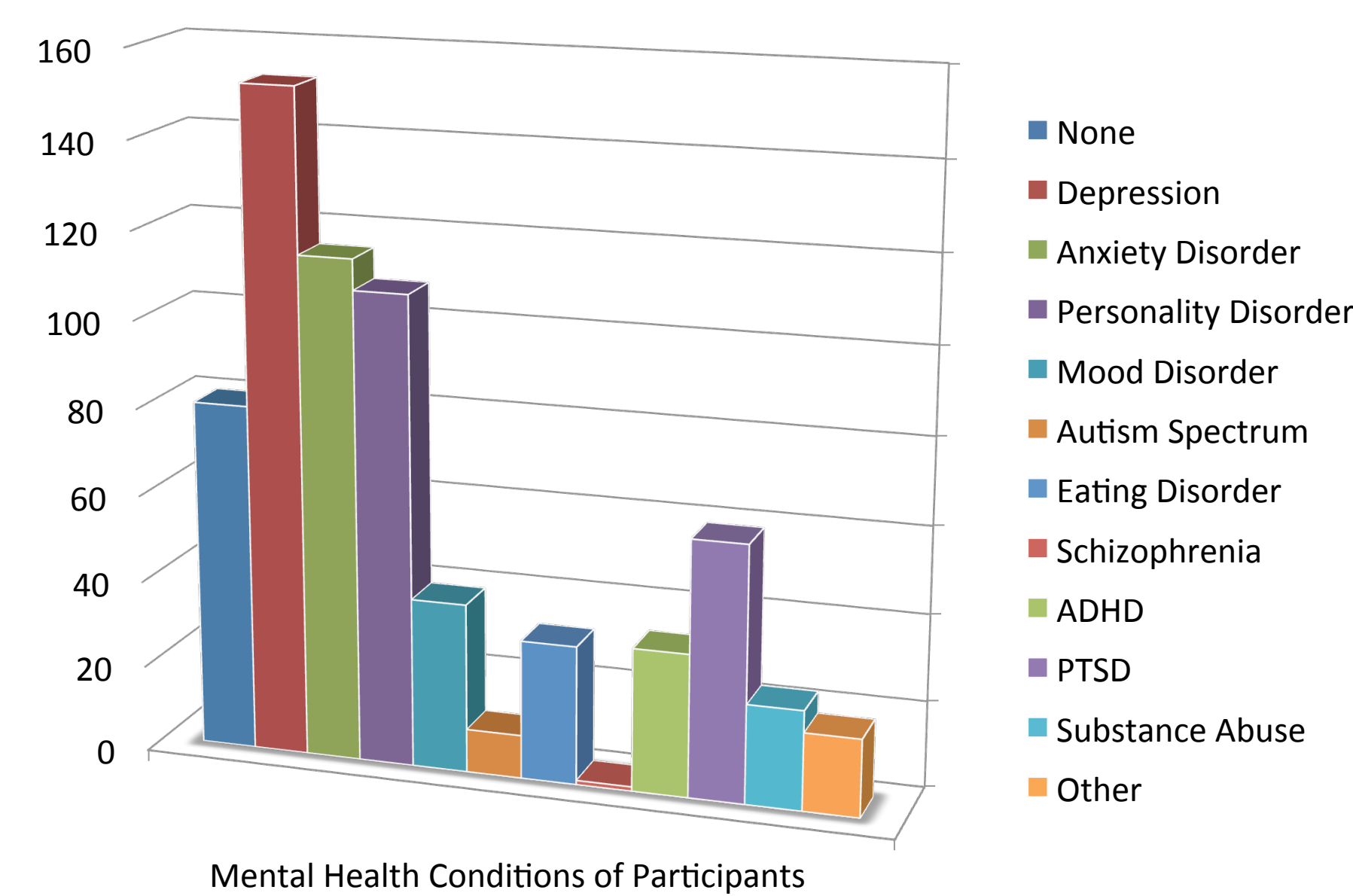
To better understand the mechanisms by which conscientiously engaging with heavy, intense, and highly emotive music may circumvent self-harming behavior, a pilot study is presented of 283 subjects, the majority of whom report suffering from thoughts of self-harm or mental disorders.

Method

To examine the role of affect regulation in both generic (non-specified) and heavy music, a 32 point survey entitled the Music in Affect Regulation Questionnaire (MARQ) was created, utilizing music in mood regulation (MMR) strategies from the work of Saarikallio (2008).

The MARQ was distributed online by various nonprofit organizations supporting music and mental health, as well as a Dialectical Behavior Therapy (DBT) skills group and network for those suffering from personality disorders. Participants were advised that the study was open to anyone over the age of eighteen, taken anonymously, and surveyed the ways in which people use music in their lives. Of particular interest are those who suffer from self-destructive impulses, affect dysregulation, and unstable or shaky sense of self (commonly manifest in but not limited to those who engage in self-harm or hold the diagnosis of a personality disorder). Figure 1 represents the number of subjects with a formal diagnosis of a mental health condition.

Figure 1



Music in Affect Regulation

To foreground the ways music listeners employ various listening strategies in the regulation and modulation of negative affect and emotion, the three MMR strategies of using music to cope with negative mood states are employed: *Diversion*, where music is used to distract from negative thoughts and feelings, *Solace*, where music is used for comfort, acceptance, and understanding when feeling sad or troubled, and *Discharge*, where anger or sadness are released through music (similar to “vicarious release”; Lacourse et al., 2001) and “reduction of negative activation” [RA]; von Georgi et al. 2006).

Of the total 283 subjects, 75% (212 subjects) report ever having had thoughts of self-harm. Of those who report thoughts of self-harm, 89% (188 subjects) report sometimes using music to intentionally regulate moods and/or emotions (66% of total subjects).

Figure 2

Figure 2 represents the percentage of the 177 subjects who continued in the survey and report both having had thoughts of self-harm and using music to intentionally regulate moods or emotions.

Subjects reporting using music to alleviate or lesson:	Sometimes, Frequently, or Always	Rarely, Sometimes, Frequently, or Always
Sadness	94%	99%
Anger	83%	96%
Thoughts of Self-Harm	78%	92%
Thoughts of hopelessness or despair	90%	97%

Self-Harm And Heavy Music

To demonstrate heavy music use in affect, emotion, and mood regulation, participants answered, “If ever, how often do you listen to heavy music?” selecting “never, rarely, sometimes, frequently, or always” via Likert-scale slider. To promote consistency across responses, “heavy, intense, and highly emotive music” was defined as follows:

“Here, we distinguish this type of music as characterized by capacious, distorted riffs; loud, pervasive percussion; or an overall feeling of ‘raw power,’ emotion, and affective intensity stemming from the instrumental or vocal parts.”

- Of the total study participants, 89% report listening to heavy music.
- Of those who report thoughts of self-harm, 89% also report listening to heavy music.
- Of those who report thoughts of self-harm and listen to heavy music, 76% report heavy music listening most often improves their mood, while 24% report it most often worsens their mood.

To designate both non-specified and heavy music listening strategies of *Diversion*, *Solace*, and *Discharge*, subjects again selected frequency via Likert-type slider response. Figure 3 describes the reported correlation for four categories of subjects:

SH : Non Specified - those who report thoughts of self harm and listen to heavy music, the type of [non-specified] music listening strategy/strategies that most often improves mood

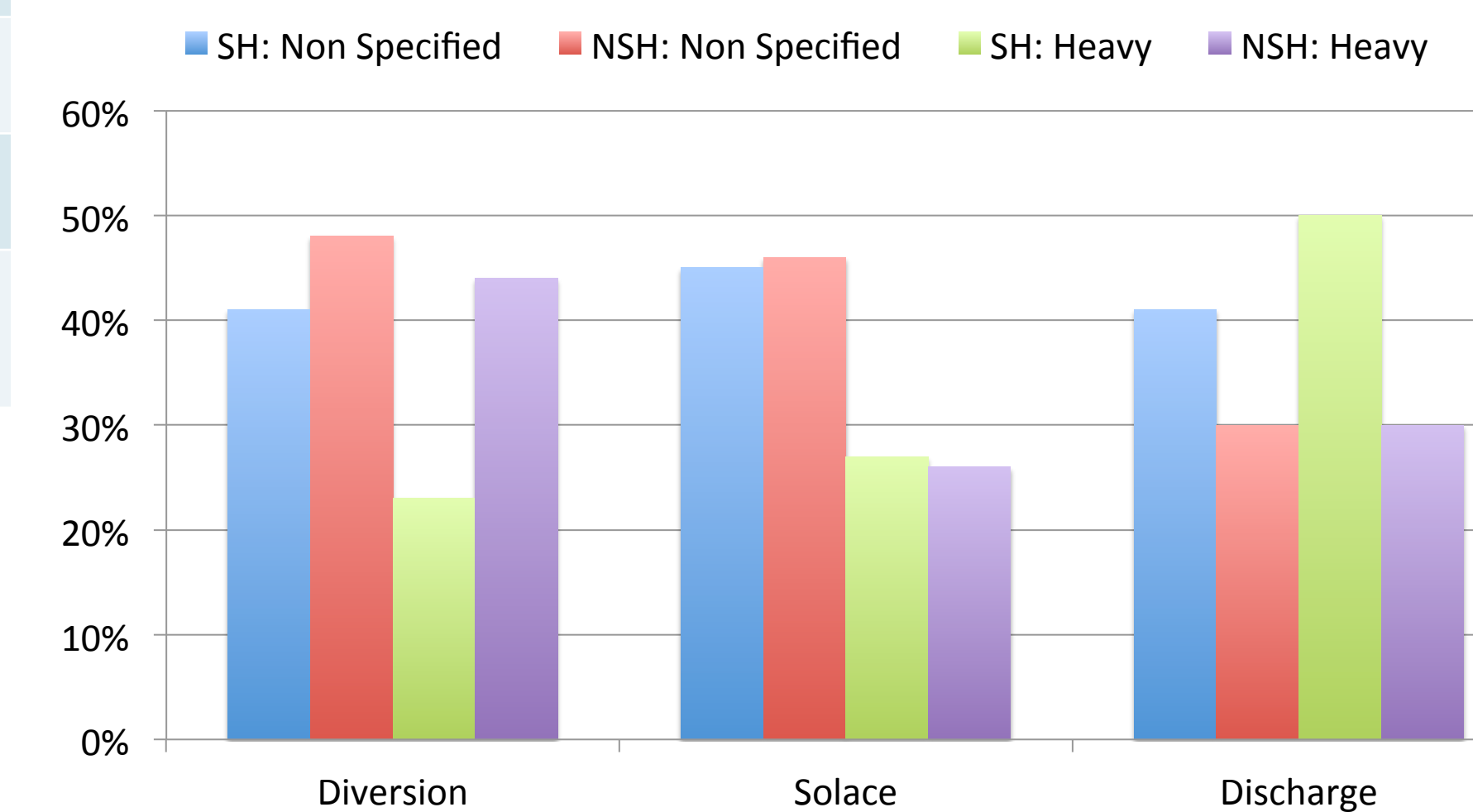
NSH : Non Specified - those who report never having thoughts of self-harm and listen to heavy music, the type of [non-specified] listening strategy/strategies that most improves mood

SH : Heavy - those who report thoughts of self-harm and listen to heavy music, the type of heavy listening that most improves mood

NSH : Heavy - those who report never having thoughts of self-harm and listen to heavy music, the type of heavy listening that most improves mood

	Diversion	Solace	Discharge
SH : Non Specified	41%	45%	41%
NSH : Non Specified	48%	46%	30%
SH : Heavy	23%	27%	50%
NSH : Heavy	44%	26%	30%

Figure 3



Results

Initial results demonstrate heavy music listeners who report thoughts of self-harm use listening strategies to non-specified music differently from the ways they use heavy music. Group *SH : Non-specified* shows use of all three strategies at a comparable rate (41%, 45%, 41%) whereas group *SH : Heavy* shows a significant dominance for Discharge (50%) compared to Diversion and Solace (23% and 27%).

These data support prior findings that those who engage in self-harm [and/or suffer from acute affective instability or other mental health conditions] use music less for positive stimulation and more for the reduction of negative activation [RA], shown here through the strong preference for Discharge, likely in the effort to overcome strong or overwhelming negative emotions. Given the similarities shown in motivational aspects of both self-destructive behavior and accounts of interactions with heavy and intense music, it is unsurprising that certain clinical populations would be drawn to the intensity often heard in heavy music in hopes of reducing negative mood in times of extreme emotional distress.

Conclusion

This study shows that survey participants who have thoughts of self-harm and listen to heavy music interact differently with heavy, intense, or highly emotive music than with generic music, especially for modulating negative mood. Though the exact music described as “heavy” varies remarkably between subjects, the catalyzing force seems less related to genre-specific categories than certain musical and psychological commonalities collectively understood as *intensity*.

These findings provide significant evidence for heavy music's ability to circumvent self-destructive impulses by providing cathartic release, and the immediate relief or control of tension or overwhelming emotion, especially when applied in tandem with specific listening strategies of affect-regulation. Additional evidence from prior case studies further supports the value of deeper investigation into the conscientious use of heavy music as a potential intervention for those suffering from affect dysregulation and self-harm.

References

Lacourse, E., Claes, M., & Villeneuve, M. (2001). Heavy metal music and adolescent suicidal risk. *Journal of youth and adolescence*, 30(3), 321-332.

Gebhardt, S., Kunkel, M., & von Georgi, R. (2016). The role musical preferences play in the modulation of emotions for people with mental disorders. *The Arts in Psychotherapy*, 47, 66-71.

Gebhardt, S., Kunkel, M., & von Georgi, R. (2014a). Emotion Modulation in Psychiatric Patients Through Music. *Music Perception: An Interdisciplinary Journal*, 31(5), 485-493. doi:10.1525/mp.2014.31.5.485

Gebhardt, S., Kunkel, M., & von Georgi, R. (2014b). The use of music for emotion modulation in mental disorders: the role of personality dimensions. *Journal of Integrative Psychology and Therapeutics*, 2(5), 6. doi: 10.7243/2054-4723-2-5

Saarikallio, S. H. (2008). Music in mood regulation: Initial scale development. *Musi- cae Scientiae*, 12(2), 291-309.

Stegemann, T., Brüggemann-Etchart, A., Badorrek-Hinkelmann, A., & Romer, G. (2010). The Function of Music in the Context of Non-Suicidal Self Injury. *Praxis Der Kinderpsychologie Und Kinderpsychiatrie*, 59(10), 810-830

von Georgi, R., Grant, P., von Georgi, S., & Gebhardt, S. (2006). Personality, emotion and the use of music in everyday life: Measurement, theory and neurophysiological aspects of a missing link. First studies with the IAAI-M. Tübing, Lübeck, Marburg: Der Andere Verlag.

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