MUSIC LISTENING AND EMOTIONAL AWARENESS: AN EXAMINATION OF THEIR RELATIONSHIP

by

STEPHEN DOUGLAS FOGLEMAN
(Under the Direction of Edward A. Delgado-Romero)

ABSTRACT

This cross-sectional and correlational study examines the relationship between music listening and emotional awareness. In an online survey, 205 respondents filled out instruments related to general emotional awareness, music use, music and mood regulation, and personality characteristics. Previous studies have demonstrated music's capacity to elicit emotion regulation in listeners. The present research aimed to look at another aspect of music and emotion: its purpose is to better understand how music listening relates to listeners' more general awareness of intrapersonal emotional states. The results gathered in the present study indicate that there are several significant relationships between participants' scores on a music and mood regulation measure and their ratings of emotional awareness, including the finding that participants who had certain higher ratings of emotional awareness were also less likely to turn to music for the purposes of discharging unpleasant emotions and were more likely to listen to music for the purpose of reflecting. The study also found that individuals who endorse the personality traits Openness to Experience and Agreeableness also have higher ratings of emotional awareness

while listening to music. Finally, the study did not reveal a significant relationship between the amount of time individuals spend purposely listening to music and ratings of emotional awareness, nor did it find that the gender identity of participants related in any way to their scores of emotional awareness. These findings may be beneficial for counseling psychologists and other mental health professionals who wish to incorporate music listening—a strength-based intervention—into their work with clients. The results may have several implications for both practicing psychologists, their clients as well as researchers in the realm of music and emotion.

INDEX WORDS: music, music listening, emotion, emotional awareness, emotion regulation, mood regulation

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CHAPTER 1

Introduction

Statement of the Problem

From an extensive and ever-growing corpus of research, it is evident that music can impact listeners in a myriad of ways. As a powerful and ubiquitous cultural artifact, music has the potential to elicit various emotions, and these may be both positive and negative (Juslin et al., 2010). Music that is perceived to be sad, for instance, may provoke sadness. Changing songs can then alleviate this feeling (Thoma et al., 2012). These findings have led to a number of studies that explore music as an emotion-inducing medium. It has also been demonstrated that music listening can have beneficial effects on stress and pain perception (Hanser, 2010). Overall, in the area of emotion research in the psychology of music, there have been so many articles written in recent years that an article was recently published to summarize the major findings (Swaminathan & Schellenberg, 2015). More broadly, the relationship between music and emotion continues to explored by researchers from a number of fields, including psychology, music, and neurobiology, with several interdisciplinary collaborations.

Concurrently, during the past few decades the body of literature on emotion and affective processes has increased. Once neglected due to a more exclusive focus on the intersection of cognition and behavior, research demonstrates that emotions are among the most significant aspects of behavior and health (Swinkels & Giuliano, 1995). They are seen to enhance adaptive self-regulation and communication, and particular skills such as the ability to recognize or identify emotions are viewed to be vital for both intrapersonal and interpersonal well-being

(Gross & John, 2003). The awareness of one's own emotions, for instance, may promote helpful strategies for managing emotions or responses to situations (Boden & Thompson, 2015).

The current study aims to build on the findings from these two fields—that of the psychology of music and that of emotion—and examine the relationship between music listening and emotional awareness. Given that emotions play such a significant role in the experience of music and that most people listen to music as a way to impact their emotions, this dissertation seeks to lay the initial framework for the question of whether music may foster listeners' capability of attending to, identifying and labeling their own emotions. Previous studies have examined music's ability to induce a particular emotion or mood (e.g., Ladinig & Schellenberg, 2012), or its capacity to increase empathy and the awareness of others' emotions (e.g., Garrido & Schubert, 2012), but there is a paucity in the literature about whether music relates to or promotes the general awareness of intrapersonal emotional states.

In order to see why this research is relevant, it is first necessary to note the broader research on music and emotion. In a U.S. study from 2003, it was demonstrated that people spend about 14% of their waking lives listening to music (Mehl & Pennebaker). In another study based in Sweden, researchers found that 78% of participants listened to music at least once per day. The principal reason for listening that individuals endorsed was to relax (Juslin et al 2010). Findings such as these have encouraged psychologists to investigate the interface between music and psychology as well as health and, in particular, the ways it influences listeners' emotional states. A general takeaway from this research is that, overall, many people listen to a substantial amount of music in the course of their daily lives, and they often consciously use it as a way to regulate—to change or maintain—how they are feeling.

The Norwegian musicologist Even Ruud argues that music can enhance an individual's sense of identity and overall health (2017). It is a method of self-care that may provide anyone who engages with it in the context of listening or performance a sense of vitality, of agency, and of belonging. It can enhance life quality by enriching one's emotional life, has been proven to contribute to self-efficacy and self-esteem, and provide an outlet for self-expression. Furthermore, music can contribute to a sense of meaning. Mary Butterton, a British psychotherapist and musician, interviewed older adults about their musical experiences. In their statements emerged a theme of music as an organizing device for sorting out important events, experiences, people and places (2004). Music helped many informants connect their thoughts and feelings together in a cohesive way and to connect with the world around them. It was clear that, for many of them, music directly related to their sense of self.

It is also becoming clear that, if one desires to have a comprehensive understanding of musical behavior, emotions and emotional health must be framed as central constructs (Saarikallio, 2017). In the second chapter, it will be shown that emotion regulation is a chief focus of many research studies. For now, suffice it to say that music use for the purposes of emotion regulation correlates positively with well-being, contributes to lower endorsements of depression, and effectively works to reduce stress (Sloboda, 2005). All of this is particularly true for individuals who are prone to habitually reappraise their cognitions (Chin & Rickard, 2014). In addition, people who listen to music that they perceive to be "sad" while feeling sad succeed in their capacity to improve their mood, especially when they use music as a means for distraction and reappraisal (Van den Toll & Edwards, 2015).

Music can facilitate positive mental health, then, in terms of regulation. It must be stated that what is often a prerequisite for regulating—i.e., maintaining or altering—emotion is being

aware of an emotional state. If one does not recognize that one sad, for instance, that individual may be less likely to engage in a behavior that would regulate that feeling. Lower ratings of emotional awareness also correlate with lower levels of self-acceptance and predict more maladaptive emotional behaviors such as suppression (Barrett & Gross, 2001). When it comes to music and its potential relationship to emotional awareness, evidence shows that listeners are highly capable of perceiving emotions in music. The psychologist Alf Gabrielsson has a book largely devoted to cataloguing the various emotions and experiences that people have perceived while listening to music (2011). The question becomes whether this capacity to recognize or perceive emotions in music relates or translates to an ability to be generally aware of one's own emotions.

Purpose of the Study

Research has evaluated the connections between individuals' level of music engagement and their competencies in the realm of emotion recognition, but what about music's potential to impact listeners' intrapersonal emotional awareness? How does the everyday approach to listening impact people's ability to attend to, identify and label their emotions? These are questions that remain unanswered.

This particular inquiry draws on research that has been conducted on the everyday use of music and its impact on general well-being. Västfjäll, Juslin and Hartig (2012) hypothesize that music affects listeners' health through the emotions that it arouses. Using self-reports and the Day Reconstruction Method (DRM), a method that asks participants to reconstruct their activities and experiences with procedures that also take into account biases involved in recall, they found that music was involved in around 1/3 of the episodes in their daily lives. They also argue that this finding is significant from the perspective of public health: "music may already be

providing health benefits to a significant proportion of the population, at low cost relative to other counter measures for stress, and with greater acceptance and more use than other measures" (p. 418). They further posit that music listening is an "overt strategy" for altering emotions but acknowledge that there is a lack of understanding about how effective music is compared to other strategies of emotion regulation (p. 419). In the end, music listening is revealed to be a powerful tool for improving health and well-being due to the fact that, as a behavior, it is intrinsically motivated.

The current study uses the research of Västfjäll, Juslin and Hartig as a model, in that it will investigate music in the context of everyday life, that is, outside of the laboratory. Furthermore, it draws on the work of Swinkels and Giuliano (1995) and their examination of how monitoring and labeling intrapersonal mood states can influence behavior and mental health. They emphasize the clinical benefits of assessing a client's level of mood awareness and demonstrate that mood labeling has several benefits. Among these is the ability to produce positive affect through the act of emotion regulation; the more aware one is that one is experiencing a given emotion, the more likely that individual is to successfully manage emotions. If emotional awareness and the labeling of emotions is constructive and benefits overall psychological health, the question becomes, what are everyday activities and behaviors that may promote this form of awareness? If music listening is indeed an act that draws out emotions and enriches listeners' inner lives, does it relate to the process of identifying emotions as well?

The aim of this study is to see how this process connects with music listening and how this act may relate to more general emotional capabilities. As Saarikalo writes, "far more research is needed to confirm whether everyday musical behavior leads to improved emotion

recognition" (2017, p. 607). Her survey "Musical Identity in Fostering Emotional Health" served as a starting point for this project and helped shape the scope of its research questions. She outlines the ways in which music advances emotional processing in the realm of everyday life. She cites music's capacity to help listeners regulate emotion, induce emotion (positive or negative), as well as the ways in which it can foster individuals' ability to recognize emotions. Noticeably absent are quantitative empirical studies that explore the question raised by this dissertation.

In framing this research, individual differences in the listener must be taken into consideration. Music listening is a personally-defined act: each listener is unique, as are their motivations for listening, relationship with music, and so forth. Hargreaves and North (2010) note that, regarding the effect of listener characteristics on the response to music, the main individual differences that have been explored are social class, personality, gender and musical training (p. 538). For the purposes of this study, social class will be omitted, as there is less validated research about how this identity factor relates to both music consumption, preference, and emotional awareness. Furthermore, musical training and music preference will be omitted as moderating variables as well, due to the fact that previous research in the related area of music listening and emotion regulation demonstrates that training and preference do not impact one's ability to emotionally respond to music (Trimmer & Cuddy, 2008). Personality, gender, music as well as general emotional awareness will be investigated as possible moderators for the general examination of the relationship between music listening and emotional awareness. Due to the potential influences they have on emotional reactions to music, each of these factors has also been investigated in other studies.

Beyond filling a gap in academic research, this project has implications for clinical practice as well. As previously stated, emotional awareness and emotion labeling in particular positively impact mental health. Research has found that people who are capable of labeling their emotions "tend to seek and be satisfied with social support, experience positive affect, have higher levels of self-esteem…and express greater global life satisfaction" (Swinkels & Giuliano, 1995, p. 946). Furthermore, mood labeling negatively predicted scores on the Beck Depression Inventory. The clinical benefits of this ability are many, and people may already engage in acts that may promote emotional awareness. If music does indeed relate to people's capacity to recognize their own emotions, psychologists may be more likely to incorporate music listening into their practice. This could strengthen individuals' abilities to self-regulate and enhance their overall psychological well-being.

It must be stated that this research will examine the potential correlations between music listening and emotional awareness. Causal relationships—such as, "Does music listening promote emotional awareness?"—would be difficult to infer, given the number of confounding variables at play; isolating music listening and emotional awareness would be an involved task that is beyond the scope of this dissertation. One would have to gather data about other behaviors that could promote emotional awareness and use that as a control for other factors in the course of statistical analysis. This research will utilize self-reports as a way to open a window of understanding regarding how people use music in their everyday lives. These measures ask participants about music use and engagement, emotional awareness, personality, and music preference. From these, it may be possible to infer if a relationship exists. In terms of future directions for research, if it is determined that such a relationship is present, an investigation about causality would be warranted.

The examination of the relationship between music listening and emotional awareness will help to fill a gap in the literature on music and emotion and contribute to the understanding of how music relates to psychological functioning. As the research in this domain becomes more prevalent, it is clear that findings have applicability beyond the realm of academic discourse and that they are useful to psychotherapists and other professionals. It is the intention of this study that it is similarly pragmatic.

With regard to key terms, emotional awareness refers to intrapersonal awareness of emotions. As Mankus, Boden, and Thompson (2016) write, "emotional awareness is a multifaceted construct that broadly encompasses how people understand, describe, and attend to their emotional experience" (p. 28). It includes clarity of emotions (the ability to identify, label, and represent their own emotions), emotion differentiation, and attention to emotion (Salovey et al., 1995). This competency is distinct from emotion recognition, or the ability to perceive or recognize the emotions of others (see O'Sullivan, 1982, for a review). As Swinkels and Giuliano (1995) note, there has been a substantial amount of research on individuals' ability to recognize the emotions of others, but comparatively little has been done to investigate awareness of one's own states. The same is true within the realm of music and emotion. It is also necessary to highlight that emotion is distinct from mood. Emotion relates to a sensorial experience that is in is response to internal or external stimuli, whereas mood is an affective state that is "pervasive and sustained for a significant period of time" (Renaud & Zacchia, 2012, p. 299).

Research Question

"What is the relationship between music listening and emotional awareness?"

Hypotheses

Research Hypothesis 1: Higher scores on the Music in Mood Regulation subscales (i.e. people who tend to listen to music in order to regulate their emotions) will positively relate to ratings of emotional awareness at more than chance rates.

Research Hypothesis 2: People who purposely listen to music more often will also have higher ratings across facets of emotional awareness.

Research Hypothesis 3: Ratings of emotional awareness while listening to music will be positively correlated with personality. Specifically, those who endorse *openness to experience* will also report higher levels of attention to emotion while listening to music.

Research Hypothesis 4: Ratings of emotional awareness while listening to music will be positively correlated with gender. Specifically, people who identify as female will also report higher levels of attention to emotion while listening to music.

Research Hypothesis 5: Ratings of emotional awareness while listening to music will be negatively correlated with music preference.

CHAPTER 2

Review of Literature

Emotional Awareness Literature

The present study operates under the assumption that emotional awareness benefits mental health and well-being, and this perspective is substantiated by empirical research (e.g., Barrett & Gross, 2001). Emotional awareness is typically operationalized as an individual differences construct that consists of "metaknowledge (i.e., beliefs) about one's own emotional experiences" (Boden & Thompson, 2015, p. 399). Furthermore, it considers the degree to which individuals attend to emotional experiences, label emotion, and understand emotional experiences). The benefits of this form of awareness come into view when one considers the broader context of emotion: emotions have the capacity to assist in the process of adaptation and can yield essential information about decision-making. One's ability to regulate one's emotions may also be impacted by emotional awareness (Barrett & Gross, 2001). Therefore, low levels of emotional awareness may lead to problems with emotional regulation and perhaps even to mental health issues (Boden & Thompson, 2015).

The aforementioned research of Boden and Thompson confirmed that decreased levels of emotional awareness, especially in the area of emotional clarity, directly correlated with higher levels of depression. Lower levels of emotional awareness were also associated with inaccurate and maladaptive self-views. The individuals who scored lower in this category tended to have difficulty with shifting focus away from negative emotional content. In addition, these

individuals had lower ratings of self-acceptance. Acceptance, as opposed to suppression, for instance, is seen to be key emotion regulation strategy that increases well-being.

Research has indicated that there are individual facets that contribute to differences in emotional experiences in general and, in particular, to levels of emotional awareness. According to Brody and Hall (2008), these differences are rooted in cultural factors and gender stereotypes therein. In Western cultures, for example, women are stereotyped to be more emotionally expressive, emotionally skilled, and more emotionally intense. Studies have been conducted in order to investigate such claims and, in fact, data supports the idea that females tend to attend to their feelings more than males (Boden, Gala, & Berenbaum, 2013). This is evidence that stereotypes impact behavior in ways that are both conscious and unconscious (e.g., Hilton & von Hippel, 1996). In other words, women may both voluntarily and involuntarily attend to their feelings due to socialization and to how they were taught to experience emotion (Mankus, Boden, & Thompson, 2016). Mankus, Boden and Thompson also demonstrated that women had greater capacity to differentiate negative emotion. In addition, women were more able to identify the source(s) of their emotion than did men. (It is worth stating that their sample predominately comprised White individuals who had a college or university degree; further research has yet to be conducted with more culturally diverse participants).

Reasons for Listening: The Use of Music in Everyday Life

In order to understand how music listening relates to emotional awareness, it is first necessary to review the various reasons that people listen to music and the role it plays in their lives. Various studies have been conducted in order to demonstrate the ubiquitous presence of music in the sphere of everyday life. People do not just hear music in concert venues. They listen to it on their drive into work. They listen to it as they study. They listen to it while they eat in

their homes or in restaurants. In a study conducted by Mehl and Pennebaker (2003) using a sample consisting of university undergraduates at a major U.S. public university, it was estimated that individuals spend about 14% of their waking lives listening to music.

Noting that people spend enormous amounts of time and money listening to music, Lonsdale and North (2011) ask why this is and propose that, while people listen for a variety of reasons, music is primarily used to "relieve tension, pass the time, fill uncomfortable silences, alleviate feelings of loneliness, manage their mood, and relieve boredom" (pg. 108). People also listen to music for psychological reasons: people use it to help manage their mood, self-identity, and interpersonal relationships. On the point of self-identity management, the authors argue that people, especially adolescents, use music as a way to create or portray an image to others. This research is also reported by North and Hargreaves (1999), who state that people use music as a way to communicate their self-views, beliefs and values.

Lonsdale's and North's (2011) article is built around four studies, all of which examine how individuals consume music in their everyday lives. This research examines how people use media to fulfill personal needs. Three of the four studies used college students as participants, while the last used people of all ages in order to observe how people use music across the lifespan. Mood management and regulation, again, proved to be the most common reason for all groups, and in particular many participants stated that they listened to music to either make their mood more positive or to have an emotional release or catharsis. Many participants said that they listened to music in order to reflect on their past and to enable themselves to bring to mind specific memories. The findings demonstrate that music appears to play a far more important role in the lives of listeners under the age of 30. What was perhaps most surprising was that individuals between the ages of 19-24 were far more likely to reminisce about their pasts than

those over the age of 30. This could perhaps be that, while older people have more years about which to reminisce, people of different ages reminisce for different reasons. Overall, they posited that people over the age of 30 typically have more personal responsibilities (children, work-related, etc.) and therefore may not have as much time for listening or disposable income for buying.

Music and Emotion Literature

Participants in a broad range of studies reported consciously using music to regulate emotion and mood. They used it as a means to relax, to distract themselves, and to enhance their level of motivation. (See Chen, Zhou, & Bryant, 2007; Juslin & Isaksson, 2014; Lonsdale & North, 2011; and Shifriss, Bodner, & Palgi, 2014.) As defined by Gross (1998), emotional regulation may be best described as a "…process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (p. 275). When it comes to the regulation of mood and emotions in general, there appear to be two main processes or strategies that people use. As discussed by Gross (1998) and Gross and Thompson (2007), the two ways are (1) distraction and (2) focusing. Distraction is simply the redirection of attention either away from an emotional state or a situation, whereas focusing is when one uses cognitive resources or media to increase attention on a chosen emotion. Music happens to be utilized for both reasons. Hunter, Schellenberg and Griffith (2011) found that, when people are feeling sad, they show mood congruency effects: they have an increased preference for "sad" sounding music, as they wish to more fully experience that state. Listeners who are already feeling sad are also more prone to perceive sadness in music that is selected to sound neutral.

Several studies have been conducted in recent years that examine the different music selection patterns that people use in order to regulate their emotions. Sloboda, Lamont and

Greasley (2009) focused on everyday music use, and they discovered seven strategies that are common among listeners (1) entertainment, or the motivation to evoke a pleasant atmosphere; (2) revival, in which listeners hope to use music in order to relax; (3) strong sensation, or the desire to experience strong emotions that are caused by listening to music; (4) diversion, or the forgetting of unwanted or undesirable thoughts and emotions; (5) discharge, or the release of negative emotions; (6), mental work, which uses music as a means to observe or reevaluate mental processes or emotions that are problematic to or problematic for the listener; and (7) solace, or the need to listen to music that in some way contains emotions or makes the listener feel "understood" by the music. The latter strategy mirrors the role and function of a friend; the listener feels a close, personal connection to the music, and it can therefore also reduce loneliness (Thoma et al, 2012 p. 235).

It becomes clear that some of these strategies of listening—including discharge, strong sensation, and mental work—focus the listener's attention on an unpleasant emotion or mood. As Shifriss, Bodner & Palgi (2015) write, "the individual's attention may be focused on his or her negative feelings by discharging these feelings through music; he or she eliminates them by intensifying emotional and physical sensations through music; and by mentally observing negative feelings while listening to music (pp. 794-5.) This further helps to answer the question of why someone might choose to listen to music that is felt to be sad. Furthermore, Van den Tol and Edwards (2015) found that listeners are more prone to listen to what they call "self-identified sad music" (SISM) shortly after a negative mood, as the music can aid in the sorting out of one's emotions (p. 489). They posit that we might sometimes listen to music in order to retrieve memories—whether happy or sad. The music functions to make past experiences more salient, as it may have strong associations with a person or an event in the listener's life.

The aforementioned studies, as well as most of the literature, are based on samples taken from individualistic cultures—from countries including The United States, England, Sweden and Germany. According to Berry et al., (2011), individualistic cultures are typically characterized as valuing personal autonomy. Collectivistic cultures, on the other hand, are usually characterized as valuing social embeddedness (i.e., the pursuit of group goals as opposed to personal goals). Juslin et al. (2016) set out to examine whether significant differences exist in the ways in which (1) individuals from individualistic and collectivistic cultures emotionally respond to music and (2) the reasons those individuals listen to music. In their cross-sectional, online-based study, their sample consisted of participants from countries that were categorized as individualistic (Australia, Sweden, and the U.S.A.) and collectivistic (Brazil, Kenya, and Portugal). It is notable that they accounted for personality differences within the two groups. While they found that there are more similarities than differences between the groups regarding emotional responses, they found some noteworthy differences in the psychological mechanisms while listening to music. In particular, participants from collectivistic cultures were more likely to experience nostalgia-longing (a rating that suggests connectedness to other people) and spirituality-transcendence (an introspective element that also speaks to a use of music for reflecting and identity-building). Meanwhile, participants from individualistic cultures tended to listen to music for the purposes of melancholic rumination and "musical expectancy" (a rating that connotes a response to the syntactical structure of the music and its expected or unexpected continuation; Meyer, 1956).

In one of the few studies that inspect the way a clinical population uses music, Gebhardt, Kunkel and von Georgi (2014) found that these individuals tend to use music more for emotional modulation than mentally healthy controls. In particular, they discovered that the "lower the

general functioning level of the patient is, the more they use music for relaxation and cognitive problem-solving to modulate negative effects" (p. 489). For instance, they found that individuals who have depression, personality disorders, schizophrenia and related delusional disorders listen to music for relaxation or restorative purposes. In short, for these clients, music plays a significant role in their everyday life and is often used by them as a "therapeutic self-medication" (p. 491).

Compared to other media, how effective is music in the process of emotion induction? In two central studies, findings vary. This question was raised by Ellard, Farchione, and Barlow (2012), and they examined the relative effectiveness of film, images and music, and the role of personal relevance, in emotion induction. In order to measure the impact of personal relevance, they used both experimenter- as well as participant-selected media, and they hypothesized that music would elicit the highest ratings of personal relevance due to its ability to "elicit personal memories, images and scenes without the confounds of presented nomothetic imagines and scenes" (p. 234). They did not find significant differences across media in their capacity to induce emotions; what mattered more was personal relevance (i.e., media that was participant-selected induced more emotions and, in particular, more positive emotions). However, in Sleigh and McElroy (2014), music was found to be more effective than writing in participants' attempts to moderate emotional states. In particular, self-selected "happy" sounding music improved mood more than writing a positive reframing of an unpleasant experience.

Finally, on the topic of music and emotion, it is necessary to take into account the role of listening context. In the study, "Experimental Evidence of the Roles of Music Choice, Social Context, and Listener Personality in Emotional Reactions to Music" (2012), Liljeström, Juslin, and Västfjäll tested whether or not the presence of another person, such as a close friend or

partner, would impact the listeners' response to music. Their findings demonstrated that "the mere *presence* of someone else with a similar taste during the music listening produced a significant increase in emotion intensity, despite the fact that the participants did not actually interact (e.g., talk) in any way during the experiment" (p. 592).

Music Preferences Literature

Within the past decade, extensive research has been done to study music preferences. While the literature (e.g., Liljeström, Juslin, and Västfjäll, 2012) demonstrates that music preference does not significantly impact emotional responses to music, it is still worthwhile to briefly review this topic. The work of Rentfrow, Goldberg and Levitin (2011) and Rentrow et al. (2012) has yielded robust ways to conceptualize this topic within Western cultures. Their research used multiple samples consisting of over 250,000 participants, and more than 250 pieces of music were selected to provide the framework. The model of individual differences that emerged from these two studies is five-dimensional and is known as MUSIC, an acronym for Mellow, Unpretentious, Sophisticated, Intense, and Contemporary (Greenberg & Rentfrow, 2017):

- Mellow comprises soft rock, R&B, and adult contemporary, and is characterized as romantic, relaxing, slow, and quiet.
- Unpretentious comprises country and folk, and is characterized as uncomplicated, relaxing, unaggressive, and acoustic.
- Sophisticated comprises classical, opera, jazz, and world, and is characterized as inspiring, intelligent, complex, and dynamic.
- Intense comprises rock, punk, and heavy metal and is characterized as distorted, loud, aggressive, and not romantic, nor inspiring.

- Contemporary comprises rap, electronica, and pop, and is characterized as percussive, electric, energetic, and not sad. (p. 308)

This builds on the earlier work of Rentfrow and Gosling (2003) and the Short Test Of Music Preferences (STOMP) scale that they proposed. This measure comprised 14 musical genres and yielded similar findings about music preferences. All of this work provides a helpful guide for understanding connections between musical preferences and different psychological dimensions, including personality. However, it is worth noting the generalizations that their genres tend to make. For example, their assumption that contemporary music mostly consists of music that is "energetic, and not sad" accurately captures the emotional quality of several modern musical selections, but it is not broad enough to capture the emotions that all listeners may seek in this music.

In their study of the circumstances that contribute to differing emotional responses to music, Liljeström, Juslin, and Västfjäll (2012) found that, more than genre or style, familiarity with a given piece of music corresponds with higher ratings of emotional intensity. They found that self-chosen music aroused more intense emotions and, in particular, positive emotions (e.g., happiness-elation, nostalgia-longing, interest-expectancy, and enjoyment-pleasure) in listeners. The authors posit that "familiarity with the music enables a larger number of underlying mechanisms for emotion induction to be activated." They cite evaluative conditioning and episodic memory as examples and argue that, compared to randomly sampled music, music that is self-selected may also "bring a greater sense of control over the situation, which enhances positive emotions" (p. 592).

People appear to prefer some genres over others because of emotional benefits as well. In a study conducted by Walworth (2003), it was found that listeners' preferred genre(s) can

alleviate anxiety levels more than sitting in silence can. Overall, adult listeners in Walworth's study would rather listen to music that is perceived to be happy, regardless of genre, but it should be noted that there are people who often turn to and enjoy sad sounding pieces. Ladling and Schellenberg (2012) found that people who score high on scales of openness to experience and introversion particularly like listening to sad sounding music, as do those who score high on measures of empathy (Garrido & Schubert, 2012). The latter study also found that listeners tend to report the same emotional experiences in both music with lyrics and without.

Music and Individual Differences Literature

Personality. There are several studies that address the links between music preferences and personality types (see Cattell & Anderson, 1953; Dollinger, 1993; Rentfrow & Gosling, 2003). Rentfrow's and Gosling's work, in particular, demonstrated that "music is important to people and that individuals believe that the music people listen to provides information about who they are" (1239). They examined how preferences aligned with the Big Five personality types and also found that music preferences revealed four broad dimensions: "Reflective and Complex," "Intense and Rebellious," "Upbeat and Conventional," and "Energetic and Rhythmic." "In terms of personality, there seems to be a strong correlation between extraversion and conventional, upbeat or high-arousal genres such as pop, dance music and hard rock. Individuals who score high on openness to experience tend to listen to a wider variety of genres including nonmainstream ones such as classical or jazz. Individuals who prefer music that falls into the "Intense and Rebellious" category, on the other hand, tend to be curious, have a tendency to be risk-taking, are physically active, and also view themselves as intelligent. Overall, Rentfrow and Gosling find that music preferences are formed and maintained by personality, as well as self-views and cognitive abilities.

In reviewing the literature on personality and musical behavior, Hargreaves and North (2010) note that there have emerged two differing conceptualizations the relationship between personality and liking a certain style or genre of music. They highlight that the first of these is that people listen to music in order to compensate for their personality, whereas the second is that people prefer music that reflects their personality characteristics. Similar to the research by Rentfrow and Gosling, they find that most evidence argues for the latter case: music preference is a means to reflect and encapsulate personality traits.

More directly pertinent to the present study, listener personality has also been shown to influence emotional reactions to music. Liljeström, Juslin, and Västfjäll (2012) demonstrated that individual differences in listeners—chiefly, personality—contributed to the perception of emotions in music. They used the five-factor model as the basis for their study and discovered that, with regards to the overall experience of emotional intensity, listeners with the trait Openness to Experience had the highest ratings. Building on the work of McCrae (2007), this study revealed that people with this personality trait tend to have greater sensitivity to art and beauty. Higher ratings of emotion intensity was also found to be correlated with Extraversion and Agreeableness as well.

Liljeström, Juslin, and Västfjäll also found that personality traits may correspond with greater levels of experience of specific emotions. Neuroticism, for instance, correlated with more reports of the perception of negative emotions (e.g., sadness-melancholy, anger-irritation, and anxiety-nervousness) as well as fewer positive emotions. Listeners with the traits of Extraversion, Openness to Experience, and Agreeableness, on the other hand, tended to experience more positive emotions and fewer negative. Similarly, listeners who identified with Conscientiousness responded with fewer negative emotions.

Gender identity and expression. In terms of gender, individuals use musical listening and, in particular, musical tastes, as a way to maintain a positive social identity. Music, in the context of social identity theory, is used as a means for affiliation; it helps individuals define their in-group and out-group membership (Dibben, 2002). As far as how this relates to the impact that gender identity has on musical preferences, it is difficult to say. In their review of individual differences and aesthetic responses to music, Hargreaves and North (2010) find that, in terms of gender and its effects on musical preference, research findings tend to be varied or inconclusive. They write that studies in this area either focus on attitudes toward music as a whole or on preferences for specific styles. Studies in this area tend be dated and are also based on dichotomous gender stereotypes. They report findings such as "males tend to prefer 'harder' styles such as rock, whereas women may prefer 'softer' styles such as mainstream pop" (Hargreaves and North, 2010, p. 539; also see Crowther & Durkin, 1982; Hargreaves, Comber, & Colley, 1995).

More pertinent to the present study, research has demonstrated that gender identity can influence people's ratings of emotion recognition. Wright et al. (2018) discovered that females tend to have a greater ability to recognize emotions than do males. Furthermore, previous literature demonstrates that gender also impacts one's reasons for listening to and generally engaging with music. Both DeNora (2000) and Christenson and Peterson (1988) submit that men and women listen to music for different reasons, and that women tend to listen to music for its more "secondary" uses. They find that, on the whole, women are more likely to listen to music in order to improve or alter mood, or to remember aspects of their emotional life. Once again, this may be at least partially due to the influence of gender stereotyping, but this research is conclusive enough to draw a sharp distinction. More recently, research conducted by Gupta and

Gupta (2016) revealed that, in terms of gender identity and psychophysiological responses to music listening, females tend to be more impacted by music in the following ways: compared to males they (1) showed a more substantial decrease in blood pressure (both systolic and diastolic) and heart rate and (2) a more marked decrease in negative affect, a strengthening of positive affect, as well as a decrease in blood pressure and heart rate.

Musical Training. One's level of musical training and ability may correlate with musical preference, in that people with higher levels of training and/or ability tend to prefer music that is "more complex" than do people with lower levels (Hargreaves & North, 2010, p. 540). However, when it comes to the relationship between musical training and emotion recognition, research findings vary. It must be stated that the research that has been conducted in this area focus on the relationship between musical training and interpersonal, as opposed to intrapersonal, emotional abilities. Some studies that have examined this connection show that general emotional intelligence increases with years of musical training (e.g., Petrides, Niven & Mouskounti, 2006) and that adults who are musically trained are more capable of recognizing the emotions in spoken sentences (Thompson, Schellenberg, & Husain, 2001). However, Trimmer & Cuddy (2008) found that music training and perceptual skills do not relate to emotion recognition abilities. Rather, their study revealed that ratings of emotional intelligence more directly predicted sensitivity to emotional speech. Due to this finding, this researcher will not hypothesize that one's level of music training impacts emotional awareness while listening to music.

The Use of Music as and in Therapy Literature

With regard to this project's potential uses in clinical work, it is also necessary to note the broader context of music in psychotherapy. Music may be used either *as* or *in* therapy; this

speaks to the distinction between music therapy and music as incorporated in psychotherapy. The former typically has the therapist more actively utilize and facilitate musical processes, and music is central to the structure of therapy. Music therapists must also be trained in an accredited music therapy program. Regarding the latter, music *in* therapy, the medium is included but is "not nearly as encompassing or direct" (Gladding, 2016, p. 30). Clinicians in this domain do not have to be credentialed music therapists but rather can be licensed counselors or psychologists. Both music therapy and music in therapy have been applied to treat an assortment of mental health issues with a variety of clients and in wide-ranging settings (Wheeler, 2009).

Music is one of the many arts that can be incorporated into therapeutic work. The reasons for using any art, including music, in this practice vary, but broadly "the creative arts help to make clients more sensitive to themselves and often encourage them to invest in therapeutic processes that can help them grow and develop" (Gladding, 2016, p. 2; Kennedy, 2008). The arts can also supplement the therapeutic process, given that therapy is predominately a verbal endeavor: it is in large part based on the supposition that verbalizing emotions and experiences can foster insight and change as well as the improvement of interpersonal communication (Gurman & Messer, 1995). However, for a multitude of reasons, clients may find it difficult to verbalize their emotions. Individuals vary in their ability to be aware of and label affect, and certain mental health issues (such as major depressive disorder) contribute to the obstacles to verbal interaction between clinician and client (Krystal, 1988). There is empirical evidence to support the idea that music is more effective than words in the process of inducing emotion, and it can therefore aid in communication or expression of them (Clarke & Teasdale, 1985).

Since the inception of music therapy in the years following the Second World War, music has been used to develop and improve emotional processing (Trondalen & Bonde, 2012).

However, outside of this specialized field, psychotherapists do not always utilize the medium as a way to assist their clients. The practice of psychotherapy is inherently complex, clients have differing needs and concerns, and there are a variety of treatment methods. Empirically-validated research plays a vital role in the selection of appropriate interventions. Based on these terms, music may not always be a fitting intervention for particular cases. Furthermore, due to lack of musical training, music-based approaches may seem inaccessible or outside of many clinicians' realm of expertise. This would be especially true about the facilitation of performance-based techniques.

In terms of easily applicable interventions that utilize music, the model of mindful music listening proposed by Eckhardt and Dinsmore (2012) stands out. Clinicians who use this approach invite their clients to use mindfulness skills—such as focusing on the present moment, observing, labeling, and adopting a nonjudgmental attitude toward emotions and cognitions—and apply these while listening to music. The results of their study demonstrate that mindful music listening helps clients to be aware of and disclose their emotions in a way that "should feel nonthreatening to most clients" (p. 184). The technique is highlighted on a number of websites, including that for The University of North Carolina at Chapel Hill's Campus Health Services and is discussed as a resource for students to facilitate the practice of mindfulness ("Using Music for Mindful Awareness," 2017).

The use of music in psychotherapy has been proven to be effective in other ways for clients who suffer from depression. For people with major depressive disorder (MDD), verbalization can prove to be especially challenging, due to the fact that the focus on negative features and on sadness associated with this condition can impede the ability to communicate. When in therapy, the hindrance can also obfuscate the creation of a strong therapeutic alliance.

Bodner et al. (2007) conducted a study on clients with this disorder and their reactions toward a variety of musical excerpts. They highlight the fact that music, once again, has an advantage over words in inducing emotions and enhancing communication. In addition, music is known to be a "pre-verbal form of emotion," and it can therefore bypass psychological defenses (p. 143). The authors hypothesize that listening to sad music can help people with MDD break through the barriers they typically face when attempting to express their emotions. They also posit that their subjects with MDD would be more sensitive and responsive to sad music compared to other types of music. In other words, these individuals would be able to more richly describe sad music, due to their bias toward this emotion. They also had "healthy" controls (i.e. people who did not have MDD), and they expected these respondents to be less reactive to sad music. This is because they lack the focus on so-called "negative" cues.

The study, which had 45 participants between the ages of 20 and 75. Of these 45, 14 were diagnosed with MDD using DSM-IV criteria. In groups of 3-4, the participants listened to instrumental/orchestral music that was associated with the following emotions: happiness, neutral, sadness, fear and anger. How were these pieces categorized and labeled by emotion? The authors did a preliminary study in which they played musical excerpts to 150 undergraduate students and then had them complete questionnaires on emotions. For the article's main study, the respondents were asked to fill out questionnaires about the emotions they experienced, and were then asked to complete the Beck Depression Inventory.

The results of the study confirmed all of the hypotheses: patients with MDD did not respond to any music but that which was considered to be sad; they described sad music in more detail than the control participants; and the control participants did not respond as well to sad music. For the authors, the implications of these results are rich. They feel that the findings could

apply to therapeutic work. If sad music is played for clients with MDD, they write, therapeutic rapport could be strengthened and enriched. In addition, listening to sad music could help them express emotions that these clients might otherwise not recognize or communicate: “patients might resist speaking of their own affective state, but they will more easily be willing to use sad music as an object on which to project their emotions” (p. 148). This type of music could make therapy generally more emotion-centered.

Such studies demonstrate that music listening is an intervention that may promote clients’ abilities to express their emotions. It has also been shown that music listening in as well as outside of the therapeutic space can enhance emotional processing and, when combined with the practice of mindfulness, can aid in the nonjudgmental acceptance of feelings. The present study intends to supplement this research and draw psychologists’ attention to the fact that clients may already be intrinsically motivated to use their emotional awareness competencies out of session. Implicit in this is the question of whether or not to further capitalize on the act of music listening and the many benefits it offers.

CHAPTER 3

Research Method

Research Design

This correlational, cross-sectional study recruited college student participants from the research pool of the Department of Counseling and Human Development Services (CHDS) in the College of Education (COE) at The University of Georgia. The COE is one of "the largest and most diverse public colleges of education" ("About the College," 2010). Students across from a wide variety of disciplines enroll in departmental courses; each year, around 4,300 students take COE courses. The study consisted of self-reports, and these were administered through the SONA system, via Qualtrics. Regarding the research pool, this comprised undergraduate students enrolled in departmental courses. Students in the department are required to obtain three (3) research hours each semester by participating in research projects. Participants review posted studies and elect to participate in studies that will fulfill the required number of research participation hours.

A power analysis utilizing the G*Power software (Faul, Erdfelder, Lang, & Buchner, 2009) was conducted to ascertain the sample size for the study. The power analysis revealed that a total of 203 participants would be needed assuming a medium effect size of .25, an alpha of .05, and a power of .95. The power analysis indicated that if these variables were to hold at these levels, the power of the study would be .9005 and that a critical F value of 3.887 would be needed to reach statistical significance. Participants for the present study were undergraduate students enrolled in CHDS courses at UGA during the spring 2018 semester.

Participants

Participants read and reviewed a consent form prior to completing any measures or questionnaires. Following the informed consent, participants were not be screened in any way and completed the online questionnaire; there were no control groups. Once they gave consent to the study, they were asked to complete a demographic questionnaire. This questionnaire gathered data about participants' age, current year of study, college, gender, race/ethnicity, and socioeconomic status (measured via family of origin's income).

A total of 216 subjects elected to participate in this study. Responses from 11 participants were removed due to the fact that they did not complete all measures. The final sample was composed of 205 undergraduate students (n=205) enrolled in CHDS courses. The mean age of the sample was 20.79 years (SD=1.3) with a range from <18 to 30. In terms of gender, the sample consisted of the following: 46 males, 157 females, and one non-binary/third gender individual; one participant elected to not disclose their gender identity. Table 1 presents the gender composition for this study. As the numbers demonstrate, the majority of the participants identified as female.

Table 1

Gender Identity of Participants

Gender	N	Percentage
Male	46	22.4
Female	157	76.6
Non-binary/third gender	1	0.5
Prefer not to say	1	0.5

Information on participants' self-reported race and ethnicity is provided in Table 2. As can be seen, the majority of the sample consists of people of identify as White; they account for 78.5% of the sample (n=161). Although demographic information is unavailable within the CHDS department, this number is largely consistent with the representation in the COE (in

which students are 71% White). The COE is further represented by students of the following races and ethnicities: 13% African-American, 4.2% Asian, 3% Hispanic, 3% identify with more than one race/ethnicity, and 6% identify as international ("2017 Annual Report," p. 13).

Table 2

Race/Ethnicity of Participants

Race/Ethnicity	N	Percentage
African American/Black	14	6.8
East of Southeast Asian	10	4.9
South or Southwest Asian	6	2.9
Hispanic / Latino/a	9	4.4
White/Caucasian	161	78.5
Multiracial	4	1.9
Other	1	0.5

Table 3 presents information on participants' self-reported family of origin's income (before taxes) in the last 12 months. 27 participants did not disclose this data. Participants whose family of origin's income equaled or exceeded $150,000 comprised the majority of the sample.

Table 3

Participants' Family of Origin Income

Family of Origin Income	N	Percentage
<$25,000	15	7.3
$25,000-$34,999	6	2.9
$35,000-$49,999	8	3.9
$50,000-$74,999	26	12.9
$75,000-$99,999	27	13.2
$100,000-$149,999	34	16.6
$150,000 or more	62	30.2

Table 4 presents information on the college in which participants' reported major or field of study is based. As can be seen, the majority of the sample has a major or primary field of study based in the College of Arts and Sciences (Franklin).

Table 4

College of Participants

College	N	Percentage
Arts and Sciences (Franklin)	64	31.2
Business (Terry)	42	20.5
Education	14	6.8
Family and Consumer Sciences	15	7.3
Journalism and Mass Communication (Grady)	25	12.2
Public Health	17	8.3
Public and International Affairs	6	2.9
Social Work	12	5.9
Other/None of the Above	10	4.9

Assessment Methodology

Participants were administered four measures in this online study: an emotion awareness scale, a music use assessment, a music and mood regulation scale, and one personality measure. Participants accessed the study through their SONA account and completed all measures through the Qualtrics system. In order to address questions or concerns about any aspect of the study, participants were provided with contact information for the study team members.

Emotional Awareness (Appendix B).

As recommended by previous research relating to the subject, items that are hypothesized to measure four features of emotional awareness were acquired from existing scales (Boden & Berenbaum, 2012). Type clarity will be assessed by eight items from the "Clarity of Feelings" subscale of the Trait Meta-Mood Scale (TMMS; Cronbach's alpha = .88 Salovey et al., 1995) and five items from the "difficulty identifying feelings" subscale of the Toronto Alexithymia Scale-20 (TAS; Cronbach's alpha = .87; Bagby et al., 1994). Similarly, as recommended by Palmieri et al. (2009), the facet of voluntary attention will be addressed by eight items from the TMMS "Attention to Feelings" subscale (Cronbach's alpha = .86) and two items from the TAS "externally-oriented thinking" subscale (Cronbach's alpha = .64). As per Boden and Berenbaum

(2012), source clarity will be measured by using six items from their Source of Emotions Scale (Cronbach's alpha = .46 to .69). Involuntary attention will be targeted by seven items recommended by Huang, Berenbaum, & Chow (2013). Items will be rated on a 5-point Likert scale (ranging from 1 *strongly disagree* to 5 *strongly agree*; Boden & Thompson, 2015, p. 402).

Music USE (MUSE) Questionnaire (Appendix C).

This 32-item questionnaire assesses levels of music engagement. It gathers information about an individual's music background, such as the years of training, frequency of music instrument playing and time spent listening to music. It additionally assesses how individuals use music in the context of their everyday lives, such as for cognitive and emotional regulation, social connection, physical exercise and dance. High scores on these factors reflect an individual identifying strongly with this type of music use. By adopting a more comprehensive, sensitive approach to in the measure of music use, this scale allows researchers to extend categorization of participants beyond "musicians" or "non-musicians." Responses to item statements are made on a 5-point Likert scale ranging from 1 ("not at all" or "not applicable") to 5 ("always" or "extremely") for both the frequency and value of a given item (Chin & Rickard, 2012). This measure was included for the purposes of gathering information about the amount of time per day participants spend purposely listening to music.

Music in Mood Regulation (MMR; Appendix D).

This questionnaire is designed to measure people's tendency or preference to regulate emotion and mood through music listening, and it will be used in the present study due to its inclusion of items that assess attention to feeling while listening to music. It is a 40-item instrument that is rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). It has seven subscales that assess the following listening strategies: Entertainment;

Revival of Energy; Strong Sensation; Diversion; Discharge; Mental Work (i.e., attention to feeling/clarity in emotion); and Solace. It will allow for some understanding of how and why it is that participants listen to music, the degree of understanding about how it impacts their affect and mood, and their emotional responsivity to music in general (Saarikallio, 2007). While solely focusing on an adolescent population in its initial scale development, the MMR demonstrated high internal reliability. The overall scale in Saarikallio's study possessed a Cronbach's alpha of .96 and individual subscales ranging between .76 and .92.

Big Five Inventory (BFI; Appendix E)

Participants will complete the Big Five Inventory. The BFI consists of 44 questions designed to assess the ways in which a participant perceives his or personality. The BFI measures Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. These five traits are beneficial in studying personality due to a structure that stresses an integrative approach to the construct (John, Naumann, and Soto, 2008). Giluk (2009) describes each of the Big Five traits in the following manner: Neuroticism relates to anxiety, emotional lability, and self-consciousness; Openness to Experience corresponds with open-mindedness, unconventionality, and curiosity; Agreeableness is related to care, concern, and empathy for others; Extraversion is associated with outgoing and social behavior; finally, Conscientiousness is associated with dependability and a sense of responsibility. Each item uses a five-point Likert scale (Soto & John, 2009). John and Srivastava reported alpha reliabilities from .75 to .80 for all subscales and test-retest reliabilities from .80 to .90 (John & Srivastava, 1999).

Data Analysis

This study utilized IBM SPSS Statistics (formerly: Statistical Package for the Social Sciences), JMP Statistical Software, and Microsoft Excel for data storage, statistical analyses, and data visualization. Data was initially exported into Excel from the Qualtrics by this researcher in order to assess missing data.

In order to test the hypotheses, multivariate correlation analysis was utilized in order to discern the types of relationships—significantly positive or negative—that exist between the variables. In addition, analysis of variance (ANOVA) will be used to test the potential differences in the means of scores and will therefore be a fitting way to explore differences between clusters of listeners. The purpose of this form of analysis will be to provide detailed descriptions of clusters of listeners and to compare means. Descriptive statistics will quantify levels of emotional awareness, personality trait scores, music in mood regulation scores, music engagement scores, and musical preference ratings.

Each hypothesis will be analyzed in the following way:

Research Hypothesis 1: Higher scores on the MMR subscales (i.e. people who tend to listen to music in order to regulate their emotions) will positively relate to ratings of emotional awareness at more than chance rates.

Statistical Analysis: This hypothesis was tested by developing a correlation matrix.

Research Hypothesis 2: People who purposely listen to music more often will also have higher ratings across facets of emotional awareness.

Statistical Analysis: This hypothesis was tested by using a one-way ANOVA comparing mean estimates for the amount of time spent purposely listening, divided into four delineated groups, and for the ratings of emotional awareness.

Research Hypothesis 3: Ratings of emotional awareness while listening to music will be positively correlated with personality. Specifically, those who endorse *openness to experience* will also report higher levels of attention to emotion while listening to music.

Statistical Analysis: This hypothesis was tested by developing a correlation matrix to explore the relationships that exist between personality traits and scores relating to attention to feeling on the "Mental Work" subscale in MMR measure.

Research Hypothesis 4: Ratings of emotional awareness while listening to music will be positively correlated with gender. Specifically, people who identify as female will also report higher levels of attention to emotion while listening to music.

Statistical Analysis: This hypothesis was tested by using a one-way ANOVA comparing gender and mean estimates of scores relating to attention to feeling on the "Mental Work" subscale in MMR measure.

CHAPTER 4

Results

The purpose of this chapter is to present the results from the statistical analyses that were conducted. The four research questions, along with their corresponding null hypotheses and results, are also provided.

The descriptive and reliability statistics of the Emotional Awareness, MMR and BFI subscales are shown in Table 5. These statistics for the MUSE measure are not provided due to the fact that, apart from the question relating to time spent intentionally listening to music, this was not utilized in the course of data analysis. In the case of the STOMP measure, they are not provided because it is a measure of preference and ranking, as opposed to classification. Cronbach's alpha coefficients for the Emotional Awareness measure, both its full-scale and subscales, ranged from .75 to .87. In terms of the Type Clarity and Voluntary Attention Subscales, the values obtained are consistent with those derived from the normative data for the instrument. Regarding the remaining subscales, the alpha coefficients are notably higher. For all subscales of the MMR instrument, the alpha values range from .86 to .92; these are consistent with the normative data. Finally, the alpha values for all subscales on the BFI ranged from .75 to .86, which is also consistent with the reliability data of the measure. For all subscales on all measures utilized in data analysis, Cronbach's alpha coefficients are higher than Nunally's (1978) suggested cutoff of .70. Based on these results, it appears that the instruments demonstrated satisfactory internal reliability and functioned as intended.

Table 5

Means, Standard Deviations, and Alpha Values for Emotional Awareness, MMR and BFI Subscales

Instrument	*M*	*SD*	*α*
Emotional Awareness			
Full-scale	125.52	16.94	.87
Type Clarity	45.68	9.09	.85
Source Clarity	22.56	4.52	.77
Voluntary Attention	30.48	5.82	.75
Involuntary Attention	26.8	5.82	.85
MMR			
Entertainment	4.5	0.77	.92
Revival	3.82	0.88	.89
Strong Sensation	4.01	0.81	.88
Diversion	3.71	0.9	.86
Discharge	3.15	1.02	.89
Mental Work	3.8	0.95	.91
Solace	3.73	0.96	.91
BFI			
Extraversion	27.0	6.68	.86
Agreeableness	34.75	5.3	.75
Conscientiousness	32.69	5.62	.77
Neuroticism	24.18	5.85	.80
Openness	34.67	6.24	.75

Research Hypothesis 1:

Higher scores on the MMR subscales (i.e. people who tend to listen to music in order to regulate their emotions) will positively relate to ratings of emotional awareness at more than chance rates.

Null Hypothesis 1: There will be no statistically significant relationship between the scores on the Emotional Awareness measure and the MMR subscales.

First, to determine if significant positive relationships exist between the scores on the MMR subscales and those of the Emotional Awareness measure, a multivariate correlation analysis (N=205) was conducted. The significance values were set at ($p \leq .05$). This analysis

yielded significant correlations between some of the variables. See Table 6 for a summary of the correlations. The following section will present the relevant findings from the correlation matrix.

Table 6

Full Correlation Matrix of Emotional Awareness (EA) and MMR subscales (N = 205)

Scale[1]	EA	TC	SC	VA	IA	E	R	SS	Div	Dis	MW	S
EA[+]	1											
TC	.756***	1										
SC	.742***	.571***	1									
VA	.719***	.249***	.408***	1								
IA	.517***	-.026	.130	.499***	1							
E	.240***	.011	-197*	.255***	.302***	1						
R	.062	-.057	.036	.102	.152*	.610***	1					
SS	.197**	.010	.039	.281***	.278***	.590***	.696***	1				
Div	.087	-.032	-.022	.148*	.187**	.493***	.744***	.698***	1			
Dis	-.093	-.173*	-.141*	-.031	.137*	.289***	.444***	.423***	.501***	1		
MW	.093	-.046	.076	.174*	.247***	.507***	.703***	.776***	.711***	.567***	1	
S	.098	-.056	.007	.185**	.202**	.544***	.770***	.764***	.803***	.528***	.850***	1

[1] *Scales EA - IA comprise the Emotional Awareness scale. Scales E – S comprise the MMR. Scale abbreviations are as follows: EA = Emotional Awareness; TC = Type Clarity; SC = Source Clarity; VA = Voluntary Attention; IA = Involuntary Attention; E = Entertainment; R = Revival; SS = Strong Sensation; Div = Diversion; Dis = Discharge; MW = Mental Work; and S = Solace.*

[+] *Subscales that are aggregated to form a primary scale. The Emotional Awareness scale is composed of TC (Type Clarity), SC (Source Clarity), VA (Voluntary Attention) and IA (Involuntary Attention).*

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

According to the correlation matrix, a significant relationship existed between the full-scale Emotional Awareness measure and MMR-Strong Sensation (r=.197, p=.0046) and also between the former and MMR-Entertainment (r=.240, p=.0005). In addition, the correlation matrix determined the following significant relationships between the following subscales: between EA-Type Clarity and MMR-Discharge (r = -.173, p = .013); EA-Source Clarity and MMR-Entertainment (r=.197, p=.0047); and EA-Source Clarity and MMR-Discharge (r = -.141, p = .044). The following significant relationships existed between EA-Voluntary Attention and

MMR subscales: Entertainment (r=.255, p=.0002); Strong Sensation (r=.281, p=<.0001); Diversion (r=.148, p=.034); Mental Work (r=.174, p=.013); and Solace (r=.185, p=.008). Finally, the correlation matrix revealed several significant relationships between EA-Involuntary Attention and the following MMR subscales: Entertainment (r=.302, p=<.0001); Revival (r=.152, p=.03); Strong Sensation (r=.278, p=<.0001); Diversion (r=.187, p=.007); Discharge (r=.137, p=.05); Mental Work (r=.247, p=.0004); and Solace (r=.202, p=.004).

The results of the multivariate correlation analysis presented in the matrix indicated several significant results and as a result Null Hypothesis 1 cannot be rejected.

Research Hypothesis 2:

People who purposely listen to music more often will also have higher ratings across facets of emotional awareness.

Null Hypothesis 2: There will be no statistically significant correlation between the amount of time that people spend purposely listening to music and ratings across facets of emotional awareness.

A one-way ANOVA was utilized to determine whether there was a significant difference among the total score from the Emotional Awareness measure and for the amount of time spent purposely listening to music. The significance of these ANOVAs was examined at the p<.05 level: Emotional Awareness [F (3, 201) = 0.798, p = .496], Type Clarity [F (3, 201) = .428, p = .733], Source Clarity [F (3, 201) = .1.47, p = .225], Voluntary Attention [F (3, 201) = .791, p = .500], and Involuntary Attention [F (3, 201) = .102, p = .383]. Due to the fact that the omnibus test statistic did not reveal significant findings, it is unnecessary to perform post-hoc tests to measure significant differences between each of the groups. Furthermore, because the test did

not indicate significant results, Null Hypothesis 2 cannot be rejected. Means and standard deviations for each group are displayed in Table 7.

Table 7

ANOVA

	# Hours/day spent purposely listening to music							
	<1 *N* = 29		1-2 *N* = 93		3-4 *N* = 51		>5 hours *N* = 32	
EA Scales	M	SD	M	SD	M	SD	M	SD
Emotional Awareness	126.71	3.15	126.89	1.76	124.63	2.38	121.85	3.0
Type Clarity	45.11	1.70	46.43	0.94	44.77	1.28	45.44	1.6
Source Clarity	41.43	7.42	64.56	7.66	48.87	7.66	41.52	.55
Voluntary Attention	56.86	5.39	71.28	12.75	54.15	7.91	21.37	.40
Involuntary Attention	54.07	14.74	56.61	12.53	41.18	9.81	10.91	.29

Research Hypothesis 3:

Ratings of emotional awareness while listening to music will be positively correlated with personality. Specifically, those who endorse *openness to experience* will also report higher levels of attention to emotion while listening to music.

Null Hypothesis 3: There will be no statistically significant difference between ratings of emotional awareness while listening to music and personality traits.

In order to determine if significant positive relationships exist between ratings of emotional awareness while listening to music and personality, a multivariate correlation analysis (N=205) was conducted. Specifically, the MMR-Mental Work subscale was selected to capture emotional awareness while listening to music. This is due to the fact that this subscale presents information about attention to emotion/clarity of emotion while listening to music. The significance values were set at ($p \leq .05$). This analysis yielded significant correlations between some of the variables. See Table 8 for a summary of the correlations. The following section will present the relevant findings from the correlation matrix.

Table 8

Full Correlation Matrix of Mental Work (from MMR) and BFI subscales (N = 205)

Scale[1]	MW	E	A	C	N	O
MW	1					
E	.026	1				
A	.199*	.127	1			
C	-.085	.130	.352***	1		
N	.136	.243***	-.196**	-.227**	1	
O	.481***	.078	.102	-.041	.011***	1

[1] *Scale MW is a subscale from the MMR. Scales E – O comprise the BFI. Scale abbreviations are as follows: MW = Mental Work; E = Extraversion; A = Agreeableness; C = Conscientiousness; N = Neuroticism; O = Openness.*
* = $p < .05$, ** = $p < .01$, *** = $p < .001$

According to the correlation matrix, a significant relationship existed between both the MMR-MW subscale and the Agreeableness and Openness subscales on the BFI. Here are results of those correlations, respectively: MW and Agreeableness (r=.199, p=.004); MW and Openness (r=.481, p=<.0001).

The results of the multivariate correlation analysis presented in the matrix indicated several significant results and as a result Null Hypothesis 3 cannot be rejected. Furthermore, the analysis revealed an unforeseen significant result between attention to emotion while listening to music and the personality trait of Agreeableness.

Research Hypothesis 4:

Ratings of emotional awareness while listening to music will be positively correlated with gender. Specifically, people who identify as female will also report higher levels of attention to emotion while listening to music.

Null Hypothesis 4: There will be no statistically significant difference between ratings of emotional awareness while listening to music and gender identity.

A one-way ANOVA was utilized to determine whether there was a significant difference among the score of the Mental Work and the reported gender identity of participants. Given that only one individual identified as non-binary/third gender, this researcher elected not to include this participant's data in the final analysis, due to the heavily screwed distribution of this data and to avoid making a statistically unsound interpretation of results. In the end, only the results from those who identified as male and female were included. The significance of these ANOVAs was examined at the $p<.05$ level: Gender [$F(1, 201) = 0.218$, $p = .641$]. Due to the fact that the omnibus test statistic did not reveal significant findings, it is unnecessary to perform post-hoc tests to measure significant differences between each of the groups. Furthermore, because the test did not indicate significant results, Null Hypothesis 4 cannot be rejected. Means and standard deviations for each group are displayed in Table 9.

Table 9

ANOVA

	Gender			
	Cluster One *N* = 46		Cluster Two *N* = 157	
MW[1]-from MMR	M	SD	M	SD
MW	3.75	0.14	3.82	0.08

[1]*Scale abbreviation is as follows: MW = Mental Work.*

CHAPTER 5

Discussion

Chief among counseling psychology's core values is an appreciation of strengths. Arising out of its holistic conceptualization of individuals, the field promotes resilience and positive coping and eschews a focus on pathology (Delgado-Romero, Lau & Shullman, 2012; Packard, 2009). The current study was framed with this value theme in mind. Its broad question, about the potential relationship between music listening and emotional awareness, arose out of the fact that research demonstrates that, separately, music listening and emotional awareness can benefit overall psychological well-being. Those who have higher ratings of emotional awareness are more likely to effectively manage their responses to situations (Swinkels & Giuliano, 1995; Boden & Thompson, 2015). Furthermore, music listening is intrinsically motivated (Västfjäll, Juslin & Hartig, 2012). If music is already so commonly consumed (Mehl & Pennebaker, 2003), and if it does indeed relate to people's capacity to recognize their own emotions, listening to music could strengthen individuals' abilities to self-regulate and may positively impact their mental health.

In addition to its initial question, the current study aimed to explore four research hypotheses: (1) higher scores on the Music in Mood Regulation subscales (i.e. people who tend to listen to music in order to regulate their emotions) will positively relate to ratings of emotional awareness at more than chance rates; (2) people who purposely listen to music more often will also have higher ratings across facets of emotional awareness; (3) ratings of emotional awareness while listening to music will be positively correlated with personality and, specifically, those

who endorse *openness to experience* will also report higher levels of attention to emotion while listening to music; and (4) ratings of emotional awareness while listening to music will be positively correlated with gender and, specifically, people who identify as female will also report higher levels of attention to emotion while listening to music.

The sample comprised undergraduate students who were enrolled in CHDS departmental courses. Data were initially obtained from 216 (n=216) participants. Due to incomplete or missing responses, data from 11 participants were eliminated; the final sample size comprised 205 (n=205) participants. The mean age of the sample was 20.79 years (SD=1.3) with a range from <18 to 30. The sample was predominately female (77%) and White (79%), and in terms of participants' family of origin's income, the majority (30%) reported $150,000 or more.

Adequate internal consistency was demonstrated by all three instruments utilized in the current study. For all subscales on all measures, Cronbach's alpha coefficients were higher than Nunally's (1978) suggested cutoff of .70. Based on these results, it appears that the instruments function as reliable measures of emotional awareness, people's tendency or preference to regulate emotion and mood through music listening, and personality.

Discussion of the Findings

This study contributes to the literature on music listening and emotional awareness, and it also adds to research conducted on music's potential relationships to emotion regulation, gender and personality.

Research Hypothesis 1

The first research hypothesis of the current study was formulated to explore whether people who listen to music in order to regulate their emotions (captured by high scores on the MMR subscales) also have higher scores on ratings of emotional awareness. In other words, if

people listen to music for reasons rooted in maintaining or altering emotional states, could that also mean that they are also more emotionally aware in general? A multivariate correlation analysis was conducted in order to explore this question and broadly determine the relationship(s) between these variables. The associated correlation matrix yielded several significant relationships.

According to the matrix, the full scale measure of emotional awareness positively relates to the MMR subscales of Entertainment and Strong Sensation. The Entertainment scale attempts to capture the regulatory strategy of listening to music to create a pleasant atmosphere and feeling to either maintain or alter a positive mood, whereas Strong Sensation aims to measure how music is used to induce or augment intense emotional experiences (Saarikallio, 2007). These results indicate that people who listen to music in these ways also have higher ratings of emotional awareness across facets. The common thread between Entertainment and Strong Sensation is that both rely on an already established positive state. A noteworthy connection arises from research conducted by Thomson, Reece and Di Benedetto (2014). In their article, they found that listeners who endorse Strong Sensation and Entertainment, as opposed to the other MMR subscales, are less likely to experience stress and mental health issues, such as depression and anxiety. Could it be that emotional clarity plays a role in this finding?

No significant relationships with the overall Emotional Awareness ratings were detected in the other subscales. Most surprisingly of all and most relevant to the question posed by this dissertation, people who are motivated to listen to music for the purpose of Mental Work, or the use of music for reflection and emotional clarification, do not also have higher scores of overall emotional awareness. In other words, one of central questions posed by the present study—whether one's interest in recognizing or perceiving emotions in music relates or translates to an

ability to be generally aware their emotions—was not supported. A possible explanation for the lack of a significant relationship between these two variables is that people who already have high levels of Emotional Awareness across facets do not need to turn to music to facilitate the appraisal of their emotions.

The results of the matrix regarding subscales on the Emotional Awareness measure indicated several significant correlations. In particular, there was a positive correlation between Source Clarity (the extent to which individuals tend to be aware of the causes of their emotions) and the MMR-Entertainment subscale. This indicates that individuals who are more aware of the sources of their emotions also turn to music to create or enhance a positive mood. In addition, both Type Clarity (the extent to which individuals can identify and determine the different types of emotions they experience) and Source Clarity were negatively correlated with MMR-Discharge. This subscale of the MMR measures the use of music to release difficult emotions, such as anger, through music that is perceived to express those emotions. For these findings, as participants' Type and Source Clarity scores increased, their Discharge scores decreased. These results suggest that, as people are more aware of the types and sources of emotions they experience, they are less likely to turn to music in order to relieve their difficult emotions. This corresponds with research conducted by Saarikallio (2008) on the topic of emotion regulation through music listening, in which it was found that discharging negative emotions through this medium is negatively or not at all related with efficient, adaptive strategies of overall emotion regulation. One way of interpreting these results is that individuals who understand their emotions in these ways may not wish to alter their emotional states, even if they are difficult. For instance, Boden and Thompson (2017) posit that it is adaptive to understand difficult or unpleasant emotions.

In terms of correlations with the Voluntary Attention subscale, which is a measure of an individual's tendency to voluntarily attention to their emotions, significant results were indicated with all but the Revival and Discharge subscales. Revival measures the use of music to relax or to get new energy when one is exhausted. Individuals with high scores in Strong Sensation or Mental Work, for instance, also had high scores in Voluntary Attention. These results indicate that music listening is one way in which individuals who voluntarily attend to their emotions and perhaps attempt to understand and enhance those states.

Lastly, significant correlations were discovered between the Involuntary Attention subscale of the emotional measure and all subscales of the MMR instrument. This finding relates to research conducted by Gasper and Clore, (2000) and Matthews and Wells (1999), in which it was discovered that, when individuals involuntarily attend to their emotions (such as in moments of distress), they are more likely to utilize strategies to regulate those emotions, often to restore a more positive mood. Music, it seems, may be one of those strategies.

Research Hypothesis 2

Research hypothesis 2 asked whether the amount of time people spend purposely listening to music relates to ratings of emotional awareness across facets. A one-way ANOVA was conducted in order to explore this research question. The ANOVA did not reveal any significant results in any of the Emotional Awareness subscales or the full-scale data. This indicates that the amount of time people intentionally listen to music does not relate in any way to their ratings of emotional awareness, which confirms related research conducted by Thoma et al. (2012). While their work addressed the construct of emotion regulation as opposed to emotional awareness, they found that it is not the amount of music that one consumes that

impacts psychological as well as physiological functioning but rather one's motivation for listening.

In light of the lack of significant findings, another, perhaps more fruitful approach would be to narrow the hypothesis and explore whether the amount of time individuals spend purposely listening to music relates to ratings of emotional awareness and include MMR-Mental Work as a moderating variable. People listen to music for a variety of reasons—not all of them involve emotional work—and therefore, by revising this hypothesis and honing in on the interaction of the amount of time spent intentionally listening to music while reflecting on and appraising emotional states may reveal that there is a relationship to scores of emotional awareness.

Research Hypothesis 3:

This hypothesis explored whether ratings of emotional awareness while listening to music will be positively correlated with personality. Specifically, it was framed to explore if those who endorse Openness to Experience will also report higher levels of attention to emotion while listening to music. A multivariate correlation analysis was conducted, and it examined the data from personality traits and ratings of MMR-Mental Work. The resulting correlation matrix supported the hypothesis that those who endorse Openness to Experience trait do, in fact, have higher ratings of emotional awareness while listening to music. This relates to previous research conducted by Liljeström, Juslin, and Västfjäll (2012), in which they demonstrated that personality traits indeed do impact one's ability to have emotional experiences while listening to music. The finding in the current study also complements such research as that conducted Nusbaum and Silvia (2011). Their work discovered that Openness to Experience predicts the tendency to have particular and marked emotional responses to music, including the experience

of chills while listening. What the result from the present study reveals is that Openness to Experience also relates to the tendency to be emotional aware while listening to music.

An unanticipated result emerged from the present study: in addition to the trait Openness to Experience, Agreeableness also positively relates to scores of emotional awareness while listening to music. No previous research found a significant correlation between this trait and the listeners' tendency to listen to music while experiencing strong emotions, and so the present study did not include this trait. Liljeström, Juslin, and Västfjäll did find that individuals who endorse Agreeableness tend to experience more positive emotions while listening, but their research also revealed that these individuals also tend to experience less intense emotions while listening to music. Perhaps most striking of all is that Purnamaningsih (2017) found that, when it comes to personality and general emotion regulation strategies, those who endorse Agreeableness actually tend to suppress their emotions. Possibly arising from the desire to maintain social harmony, these individuals tend to pay greater attention to others' interest and emotions than those of their own. The contradictory result from the present study warrants further research.

Research Hypothesis 4:

Research hypothesis 4 asked whether ratings of emotional awareness while listening to music relates to the gender identity of the listener. A one-way ANOVA was conducted in order to explore this research question. The ANOVA did not reveal any significant results in any of the MMR-Mental Work subscale and its relationship to gender. The lack of a significant finding is surprising, given that previous research on gender differences and psychological as well as psychophysiological responses to music listening tends to demonstrate that females are more likely to be impacted by music's emotive qualities. In light of research by Wright et al. (2018), in

which it was discovered that females tend to have a greater ability to recognize emotions, there are no indications that, at least when it comes to music listening, males and females experience a difference in their ratings of emotional awareness.

Implications

While the central question of whether one's capacity to recognize or perceive emotions in music relates or translates to an ability to be generally aware their emotions was not supported by the data, there were several significant relationships discovered between participants' motivations for listening and their ratings of emotional awareness across facets. The data show the following: (1) individuals who have higher overall ratings of emotional awareness also listen to music in order to maintain or enhance positive emotional states; (2) those who are able to identify the types and sources of their emotions are also less likely to turn to music in order to relieve difficult emotions such as anger or misery; and (3) those who voluntarily attend to their emotions are more likely to use music listening as a means to further understand and enhance their emotional states. Broadly speaking, all of these findings are pragmatic in a clinical context for the questions they implicitly raise: for therapists who are already inclined to utilize music listening as a way to supplement their work, it is worth asking clients about their motivations for listening. Do they, for instance, use music as a way to strengthen positive feelings? When they get upset, what kinds of music do they select? And what, in the end, might that say about their emotional awareness? Conversations that may have been hitherto unexplored may be started as a result of these findings.

A more particular and perhaps more substantive implication relates to the finding that individuals who have greater Type and Source clarity are less likely to turn to music in order to relieve unpleasant emotions. Clinicians could utilize this finding, along with those indicated by

Saarikallio (2008), that discharging difficult, unpleasant emotions through music listening is negatively related or unconnected to more successful strategies of emotional processing. Again, it is an adaptive strategy to understand unpleasant emotions. What is more, this finding might also relate to the fact that, as aware individuals in these ways, they are less likely to resort to inefficient emotion regulation strategies such as venting outside of the context of music listening (Salovey et al., 1999; Gross & John, 2003). The question, for both the researcher and the clinician, becomes whether the relationship between these two variables is causal. In addition, for those individuals who voluntarily attend to their emotions, music appears to be one way in which emotions are reflected upon and processed. With this knowledge, a clinician could encourage the utilization of music to aid the therapy of clients who are already motivated to engage in this form of mental work.

For clinicians who find that it may be therapeutic to incorporate music listening into therapy, the present study also helps to answer questions based on both its significant and rejected findings. Related to individual differences, those individuals who endorse Openness to Experience are, as predicted, already inclined to listen to music for the purposes of working through and reflecting upon emotional states. Clients who possess this trait may find a therapeutic intervention involving music listening to aid in the exploration and understanding of emotions particularly beneficial. The same applies to those who endorse Agreeableness. In terms of gender identity, the lack of differences vis-à-vis music listening and emotional awareness may be insignificant in the context of research findings, but for the clinician this is an important result: clients may find a therapeutic intervention of this sort to be meaningful, regardless of their gender identity.

Hypothesis 2 also did not yield a significant result but could still be relevant to therapists interested in the application of music listening in therapy. Since this data suggests that the amount of time spent purposely listening does not relate to scores of emotional awareness, therapists and their clients should not be concerned about listening to a given quantity of music in order to impact this construct or general psychophysiological health. Instead, the focus should be placed on the motivation or strategy for listening (Thoma et al, 2012; Van den Toll & Edwards, 2014).

Limitations of the Study

In terms of limitations, this study has several that should be noted. First, the sample is small and therefore hindered the possibility of drawing significant conclusions from the data. In addition, the sample is predominately White and female, there is no measurement of participant willingness to seek counseling services, it does not account for people currently receiving counseling, and the majority of participants also reported a relatively high level of income in their family of origin. The sample was also entirely drawn from a university setting and consists of younger adults. Conclusions therefore cannot be made or suggested about the use of music listening and its relationship to emotional awareness and health in diverse settings, or in other cultures and communities. Even inferences regarding university students at predominately White institutions within U.S. society should be carefully considered. Further, on the topic of culture and music listening, the questions on the measures selected for the study reflect the idea that music is used only for personal emotional experiences as opposed to it being consumed for the purposes of, say, heightening a sense of social connectedness or inducing memories or emotions about others. In this sense, the study is framed with members of an individualist culture in mind,

and conjectures cannot be made about the use of music and its relationship to emotional awareness in collectivist cultures (Juslin et al., 2016).

Another limitation concerns the present study's research design. It is cross-sectional and also correlational. The research is not meant to suggest that any causal relationships exist between the variables. In other words, nothing can be indicated about music listening being a predictive factor of emotional awareness or health. A longitudinal design would be needed for this, one that controls for a variety of potentially moderating variables.

Recommendations for Further Research

In a *New York Times* profile, the jazz pianist Craig Taborn said the following (Shatz, 2017):

> All the things people say when they talk about music have to do with entertainment, or some kind of aesthetic advancement. Yet when they talk about how music moves them, they talk about other things: feelings, times of life, etc. So I suppose that for me, music is one of the things we use to get ourselves through life.

As seen in the literature and as demonstrated by the present research, these words capture the emotive power of music for many listeners. While there are myriad reasons for listening, and there are countless ways in which it affects people, music has power because people tend to be inherently drawn to it. Its health benefits, both psychological and physiological, are many. In these ways, music listening is a fitting intervention for counseling psychologists in practice; it is strengths-based and client-centered. For researchers looking to lay further groundwork for music listening to be an empirically-validated tool to aid in the exploration and enrichment of clients' emotional lives, there are several avenues to consider. The present study presents only a few

tentative connections between music listening and general emotional awareness. The following are only a few recommendations for future research:

1. Future studies should adopt a longitudinal methodology to explore music listening and emotional awareness.
2. Future research should have a more diverse and inclusive sample in order to offer suggestions on the role of music listening in other populations and communities. Scant research exists on this topic even outside of this dissertation; there is much work to be done to investigate how people in different countries, or of different races, ethnicities, socioeconomic backgrounds, ages and cultures use music. Furthermore, it should account for participant willingness to seek counseling services and for participants currently in counseling.
3. Future research should further examine the impact of various listening strategies on emotional awareness. While this study drew upon those offered by the Music in Mental Work scale, there are others that include a broader range (Boer & Fischer, 2012; Juslin & Laukka, 2004; Merriam, 1964; North, Hargreaves, & Hargreaves, 2004; Roe, 1985; Saarikallio, 2012; Sloboda & O'Neill, 2001). Furthermore, these sources offer theories and empirical results involving cultures beyond those of Euro-America.
4. This study recommends that future research explore particular applications of music listening and its impact on emotional awareness in therapeutic contexts. As more research supports the idea that this behavior positively affects well-being via certain listening strategies, counseling psychologists and helping professionals in other fields could benefit from literature on interventions in order to make this work more accessible.

As this strengths-based approach is augmented and interventions become increasingly empirically validated, counseling psychologists, scientist-practitioners that they are, may be more inclined to incorporate music listening into their work.

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