The Effectiveness of Music Interventions in Psychotherapy with Adolescent Clients

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Abstract

This study addresses the effectiveness of music therapy techniques on psychotherapy with adolescent clients. While numerous outcome-based studies support the effectiveness of music therapy as an effective treatment modality for a number of diagnoses in a variety of treatment settings, little research is specific to work with adolescent populations. This study focuses on the importance of music in an adolescent's life, as well as developmental characteristics of this age group. These findings suggest the potential effectiveness of specific music therapy techniques in psychotherapy with adolescent clients, particularly lyric analysis techniques. Suggestions for further research are noted.

Keywords: Music therapy interventions, adolescence, lyric analysis

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The Effectiveness of Music Interventions in Psychotherapy with Adolescent Clients

Music plays a prominent role in the life of most adolescents. This can be seen quite clearly in the amount of time a teenager spends listening to music. One study concluded that adolescents in the United States and the United Kingdom listen to music somewhere between 2.5 and 4 hours each day (Baker & Bor, 2008). Consider this number in the lives of teens you know, adding up the times you see them with headphones on or blasting the stereo in their car or bedroom, and this statistic would likely seem accurate. This study takes an in depth look at the significance of music in the life of an adolescent, and explores how this prominent aspect of teenage life can be effectively utilized by mental health professionals working with adolescent clients to increase their likelihood of success in psychotherapy.

This study reviews the current literature of music therapy interventions used in counseling and psychotherapy with young people and examines the effectiveness of specific music therapy techniques. This researcher explores how music therapy can be used to increase cultural competency in therapeutic practice, both in working with individuals of other races and ethnicities as well as viewing adolescents as a sub-culture in need of specific therapeutic practices to cater to their specific developmental and environmental needs.

Rationale

It is generally understood among mental health practitioners that insurance companies, private pay organizations, and clients are seeking mental health interventions that are timely, effective, and empirically proven to be successful at eliminating mental health symptoms and achieving therapeutic goals. Such interventions that are proven in

this way can be referred to as evidence-based practices. The purpose of this paper is to determine whether or not music therapy interventions with adolescent clients provide the therapeutic outcomes necessary to be considered evidence-based practice. If this evidence is found, this researcher will share how specific music-based therapy interventions could be commonly used in psychotherapeutic practice with adolescent clients.

Evidence-Based Practice using Music Therapy

In reviewing the current literature, this researcher found that music therapy interventions are being used in a wide variety of therapeutic settings including schools, outpatient, and long or short-term inpatient treatment facilities. It is also noted that music therapy is being used in treatment settings throughout the world, including Austria (Gold, Wigram, & Voracek, 2007), Australia (McIntyre, 2009), the United Kingdom (Dyer, 2011; Cathro & Devine, 2012), and South Africa (Kruger & de Villiers, 2010). Music therapy is also found to be used for a variety of different diagnoses and therapeutic needs such as bereavement (McFerran, Roberts, & O' Grady, 2010; Rosner, Kruse, & Hagl, 2010), trauma (Davis, 2010), ADHD (McIntyre, 2009), and many others to be discussed in further detail later in this paper.

Music Therapy with Specific Disorders or Therapeutic Needs

Bereavement. Two studies in this literature review are focused on interventions for bereaved adolescents. In a meta-analysis study, Rosner, Kruse, and Hagl (2010) conduct extensive literature research in an attempt to find a variety of treatments used for children and adolescents (in this study defined as anyone less than 18 years old). The researchers of this meta-analysis found that the most successful interventions are music

therapy interventions, as two particular studies demonstrated large effect sizes when compared to other controlled studies using differing treatment models.

The other study on bereaved teenagers revealed the effects of music therapy groups in a school setting for students who have experienced loss. McFerran, Roberts, and O' Grady (2010) shared how they developed music therapy groups with the goals of processing grief-related experiences. While their research attempted to display accurate post-data by having the participants complete various psychological evaluations, it seemed as though the participants did not take this testing seriously, as it was noted that some of the participants appeared to circle answers randomly while complaining about the questionnaire. Despite this lack of scientific-based outcome, the researchers did gather a significant amount of anecdotal comments and responses of participants that display the improvements and therapeutic gains obtained by their participation in the music therapy group.

Trauma. In a study by Davis (2010), music therapy was used in transitioning children back to school following a severe tornado. The study participants ranged in age from 8 through 11 years old. In this study, Davis used music therapy techniques with instruments to engage the children in expressing their feelings surrounding the natural disaster that had occurred.

Lefevre (2004) explained that music can be highly effective at processing trauma, particularly when working with children. She noted that these are often pre-verbal experiences; therefore symbolic expressions such as play therapy and music therapy are much more effective at processing this non-verbal trauma.

Borderline personality disorder. Similar with the findings of Lefevre's (2004) work with trauma, Odell-Miller (2011) found music therapy effective for patients with borderline personality disorder. She also argued that music can help patients get connected to their emotions and can deepen discussions surrounding these emotions. In her experience with clients, she noted that the shift between structured and unstructured patterns that happens with improvisational music therapy can help clients break from rigid thought patterns in clients with personality disorders.

Processing parental divorce. DeLucia-Waak and Gellman (2007) presented a case study of a psychoeducational group for children of divorce using music interventions. The research compared two groups comprised of similar participants. One group utilized music interventions such as singing songs and listening to and reflecting on the lyrics of songs. The control group had no music interventions. The researchers had participants complete pre-assessments and post-assessments addressing the child's feelings about the divorce, level of anxiety, and level of depression. While there did seem to be a significant decrease in level of irrational beliefs surrounding divorce from both groups, the results of this research did not show significant added effect of music interventions to the group's ability to reach those outcomes.

Anger management. Kruger and de Villiers (2010) explored music therapy interventions as behavior-management techniques in working with children. Their study specifically focused on anger-management, and encouraged healthy expression of emotions by drumming. The researchers also utilized relaxing music as a calming method and saw improvements in the behaviors of most study participants.

Depression and ADHD. In explaining her work as a family music therapist in cooperation with a multi-disciplinary team, McIntyre (2009) shared successes she had working with a variety of clients including those with depression and ADHD. She shared a case of a 14 year old boy who was admitted with severe depression who improved in his confidence greatly when playing piano in music family therapy sessions. McIntyre shared about working with children with ADHD. They often play music quite loud without patterns or connections to what the therapist is playing. McIntyre noted this to be a direct reflection of what the client is feeling and that they play their feelings without knowing it.

Music Therapy in Varying Treatment Settings

School counseling. When working with adolescents, school seems like the natural environment to use music therapy techniques. Music therapy interventions can be done with individuals in school counseling sessions, such as the case studies of rap therapy based sessions in studies by Elligan (2001) and Gonzalez and Haynes (2009). Another way to work with young people in the school setting is with group therapy, as done with a trauma group shared by Davis (2010). Kimbel and Protivnak (2010) also noted how music can be used by school counselors in classroom guidance lessons by using songs to raise awareness about important topics followed by a class discussion.

Group therapy. Music interventions can be useful in a number of group settings such as psychoeducational groups, support groups, and group therapy. Examples with young students include Davis's (2010) trauma processing group with children; DeLucia-Waack and Gellman's (2007) children of divorce group; and the children's anger management group discussed by Kruger and de Villiers (2010). Skudrzyk et al. shared an

example of a bullying support group involving older adolescents. Incorporating group music interventions with adult clients is even seen, as Cathro and Devine (2012) demonstrated in their work with adults with severe and persistent mental illness, involving these clients in a weekly drumming group.

        Inpatient/residential treatment. Inpatient or residential treatment can look very different depending on the clientele that is seen at the treatment facility. Research finds music therapy being used in a wide range of types of treatment settings. Silverman (2009) shared his process of implementing a music therapy program in an acute psychiatric admissions unit where patients only stay for a maximum of 72 hours. On the other end of the spectrum in terms of duration of treatment is the program noted by Kruger and de Villiers (2010) at a long-term residential care facility for children where they implemented a music-based anger management group for the residents. Another form of music therapy within a residential program is shared by McIntyre (2009) in her work as part of an interdisciplinary team doing family music therapy with families who have been admitted to their 2 to 3 week program. Despite the variances in amount of time with clients, each of these programs has demonstrated how music therapy techniques have fit into residential or inpatient treatment settings.

        Lindsey Dyer (2011) shared that having live music played at a residential mental health center was a beneficial therapeutic experience that had a clinical impact on the residents. Dyer did explain specifically that the concerts performed in the center were a therapeutic experience and not a form of therapy. However, there was still a noted improvement in the mood and concentration of the residents.

Outpatient individual therapy. As with most other treatment modalities, music therapy interventions can be effective with individuals in outpatient treatment programs. Gold, Wigram, and Voracek (2007) completed a pre-post design study to examine changes in child and adolescent clients in out-patient individual music therapy. Their findings showed that the therapy tended to be more effective when focused on discipline-specific music therapy techniques including improvisation and subsequent discussion. Their research shared that the individuals who received therapy using this model experienced significant change in symptoms.

Numerous other researchers shared their experiences of using music interventions with clients in an individual outpatient setting.   Lefevre (2004) referenced numerous case examples of her use of music interventions with clients ranging in age from 6 to 13 years. Odell-Miller (2011) explained the benefits of music interventions on her work with a 21 year old client with borderline personality disorder. Gold, Voracek, and Wigram (2004) shared the results of their study on the effectiveness of music therapy for children and adolescents diagnosed with various types of psychopathology. Their research showed that music therapy had large effects for mixed diagnoses, developmental problems, or behavioral problem, and that these effects were equally significant among children as well as adolescents. They noted that subjects with emotional problems appeared to benefit the least from music therapy interventions.

Music Therapy Techniques

As with other mental health disciplines and theories, there are a number of different techniques and interventions in music therapy that can be implemented by practitioners. Many of these can be done by a therapist who does not have prior musical

knowledge or experience. It is important as professionals to maintain a distinction

between doing music therapy and using music-based techniques with clients. Kimbel and

Protivnak (2010) share a definition of *music interventions* to clarify this distinction. They

explain such interventions as the use of a music application with clients in a positive,

constructive way without the practitioner having specialized training in music therapy.

Mrazova, Celec, and Ing (2010) explain that music therapy interventions can be

either passive or active. They state that active interventions include improvisation,

playing instruments, singing, or writing lyrics and songs. Their study explains passive

music therapy as listening to music or sounds during therapy, either by recording or

played by the therapist. Both the active and passive modes of music therapy techniques

are discussed in further detail.

Lyric Analysis

Many therapists find it can be easier for clients to talk about uncomfortable

emotions, experiences, and thoughts when these words are not their own, but instead are

brought up by someone else. This is done through a music technique known as lyric

analysis. Gladding et al. (2008) discuss this technique in detail, sharing that lyrics can be

used to help clients relate to themselves in a deeper way and access memories, emotions,

and thoughts that clients would otherwise not open up about with traditional talk therapy

interventions. DeLucia-Waack and Gellman (2007) state that, particularly in working

with children and adolescents, having them identify emotions in a song can help them to

label their own emotions. Gold et al. (2007) share that discussing the symbolic meaning

in music interpretation is essential to the music therapy process. Tyson (2003) compares

the technique of lyric analysis to another recognized therapy model of bibliotherapy that

uses literature including stories and poems to stimulate therapeutic discussion and provide insight into the client's problems. Tyson goes on to explain that lyric analysis can be a strengths-based approach by identifying positive therapeutic themes in music as a means to help clients develop solutions to their struggles.

Lefevre (2004) discusses the potentially unexpected outcomes of listening to music during session, stating that the client's previous experiences can influence how the person responds to the music such as if the music is associated with a traumatic or abusive event in his or her past. While this triggering effect may be the case with a specific song or genre of music, lyric analysis still shows great potential for facilitating therapeutic discussion. Baker and Bor (2008) assert that discussing the themes of an adolescent's preferred music could potentially be an indicator of his or her progress or deterioration in their mental health.

Lyric Revision and Song Writing

Songwriting can be used with clients who already have some musical abilities. For instance, they may play guitar or piano, rap, or compose their own music. If through the course of therapy these talents are uncovered, it can be highly beneficial for a therapist to encourage their use of songwriting for therapeutic purposes. Lefevre (2004) encourages having clients tape themselves playing, possibly even record it during the session, and listen to it. She notes that this may help encourage the client's sense of self. Don Elligan (2001) shares his experience of encouraging his young clients to write rap music of their own, and how this has been an effective approach to having his clients open up about emotions and past experiences.

Lyric revision is a technique that is similar to songwriting, but simpler. Gladding et al. (2008) explain this technique as having the client rewrite or edit the lyrics of a familiar song to convey a different message. Kimbel and Protivnak (2010) also instruct on this technique, stating that the revisions are intended to change the lyrics in a way that reflects the client's personal experiences. They also encourage counselors to engage in subsequent discussion about the meaning of the client's lyrics.

Improvisation

Improvisation can be thought of as free form music creation. In the therapy setting, this can include the client creating lyrics or using various musical instruments to compose music, and can even be as simple as creating a beat by clapping hands or tapping on a desk (Kimbel & Protivnak, 2010). Kimbel and Protivnak state that improvisation can be similar to the lyric revision technique, with the difference being that it does not involve pre-composed songs (Kimbel & Protivnak, 2010). Lefevre (2004) shares that improvisation can be done with pre-recorded rhythms or accompaniments that can provide structure that the client can freely improvise with. Various instruments can be used in improvisation. Lefevre (2004) and McIntyre (2009) both describe techniques using piano or keyboards, as well as a drum kit or other percussive instruments. McIntyre (2009) also explains using guitars in her work doing music therapy with families.

In their meta-analysis of experimental research on music therapy for children and adolescents, Gold, Wigram, and Voracek (2007) find that improvisation techniques are helpful in exploring and expressing feelings, enabling communication, and building relationships. Improvisation is one of the central techniques described in their study.

McIntyre (2009) also explains the usefulness of improvisation, stating that when improvising music the participants tend to play music that is a direct reflection of what they are feeling without even knowing it. McIntyre (2009) also advises therapists to be sensitive to a block in client creativity. These potentially may be attributed to the issues surrounding their admission into thereapy. She recommends in these cases of creativity blocking for the therapist to move onto other techniques that are less confrontational.

Drumming

As explained earlier in the discussion of improvisation techniques, a variety of instruments can be used with clients in music therapy. While the use of various instruments is understood as improvisation, the use of drums seems to be a unique technique of its own. It may be that they are used so prevalently in music therapy because percussive instruments such as the drums often require little musical knowledge or skill to create a desired sound (Lefevre, 2004). This could potentially make clients more open to using them. Whatever the case for the popularity of percussive instruments in music interventions, researchers have found them to be useful for having clients express their emotions. Silverman (2009) shares that he uses drumming in a group setting by having patients express their feelings on a drum and have the peers interpret their playing. Kruger and de Villiers (2010) give examples of how loud drumming is used in an anger management group to release pent-up anger. Drumming was also used in this group to express other emotions including happiness, fear, and sadness. Cathro and Devine (2012) established a percussion-based music group for adults with severe and enduring mental health conditions to provide these individuals with the opportunity to master an activity while working in a team to develop social skills and confidence.

Music as a Coping Skill

Music is widely used in therapeutic practice as a distractive, relaxing, and anxiety-reducing mechanism and seems to be an effective tool for reducing symptoms of depression (Mrazova, Celec, & Ing, 2010). Scientists note endocrine changes including decreases in the stress hormone cortisol when individuals listen to self-chosen music for 30 minutes (Mrazova, Celec, & Ing, 2010). McFerran, Roberts, and O'Grady (2010) state that for teenagers this process is largely unconscious, and that they actively use music to manage their feelings, selecting what they need to hear in the moment. McFerran, Roberts, and O'Grady (2010) go on to warn that adolescents may not always be successful in using music as mood management. In particular, vulnerable young people may feel worse after listening to their chosen music.

DeLucia-Waack and Gellman (2007) share that listening to music can reinforce coping skill use by listening to songs with coping messages, serving as a reminder of coping strategies that can be used in stressful situations. McIntyre (2009) explains that music itself can be a skill, as it can be used to assist children to self-regulate and soothe. By doing so, they can more easily find the middle ground between over-arousal and numbness, therefore increasing their emotional stability. Bettmann and Jasperson (2010) emphasize the importance of these self-regulation strategies as adolescent clients generally lack awareness of physiological responses and underutilize de-escalation skills.

While Mrazova, Celec, and Ing (2010) cite stress hormone level changes as a result of listening to self-chosen music. There is still much to be questioned about the effect of music listening as a coping skill for adolescents. Baker and Bar (2008) share that music can be used as a temporary escape from thoughts or feelings, to validate

current thoughts and feelings, or to release pent up emotions including anxiety and anger. The researchers go on to state that listening to preferred music can also have a purgative or cathartic effect on adolescents, and that listening to preferred music was associated with a positive change in affect.

Cultural Competency in Music Therapy

In today's society, practicing psychotherapists need to practice in a way that is culturally sensitive, in order to follow with evidence-based practice guidelines (Nelson & Nelson, 2010). This is particularly true in working with young people. Referencing information from the U.S. Census Bureau, Kimbel and Protivnak (2010) express the importance of incorporating new techniques as student populations are rapidly increasing in diversity. Music therapy techniques are an effective way of developing and maintaining a therapeutic practice that is sensitive to the specific needs and backgrounds of a wide variety of clients. As a number of music therapy techniques are done using the client's preferred choice of music, this individualized approach is effective for clients that are of a different cultural background than the therapist. This can be seen in more detail as this researcher shares literature on the use of rap music with African American adolescent male clients.

Culturally-Sensitive Music in Practice

Don Elligan (2001) explains a therapeutic model of using rap music with African American adolescent males, similar to the music therapy techniques of lyric analysis, lyric revision, and improvisation. In his approach, Elligan listens to rap music together with clients and discusses meanings and messages portrayed in the music. He also has his clients write rap lyrics discussing therapeutically relevant topics as a way to challenge

his clients to open up about sensitive personal issues. Elligan argues that use of rap music in therapy is a culturally sensitive approach to psychotherapy with this particular clientele. Gonzalez and Hayes (2009) concur with this argument, and explain that hip hop culture from which rap music is derived has a large influence on both Latino and African American adolescents, particularly for such adolescents living in inner-city environments.

Environmental understanding is essential in maintaining cultural competency in mental health practice. Elligan (2001) draws this notion back to a concept known as *field theory*. Elligan explains how field theory suggests that one's behavior is a function of both the person and the environment. Researchers also explain that using rap music in therapy with inner city youth is an empowering approach that has value in clinical practice (Tyson, 2003). In considering this emphasis on environment in mental health practice, Tyson (2003) states that the use of rap music lyrics in clinical practice with youth is most relevant among African American and Latino youth.

While this research only demonstrates the cultural sensitivity of using rap music with African American and Latino youth, the concepts can be translated to clients from varying cultures, socioeconomic statuses, and life experiences. In considering that certain music therapy techniques such as lyric analysis, lyric revision, and improvisation allow clients to choose their own music to utilize in therapy, this individualizes the music therapy interventions to each specific client. The music they choose can be a reflection of their cultural background, and therefore can potentially provide further insight into the client's life. Tyson (2003) explains this in terms of rap music, stating that in examining the lyrics one can find social, cultural, and political perspectives that the client can connect with. If this can be seen in using rap music in therapy with African American

and Latino youth, potentially this cultural understanding can be developed using music therapy interventions with other culturally diverse clients.

Rapport Building with Music Therapy

Using an adolescent's preferred music choice in therapy can be an excellent way of engaging with the client and building rapport. Particularly with adolescent clients, rapport building is an essential and often difficult part of the therapeutic process. Using music techniques with a client's preferred music choices can be an effective way of gaining the rapport necessary for a healthy working relationship between therapist and an adolescent client.

Rubenstein (2003) argues that the formulation of a therapeutic relationship with an adolescent is different than that of a child or an adult. In their study on alliance in child and adolescent psychotherapy, Shirk, Karver, and Brown (2011) note that youth are typically referred to treatment by others such as parents or guardians. They also go on to also address the role of parents in psychotherapy with youth. They explain that alliance with the parents predicted better therapy participation, whereas alliance with the youth predicted symptom change. Therefore, alliance with both the parents and the youth are necessary for treatment completion and reaching desired outcomes in psychotherapy with adolescent clients.

Gonzalez and Hayes (2009) argue that counselors may ease apprehension in adolescent clients by engaging them in activities that interest them. This is why music therapy can be an effective way of building rapport and keeping adolescent clients engaged in the therapy experience. Tyson (2003) expands on this argument by stating

that human service professionals can improve their credibility and rapport with youth by incorporating music into their clinical practice.

Adolescence as Unique Developmental Stage

In looking at being sensitive to an individual's treatment needs, it is also important to recognize the significance of the developmental period of adolescence. Adolescence is a complicated and unique time period in an individuals' life where they are no longer considered children, yet also are not quite adults. Recognizing this stage of life as a unique developmental period requires mental health practitioners to treat adolescents in a way that is different than both children and adult clients. If mental health practitioners recognize the unique needs and life experiences of this age group, it can be clearly understood that techniques used in psychotherapy with these individuals need to be uniquely tailored to adolescent clientele. Oetzel and Scherer (2003) explained that most psychotherapy models are based on treatment for adults. These researchers went on to state that because of an adolescent's developmental maturity these models are not conductive to building rapport with adolescent clients. In her study on adolescent psychotherapy, Rubenstein (2003) concurred with that point and stated that theories and techniques developed for treating children and adults were far less effective for treating adolescents. Rubenstein strongly advocated for psychotherapists to incorporate developmental psychology into their clinical practice with adolescents. She went on to state that adolescent psychotherapy must address the biological, psychological, and sociological changes that happen during this developmental stage.

Definition of Adolescence

Adolescence is defined in a number of different ways. For the purposes of this paper, it is defined as a period of physical, social, and psychological transition from childhood to adulthood (Blakemore, 2008). Bettmann and Jasperson (2010) caution that this developmental transition can vary greatly depending on the cultural context, particularly when examining the relationship between adolescent and parent. Keeping that in mind, this researcher notes that this particular paper is focused on adolescents in the United States.

<center>**Developmental Changes Occurring in Adolescence**</center>

As was mentioned earlier in the definition of adolescence, changes occur in numerous areas of an adolescent's life. These include biological and physical changes, changes in social life, and internal changes in the sense of self. All of these changes in turn impact their familial relations, as their search for identity and independence shifts the roles they hold in their family system.

Physiological Changes

It is obvious that adolescents are undergoing numerous physical changes during their teenage years, as their bodies are growing and developing into that of a fully grown adult (Oetzel & Scherer, 2003). It should not be a surprise that their brains are going through similar anatomical development. In his research on brain development, Steinberg (2011) stated that adolescence is a time when important changes are occurring in the structure and function of the brain. As far as structure is concerned, Steinberg noted that certain parts of the brain are smaller in childhood than in adolescence, when they grow relatively larger. When describing changes in function of the brain, Steinberg

associated this with the fact that adolescents may use different parts of the brain than children do when performing the same task.

Steinberg (2011) stated that adolescence is a time period characterized by more dramatic brain changes than any other developmental period with the exception of the first 3 years of life. This significant anatomical development has been noted in brain areas such as the medial prefrontal cortex, the superior temporal cortex, and the temporo-parietal junction (Burnett et al., 2008). Burnett et al. went on to explain that these brain areas are involved in social cognition, something that will be discussed later in this paper.

Much of current scientific understanding of adolescent brain development comes through studies using functional magnetic resonance imaging, or fMRI (Burnett et al., 2008; Steinberg, 2011). This technique allows researchers to take pictures of an individual's brain and compare the brain activity of individuals, therefore finding functional differences in brain activity among children, adolescents, and adults (Burnett et al., 2008; Steinberg, 2011). In their research studying sensation seeking in adolescent behavior, Casey, Jones, and Somerville (2011) noted that brain imaging studies cannot specify the cause of developmental changes, yet can reflect the development of activated brain regions over extended periods of time.

While these functional differences in brain activity are a significant part of an adolescent's physiological development, Sarah-Jayne Blakemore (2008) urges researchers to factor in hormonal changes as well as changes in brain anatomy when discussing adolescent development. She goes on to state that hormonal changes, along with social changes, could potentially trigger anatomical changes. Her research emphatically expresses the need for mental health professionals to integrate all potential

sociological and developmental factors in adolescents' current situation when engaging them in psychotherapy.

Social Changes

One of the physiological changes noted in fMRI studies is that neural processing of social emotion is something that continues to develop between adolescence and adulthood (Burnett et al., 2008). The researchers defined social emotions as emotions that require the representation of mental states, as in an individual must assume and represent someone else's beliefs in reaction to one's behaviors to feel such an emotion. Examples in their study of social emotions included embarrassment, guilt, shame, and pride. Burnett et al. went on to explain that social emotions permeate the everyday lives of adolescents. At the same time, adolescents are becoming increasingly aware of and concerned with their self-concept and what others think of them. The researchers stated that this increase in awareness happens sometime around puberty. Blakemore (2008) echoed this by stating that adolescence is characterized by heightened self-consciousness and the importance of peer relationships. Nelson and Nelson (2010) concurred with this emphasis on peer relationships, explaining that peer relationships are the most influential to adolescents, overshadowing the influence of parents and other adult role models. The influential nature of peer relationships during this developmental period has a significant impact on an adolescent's mental health. Nelson and Nelson go on to state that an adolescent's close friendships can influence their struggles with internalizing problems. Furthermore, Blakemore also suggested a link in the psychological change in an individual's sense of identity with the individual's self-consciousness.

It can also be noted in social-psychology studies that there is an increased complexity of peer relationships during adolescence as compared to childhood, as well as an improved understanding of others (Blakemore, 2008). Casey, Jones, and Somerville (2011) explained this marked change in peer interactions from an evolutionary standpoint, stating that during a stage of independence-seeking such as that of adolescence, mammals show increases in peer-directed social interactions. Blakemore (2008) explained that, compared with children, adolescents form more complex and hierarchical peer relationships. She also stated that adolescents are more sensitive to acceptance and rejection by their peers as compared to younger children experiencing similar social situations. When considering the influence of peer relationships on identity, it can be argued that an adolescent's self-concept depends greatly on his or her perceived social reputation (Burnett et al., 2008).

Increased Independence Resulting in Familial Changes

Identity formation has been understood as an important process in growing up, and this process is most often associated with the developmental stage of adolescence. Bill Fitzgerald (2005) referenced the noteworthy theory of Erikson by stating that adolescence is a period of identity crisis. Whether or not one wants to consider this a time of crisis, it remains well established that identity formation is a key part of the developmental period of adolescence. Nelson and Nelson (2010) shared that formulating a personal identity and individuating from parents is a common challenged shared among adolescents. They went on to state that adolescents engage in identity exploration to discover new ways of finding independence and self-reliance.

Part of this identity formation process includes gaining independence from one's family of origin, as they form their own identity separate from their familial identity (Campbell et al., 2007). Casey, Jones, and Somerville (2011) explained this gaining of independence in reference to human evolution. They stated that, historically, adolescence is a period of gaining independence from the protection of the family, this puts them into harms way. They went on to state that independence-seeking behaviors are seen across mammalian species, and described how this impacts an adolescent's propensity for risk-taking behavior during this developmental period.

Bettmann and Jasperson (2009) explained the developmental stage of adolescence in relation to attachment theory. They first established that adolescence looks different depending on one's cultural context. For instance, Western cultures put a great emphasis on individuation, whereas Japanese adolescents are seen as more invested in parental relationships and less engaged in the individuation process. The researchers went on to state that secure attachment relationships between adolescents and their parents demonstrate a successful balance between autonomy and relatedness. What this means in a relationship between a parent and an adolescent is that the adolescent is able to maintain independence while utilizing the support of his or her parent or caregiver when needed.

Connection between Music and Mental Health

A number of professionals who work with young people express concern about the effect of the media on youth in this currently media-driven culture. In an article put out by the American Academy of Pediatrics, researchers expressed concerns that popular music has an effect on adolescents' behavior and emotions ("Impact of Music," 2009).

These researchers caution parents on the explicit nature of lyrics in referencing drugs, sex, and violence. While the explicit nature of music lyrics may be accurate, particularly depending on the genre of preferred music such as rap or heavy rock music, the argument that this type of music has a direct effect on an adolescent's behavior or emotions is yet to be clearly identified. Correlations can be found, as this research discusses in further detail, yet researchers are unable to identify a clear cause and effect relationship between the music preferences of an adolescent and the adolescent's behaviors ("Impact of Music," 2009; Schwartz, 2004). This paper attempts to establish clarity regarding the connection between adolescent's music preference and his or her emotions, behaviors, and overall mental health.

Music as a Means to Control Mood

As stated earlier in this paper, listening to preferred music can be a coping skill for adolescents. Mrazova, Celec, and Ing (2010) shared research that proves this to be effective, as listening to self-chosen music for 30 minutes was seen to decrease stress hormone levels, specifically the hormone cortisol. The resulting decrease in stress would be the desired effect of a coping skill, making this an effective way for one to regulate mood when experiencing stress. This stress relieving effect can also be seen in a self-report study done by Campbell et al. (2007). In their study, students reported that one of the reasons music is important to them is that it is used as a way to relieve tension and stress.

One other way adolescents could potentially use music as a way to control their mood is by using music as a means of distraction. Schwartz (2004) described this in detail, stating that adolescents may use music to escape or avoid unwanted feelings. She

stated that adolescents may do so by using music as external stimulation to distract themselves. Baker and Bor (2008) concurred with this argument, stating that adolescents use music as a way to regulate their emotions by escaping from thoughts and feelings. Schwartz (2004) specified that adolescents particularly do this with the genre known as heavy music.

Furthermore, music can be used as an emotional release, as Baker and Bor (2008) described. They stated that music can be used to release pent up emotions such as anxiety, excess energy, and anger. They went on to state that this cathartic effect can be associated with a positive change in affect if an adolescent listens to preferred music when experiencing distress.

Music as a Reflection of Affect

The music an adolescent is listening to could potentially be an outward reflection of their inner emotions. A study done by the American Academy of Pediatrics (2009) stated that adolescents are likely to use music to reflect their emotional state. The researchers explained that females are more likely to do this than males, and that female adolescents do this in particular when they are feeling lonely or sad. Research done by Schwartz (2004) further explained the use of music as a reflection of an adolescent's emotions. She stated that adolescents use music to seek validation for what they think and feel, allowing them to no longer feel emotionally alone. As was discussed earlier in relation to the music intervention of lyric analysis, music can help adolescents identify and label their emotions (DeLucia-Waack & Gellman, 2007).

When keeping in mind this concept of music being a reflection of one's inner emotions, a perceptive individual could potentially be able to accurately identify

another's affect simply by listening to their current preferred music. Schwartz (2004)

explained that knowing the music preferences of an adolescent can be useful in assessing

that adolescent's internal reality, as it reflects their thoughts, attitudes, and feelings. This

depth in understanding can be particularly helpful knowledge for parents of adolescents,

as well as mental health professionals working with young people.

Behaviors Linked to Specific Music Preferences

A number of studies have set out to find connections between music preference

and adolescent behaviors. One particularly comprehensive study done by Schwartz

(2004) compared music preference to personality characteristics. She did so by having

adolescents complete questionnaires assessing their music preferences based on qualities

found in the music style, then had them complete The Millon Adolescent Personality

Inventory to quantify specific personality characteristics and developmental issues in

each of the participants. In the literature shared prior to her original research, Schwartz

explained that adolescents who prefer heavy music exhibit greater criminal and antisocial

behavior, hypersexuality, and less respect for women. It is also mentioned that

adolescents with this music preference demonstrate more risk-taking behavior than their

peers. As a result of her personality research, adolescents who prefer heavy music were

found to likely be more aggressive than their peers, as well as have lower self-esteem and

tend to question others' motives and rules. These personality characteristics seem to line

up with the increased criminal and antisocial behaviors found in this group of

adolescents.

Schwartz (2004) also shared profiles of the personalities of adolescents who

prefer lighter pop music. Her findings conclude that these individuals appear to have

developmental concerns in their sexuality and their relationships with peers. Schwartz

noted that these adolescents seem to struggle more than their peers do with their

developing sexuality. This group of young people also appears to be more concerned

with being accepted by their peers and fitting in, nearly to the point of experiencing

dependency on their peers.

Finally, Schwartz (2004) shared the personality profiles of adolescents who have

an eclectic music taste. She found these individuals to exemplify a more typical

adolescent development than the two other groups. According to Schwartz, this group

seems to show flexibility in their music choices, likely changing it to reflect their current

contexts or needs. As with other music-based research, it is difficult to find a causal

effect for these findings. Schwartz explained that current literature finds it unknown

whether this eclectic taste in music facilitates effective adolescent adjustment, or if

individuals who are well adjusted naturally have eclectic tastes in music.

Unidentified Cause and Effect Relationship

One major limitation to the understanding of music preferences as they relate to

an adolescent's behavior is that while researchers are able to identify correlations, they

are unable to identify cause and effect relationships between music preferences and

behaviors ("Impact of Music," 2009; Schwartz, 2004). Delsing et al. (2008) explained

that any causal inferences should be made with caution when researching music

preferences. These researchers did note that they were able to find a clear structure in the

music preferences of the adolescents who participated in their investigation. Their

research also demonstrated that music preferences remain relatively stable during early

adolescence and become increasingly more stable in later adolescence.

In studying correlations between music preferences and behaviors, Baker and Bor (2008) made a clear point that even if preference for a genre of music is found to correlate with a particular type of behavior, research does not suggest that music causes behaviors. They did go on to state, however, that music preference may indicate underlying emotional disturbances or vulnerabilities, as can be inferred from research findings correlating music preferences to antisocial behaviors (Schwartz, 2004).   As was discussed earlier in this research focusing on the technique of lyric analysis, discussing the themes brought up in a client's preferred music can be highly effective in psychotherapy with adolescents. Baker and Bor (2008) stated that discussions of such themes may be an indicator of the client's progress or deterioration in mental health, and therefore can be a useful assessment tool for therapists to gain insight into the status of their adolescent clients.

Music as Means of Social Inclusion

The influential psychologist Alfred Adler established in his psychoanalytic theories the basic principle that individuals have an intrinsic desire to belong. Adler believed the desire to belong was the strongest motivating force for a human being (Griffith & Powers, 2007). It can be argued that this desired belonging likely becomes intensified during the developmental stage of adolescence, as was discussed previously on the social changes that occur during this developmental period. Research established that adolescents experience more complexities in their peer relationships than earlier in their childhood (Blakemore, 2008).

Music can be highly influential in helping adolescents meet this need for belonging. Adolescents often use music to establish their personal identity, therefore

increasing their self-awareness and potentially their level of confidence. This solidly

established form of identity can help adolescents form deep, personal attachments with

others. Furthermore, shared music preferences can be a means of creating bonds with

other peers, as music interest has been found to be group-based (Bakagiannis & Tarrant,

2006).   Miranda, Gaudreau, and Morizot (2010) further explained the relational

phenomenon that music has with adolescents. They shared that adolescents use music

preferences both to display their personality and to evaluate the personality of others.

They went on to explain that this evaluation process is a form of social exchange for

adolescents.

Music as Reflection of Identity

As was established earlier in this paper, adolescence is a critical time in which

identity formation occurs (Fitzgerald, 2005). This goes along with the research done by

Burnett et al. (2008), that establishes that adolescents are becoming increasingly aware of

their self-concept during this developmental stage. Campbell et al. (2007) give an

important reminder that identities are not static, and that as adolescents adapt to new

situations and experiences, their identities can also shift.

In understanding this critical life phase, research shows that music may be

influential in helping adolescents navigate the developmental life crisis of identity

formation ("Impact of Music, 2009). Campbell et al. (2007) assert that identity formation

is one of the main functions of music, as it provides a medium through which adolescents

construct their personal identities. The researchers also suggest that adolescents use

music preference as a way to project their inner selves to the world. This concept was

discussed earlier in relation to music being a projection of an adolescent's inner emotions and current mental health status (Baker & Bor, 2008; Schwartz, 2004).

This establishment of identity may come from the adolescent connecting to the identity of the musical performers. Schwartz (2004) shared that adolescents listening to heavy music that has themes of distrust and lack of self-understanding, as well as harsh and distorted sounds, may be doing so because they are matching their own identity issues and feelings to that of the performers. She goes on to state that listening to such music could be validating their identity confusion and provide a safe context for them to explore their sense of self.

Use of lyric analysis technique. As was brought up in research on the technique of lyric analysis, music lyrics can have significant symbolic meaning to a client (Gold et al., 2007). This symbolic meaning may include identity struggles with adolescents. Bakagiannis and Tarrant (2006) stated that music lyrics can reflect a wide range of adolescent issues including identity, values, independence, and perception of self. As established earlier, adolescents may be more resistant to traditional talk therapy methods, as they are often referred to treatment by others (Shirk, Karver, & Brown, 2011). Engaging adolescent clients in activities that interest them can be an effective way of encouraging open discussion in therapy (Gonzalez & Hayes, 2009). Lyric analysis technique may be an effective way to help adolescents understand and navigate their struggle with identity formation. Furthermore, an adolescent's progress in this life task may be reflected by his or her current music listening preferences, as was established with music preference being an indicator of current mental health status and therapeutic progress (Baker & Bor, 2008).

Music as Means of Connecting with Others

It is clearly established that during the life stage of adolescence individuals go through a process of formulating their identities (Fitzgerald, 2005). What may not be understood as clearly is that part of this process includes establishing a group identity. It was stated earlier in this paper that social relationships and perceived identity become increasingly important to individuals as they transition into adolescence and young adulthood (Burnett et al., 2008). Finding meaningful connections with peers becomes a priority for young people as they seek to become part of a group. Mental health professionals working with adolescents can help them navigate the difficult process of experiencing social connectedness.

Previously in this research it was established that music preference can be a reflection of an adolescent's mental health status and inner emotions (Baker & Bor, 2008; Schwartz, 2004). Schwartz (2004) also asserted that music preference can reflect an adolescent's feelings associated with their level of connectedness. She went on to state that listening to hard music with themes that are tough and protesting may be reflecting feelings of being rejected or misunderstood by others. In this way, a young person's music preferences could provide mental health professionals with an indication of the adolescent's level of social connectedness.

Music preference can provide a means to achieve group identity ("Impact of Music," 2009). In this way, music can be used to connect with others. Campbell et al. (2007) asserted that just as adolescents use music to construct their personal identities, they can also use music to construct and modify aspects of their group identities. The researchers went on to state that music can offer adolescents strategies for both getting to

know themselves and for connecting with others, particularly peers who share similar

music preferences.

Bakagiannis and Tarrant (2006) explained the effects of shared music preferences

in adolescents through the framework of social learning theory. According to them,

social learning theory suggests that individuals have their own social groups or *ingroups*

of which they are members, and *outgroups* of which others are considered nonmembers.

Based on the idea that musical interest is often group-based, the researchers formulated a

self-report study on how adolescents perceive others with similar and different musical

preferences. Their study found that participants who were told the other group members

had distinct musical preferences different from their own reported the lowest levels of

identification to those group members. Furthermore, it was found that the more strongly

the adolescents identified with the ingroup, the more strongly they differentiated between

the ingroup and the outgroup in the study. In discussing the findings of their research,

Bakagiannis and Tarrant (2006) stated that their results indicate that music can be used to

improve peer relations in adolescents, more specifically if the peers have similar musical

preferences.

Summary of Findings

The purpose of this paper is to investigate whether or not using music based

therapy interventions with adolescent clients provides the therapeutic outcomes necessary

to be considered effective evidence-based practice. This paper reviews the current

literature of music therapy interventions used with young people in psychotherapy,

examining the effectiveness of specific music therapy techniques. This researcher

explores how music therapy can be used to increase cultural competency in therapeutic

practice by sharing an example from current literature of mental health professionals using music interventions with clients of other races and backgrounds. This researcher also establishes adolescents as a sub-culture in need of specific therapeutic practices to cater to their specific developmental and environmental needs. Finally, this paper explores the significance of music in the life of an adolescent and determines how this aspect of teenage life can be effectively utilized by mental health professionals working with adolescent clients to increase an adolescent's likelihood of success in psychotherapy.

Prevalent Use of Music Interventions

This investigation touches on many aspects of how music therapy techniques are effective with adolescent clients in psychotherapy. Numerous music interventions can be used by mental health professionals without any special degree or training in music therapy (Kimbel & Protivnak, 2010). This paper includes discussion on the following music interventions that are used by mental health professionals without specific training: lyric analysis, lyric revision, song writing, improvisation techniques, drumming, and listening to music as a coping skill. Furthermore, the literature finds that such music interventions are effective in a variety of therapy settings. This wide range of treatment settings includes: traditional outpatient therapy, inpatient or residential care, group therapy, and school counseling. Additionally, the literature finds music therapy techniques used with a vast assortment of mental health needs. A small portion of this assortment of diagnoses and mental health needs include bereavement, trauma, personality disorders, depression, and ADHD.

The prevalence of music therapy techniques in the mental health profession is clearly seen by the numerous examples shared in this paper. The commonality of music therapy strategies is encouraging evidence for the potential effectiveness of such techniques. It is important to note, however, that such commonalities of practice are not empirical evidence of effectiveness. In order to be established as an evidence-based therapeutic technique, music interventions must be consistently proven by concrete research to lessen symptoms of mental health issues. As will be discussed in further detail in this paper, this is a common limitation of professional literature on music therapy interventions.

Culturally Competent Practice

Using music therapy techniques that utilize the client's preferred style of music is an effective way of maintaining cultural competency in mental health practice. This is seen in the approach of using rap music in therapy with African American adolescent youth, as discussed by Elligan (2001), Gonzalez and Hayes (2009), and Tyson (2003). This culturally specific example shows that using music techniques in which clients share their preferred music in therapy can be effective at connecting with clients who are of a different racial or ethnic background. This idea is transferred to therapy with numerous other cultural differences, as music preference is highly individualized.

Adolescent Development

In addition to developing competency with other cultures, this paper argues that mental health professionals can view adolescence as a unique sub-culture in need of its own specific therapeutic interventions. Current literature establishes that adolescents are going through a unique developmental period. This includes physiological development,

social development, and one's personal development of identity and sense of self. Shirk

and Brown (2011) argued the importance of incorporating developmental psychology

into clinical practice. Furthermore, Nelson and Nelson (2010) shared that the

developmental stage of adolescence represents a unique culture, as adolescents share

common values, challenges, and characteristics. This understanding of developmental

psychology establishes the need for mental health professionals to incorporate specific

therapy techniques for working with adolescent clients.

Therapeutic Implications

The information brought up in this paper has an impact on the effectiveness of

mental health professionals engaging in psychotherapy with adolescent clients. The

research clearly establishes adolescence as a unique developmental period in one's life.

This, therefore, establishes the need for unique therapeutic interventions to develop an

effective practice with adolescents.

A fact that is also understood through the research is that music holds a significant

role in the lives of adolescents. Music is seen to be influential in an adolescent's identity

formation (Campbell et al., 2007; "Impact of Music," 2009). It is also noted that music

fulfills social needs of adolescents, as music interests are highly group-based

(Bakagiannis & Tarrant, 2006). Music also holds the potential to be reflective of an

adolescent's emotional state (Schwartz, 2004), as well as an escape or cathartic release of

tension or excess emotion (Baker & Bor, 2008).

If mental health practitioners use an adolescent's preferred music for therapeutic

purposes, this has the potential of developing significant therapeutic results. More

specifically, if mental health professionals use the music therapy intervention of lyric

analysis, the adolescent's preferred music can be used to facilitate deep therapeutic

discussion as well as be a gauge of the client's progress or deterioration in mental health

(Baker & Bor, 2008). Evidence shows that the use of lyric analysis has the potential to

be an effective therapeutic intervention for psychotherapy with adolescent clients, and

therefore it is this researcher's recommendation that mental health professionals

incorporate this technique in their practice with adolescents.

Research Limitations

Numerous limitations are found when researching the effectiveness of music

therapy interventions. One limitation that was consistently uncovered among the

research cited in this paper is the lack of a sufficient control group to utilize as a

comparison in the research. An example of this research limitation is seen in the work of

Rosner et al. (2010) in which two bereavement groups with teenagers were held and

compared to one another, yet the two groups displayed significantly different structures

and interventions. This research limitation can be controlled for, as seen in the work of

DeLucia-Waack and Gellman (2007). In their comparison study of children of divorce

groups, the interventions of both groups were identical with the exception of utilizing

therapeutic songs in the study group.

Another limitation is the use of anecdotal evidence to support claims of the

effectiveness of music therapy interventions, without more substantial empirical evidence

to supplement such claims. This can be difficult to avoid, as many studies utilize self-

report surveys to gather pre-treatment and post-treatment information. Instead, it would

generate greater effectiveness if pre-data and post-data were obtained from empirically

proven psychological assessments.

Mrazova, Celec, and Ing (2010) discuss another limitation to studies in the music therapy field. They state that there is a lack of replicability in music therapy studies. They contend that factors contributing to this are lack of a thorough description of the study's methods including detailed participant descriptions and minimal specifics about interventions and statistics. The researchers state that, without this specific information, it is difficult for future researchers to replicate the study or for professionals to apply the results in a clinical setting.

Another limitation that can be noted from this study is that this researcher finds that some of the articles hold strongly biased opinions. This is particularly seen in articles regarding the connection between music preferences and an adolescent's behaviors or mental health status. This researcher attempts to correct for the biases of the studies by expressing strongly that connections found between music preferences and an adolescent's behaviors or mental health are found to be correlative relationships, not cause and effect relationships.

Suggestions for Further Research

In considering the limitations of this paper, and the limitations of music therapy studies overall, there are a number of studies that can extend the knowledge in this research area. As mentioned earlier, the use of control groups in studies can help further knowledge of the effectiveness of music therapy interventions. If researchers utilize music therapy interventions and have a clearly defined control group that maintains as many similar factors as possible compared to the group receiving the music interventions, researchers can then see more clearly the potential effects of the music interventions. Concurrently, studies can be done utilizing highly specific psychological assessments at

the beginning, middle, and end of the research in order to establish empirical evidence about the effectiveness of the music therapy interventions. A benefit of these studies is that it can potentially be done with larger groups of participants, and therefore the results received from the assessment tools used in the studies could provide statistically significant information regarding the effectiveness of music interventions.

Researchers may also consider doing highly specific longitudinal case studies on using music therapy interventions with adolescent clients. These adolescent clients can range in diagnoses and therapeutic needs, as well as length of treatment. These case studies can share the specifics of the client's diagnosis, including the client's psychological symptoms, as well as environmental factors such as family of origin, academic, and social information. The researcher can then track the progression of the client through therapy, discussing the specific responses to music interventions in the therapy session as well as long term progress through the therapy experience. One benefit to this type of study is that it can be helpful for professionals to gain an in depth understanding of how to implement music interventions in practice.

Conclusion

This paper summarizes information from numerous studies on the effectiveness of music therapy interventions, finding a number of interventions that can be used without requiring the mental health professional to receive advanced training. The studies show the effectiveness of music interventions on a wide variety of clients. In conjunction with the research question of the effectiveness of music interventions on adolescents, evidence points to the music therapy technique of lyric analysis being an effective intervention for mental health professionals working with adolescents. Research establishes adolescence

to be a unique period in a person's life requiring specific interventions to engage these

clients in psychotherapy. In considering the significant impact music has on the life of an

adolescent, lyric analysis tactfully recognizes the significance of an adolescent's

preferred music while utilizing the symbolic meaning behind the music to facilitate in

depth therapeutic discussion.

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