Oxford Handbooks Online

Receptive Music Therapy

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The Oxford Handbook of Music Therapy (*Forthcoming*)

Edited by Jane Edwards

Online Publication Date: Apr
2015

Subject: Psychology, Clinical Psychology
DOI: 10.1093/oxfordhb/9780199639755.013.21

Abstract and Keywords

Listening to music is an everyday experience for most people. In music therapy music listening can be used to support many therapeutic goals. This chapter presents an overview of methods used in receptive music therapy that are supported by research literature, including music-assisted relaxation, music and imagery, and Guided Imagery and Music (Bonny Method). Salient features of each approach are outlined and supported with evidence-based research. Elements of music used in relaxation and imagery are discussed in some further depth to highlight the need for greater transparency when reporting the effect of recorded and live music in receptive music therapy.

Keywords: receptive music therapy, music-assisted relaxation, music and imagery, Guided Imagery and Music, Bonny Method

Listening to music

Listening to music is an everyday experience for most people. DeNora (2000) and others have written extensively about music in everyday life, and the increasing ease of access to music via i-Pods, MP3 players, and other digital media. Studies have shown that we listen to music many hours a day and in varying contexts. Numerous studies have also investigated why people listen to music and the effect on mood. Over a 20-year period the Swedish psychologist Gabrielsson (2011) collected 1354 statements from members of the public about strong experiences while listening to music (SEM). The thematic analysis of these responses found seven main themes: Including that strong experiences while listening to music were hard to describe and were unique. Physical reactions including (1) tears (in 24 percent of responses) more so in women than men, (2) thrills, chills, shivers (ten percent), and piloerection (goose bumps) in five percent. Other reactions were muscle tension or relaxation, warmth (perspiration), palpitation of the heart, changed breathing, and a lump in the throat. Changed perceptions of time were recorded in 35 percent of responses, including experiences of being absorbed in the sound, so that the world around disappears; that time stands still, or does not exist; and that the experience was contained in a single "now" (moment). These responses parallel the intentions of mindfulness practice (described below). Ten percent of responses referred to images spontaneously evoked by the music: That music evoked inner images, such as nature, people, situations, events, dreams of another life, or of something different and better. Listeners imagined themselves performing the music, and sometimes SEM elicited an inner music, it came for no apparent reason, and sounded as clear as live music. With regard to feelings and emotions, responses included:

- Intense/powerful feelings, included overwhelming waves of feeling (15 percent).
- Positive feelings (72 percent).
- Negative feelings (23 percent).
- Different feelings (mixed, conflicting, changed) (13 percent).
- Using music to affect one's mood; that music becomes a resource (10 percent).

Of the 72 percent reporting positive feelings, these were further delineated as (in part):

- Joy, happiness, bliss (38.8 percent).
- Enjoyment, delight, sweetness, and beauty (27.3 percent).
- Peace, calm, harmony, stillness (11.1 percent).

Interestingly negative feelings included melancholy, unhappiness, and sadness in 8.6 percent of the responses. It is evident from these results that music evokes strong responses, even when a facilitating person (in the form of the therapist) is not present. The purpose of this chapter is to report on receptive music therapy approaches, where the music therapist facilitates some of the experience described above to improve clients' health and well-being.

What are receptive methods in music therapy?

Receptive methods in music therapy include those approaches in which:

... the client listens to music and responds to the experience silently, verbally or in another modality (e.g. art, dance). The music used may be live... or commercial recordings of music literature in various styles (e.g. classical, rock, jazz, country, spiritual, new age). The listening experience may be focused on physical, emotional, intellectual, aesthetic, or spiritual aspects of the music and the client's responses are designed according to the therapeutic purpose of the experience

Bruscia 1998a, pp. 120–121

Bruscia (1998a) goes on to identify clinical goals in receptive music therapy as to:

- 1 Promote receptivity
- 2 Evoke specific body responses
- 3 Stimulate or relax the person
- 4 Develop auditory/motor skills
- 5 Evoke affective states and experiences
- 6 Explore ideas and thoughts of others
- 7 Facilitate memory, reminiscence, and regression
- 8 Evoke imagery and fantasies
- 9 Connect the listener to a community or sociocultural group
- 10 Stimulate peak and spiritual experiences (Bruscia 1998a, p. 121)

Receptive methods are not new to music therapy, although the term “receptive” is relatively new. Previously, methods where the client listened to music (either live or recorded) were referred to as “passive,” however, with the knowledge of current research that indicates extensive involvement of physiological and affective systems of the body when listening to music, it is clear that responses, whether intentional or not, are more than passive.

Music therapists are not the only professionals who choose recorded music or improvise music live to engage clients in receptive experiences. Other professionals, particularly nursing staff in hospitals, also offer music to their patients. Dileo and Bradt (2005) clarify the difference between the use of recorded music by medical personnel and music therapists. They defined “music medicine” as a description for practices in which there are passive music listening interventions of pre-recorded music, implemented by medical personnel, whereas music therapy entails a qualified music therapist implementing an *in-person* treatment intervention using music therapy methods (Dileo and Bradt 2005, p. 9). Further, the interpersonal relationship between the patient and music therapist is maintained throughout the listening experience as the music therapist remains with the patient, however medical personnel generally do not remain with the patient during the listening experience.

There are many types of receptive music therapy approaches (Grocke and Wigram 2007) however this chapter will focus on three:

- Music-assisted relaxation for children and adults in different clinical settings

- Music and imagery
- Guided Imagery and Music (Bonny Method)

Each of these will be outlined according to salient features of the approach, and research that underpins evidence for effectiveness.

Music-assisted relaxation for children and adults

In the early years of the development of music therapy, studies into the effect of music on the physiology of the body were prolific. Research studies from the 1970s and 1980s used sedative and stimulative music selections to measure the effect on physiological systems of the body, particularly heart rate, respiration rate and amplitude, and galvanic skin conductance (see review in Hodges and Sebald 2011, and Krout 2007). Music therapists began to explore the diverse responses of clients to different types of music, and recognized that music that was familiar to the client, and in the preferred style or genre was the most effective (Saperston 1999). Individualized music programs for clients in different contexts were developed—for women in labor (Clark et al. 1981; Hanser and O'Connell 1983), patients experiencing stress (Hanser 1985; Scartelli 1989) and anxiety pre-surgery (Spintge 1999), or in intensive care (Bonny 1983).

Salient features of music-assisted relaxation for children and adults

Music-assisted relaxation is important in a variety of contexts where children and adults may experience stress, including hospitalization, in schools, or in the workplace. In addition, music-assisted relaxation that can be self-administered may be an important way of that people who are experiencing anxiety or pain can be supported.

Principles of music-assisted relaxation

- 1 Context.** A quiet environment is conducive to listening to music, preferably with dimmed lighting and comfortable mat or chair on which to recline.
- 2 Voice quality of the therapist.** Voice quality is crucial to facilitate relaxation in a client/patient. The therapist's voice tone should be warm, the volume soft (but loud enough to be heard), pitch should be mid-range, the dynamics of the spoken voice quite flat, and the pacing in time with client's breath (Grocke and Wigram 2007, p. 62 and p. 92).
- 3 Breath.** A music-assisted relaxation normally begins with suggestions for deepening and slowing the breathing pattern of the client/patient. The therapist may audibly model slower breathing, however too much attention to regulating breathing may increase anxiety for some patients, particularly if he/she suffers from asthma, or has difficulty breathing because of a medical apparatus. Edwards (1999) uses the simple phrase "nice slow breathing" when working with children (p. 73).
- 4 Closed eyes.** Music-assisted relaxation is enhanced if the client/patient can block out visual distractions by closing their eyes. Young children however may not be comfortable closing their eyes, and may prefer to relax with eyes open.
- 5 Relaxation inductions.** A wide variety of relaxation inductions are in use, ranging from short inductions, often based on the client being aware of their breath, to more extended inductions including Progressive Muscle Relaxation (PMR, Jacobsen 1938), autogenic, autogenic with color (Grocke and Wigram 2007 pp. 97–107), mindfulness (Grocke and Van Dort 2013), and others developed by the practitioner.
- 6 Enhancing relaxation with a visualization.** Listening to music in a relaxed state can be assisted by introducing a non-threatening image, such as a favorite place, or a place in nature. Children may enjoy hearing a story as part of the music and relaxation session, whereas for older children making a choice is important as a means of empowering him/her, and they may bring to mind the image of a favorite place. Directed imagery scripts can also be used (see Naparstek 1995; Standley 1991a) and are effective to help children sleep (Grocke and Wigram 2007, pp. 73–76).
- 7 Choice of music.** The most effective music for relaxation is music that is liked by the client/patient. Preference for music is established from early adolescence, and asking the client about the type of music he/she enjoys is important to the effectiveness of the intervention. In a situation where a client/patient is unable to speak, or unable to indicate a choice, music is chosen by the therapist (see further discussion on

therapist-chosen versus research-indicated music, below). Music suitable for relaxation has identifiable features:

- Stable tempo
- Stable or gradual change in: Volume, rhythm, timbre, pitch or harmony
- Consistent texture
- Consonant harmonies, and predictable modulations and cadences
- Predictable melodic line, and repetition
- Predictable structure and form
- Gentle timbre
- Few or gradual changes in dynamics (Wigram et al. (2002)).

Using the parameters outlined above, the therapist may choose instrumental music that matches the elements in tempo and form. Alternatively, music therapists may provide music for relaxation by playing music live. Music that is predictable enables the client/patient to fully relaxed and feel supported by the music and the presence of the therapist. Choice of genre is important, particularly for adolescents, who may prefer soft rock music, or meditative music.

Theoretical frameworks in music-assisted relaxation research

Numerous studies have investigated the effect of music-assisted relaxation for children and adult clients. The intention and benefits include the reduction of pain, fear, anxiety and distress, and enhanced mood, relaxation and positive experience, or a combination of these goals. Common theoretical frameworks that underpin these studies are presented below and include (1) Gate Control Theory (Melzack and Wall 1965; Melzack and Katz 2004), (2) entrainment (Rider 1985), (3) mental escape from the stressful environment (Loewy 1997), and (4) mindfulness (Kabat-Zinn 2005, and Nhat Hanh 1976).

The *Gate Control Theory* of pain (Melzack and Wall 1965) proposes that an auditory stimulus, such as music, acts to divert attention away from the experience of pain, by activating different areas of the brain required for processing auditory information. In a review of research studies of music therapy as procedural support for invasive medical procedures, Ghetti (2012) found that the Gate Control theory was the most commonly mentioned theory in these studies, although Melzack and Katz' (2004) theory of the body-self neuromatrix goes further to address the inter-related areas of the brain that are involved in pain perception and pain behavior. Ghetti (2012) stated that:

Music therapy as procedural support may modify the various cognitive and emotional inputs to the neuromatrix by influencing attention, levels of anxiety, and meaning of the experience, as well as by impacting emotional responses through activation of the limbic system

(p. 30).

In medical settings, *entrainment* (Rider 1985) has been used in the control of anxiety and pain. Initially the level of anxiety/pain is matched in the music, adopting the "iso" principle (meaning "the same") (Altschuler 1948). Gradually the dynamics can be reduced (e.g. slower tempo, gradual lessening of harsh timbres) until the patient's physiological parameters are reduced, thereby enhancing relaxation. Music that meets the features of "sedative" music (above) can induce deeper breathing that in turn controls symptoms of anxiety (rapid, shallow breathing and hypervigilance to stimuli), so that anxiety is reduced.

The reduction of anxiety pre-surgery has also shown reduction in the amount of analgesic used post-surgery (Spintge 1999), and reduced number of complications post-surgery. Other outcome studies have shown effectiveness of music in reducing distress in pediatric patients prior to surgical procedures (Robb et al. 1995), and to regulate breathing (Snyder Cowan 1991), particularly in children who have asthma.

A third perspective in support of providing music in stressful environments, is music listening and relaxation as a means of *mental escape* from the environment (Loewy 1997), to provide opportunities for creative thinking and

fantasy, and to engage the imagination (Snyder Cowan 1991). Visualizations (defined as static images used as a focus for relaxation), imagery scripts, and imagery sequences are used to enhance, deepen and prolong the relaxation (Grocke and Wigram 2007), and to allow the child or adult to mentally leave the stressful environment and imagine a more preferred environment, such as a favorite place (see further discussion in sections below).

Mindfulness.

Intentional and focussed listening to music may enhance a mindful awareness of a person's physical, emotional, esthetic or spiritual life. Nhat Hanh (1976) suggests that mindfulness of the mind requires an attentiveness to observe and recognize feelings and thoughts in the moment. A central feature is to cultivate an attitude of letting go, or non-attachment, to accept what is in the moment without judgment (Kabat-Zinn 2005). While relaxation allows a stilling of the mind, carefully chosen music elongates the sense of being in the moment and allows an individual to be fully present (Grocke and Van Dort 2013).

Research studies

A large body of literature exists on music and relaxation, and the effects on anxiety, fear and pain, including pediatric patients (Nolan 1997); pediatric burns patients (Barker 1991; Bishop et al. 1996; Edwards 2005; Robb et al. 1995); in cardiac rehabilitation (Mandel et al. 2010; Schou 2008); bronchoscopy patients (Metzler and Berman 1991); chemotherapy-induced anxiety (Lin et al. 2011); other medical conditions (Saperston 1999), residential aged care (Short 2007); insomnia in older people (Ziv et al. 2008); and a stressful call center (Smith 2008).

Cochrane reviews on the effect of music interventions on mechanically ventilated patients (Bradt et al. 2010), coronary heart disease (Bradt and Dileo 2009) and cancer patients (Bradt et al. 2011) have all found evidence for music listening in decreasing physiological effects of anxiety, particularly in reducing heart rate and respiration rate.

Different types of relaxation inductions are used in these studies, and in Robb's (2000) study of state-trait anxiety she incorporated music-assisted progressive muscle relaxation (PMR), PMR alone, music listening, and silence as discrete groups. The participants were 60 university students. Although there was no significant difference between the four groups on the Spielberger State-Trait Anxiety Inventory, music-assisted PMR elicited the greatest level of change.

Who chooses the music?

One of the salient features of music-assisted relaxation is the choice of music, and often research studies provide paucity of information about the selection of music, who makes the choice, and the details of performance/recording (Robb et al. 2011; Wigram et al. 2002). This criticism was addressed in a landmark meta-analysis of systematically reviewed studies (Pelletier 2004) where music was used to decrease arousal due to stress. Twenty-two studies were identified as meeting inclusion criteria for meta-analysis. Six techniques were used across these studies including (1) passive listening (with instructions to just listen), (2) Guided Imagery and Music (described below), (3) vibrotactile stimulation via a couch that transmits sound in high density vibration, (4) PMR, (5) autogenic training, and (6) combinations of breathing, PMR, autogenic and/or imagery. A large effect size ($d = +.6711$) was found for music combined with relaxation techniques in reducing arousal. There were differences between the effects of certain relaxation inductions, where verbal suggestion (autogenic) with music had the greatest effect on level of stress. Interesting results were found with regard to the choice of music however. Interventions in which the choice of music was based on evidence in research studies were more effective than music chosen by the participants.

Pelletier (2004) has argued that the findings indicate that participant-preferred music may be too stimulating, rather than relaxing. Furthermore, individual interventions were found to be more effective than group listening interventions. Research-supported music selections for relaxation based music listening incorporate the following musical elements; slow tempo, low pitch, primarily stringed instruments, regular rhythmic patterns, no extreme changes in dynamics and no lyrics.

Music and imagery

Definition of music and imagery and rationale for use

Music and imagery approaches are used when the client/patient listens to music in a relaxed state, and imagery is either scripted or read by the researcher/clinician, or the imagery is spontaneously evoked in response to the music. The client may experience the imagery in silence, or in some methods, may engage with the therapist in dialogue about the imagery being experienced (as in the Bonny Method of Guided Imagery and Music) (Bonny 2002; Bruscia and Grocke 2002). Music and imagery is practiced in groups and with individual clients.

The combination of music and imagery has also been used to ameliorate pain within various clinical applications: In childbirth (Geden et al. 1989), in the control of stress (Rider 1985) in reducing anxiety prior to surgery (Naparstek 1995; Reilly 1996; Robb et al. 1995), and following surgery (Locsin 1981); in debridement procedures with children with severe burn injury (Edwards 1995), in pediatric music therapy (Edwards 1999), and with clients who have post-traumatic stress disorder (Blake 1994).

Imagery is most often understood as visual imagery, such as a scene that can be brought to mind easily (at the seaside, in the mountains, sitting beside a still lake, a favorite pet, or a favorite room at home). Samuels and Samuels (1975) explain that images may be memories that are indelibly imprinted in the brain and can be accessed at times to reduce stress, anxiety, pain, and sleeplessness. Other imagery experiences in adult clients can include somatic imagery (where changes are felt within the body), altered auditory experiences (where the client hears the music in a special way, as in Gabrielsson's study of SEM), abstract imagery (such as geometrical shapes, or colors), symbolic shapes (such as a cross or tunnel), and images of a significant person in the client's life (Grocke 1999, p. 15).

The function of the imagery is similar to that of music: As a distraction from pain, as a focus for the mind, or as a mental escape from a stressful environment. Imagery scripts (Naparstek 1995; Standley 1991b) may direct the imagery for a client/patient, however imagery that is self-evoked allows for special images, memories or persons to appear. Often the image is a memory of a person, place or event that has occurred in the person's life (Grocke 1999). In addition, music that is personally significant has strong associations to events in the person's life, thus imagery and music co-exist in memory.

Music choice

Music to stimulate imagery has different features than music for relaxation. Table 1 lists the distinguishing features of music for relaxation and to stimulate imagery.

Table 1 Comparison of the elements of music for relaxation and imagery.

Music for relaxation	Music for imagery
Tempo is consistent and steady	Tempo may vary
Tempo is slow	Tempo is predominantly slow, but there may be contrasting sections of faster music
Either duple or triple time, as long as it remains consistent	Fluctuations between duple and triple time may stimulate imagery
Melodic line may be predictable, with a rounded shape, and small range of intervals (often in step-wise progression). The phrases of the melody may match the intake and exhale of breath	Melodic line may include leaps and wide intervals. It might be unpredictable in places to stimulate imagery
Harmonic structure is typically tonal and consonant, with predictable sequence of chords, or suspended harmonies that resolve	Harmonic structure may have more variance, sometimes with dissonance
Instrumentation is likely to include strings and woodwinds, and exclude brass and percussion	Instrumentation may include various instruments including brass and percussion, although they are likely to be unobtrusive
Predominantly legato, however some effective music features legato melody line with pizzicato bass line	Combination of legato, staccato/pizzicato, marcato and other forms of stress and emphasis
Few dynamic changes	Larger dynamic changes, but not sudden or frightening
Repetition is a key feature	Repetition is less important—variation is needed to stimulate imagery
Texture likely to be consistent—could be thin or thick texture, but it is mostly consistent	Texture is likely to change from thin to thick
Supportive bass line	Bass line may vary between supportive and not
Predictable in melodic, rhythmic and harmonic features	Less predictable in melodic, rhythmic and harmonic features

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Overview of research on music and imagery

McKinney (1990) researched the effect of listening to a piece of classical music (Vaughan-Williams' *Prelude Rhosymedre*, orchestrated version), on spontaneous imagery. The participants in the study were two groups of college students, 81 in total. One group was given a relaxation induction, then left in silence to create images in their mind, the second group was given a relaxation induction followed by the music, with instructions to allow images to come to mind. The results indicated that music had no effect on the number of senses, types of imagery, vividness of the imagery, activity of the imagery, or percentage of time engaged in imagery. The music condition however significantly increased the intensity of the feelings experienced ($p = .003$).

A key element of the effectiveness of music and imagery as a therapeutic method is the creativity capacity of the participant to create imagery. McKinney and Tims (1995) used the Creative Imagination Scale to assign participants as either high imagers or low imagers. Two different pieces of music were used in the study, and both pieces of music increased the vividness and activity of the imagery for the high imagers, but not for the low imagers, the latter being more likely to experience feelings of relaxation with the music, rather than visual imagery. This study has implications for the use of music and imagery within clinical practice, particularly for hospitalized patients, where additional factors such as medication, tiredness, and levels of pain may impact the production of imagery.

Guided Imagery and Music (Bonny Method)

Guided Imagery and Music (Bonny Method) is a specialized form of receptive music therapy in which the client experiences music-evoked imagery in a deeply relaxed state (an altered state of consciousness), and imagery experiences are relayed verbally to the therapist who engages in dialogue to enhance the listener's experience. Guided Imagery and Music (hereafter GIM) was developed by Dr Helen Bonny in the 1970s (Bonny 1978a,b, 2002), and the method now bears her name. Typically there are four segments to a Bonny Method GIM session:

- 1** A pre-music discussion (often referred to as a prelude), during which the therapist and client discuss issues and concerns for the client, and then determine a focus for the music and imagery component.
- 2** A relaxation induction for the client, who may be lying on a relaxation mat, or in a reclining chair. The relaxation induction is of sufficient length for the client to be deeply relaxed. The focus image, pre-determined in the pre-music discussion, may be given to bridge the relaxation experience to the music.
- 3** The GIM component, comprising a music program chosen by the therapist from a vast array of programs currently available, or spontaneously programmed by the therapist in the moment. Bonny created 18 music programs of 30–45 minutes in length, and additional programs have been developed by GIM practitioners. The music programs may be designed in various ways—a movement of a concerto may be placed alongside a work of a different composer for example. The central tenant of the music program is its contour, and therapeutic intention. Music programs may:
 - Follow an affective contour, comprising an introductory selection of music to stimulate imagery, e.g. a work of an impressionist composer such as Debussy or Ravel; followed by a “deeper” selection in which the music may suggest a deeper emotion, so that a theme from the client's imagery may be explored from different perspectives; and at the end of the music program a more grounded piece of music, such as a work from the Baroque period to bring the client's imagery to a close.
 - Comprise music that includes challenging selections of music, referred to as a “working” program (Bonny 1978b).
 - Be designed to match emotion, such as grieving, affect release (for anger) (Bonny 1978b).
 - Enhance spirituality, such as expanded awareness, peak experience (Bonny 1978b).

While the music is playing, imagery evoked by responses to the music is verbally relayed to the therapist, who makes verbal interventions to facilitate a deepening of the client's experience. Interventions are non-directive, and commonly help the client's narrative, e.g. “what is happening for you now?”, “how does that feel for you?” Interventions are made with an awareness of the music, indeed the music is often referred to as “co-therapist” (Goldberg 1995).

4 As the music program comes to the end, the therapist reduces the number of verbal interventions as a deliberate means to help the client draw the imagery to a close. The closing selection of music also assists with this transition, often having a simple repetitive melodic line that is positive in mood. There is a period of post-music integration, which may include a drawn mandala (a circle is placed in the center of a sheet of paper for reference, and clients are encouraged to draw anything to represent the music and imagery

experience). The therapist then engages the client in a discussion of the session, beginning with the question “what stands out for you from the session?” The therapist does not interpret the imagery, although may suggest the client reflects on the meaning of the imagery.

GIM is practiced with individual clients in a series of sessions. Contraindications for GIM include clients/patients who are not able to benefit from the symbolic nature of the therapy, or those who are confused, or non-verbal, or those who are unable to return from a deeply relaxed state (Summer 1988).

Overview of research studies in GIM

Since the 1990s, studies have provided evidence for the effectiveness of GIM in enhancing health, and reducing symptoms in illness.

One of the first studies, conducted by McKinney et al. (1995), investigated the effect of GIM on levels of depression and beta-endorphin levels in eight healthy subjects, who were randomly assigned to either the experimental condition (GIM) or a wait-list control condition. The participants in the experimental group had a series of six weekly GIM sessions. The Profile of Mood States (POMS) was completed by the participants pre-post the series of GIM sessions, or the waiting period for the control group. Lower scores on depression were found in the experimental group compared to participants in the control condition, however there were no significant differences between the groups on levels of beta-endorphin activity.

A second study targeted levels of stress as measured by cortisol level (McKinney et al. 1997), taken before and after a series of six fortnightly GIM sessions and again at six-week follow-up. Healthy participants ($n = 28$) were randomly assigned into either the experimental condition (six GIM) sessions, or the control group. The control group was wait-listed—they had GIM sessions once the data had been collected. Mood was assessed on the POMS (Profile of Mood States), and blood samples measured cortisol levels. Those in the GIM group showed reduced total mood disturbance, depression, fatigue, and lower cortisol levels, and these indicators were still significantly reduced seven weeks after the end of the study demonstrating the long-term effects of the therapy.

Studies of GIM and patients with psychiatric conditions

A Swedish team of psychiatrists used the Hopkins Symptom Checklist-90 to measure psychiatric status in patients receiving GIM (Wrangsjö and Körlin 1995). Participants were fourteen adults (aged 19–63), 10 of who were rated as healthy and four who had mild to moderate psychiatric disturbance. Participants had a varying number of GIM sessions, depending on the individual's need. At the end of the GIM series participants showed a decrease in psychiatric symptoms (measured by HSCL-90) and interpersonal problems, and a significant increase in the participants' experience of life as more meaningful and coherent (measured by Antonovsky's Sense of Coherence Scale).

In a further study, Körlin and Wrangsjö (2002) grouped 30 participants into two groups based on scores on the Hopkins Symptom Checklist-90: functional ($n = 20$) and dysfunctional ($n = 10$). Following a series of GIM sessions, six of the ten people in the dysfunctional group improved sufficiently to be re-grouped into the functional group. For the total scores ($n = 30$), Körlin and Wrangsjö found significant improvement particularly in areas that are typically hard to treat, such as managing anger. They argued that GIM is effective because it draws on the person's inner resourcefulness to face issues, rather than in verbal therapies where the client relies on the therapist for guidance.

GIM has also been used in treating patients with posttraumatic stress disorder (PTSD) (Blake and Bishop 1994; Maack 2012). In Maack's (2012) mixed methods controlled trial, GIM was compared with Psychodynamic Imaginative Trauma Therapy (PITT). The GIM intervention was adapted for the clients, as is required for those who have been traumatized. There were 34 participants in each group; participants in the GIM condition showed significantly greater improvement in symptoms of complex PTSD, dissociation and quality of life, when compared to PITT, and the control condition. In addition, the improved scores were maintained at follow-up, indicating that the gains in therapy remained stable.

In a qualitative study, group GIM was chosen to activate “restitutional” factors in patients with severe mental illness (Moe 2002; Moe et al. 2000). The GIM intervention was adapted to the patients' presenting psychiatric state and

sessions were directed toward instilling and enhancing resilience.

Medical conditions—hypertension

One of the earliest controlled studies in GIM was conducted by McDonald (1990) who examined the effect of GIM versus verbal therapy on hyper-tension. Participants ($n = 30$, aged 21–75) were assigned to one of three groups: Group 1 received six individual GIM sessions, Group 2 received six verbal therapy sessions, and Group 3 was a control condition. Blood pressure was measured prior to the sessions, weekly throughout the treatment phase, at the end of the therapy session, and again six weeks after the end of the sessions. The mean systolic and diastolic measures were used as data. Those in the GIM condition had significantly lower diastolic as well as systolic blood pressure than those in the other groups. Diastolic blood pressure reduced during the series of GIM sessions, whereas systolic blood pressure (which responds more slowly) reduced in the weeks *after* treatment.

A semiotic study of GIM following complex cardiac surgery

Semiotics is a study of the symbolic meaning of words, and Short et al. (2013) studied the written transcripts of GIM sessions given to six clients who had undergone complex cardiac surgery. She analyzed transcripts of sessions for semiotic meanings. Text from 31 GIM sessions was used in the analysis. Five grand themes emerged: (1) Looking through the frame, (2) feeling the impact, (3) spiraling into the unexpected, (4) sublime plateau, and (5) rehearsing new steps. Short looked for meaning in the words of clients relative to their life story. For example under theme 5, one participant in the imagery tried to unzip the fastener across the chest, a symbolic reference to the metal clips used to hold the rib cage together following cardiac surgery. Another person mentally played a game of golf, imagining the difficulties he might encounter. Findings indicated that semiotic analysis had the capacity to integrate all aspects of the GIM therapeutic session and deliver a depth of experiential meaning relevant to the therapeutic management of clients' post-surgical recovery.

Rheumatoid arthritis

Rheumatoid arthritis is one of the autoimmune diseases that is typically difficult to treat, with fluctuating symptoms, including high levels of pain (Grocke 2003). Jacobi and Eisenberg (2001/2) investigated the efficacy of ten individual GIM sessions on medical measures of 27 participants, including erythrocyte sedimentation rate (ESR, an indicator of disease status), walking speed, joint count and perception of pain intensity, and general psychological status including mood, symptoms of distress/anxiety and "ways of coping." Statistically significant results were found on lower levels of psychological distress, subjective experience of pain, walking speed, and joint count. Disease status was unaffected by GIM, and the authors argued that a longer period of treatment would be required for changes to occur in disease indicators.

Cancer

Two studies have investigated individual GIM sessions for cancer patients. Burns (2001) investigated the effect of GIM on mood (measured on the Profile of Mood States) and quality of life (measured on the QOL-CA scales) of eight cancer patients, 4 in the treatment group, and 4 in the wait-list control. After ten individual GIM sessions participants in the treatment group showed significantly better scores on mood and quality of life, when compared to the group who were waiting. In addition, mood and QOL-CA scores continued to improve after the post-test.

Bonde (2004) studied the effect of GIM on women recovering from breast cancer. Six women received 10 individual GIM sessions and anxiety and depression were measured pre-post on the Hospital Anxiety and Depression Scale (HADS), quality of life (EORTC-QLQ-30), and Antonovsky's Sense of Coherence Scale (SOC). Although there was no control group, results showed significantly reduced anxiety scores from pre-test to follow-up (week 17) for the five of the six women, and there was a large effect size. Depression was reduced for two of the six women but not at a significant level. Scores on the EORTC-QOQ-30 indicated increased level of function and quality of life, and a decrease in symptoms, but not at a significant level. The women in the study were also interviewed about their experiences of the GIM therapy. They reported that the imagery related to global aspects of their life such as self-understanding, and healing experiences (Bonde 2007).

Depression

A phenomenological study (Lin et al. 2010) described pivotal moments and changes in patients with depression. The study conducted in Taiwan interviewed five patients after each received eight GIM sessions. The forty transcripts were analyzed and coded into themes using a phenomenological process. These were: (1) Pushing aside a barrier, (2) gaining new insight, and (3) moving forward. Meaningful moments were coded as releasing mind-body rigidity, awareness and inspiration, acceptance and inner transformation.

Clients on stress leave from work

Beck (2012) adapted the Bonny Method of Guided Imagery and Music in her study of people on stress leave from work. Six modified GIM sessions were provided to 20 participants in a wait-list randomized controlled trial. Questionnaires included scales measuring perceived stress, mood, sleep quality, depression, anxiety, well-being, and a post-traumatic stress disorder (PTSD) scale. In addition, saliva samples were taken at baseline, pre-therapy, post-therapy, and at follow-up. Significant results were found on psychological variables of mood, sleep quality, anxiety, well-being, and physical symptoms, with high effect sizes (0.73–1.37, Cohen's *d*). A significant decrease in cortisol indicated reduced stress (medium effect size: 0.43). Significant results were seen for those participants who were in the early stages of stress leave, compared to those who had longer periods of leave. A qualitative analysis of interview data indicated fourteen themes, including specific imagery relative to the body, renegotiation of traumatic situations with work colleagues and family members leading to greater insight. Body imagery was mostly associated with sensorial effects (gut feelings), pain relief, and awareness of psychological patterns linked to pain.

Modes of consciousness

Bruscia's (1998b) heuristic study of clients living with the AIDS virus began with the clinician author reflecting on the therapeutic process, and through reflexivity, explored modes of consciousness during a GIM session. He delineated different worlds of consciousness that he entered into (as therapist) during a GIM session: The client's world, the therapist's personal world, and the therapist's therapist world. He identified four levels of experiencing (as a therapist):

- 1 A sensory level whereby the therapist senses what is happening for the client through his own body.
- 2 Affectively, where the therapist can identify feelings and emotions that are aroused by what is taking place for the client.
- 3) Reflectively, where the therapist tries to integrate meaning out of the sensory and effective experiences.
- 4) Intuitively, a level of spontaneous response to what is occurring for the client. Bruscia then demonstrated these worlds and levels of experiencing by presenting an extraordinary GIM session in which the client experienced himself being stoned to death. Bruscia's own reflection is captured in these words:

It is very difficult to describe what Tom (the client) and I were experiencing in those last few moments of the man's death. Both of our voices were cracking: Our words fell into the same rhythm and tonality; and our bodies seemed filled with the tension and expectation

(1998b p. 504).

Transpersonal experiences in GIM

Qualitative studies have also explored the depth of meaning in GIM. Lewis (1998–1999) studied the transpersonal matrix, in which she reviewed 128 GIM session transcripts, and categorized the imagery experiences described in the transcripts. Eight themes/categories emerged from the analysis. Transpersonal experiences involved:

- 1 Body changes
- 2 Past life imagery
- 3 Imagery of light and energy
- 4 Deep positive emotion
- 5 Archetypal or spiritual figures appeared in the imagery

6 Insights of wisdom

7 Unitive experience with the world

Lewis then related these to Wilber's (1986) spectrum of consciousness. All categories fell in levels 5–9, with none below 5, indicating all experiences were in the higher realms of consciousness. Lewis also ranked the music programs according to transpersonal experiences of the clients.

Phenomenological studies

Client experiences of music were explored through a phenomenological lens to narrate client's positive and negative experiences with the music in GIM and describe similarities and differences (Abbott 2004). Twelve participants were interviewed (nine female, three male). Four participants had up to 24 GIM sessions, six had 25–49 sessions and two had more than 90 sessions. Negative experiences with music were challenging but were often turning points in their therapy. They occurred when the music was incongruent with their experience, or had an undesirable or uncomfortable effect on them, which they tried to accommodate by using strategies to help. One was to reject the music, another to openly relate it to the imagery. Positive experiences on the other hand were seen as desirable, helpful, or supportive.

Pivotal moments in GIM

Another phenomenological study was Grocke's (1999) exploration of pivotal moments in GIM. Data for this study was derived from:

- 1** Interviews with clients about pivotal moments in their GIM experience.
- 2** Interviews with the therapists about their perceptions of those moments identified by the clients as being pivotal.
- 3** Analyzing the music that underpinned the clients' pivotal moments.

Seven clients volunteered to participate in the study, three male and four female. The leading interview question was: "Looking back over all the GIM sessions you have had, does one stand out for you as being pivotal? The participant was then asked to amplify on that experience—what was it like? Further questions were asked in order to collect descriptions of the experience relative to the research questions. From the seven client interviews, twenty themes emerged. Pivotal moments were (in part):

- 1** Remembered and described in vivid detail.
- 2** They were emotional and embodied experiences.
- 3** They impacted on the person's life.
- 4** Clients had insight into the meaning of the pivotal moment.
- 5** The effect was lasting.
- 6** The therapist's presence, or interventions, or silences were important to the pivotal experience.
- 7** The pivotal experience often followed unpleasant feelings or images which were uncomfortable, unpleasant or horrible.

Two GIM therapists were interviewed about their experience of witnessing the pivotal moments of their clients. From the therapists interviews fourteen themes emerged, and these were (in part):

- The therapists remembered the session identified by their clients as pivotal and also identified other sessions which they thought were pivotal.
- The client's pivotal experience was an emotional experience for the therapist and the therapists anticipated pivotal moments occurring.
- The therapists noted observable changes in the client's body language during a pivotal experience and intentionally intervened to facilitate the pivotal moment, but they were often silent during the precise moment.
- The therapist may intentionally intervene to facilitate a moment which may be pivotal.
- The therapist may feel time is suspended during a pivotal moment.

Using the Structural Model of Musical Analysis (Grocke 1999, 2007) an analysis of the music that underpinned the pivotal moment in GIM across the participants' experience found that the music prolonged the moment or provide momentum for it. Typically, the music was composed in a structured form with repetition of themes. It was predominantly slow in speed, predictable in melodic, harmonic and rhythmic elements, and featured dialogue between instruments.

Music studies

Studies of the effect of music in GIM

Two studies have focused on analyzing the salient features of music in generating imagery. Summer (2009) incorporated a music-centered GIM session using modification to traditional GIM: (1) Repeated selections of music—instead of a music program comprised of different pieces, the music program included repeated hearings of the same piece; and (2) music-centered guiding—instead of verbal interventions that focus primarily on imagery, the interventions focused primarily on the music. Four music therapist participants were able to use this process of deep listening as a means to listen to their internal world. Each participant's music experience was separated into music episodes that showed a successively changing listening attitude and hence, a changed relational capacity towards the music that deepened during the music program. For two participants there was a tendency to approach music listening from an analytical perspective, yet both were able to let go of this perspective to deepen their music listening stance throughout the GIM session.

The effect of music on shifts in imagery

Marr (2000) studied the effect of music on changes and shifts in imagery. She conducted a series of six sessions with four clients and recorded the music and imagery segment. The session in which the music program titled "Grieving" (Keiser Mardis) was used was selected for analysis. Marr wrote the imagery narrative across the score of the music for each of the music selections of the Grieving program, and looked for shifts in imagery related to what was occurring in the music. She used the Structural Model of Musical Analysis (Grocke 1999, 2007) to compare those events and found that imagery was evident when the music showed predictable rhythms, harmonic structure, and long and symmetrical melodic phrasing. In passages with rapid changes in tonality, dynamic range, rhythmic pulse and melodic fragmentation, imagery tended to be sparse with long, silent pauses in imagery reporting. Furthermore, tension and resolution that occurred in the music was matched in the imagery sequences. Images expanded with high pitches and light timbres and texture in the music, while they became embodied with low pitch and descending melodic lines. The use of solo instruments often matched somatic and kinesthetic imagery in specific parts of the body and, when used in dialogue, allowed several aspects of an image to be examined.

EEG studies

Developments in neurobiology and neuroscience have inspired several studies using EEG recording to graph changes in brain wave activity while engaged in GIM. Lem (1995) graphed EEG tracings of 27 participants listening to one selection of GIM music (Pierne's *Concertstücke for Harp and Orchestra*). The participants listened to the music without dialogue, and reported imagery at the conclusion of the music. Lem created an intensity spectrograph of the Pierne's *Concertstücke for Harp and Orchestra*, and provided averages for the graphed brainwave activity of the 27 participants. There were different graphs for posterior and anterior views. He laid these averaged graphs of brain activity across the spectrograph of the music, and explored relationships between the music and brain activity. Brain activity increased during moments of sudden and unexpected changes, such as the very soft harp cadenza towards the end of the piece. Lem explained that this finding has implications for how GIM therapists might guide clients, in particular, that changes in the music may be sufficient to stimulate new imagery and that guiding may interfere with this process.

An ambitious study of neurophenomenology used mixed methods to graph brain wave activity during GIM sessions (with verbal dialogue), and interface these results with qualitative interviews of the clients, using phenomenological analysis. Hunt (2011) adapted the traditional form of verbal interventions used by GIM therapists, instead using

directed interventions representing six types of experience: Affect, Body, Interaction, Kinesthetic, Memories, and Visual, pre-recorded over two different classical musical pieces selected from the GIM repertoire. Four participants demonstrated distinctive reported imagery and brain wave activity, and a comparison across cases showed that: (1) The altered state of consciousness (ASC) involves both physical relaxation and ongoing focus on the imagery experience; (2) imagery generates brain activity in the same regions that would process information from similar real-life experiences; (3) beta and gamma frequencies played a significant role in how participants maintained an ASC and made meaning out of the imagery.

Merging neurobiological advances with psychotherapy is both exciting and challenging as the two paradigms do not seem immediately congruent, however as research into the neuroscience of the brain is directed to music, so too does future research appear the richer. The “discovery” of mirror neurons (Siegel 2007) has offered new ways to think about the was music therapy and GIM work, in that imagery indelibly imprinted on the brain might be used to positively influence coping strategies for those undertaking GIM as a form of psychotherapy.

Implications for the future

One of the major criticisms of receptive music research is that researchers commonly under-report details about the music stimulus. In response to this criticism Robb et al. (2011) have developed guidelines for music-based interventions, and appropriate mechanisms for reporting under the CONSORT and TREND requirements. The list of improvements to reporting music interventions is lengthy, but those that apply to receptive music therapy include: (1) Clearer theoretical conceptualization to substantiate the choice of music interventions, (2) precise details of the music intervention and description of procedures for tailoring the intervention to individual's needs, (3) specifics of who chose the music, and better distinction and clearer rationale for therapist-chosen, and participant-chosen music selections, (4) describing the music's overall structure (i.e. form, elements, instrumental timbre) and details of the recording used (artist, length of the selection), as performances vary in quality, speed, and interpretation, (5) when using recorded music specify playback equipment and placement of headphones/speakers; who controls the volume, and decibel level, and (6) report number of sessions, session duration and session frequency including practice sessions. Adopting this set of recommendations will advance future research in receptive music therapy, and inevitably awaken new areas for collaborative studies.

References

- Abbott, E. (2004). Client experiences with the music in the Bonny Method of Guided Imagery and Music. In: A. Meadows (ed.), *Qualitative Inquiries in Music Therapy*, 2nd edn., pp. 36–61. Gilsum, NH: Barcelona Publishers.
- Altschuler, I.M. (1948). A psychiatrist's experience with music as a therapeutic agent. In: D.M. Schullian and M. Schoen (eds.), *Music and Medicine*, pp. 250–275. Freeport, New York: Books for Libraries Press.
- Barker, L. (1991). The use of music and relaxation techniques to reduce pain of burn patients during daily debridement. In: C. Dileo Maranto (ed.), *Applications of Music in Medicine*, pp. 123–140. Washington: National Association for Music Therapy.
- Beck, B. (2012). Guided Imagery and Music (GIM) with adults on sick leave suffering from work-related stress. A mixed methods experimental study. Doctoral dissertation, Aalborg University: Denmark.
- Bishop, B., Christenberry, A., Robb, S., and Rundenberg, M. (1996). Music therapy and child life interventions with pediatric burn patients. In: M.A. Froehlich (ed.) *Music Therapy with Hospitalised Children*, pp. 87–108. Cherry Hill, NJ: Jeffrey Books.
- Blake, R.L. (1994). Vietnam veterans with post traumatic stress disorder: Findings from a music and imagery project. *Journal of the Association for Music and Imagery* 3: 5–18.
- Blake, R. and Bishop, S. (1994). The Bonny Method of Guided Imagery and Music (GIM) in the treatment of post-traumatic stress disorder (PTSD) with adults in a psychiatric setting. *Music Therapy Perspectives* 12 (2): 125–129.
- Bonde, L-O. (2004). The Bonny Method of Guided Imagery and Music (BMGIM) with cancer survivors. Doctoral

dissertation. Aalborg University: Denmark.

Bonde, L-O. (2007). Imagery, metaphor and perceived outcomes in six cancer survivors' BMGIM therapy. In: A. Meadows (ed.), *Qualitative Inquiries in Music Therapy*, 3rd edn., pp. 132–164, Gilsum, NH: Barcelona Publishers.

Bonny, H.L. (1978a). *Facilitating GIM sessions. GIM Monograph no.1*. Baltimore MD: ICM Books.

Bonny, H.L. (1978b). *The role of taped music programs in the GIM process. GIM Monograph no. 2*. Baltimore MD: ICM Books.

Bonny, H. (1983). Music listening for intensive coronary care units. A pilot project. *Music Therapy* 3: 4–16.

Bonny, H. (2002). *Music Consciousness: The evolution of Guided Imagery and Music*. Gilsum, NH: Barcelona publishers.

Bradt, J. and Dileo, C. (2009). Music for stress and anxiety reduction in coronary heart disease patients. *Cochrane Database of Systematic Reviews* 2009, Issue 2. Art. No. CD006577. doi: 10.1002/14651858.CD006577.pub2.

Bradt, J., Dileo, C., and Grocke, D. (2010). Music interventions for mechanically ventilated patients. *Cochrane Database of Systematic Reviews* 2010, Issue 12. Art. No. CD006902. doi: 10.1002/14651858.CD006902.pub2.

Bradt, J., Dileo C., Grocke, D., and Magill, L. (2011). Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database of Systematic Reviews* 2011, Issue 8 Art No: CD006911. doi: 10.1002/14651858.CD006911.pub2.

Bruscia, K. (1998a). *Defining Music Therapy. Second Edition*. Gilsum, NH: Barcelona Publishers.

Bruscia, K. (ed.) (1998b). *The Dynamics of Music Psychotherapy*. Gilsum, NH: Barcelona Publishers.

Bruscia, K. and Grocke, D. (eds) (2002). *Guided Imagery and Music (GIM): the Bonny Method and beyond*. Gilsum, NH: Barcelona Publishers.

Burns, D.S. (2001). The effect of the Bonny Method of Guided Imagery and Music on the mood and life quality of cancer patients. *Journal of Music Therapy* XXXVIII(1): 51–65.

Clark, M., McCorkle, R., and Williams, S. (1981). Music therapy-assisted labour and delivery. *Journal of Music Therapy* 18: 88–100.

DeNora, T. (2000). *Music in Everyday Life*. Cambridge: Cambridge University Press.

Dileo, C. and Bradt, J. (2005). *Medical Music Therapy: A Meta-analysis and Agenda for Future Research*. Cherry Hill, NJ: Jeffrey Books.

Edwards, J. (1995). "You are singing beautifully": music therapy and the debridement bath. *The Arts in Psychotherapy* 22(1): 53–55.

Edwards, J. (1999). Anxiety management in paediatric music therapy. In: C. Dileo (ed.), *Music Therapy and Medicine: Theoretical and Clinical Applications*, pp. 69–76. Washington: American Music Therapy Association.

Edwards, J. (2005). A reflection on the music therapist's role in developing a program in a children's hospital. *Music Therapy Perspectives* 23: 36–44.

Gabrielsson, A. (2011). Strong experiences with music. In: P.N. Juslin and J.A. Sloboda. *Handbook of Music and Emotion: Theory, Research, Applications*. Oxford: Oxford University Press.

Geden, E.A., Lower, M., Beattie, S., and Beck, N. (1989). Effects of music and imagery on physiologic and self-report of analogue labor pain. *Nursing Research* 38: 37–41.

Ghetti, C. (2012). Music therapy as procedural support for invasive medical procedures: toward the development of music therapy theory. *Nordic Journal of Music Therapy* 21(1): 3–35.

- Goldberg, F. (1995). The Bonny Method of Guided Imagery and Music. In: T. Wigram, B. Saperston, and R. West (eds), *The Art and Science of Music Therapy: a Handbook*, p. 115. Switzerland: Harwood Academic.
- Grocke, D. (1999). A phenomenological study of pivotal moments in Guided Imagery and Music. Doctoral dissertation. The University of Melbourne: Australia. <<http://repository.unimelb.edu.au/10187/461>>.
- Grocke, D. (2003). Healing an inflamed body: the Bonny Method of GIM in treating rheumatoid arthritis. In: S. Hadley (ed.), *Psychodynamic Music Therapy*, pp. 389–401. Gilsum, NH: Barcelona Publishers.
- Grocke, D. (2007). A structural model of music analysis. In: T. Wosch and T. Wigram (eds), *Microanalysis in Music Therapy*, pp. 149–161. London: Jessica Kingsley Publishers.
- Grocke, D. and Van Dort, C. (2013). Music, imagery and mindfulness in substance dependency and personal growth. In: L. Rappaport (ed.), *Mindfulness and Arts Therapies*, pp. 117–128. London: Jessica Kingsley.
- Grocke, D. and Wigram, T. (2007). *Receptive Methods in Music Therapy*. London: Jessica Kingsley Publishers.
- Hanser, S. (1985). Music therapy and stress reduction research. *Journal of Music Therapy* 22 (4): 193–206.
- Hanser, S. and O'Connell, A. (1983). The effect of music on relaxation of expectant mothers during labor. *Journal of Music Therapy*, 29: 50–58.
- Hodges, D.A. and Sebald, D.C. (2011). *Music in the Human Experience*. New York: Routledge.
- Hunt, A. (2011). A neurophenomenological description of the Guided Imagery and Music experience. Doctoral dissertation, Philadelphia: Temple University.
- Jacobi, E. and Eisenberg, J. (2001/2). The efficacy of the Bonny Method of Guided Imagery and Music in the treatment of Rheumatoid Arthritis. *Journal of the Association for Music and Imagery* 8: 57–74.
- Jacobson, E. (1938). *Progressive Relaxation: A Physiological and Clinical Investigation of Muscular States and their Significance in Psychology and Medical Practice*. Chicago, IL: University of Chicago Press.
- Kabat-Zinn, J. (2005). *Coming to our Senses*. New York: Hyperion.
- Körlin, D. and Wrangsjö, B. (2002). Treatment effects of GIM therapy. *Nordic Journal of Music Therapy* 11(1): 3–15.
- Krout, R. (2007). Music listening to facilitate relaxation and promote wellness: Integrated aspects of our neurophysiological response to music. *The Arts in Psychotherapy* 34: 134–141.
- Lem, A. (1995). An integrated profile of brain-wave activity and structural variability of music in the study of music and imagery experiences in vivo. Unpublished Master's thesis, The University of Melbourne.
- Lewis, K. (1998–1999). The Bonny method of guided imagery and music: Matrix for transpersonal experience. *Journal of the Association for Music and Imagery* 6: 63–85.
- Lin, M-F., Hsu, M-C., Chang, H-J., Hsu, Y-Y., Chou M-H., and Crawford, P. (2010). Pivotal moments and changes in the Bonny Method of Guided Imagery and Music for patients with depression. *Journal of Clinical Nursing* 19: 1139–1148.
- Lin, M-F., Hsieh, Y-J., Hsu, Y-Y., Fetzer, S., and Hsu, M-C. (2011). A randomized controlled trial of the effect of music therapy and verbal relaxation in chemotherapy-induced anxiety. *Journal of Clinical Nursing* 20(7/8): 988–999.
- Locsin, R. G. (1981). The effect of music on the pain of selected post-operative patients. *Journal of Advanced Nursing* 6(1): 19–25.
- Loewy, J. (ed.) (1997). *Music Therapy and Pediatric Pain*. Cherry Hill, NJ: Jeffrey Books.
- Maack, C. (2012). Outcomes and processes of the Bonny Method of Guided Imagery and Music (GIM) and its adaptations, and Psychodynamic Imaginative Trauma therapy (PITT) for women with complex PTSD. PhD dissertation, Aalborg University, Denmark.

- Mandel, S.E., Hanser, S.B., and Ryan, J. (2010). Effects of a music-assisted relaxation and imagery compact disc recording on health-related outcomes in cardiac rehabilitation. *Music therapy perspectives* 28(1): 11–21.
- Marr, J. (2000). The effects of music on imagery sequence in the Bonny Method of Guided Imagery and Music (GIM). Unpublished Master's thesis, The University of Melbourne, Australia.
- McDonald, R. (1990). The efficacy of Guided Imagery and Music as a strategy of self-concept and blood pressure change among adults with essential hypertension. Doctoral dissertation, Minneapolis, MN, Walden University.
- McKinney, C. (1990). The effect of music on imagery. *Journal of Music Therapy* 27(101): 34–46.
- McKinney, C.H. and Tims, F.C. (1995). Differential effects of selected classical music on the imagery of high versus low imagers: Two studies. *Journal of Music Therapy* 32(1): 22–45.
- McKinney, C., Antoni, M. H., Kumar, A., and Kumar, M. (1995). The effects of Guided Imagery and Music on depression and beta-endorphin levels in healthy adults: A pilot study. *Journal of the Association for Music and Imagery* 4: 67–78.
- McKinney, C., Antoni, M., Kumar, M., Tims, F., and McCabe, P. (1997). Effects of guided imagery and music (GIM) therapy on mood and cortisol in healthy adults. *Health Psychology* 16(4): 390–400.
- Melzack, R. and Katz, J. (2004). The gate control theory: reaching for the brain. In: T. Hadjistavropoulos and K.D. Craig (eds.), *Pain: Psychological Perspectives*, pp. 13–34. Mahwah, NJ: Lawrence Erlbaum Associates.
- Melzack, R. and Wall, P.D. (1965). Pain mechanisms: A new theory. *Science* 150: 971–979.
- Metzler, R., and Berman, T. (1991). The effects of sedative music on the anxiety of bronchoscopy patients. In C. Maranto (ed.), *Applications of Music in Medicine*, pp. 163–178. Washington, D.C.: The National Association for Music Therapy.
- Moe, T. (2002). Restitutional factors in receptive group music therapy inspired by GIM. *Nordic Journal of Music Therapy* 11(2): 152–166.
- Moe, T., Roesen, A., and Raben, H. (2000). Restitutional factors in group music therapy with psychiatric patients based on a modification of Guided Imagery and Music (GIM). *Nordic Journal of Music Therapy* 9(2): 36–50.
- Naparstek, B. (1995). *Staying Well with Guided Imagery*. London: Thorsons.
- Nhat Hanh, T. (1976). *The Miracle of Mindfulness*. Boston: Beacon Press.
- Nolan, P. (1997). Music therapy in the pediatric pain experience: theory, practice and research at Allegheny University of Health Sciences. In: J. Loewy (ed.) *Music Therapy and Pediatric Pain*, pp. 57–68. Cherry Hill, NJ: Jeffrey Books.
- Pelletier, C. (2004). The effect of music in decreasing arousal due to stress: a meta-analysis. *Journal of Music Therapy* XLI (3): 192–214.
- Reilly, M. (1996). Relaxation, imagery and music as adjunct therapy to narcotic analgesia in the perioperative period. In: R. Rebollo Pratt and R. Spintge (eds), *Music Medicine*, Vol. 2, pp. 206–217. St Louis, MO: MMB.
- Rider, M. (1985). Entrainment mechanisms are involved in pain reduction, muscle relaxation and music-mediated imagery. *Journal of Music Therapy* 22(1): 46–58.
- Robb, S.L. (2000). Music-assisted progressive muscle relaxation, progressive musical relaxation, music listening, and silence. A comparison of relaxation techniques. *Journal of Music Therapy* 37(1): 2–21.
- Robb, S.L., Burns, D.S., and Carpenter, J.S. (2011). Reporting guidelines for music-based interventions. *Journal of Health Psychology* 16(2): 342–352. doi: 10.1177/1359105310374781.
- Robb, S., Nichols, R., Rutan, R., Bishop, B., and Parker, J. (1995). The effects of music assisted relaxation on preoperative anxiety. *Journal of Music Therapy*, XXXII(1): 2–22.

- Samuels M.S. and Samuels N. (1975). *Seeing with the Mind's Eye*. New York: Random House.
- Saperston, B. (1999). Music-based individualised relaxation training in medical settings. In: C. Dileo (ed.), *Music Therapy and Medicine: Theoretical and Clinical Applications*, pp. 41–51. Silver Spring, MD: American Music Therapy Association.
- Scartelli, J. (1989). *Music and Self-management Methods*. St Louis: MMB.
- Schou, K. (2008). Music therapy for post operative cardiac patients: a randomized controlled trial evaluating guided relaxation with music and music listening in anxiety, pain and mood. Doctoral dissertation, University of Aalborg, Denmark.
- Siegel, D. (2007). *The Mindful Brain*. New York: Norton.
- Short, A. (2007). Theme and variations on quietness: relaxation-focussed music and imagery in aged care. *Australian Journal of Music Therapy* 18): 39–61.
- Short, A., Gibb, H., Fildes, J., & Holmes, C. (2013). Exploring the role of music therapy in cardiac rehabilitation after cardiothoracic surgery: a qualitative study using the Bonny method of guided imagery and music. *Journal of Cardiovascular Nursing*, 28(6): E74–E81.
- Smith, M. (2008). The effects of a single music relaxation session on state anxiety levels of adults in a workplace environment. *Australian Journal of Music Therapy* 19: 45–66.
- Spintge, R. (1999). Music Medicine: Applications, standards and definitions. In: R.R. Pratt and D. Grocke (eds.), *MusicMedicine 3: MusicMedicine and Music Therapy: Expanding horizons*, pp. 3–11. Melbourne: Faculty of Music, University of Melbourne.
- Standley, J. (1991a). *Music Techniques in Therapy, Counselling and Special Education*. St Louis: MMB.
- Standley, J. (1991b). The effect of vibrotactile and auditory stimuli on perception of comfort, heart rate and peripheral finger temperature. *Journal of Music Therapy* 28(3): 120–134.
- Summer, L. (1988). *Guided Imagery and Music in the Institutional Setting*. St Louis: MMB.
- Summer, L. (2009). *Client Perspectives on the Music Experience in Music-centered Guided Imagery and Music*. Doctoral dissertation, University of Aalborg, Denmark.
- Snyder Cowan, D. (1991). Music therapy in the surgical arena. *Music Therapy Perspectives* 9(1): 42–45.
- Wigram, T., Pedersen, I., and Bonde, L-O. (2002). *A Comprehensive Guide to Music Therapy*. London: Jessica Kingsley.
- Wilber, K. (1986). The spectrum of development. In: K. Wilber, J. Engler, and D.P Brown (eds), *Transformations of Consciousness*, pp. 65–105. Boston: Shambhala.
- Wrangsjö, B. and Körlin, D. (1995). Guided Imagery and Music (GIM) as a psychotherapeutic method in psychiatry. *Journal of the Association for Music & Imagery* 4: 79–92.
- Ziv, N., Rotem, T., Arnon, Z., and Haimov, I. (2008). The effect of music relaxation versus progressive muscular relaxation on insomnia in older people and their relationship to personality traits. *Journal of Music Therapy* 45(3): pp. 360–380.

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2015

Citation:

GROCKE, D. (2015). Receptive Music Therapy. Edwards, J (Ed.). The Oxford Handbook of Music Therapy, (1), Oxford University Press.

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