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The Impact of Training on Music Therapists' Songwriting Knowledge, Self-efficacy, and Behavior

Tracy G. Richardson
Indiana State University

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VITA

Tracy Richardson

EDUCATION

Indiana State University Doctor of Philosophy, Counselor Education	May 2011
Indiana State University Master of Science, Agency Counseling	May 1999
Saint Mary-of-the-Woods College Bachelor of Science, Music Therapy	May 1988

EMPLOYMENT

Saint Mary-of-the-Woods College, Saint Mary-of-the-Woods, IN Associate Professor and Director of Music Therapy	2001 - Present
Assistant Professor and Director of Music Therapy	1995 - 2001
Charter Hospital, Terre Haute, IN Music Therapist	1988 - 1995

AWARDS

Award of Merit, Spirit of Unification Award and Songwriting Award American Music Therapy Association	2009
Jacob G. and Lydia Gemmer Collicott Memorial Post-Graduate Scholarship Indiana State University School of Graduate Studies	2007 - 2008

COMMUNITY SERVICE

The Maple Center, Terre Haute, IN. Facilitated songwriting sessions for those coping with grief (Creating a Path through Loss)	November 2010
Facilitated songwriting sessions for breast cancer survivors (Celebration of Life)	February 2010
Hospice of the Wabash Valley, Terre Haute, IN. Volunteer for children's grief camp	1999, 2000, 2002

THE IMPACT OF TRAINING ON MUSIC THERAPISTS' SONGWRITING
KNOWLEDGE, SELF-EFFICACY, AND BEHAVIOR

A Dissertation

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by

Tracy G. Richardson

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COMMITTEE MEMBERS

Committee Chair: Debra Leggett, Ph.D.

Assistant Professor of Counseling

Indiana State University

Committee Member: Thomas Johnson, Ph.D.

Professor of Psychology

Indiana State University

Committee Member: Randall Mitchell, D.M.A.

Professor of Music

Indiana State University

ABSTRACT

Songwriting has been used as an effective intervention for persons with a wide range of therapeutic needs. However, a literature search revealed that songwriting is underrepresented in the music therapy research literature, indicating that music therapists may perceive they do not have the abilities to effectively use songwriting interventions in therapy sessions. The purposes of this study were: (a) to investigate the impact of a songwriting training session on the songwriting knowledge, self-efficacy, and behavior of music therapists; (b) to evaluate the songwriting training program; and (c) to explore the impact of the training on perceived barriers and clinical practice. Participants were 32 board-certified music therapists who chose to attend a songwriting training session between November 2009 and April 2010. The 32 participants completed a pre-test, attended a five-hour songwriting training session, and completed a post-test. However, only 17 of the 32 persisted through all phases of the study by submitting the follow-up test six weeks after the training. Results showed a statistically significant increase in songwriting knowledge, self-efficacy, and behavior from pre-test to follow-up. Additionally, change in knowledge was found to predict change in self-efficacy from pre-test to post-test but not from pre-test to follow-up. Participants reported being highly satisfied with the training. Thematic analysis of open-ended questions confirmed the quantitative results, with participants indicating a positive impact of songwriting training on perceived barriers and clinical practice. Implications for clinical practice and recommendations for future research are discussed.

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CHAPTER 1

INTRODUCTION

Music Therapy and Songwriting

Music therapists are trained to use their musical skills and clinical knowledge to involve clients in music experiences that are meant to address therapeutic goals. Bruscia (1998) stated that “in music therapy, the client undergoes the processes of assessment, treatment and evaluation by engaging in various types of music experiences” (p. 113). According to Bruscia, there are four music therapy experiences, or methods, utilized with clients: (a) improvisatory (the extemporaneous creation of music), (b) re-creative (the reproduction of previously composed music), (c) receptive (structured listening followed by client response), and (d) composition (the creation of songs, instrumental pieces, or musical products such as videos). Composition experiences are commonly referred to as songwriting.

Music therapists utilize songwriting experiences with many types of clients to address a wide range of problem areas including: (a) adults with substance abuse issues (Ficken, 1976); (b) adolescents undergoing cancer treatments (Kennelly, 2001); and (c) patients suffering from traumatic brain injuries (Baker, Kennelly, & Tamplin, 2005). Furthermore, researchers have shown the therapeutic effectiveness of songwriting to reduce grief symptoms in children (Hilliard, 2001), to facilitate an in-depth exploration of emotions in adults with depression who

are HIV-seropositive (Cordobés, 1997), and to decrease anxiety in children undergoing bone marrow transplantation (Robb & Ebberts, 2003).

Given that songwriting is (a) one of the four methods of music therapy and (b) an effective therapeutic approach, one might assume that all music therapists utilize songwriting as a clinical intervention. However, Jones' (2006) survey of music therapists' songwriting practices revealed that only 73% of the music therapists in the study reported using original songs (goal-oriented songs written outside of the therapy session) in their practice. Additionally, only 3% of music therapists surveyed stated they used clinical songwriting (songs written during the session with input from clients). Furthermore, a review of peer-reviewed music therapy literature from 1999 to 2008 revealed few publications that include the topic of songwriting or composing in the title or abstract.

One plausible explanation for music therapists' lack of songwriting with clients is that music therapists may not feel confident in their songwriting abilities. Richardson (2008) found that prior to a songwriting training program, over 50% of music therapists in attendance chose "not at all confident" or "somewhat not confident" to describe perceived levels of songwriting confidence. Confidence is defined by Merriam-Webster (2011a) as "faith or belief that one will act in a right, proper, or effective way" ("confidence," para. 2).

Self-Efficacy

The concept of confidence is closely related to that of self-efficacy. Bandura (1994) asserted that "perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 421). He also stated that "people who doubt their capabilities shy away from difficult

tasks which they view as personal threats” (p. 421) and he referred to this occurrence as a lack of self-efficacy. Bandura stated that there are four sources of self-efficacy: mastery experiences (practice), vicarious experiences (watching others), social persuasion (being persuaded that success at a particular skill is possible and then having the situation structured carefully for success), and altering psychological responses (learning to alter the perception of emotional and physical states).

Training

One possible way to increase songwriting self-efficacy in music therapists is through songwriting training. Training programs are common and are useful in many professions according to Kirkpatrick and Kirkpatrick (2007). However, in order to be effective, Kirkpatrick and Kirkpatrick stated a training program must be designed carefully and should be based on the following factors: (a) determine participants’ needs, (b) set objectives, (c) determine schedule, (d) select facilities with necessary amenities, (e) select participants, (f) choose effective instructors, (g) use appropriate techniques, (h) accomplish objectives, (i) satisfy attendees, and (j) evaluate the training program. When increasing participants’ self-efficacy is a desired goal of a training program, the program can be structured to include one or more of Bandura’s (1994) experiences.

Problem Statement and Purposes

Music therapists are trained to use music experiences, such as songwriting, to help clients achieve therapeutic goals. Although songwriting has been shown to be a clinically effective music therapy technique, it appears that it is used less frequently by music therapists than other

types of music experiences. Lack of songwriting self-efficacy is a possible explanation for this phenomenon.

The purposes of this study were: (a) to investigate the impact of a songwriting training session on the songwriting knowledge, self-efficacy, and behavior of music therapists; (b) to evaluate the songwriting training program; and (c) to explore the impact of the training on perceived barriers and clinical practice.

Research Questions

The purpose of this research was to attempt to answer the following questions:

1. Is songwriting knowledge different at pre-training, post-training, and follow-up?
2. Is songwriting self-efficacy different at pre-training, post-training, and follow-up?
3. Is songwriting behavior at pre-training different from songwriting behavior at follow-up?
4. Can change in songwriting self-efficacy be predicted by change in songwriting knowledge?
5. How satisfied with the training were the participants?
6. How did the training impact perceived barriers to songwriting as a clinical intervention?
7. What impact did the training have on clinical practice?

Variables and Hypotheses

The independent variable for this study was observation period (OP). This variable has three levels: pre-training (OP1), post-training (immediately after training; OP2), and follow-up (six weeks after training; OP3). The dependent variables were songwriting knowledge, songwriting self-efficacy, and songwriting behavior.

Several hypotheses, based on the research questions, were generated for this study.

1. Songwriting knowledge differs significantly among observation periods.
2. Songwriting self-efficacy differs significantly among observation periods.
3. Songwriting behavior is significantly different at follow-up as compared to pre-training.
4. Change in songwriting knowledge will predict change in songwriting self-efficacy.
5. Participants will be satisfied with the training.

The last two research questions (numbers 6 and 7) were not amenable to hypotheses. Those open-ended questions were designed to elicit qualitative data for thematic analysis.

Assumptions

This study was based on several assumptions. First it was assumed that music therapists do not utilize songwriting as a clinical intervention as frequently as other types of music experiences (receptive, re-creative, and improvisational). A review of music therapy literature (*Journal of Music Therapy* and *Music Therapy Perspectives*) published in the years 1999 to 2008 revealed fewer than 15 articles with the words *songwriting*, *composing*, or *songs written* in the title or abstract (American Music Therapy Association [AMTA], 2008c).

Second, it was assumed that music therapists avoid the use of songwriting as a clinical intervention due to lack of self-efficacy in songwriting. This assumption was based on the researcher's informal conversations with music therapists on this topic, and on Richardson's (2008) description of music therapists' self-reported lack of songwriting confidence.

Third, it was assumed that this study has relevance to the profession of counseling. Counselors have reported using songwriting techniques with their clients including lyric

discussion and lyric rewriting (Gladding, Newsome, Binkley, & Henderson, 2008), rap therapy (Elligan, 2000), and community songwriting (Denborough, 2002). Counselors who are also songwriters may find it beneficial to receive additional training in songwriting as a creative technique for helping their clients. In addition, counselor educators may find it useful to incorporate songwriting training into a creative/expressive track for those students who have strong music backgrounds.

Definitions

Strategic songwriting, *process songwriting*, and *spot songwriting* are terms used and defined by Brunk (1990) in her book *Songwriting for Music Therapists*. Those definitions were modified slightly for the purposes of this study. The following operational definitions were used in this study.

Strategic songwriting is songwriting that is done outside the therapy session. The song is written entirely by the music therapist, perhaps using words or phrases from previous sessions with the clients. The song is used as a therapeutic intervention to help the clients meet specific goals.

Process songwriting is songwriting that is done during a session with some degree of collaboration between the music therapist and client(s). The song may take more than one session to complete. Both the songwriting process and the end product (the song) are used as therapeutic interventions.

Spot songwriting is writing a song “on the spot” to meet a need that emerges during the therapy session. The song is typically written primarily by the music therapist and is used as a

therapeutic intervention. When the client collaborates in the songwriting process, the songwriting process is a therapeutic intervention as well.

Personal songwriting: writing a song for one's own pleasure or as a creative outlet. The song is not intended to be used as a therapeutic intervention.

Songwriting self-efficacy: beliefs about one's own capability to write songs and to use songwriting as a clinical intervention.

Songwriting knowledge: musical and clinical information needed to initiate songwriting as a clinical intervention.

Songwriting behavior: frequency of a therapist's use of songwriting as a clinical intervention.

CHAPTER 2

LITERATURE REVIEW

Music Therapy

Throughout history, music has been recognized as a powerful force over mental and physical well-being (Davis, Gfeller, & Thaut, 1999). In preliterate cultures, the shaman, or medicine man, used music alongside religion and magic in an attempt to heal the sick. In ancient Greece, music was believed to influence emotion and develop character. During the Renaissance, music “was not only used as a remedy for melancholy, despair, and madness, but also prescribed by physicians as preventive medicine” (p. 18). After World War II, volunteers provided music in Veterans Administration hospitals to boost morale and to assist in the rehabilitation of social skills and physical and emotional functioning. At the same time, music therapy training programs were being developed in some universities and colleges in the United States. In 1950, the first professional organization for music therapy, the National Association for Music Therapy, was formed.

The American Music Therapy Association (AMTA; 2008d) defines music therapy as “an allied health profession in which music is used within a therapeutic relationship to address physical, psychological, cognitive, and social needs of individuals” (para. 2). Music therapists are healthcare professionals who have received training in the foundations of music, clinical

work, and the principles of music therapy (AMTA, 2008a). This training, which follows a specific curriculum approved by the AMTA and the National Association of Schools of Music (NASM), requires 1,200 hours of supervised clinical training. After completing all academic and clinical requirements a trainee must pass a national examination administered by the Certification Board for Music Therapists in order to achieve the credential *Music Therapist-Board Certified* (MT-BC; AMTA, 2008b).

Music therapists are trained to work with clients who have a broad range of presenting issues. The client populations most commonly served by music therapists are those with mental health issues, developmental disabilities, aging and dementia concerns, and medical or surgical problems (AMTA, 2009). Because of the wide range of abilities and needs of these populations, music therapists must understand how to use and adapt a variety of music experiences in a therapeutic manner.

Bruscia (1998) lists four categories, or types, of therapeutic music experiences: improvisatory, re-creative, receptive, and composing. Bruscia defined each type of music experience according to the activity of the client. Improvisatory experiences include those in which “the client makes up music while playing or singing, extemporaneously creating a melody, rhythm, song, or instrumental piece” (p. 116). Re-creative experiences are those in which “the client learns or performs pre-composed vocal or instrumental music or reproduces any kind of musical form presented as a model” (p. 117-118). Receptive methods are those in which “the client listens to music and responds to the experience silently, verbally, or in another modality” (p. 120). In composition experiences, “the therapist helps the client to write songs, lyrics or instrumental pieces, or to create any kind of musical product such as music videos or

audiotapes” (p. 119). In the music therapy literature, compositional experiences are often referred to as “songwriting.”

Songs and Songwriting

Humans have created music since ancient times. However, the way in which cultures have defined music and its function has evolved (Grout, 1980). In ancient Greece, music was thought to be of divine origin and therefore was “an inseparable part of religious ceremonies” (p. 3). Melody and poetry were intertwined, and the terms were “practically synonymous” (p. 7). In the 11th century, many European songs took the form of *chanson de geste* (song of deeds). These songs were written to describe the deeds of national heroes and often were performed by traveling minstrels. Around the same time, the troubadours and trouvères (poet-composers) in France were writing songs that focused unashamedly on love. As Baker and Wigram (2005) state, throughout the centuries “songs have become increasingly important for the precise functions for which they were originally developed—telling stories, reflecting emotions and enhancing worship” (p. 12).

According to Merriam-Webster (2011b), a song is “a short musical composition of words and music” (“song,” para. 3). A songwriter is “a person who composes words or music or both especially for popular songs” (Merriam-Webster, 2011c, para. 1). Although songs and songwriting have existed in many forms throughout history, Baker and Wigram (2005) report that something unique happened in the 1960s when the songwriter became the singer-songwriter. The singer-songwriter displays more “investment and ownership of the song, both in its creation, and the idiosyncratic way the songwriter performs it” (p. 13). The singer-songwriter, in essence, puts pieces of his or her identity into each song. In the same way, therapists can help guide

clients in songwriting interventions aimed at putting important elements of their lives and experiences into song.

Songwriting as a Clinical Intervention

Although songwriting generally is used in many ways and for multiple purposes, when the term appears in music therapy literature it is typically in reference to its therapeutic use. Brunk's (1990) book is an attempt to help music therapists improve their skills as songwriters so they can use songwriting as an effective therapeutic intervention. She defined three types of clinical songwriting: (a) strategic songwriting, (b) process songwriting, and (c) spot songwriting.

Strategic songwriting involves "composing a song ahead of time--for a specific goal and/or client" (Brunk, 1990, p. 3). Typically the music therapist has some information about the client, including therapeutic goals and music preferences, prior to engaging in strategic songwriting. Because the song is written before the session, the therapist has ample time to craft the song into the desired product before using it in therapy.

Process songwriting is "the kind of composition you do with a client or group of clients over one or more sessions" (Brunk, 1990, p. 3). Brunk stated that process songwriting involves collaboration between the therapist and client or clients. The therapist and client work together on all aspects of writing the song, such as lyric creation, chord selection, desired tempo, and song style. Incorporating all of the client's ideas and preferences into a song can be a challenge for the music therapist. Additionally, if the therapist is working with a group the challenge is magnified due to multiple opinions and preferences. However, the processes that occur in group songwriting, such as asserting one's own preferences and negotiating with others, are valuable

therapeutic processes. Due to all the decisions that must be made in process songwriting, a song may take several sessions to complete.

Spot songwriting is “the composing you do ‘on the spot’--usually with a group of people . . .” (Brunk, 1990, p. 3). Spot songwriting involves creating a song extemporaneously to address a client goal, and Brunk states that this can be the most intimidating type of songwriting for the therapist. Spot songwriting can be very difficult in that the therapist must create the song quickly in response to a therapeutic need.

There are multiple kinds of music experiences that are considered variations of therapeutic songwriting. Bruscia (1998) described some of those experiences including: song parodies, lyric writing, composition of “an original song or any part thereof (e.g., lyrics, melody, accompaniment) . . .” (p. 120), and composing instrumental pieces. Bruscia emphasized that the therapist assists the client in the songwriting process and needs to understand the client’s abilities and limitation. The music therapist “takes responsibility for the more technical aspects of the process, and gauges the client’s participation to his/her musical capabilities” (p. 119).

Gladding et al. (2008) described several ways that song lyrics can have therapeutic value when used in therapy. The authors stated that listening to lyrics chosen by the client can help establish rapport between client and therapist, especially if the therapist allows the client to discuss why those lyrics were chosen and how they relate to the client’s situation. The therapist can then encourage the client to find lyrics from other songs that provide a positive suggestion for how to deal with that situation. In addition, the authors discussed the value of having clients rewrite or edit existing lyrics, inserting words and phrases that “convey a different message from the original one. The tune may stay the same, but the words and emotions are changed” (p. 216).

The process of rewriting one's story is one that is common in narrative therapy approaches. Narrative therapy was shaped in part by such fields as family therapy and anthropology (Beels, 2009). Narrative approaches aim to "shift power from the expert professional therapist or teacher toward the beneficiaries of the process" (p. 364) and to help "someone to name, describe, and therefore possess new knowledge" (p. 367). Denborough (2002) described the value of writing songs with communities in the context of narrative therapy. "While I am totally devoted to the written word . . . songs can be sung together in a way that the written word cannot" (para. 5). He provided examples of songs written with an Aboriginal community, with a group of mental health consumers and caregivers, and with a group of people who were HIV positive along with workers in the HIV field. Denborough stated that the song lyrics should be developed from the words of the community, often reflecting a shared trauma or hardship. However, the lyrics should also contain an aspect of hope. "The songs are very deliberately a part of the re-authoring process" (para. 8). He also stated the importance of "de-centred [*sic*] musical practice" (an intentional act by the therapist to keep the focus on the community; para. 11) as well as the particular skills needed in order to facilitate writing songs.

Songwriting has been used as a music therapy intervention to help people with many types of problems. Ficken (1976) discussed several cases in which songwriting was used as an effective method in a psychiatric setting. In one example, clients were guided through the development of a theme song in order to facilitate the group process. In another, the therapist helped a group of clients in an alcohol treatment program write and record a song that reflected their experiences with the consequences of their alcoholism.

Songwriting has been used to help those who have academic challenges. Gfeller (1987) described the benefits of combining songwriting with the language experience approach (LEA) to help clients who have difficulties with reading and language. The LEA “is based on the assumption that children can learn to read by using natural language patterns and vocabulary” (p. 29). Thus the LEA utilizes clients’ own experiences as the basis for stories which are then printed and used to teach reading and writing skills. Some clients who might benefit from such an approach are academically disadvantaged students, bilingual students, students with learning disabilities, and students with hearing impairments. Gfeller provided a step-by-step guide for incorporating songwriting and the LEA, which includes collaboration between the music therapist and the group in making decisions about the evolving song. Gfeller gave two warnings to the music therapist guiding the session: one, the primary goal must be language development and therefore more complex melodies, rhythms, or forms may have to be abandoned if they detract from the language skills being targeted, and two, the melodies, harmonies, and rhythms chosen must match the clients’ cognitive and language development skills as well as the cultural context.

Krout (2005) discussed the value of using songwriting in grief work with teenagers, using therapist-created songs to provide a “springboard for verbal sharing and processing” (p. 213). He stated that, in general, music therapists try “to create songs that are musically motivating and interesting to clients, as well as being clinically sound and appropriate to their needs” (p. 206). He then outlined a ten-step strategic songwriting process designed to assist the therapist in songwriting. In addition he provided an example of such a song he wrote for bereaved adolescents.

Several researchers have conducted empirical studies to investigate the effectiveness of songwriting. Hilliard (2001) discovered that children who participated in eight music therapy sessions, which included songwriting, experienced a decrease in depression. Additionally, Cordobés (1997) found that songwriting was effective in promoting an in-depth exploration of emotions in HIV-seropositive adults. In another example, Robb and Ebberts (2003) investigated the effect of songwriting and digital video production on hospitalized children undergoing bone marrow transplantation. They discovered that anxiety decreased in those who participated in songwriting.

Writing a song with clients can be a daunting task. There are many decisions the therapist must make, including:

1. How much do I do, and how much do the clients do?
2. Do we create an entire song or use an existing melody?
3. To what style of music will the clients respond?
4. Do I have the accompaniment skills to facilitate this type of song?

Several authors have written articles to help therapists with these decisions. One such author, Schmidt (1983), listed several specific suggestions for approaching songwriting with clients. For lyric writing she offered “fill in the blank” techniques, song collage, parodies, question and answer, and poetry writing. For creating musical setting and melody, she thought that clients should be allowed to experiment with instrumental and vocal activities. Clients can also be encouraged to use vocal improvisation to find melodies they like. In choosing a form, Schmidt suggested that predetermined forms, such as the 12-bar blues, can “facilitate creative songwriting efforts by providing a focus and direction for self-expression” (p. 6). Most importantly,

however, the author emphasized that the therapist must remember that clients can be very vulnerable in this creative process.

Edgerton (1990) provided a review of published clinical songwriting procedures as well as an outline of her own approach to songwriting with clients. In her review of songwriting procedures, Edgerton discovered that lyric writing was given priority over other components and that “overall composition is usually of peripheral importance to the procedures” (p. 15). She also described studies in which clients composed music by starting with improvisation. In her songwriting approach, called *Creative Group Songwriting*, she outlined a procedure that includes the following steps: (a) lyric analysis and interpretation, (b) music analysis, (c) theme and style selection, (d) lyric writing, (e) music composition, and (f) culmination. She reported using this procedure with emotionally impaired adolescents and that the benefits included group cohesion, self-expression, problem-solving skills, and developing concern for others.

Farnan (1987) outlined songwriting procedures that she used with both individuals and groups with developmental disabilities. She emphasized the importance of creating individualized music for clients. She stated that music therapists need to tap into their own sources of creativity in order to address specific client needs and that composing is one way to do so. Farnan provided examples to illustrate both group and individual songwriting procedures and stated these procedures have been used successfully by several music therapists and interns.

Although songwriting has been found to be an effective clinical intervention, little has been written about the songwriting practices of music therapists. Jones (2006) surveyed music therapists in order to learn about their original songwriting practices. For the purposes of her study, Jones defined an original song in the following manner:

An original song is a song written outside of the therapy session by the music therapist for addressing client goals during music therapy. A song using original lyrics piggybacked to an existing melody is considered an original song in the survey if more than 50% of the original lyrics have been changed. (p. 98)

Jones excluded songs which were written during the session with clients and referred to that process as *clinical songwriting*. She found that 73% of music therapists reported that they use original songs in sessions with clients, yet only 3% used clinical songwriting.

Jones (2006) also reported that several factors played a role in a music therapist's use of original songs, including the population served, age of clients, years as a music therapist, and years working with the specific population. The most original songs were used with the school-aged and developmentally disabled populations. Sixty percent of music therapists reported using originals songs with children and adolescents and 69% of those who did not use original songs stated they worked with adults. In addition, 42% of those who used original songs in clinical work reported being in practice no more than five years. These findings suggest that the decision to use original songs in music therapy is influenced by the client population and the number of years the music therapist has been practicing.

Other helping professionals, such as counselors, who possess certain music skills and interest may be inclined to use songwriting and other music-based techniques as therapeutic interventions. Elligan (2000) reported using *rap therapy* with young African-American men. In rap therapy, the therapist builds an alliance with the client by listening to raps chosen or written by the client. The therapist then helps the client learn about different genres of rap which promotes cognitive restructuring. The therapist must then "model and reinforce styles of rap that

are consistent with the treatment plan” (pp. 31-32). For this reason, Elligan stated, “Unlike other forms of therapy that focus on a particular treatment being clinically indicated for the client, Rap Therapy must be clinically indicated for both the client and therapist” (p. 30).

Songwriting has been used successfully with persons of diverse age and problem areas and with individuals as well as groups. However, some professional helpers may avoid the use of songwriting because of a lack of songwriting self-efficacy.

Self-Efficacy Theory

Along with his social learning theory, which emphasized the importance of observing and imitating others in the learning process (Bandura, 1977; Crain, 1992), Bandura developed a theory of self-efficacy. Bandura (1994) defined self-efficacy as “people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (p. 421). Songwriting self-efficacy is the belief about one's own capability to write songs and, in cases where songwriting is used in the therapy process, to use songwriting as a clinical intervention. In his theory of self-efficacy, Bandura described the sources of self-efficacy, psychological processes influenced by self-efficacy, and the adaptive benefits of self-efficacy.

Bandura (1994) described four sources of self-efficacy beliefs: (a) mastery experiences, (b) vicarious experiences, (c) social persuasion, and (d) alteration of the interpretation of emotional and physical states. Mastery experiences allow the person to experience success and overcome obstacles. However, self-efficacy is not developed by quick or easy success experiences but by sustained effort. Barnes (2004) stated that “Engaging in counseling with either real clients or through role playing may dramatically enhance a trainee's CSE [counseling

self-efficacy] if the trainee views the experience as successful” (p. 56). Vicarious experiences are those that involve the observation of a particular skill. Bandura asserted that people develop self-efficacy when they see someone with similar qualities succeed at that skill. In the training of professional helpers, such as music therapists or counselors, this could be achieved by the trainee observing an experienced clinician as they engage in the helping process with clients. Another way to develop self-efficacy is through social persuasion. Social persuasion occurs when a person is persuaded by another that success at a particular skill is possible. However, it is important for the helper to structure the situation carefully so that the person being helped does not experience multiple failures and frustrations. Barnes stated that effective counseling supervisors provide social persuasion when they give “positive corrective feedback for trainees who are engaged in difficult counseling situations” (p. 59). Finally, self-efficacy can be increased by teaching a person to change how physical and emotional states are interpreted. For example, physical arousal can be interpreted as a sign of being stressed or anxious. However, the person experiencing arousal can be taught that arousal can also function as an energizer to help one perform some task. In addition, Barnes points out that counselor trainees can be taught methods to lower anxiety that may arise prior to engaging in counseling sessions.

Bandura (1994) stated that self-efficacy has an important role in influencing and regulating cognitive, motivational, affective, and selection processes. Cognitive processes, such as planning, goal-setting, analyzing, and rehearsal, are influenced by self-efficacy. A person who has successfully conquered academic challenges, and therefore thinks academic achievement is likely, contemplates greater academic challenges than a person who does not have high academic self-efficacy. Motivational processes are linked to cognitive processes; our

actions are guided by forethought. Bandura stated “Self-efficacy beliefs contribute to motivation in several ways: They determine the goals people set for themselves; how much effort they expend; how long they persevere in the face of difficulties; and their resilience to failures” (pp. 423-424). In addition, Bandura stated that affective processes, such as anxiety and depression, are influenced by self-efficacy beliefs and cognitive processes; the ability to reduce anxiety and avoidant behavior is related to beliefs about ability to cope and to control thoughts. Finally, Bandura asserted that selection processes, or choices, are regulated by self-efficacy. Therefore, the choices we make in life, such as career paths, are greatly influenced by how efficacious we feel in that area and in turn shape our lives.

Larson (1998) connected these psychological processes to the profession of counseling. Larson stated that “SCT [social cognitive theory] explains how learning complex actions like counseling occurs. Self-efficacy beliefs, along with the intervening cognitive, affective, and motivational processes, serve as the causal link between knowing what to do and executing the action” (p. 221).

There are several adaptive benefits that accompany self-efficacy. One benefit is that of endurance or resilience. Bandura (1994) asserted that when faced with adversities and frustrations “people with a high sense of efficacy have the staying power to endure the obstacles and setbacks that characterize difficult undertakings” (p. 426). Another benefit is that persons with high self-efficacy often overestimate their abilities. This as a positive trait because if people attempted to do only those things they knew they could do they would never attempt more difficult tasks. Finally, a benefit of self-efficacy is achievement. Bandura provided several

examples of great achievers in art, music, technology, literature and other fields who succeeded only after many failures or rejections, displaying a strong sense of resiliency.

Self-efficacy is at the core of becoming an effective professional helper. Music therapists and counselors develop self-efficacy and competency by engaging in clinical and educational experiences provided within their respective training programs. However, it is important for professional helpers to be aware of the areas in which they need to improve and new areas in which they desire to become competent. One way to develop self-efficacy and competence in a particular area of practice is by engaging in a well-designed training program.

Training Programs

Training programs are used by many types of businesses to help employees learn or improve knowledge, skills, attitudes, or behaviors valued by those businesses. In many human service professions such as music therapy, counseling, and speech language pathology, professionals are required to successfully complete ongoing, periodic training (Certification Board for Music Therapists, 2009b; Indiana Professional Licensing Agency, 2009a/b). The trainings are often referred to as *continuing education requirements*, implying that professionals are expected to continue learning material that will help in the performance of their jobs. The Certification Board for Music Therapists (CBMT; 2009a) stated that music therapists “must fulfill requirements for recertification to assure continued competence in music therapy” (para. 1). The CBMT requires that music therapists obtain 100 continuing music therapy education (CMTE) credits every five years or pass the CBMT examination in the fourth year of their five-year cycle.

It should not be assumed, however, that all training programs are successful in increasing or changing participants' knowledge, skills, behavior, or attitudes. Kirkpatrick and Kirkpatrick (2007) stated a training program must be designed carefully with attention given to the following: (a) determine participants' needs, (b) set objectives, (c) determine schedule, (d) select facilities with necessary amenities, (e) select participants, (f) choose effective instructors, (g) use appropriate techniques, (h) accomplish objectives, (i) satisfy attendees, and (j) evaluate the training program. In addition, Kirkpatrick (1998) developed a four-level process for evaluating training programs in which "the four levels represent a sequence of ways to evaluate programs. Each level is important and has an impact on the next level" (p. 19). The four-level process consists of the following: (a) reaction, (b) learning, (c) behavior, and (d) results.

Evaluation at the first level, reaction, consists of a "measure of customer satisfaction" (Kirkpatrick, 1998, p. 19). The evaluator is concerned with understanding participants' reactions to the training. Kirkpatrick stated that evaluating reaction is important because it: (a) gives the trainer information that can be used to improve future trainings, (b) communicates to participants that the trainer wants to know what aspects of the training were effective, (c) provides information for those who are interested in the program, and (d) gives the trainer "quantitative information that can be used to establish standards of performance for future programs" (p. 25).

Evaluating learning is the second level in Kirkpatrick's (1998) model. Kirkpatrick reported that learning is "the extent to which participants change attitudes, improve knowledge, and/or increase skill as a result of attending the program" (p. 20). Learning is important to evaluate because

no change in behavior can be expected unless one or more of these learning objectives have been accomplished. Moreover, if we were to measure behavior change (level 3) and not learning and if we found no change in behavior, the likely conclusion is that no learning took place. This conclusion may be very erroneous. (Kirkpatrick, 1998, p. 39)

The third level, evaluating behavior, is defined by Kirkpatrick (1998) as “the extent to which change in behavior has occurred because the participant attended the training program” (p. 20). Although many trainers may want to evaluate changes in behavior immediately after a training program, Kirkpatrick stated that may not be the optimum time. The trainee has to have an opportunity to apply what was learned. Thus, the difficulty for the trainer is to decide “when to evaluate, how often to evaluate, and how to evaluate” (p. 49).

The fourth level, results, refers to the “final results that occurred because the participants attended the program” (Kirkpatrick, 1998, p. 23). Kirkpatrick stated this is perhaps the most difficult yet most important aspect of evaluating a training program. One difficulty lies in determining when to evaluate results as the trainer must consider how long it will take for results to become evident. Kirkpatrick suggested evaluating results more than once.

Summary

Although songwriting has been shown an effective therapeutic intervention with clients, music therapists do not appear to use it as frequently as other types of music therapy methods. One plausible reason is that many music therapists may not have a strong sense of songwriting self-efficacy. Thus, music therapists may benefit from a carefully-designed songwriting training session that is intended to improve songwriting knowledge and self-efficacy and to increase songwriting behavior. Such a program, as is the case with all training programs, should be

evaluated to determine effectiveness of the training. The purposes of this study are: (a) to investigate the impact of a songwriting training session on the songwriting knowledge, self-efficacy, and behavior of music therapists; (b) to evaluate the songwriting training program; and (c) to explore the impact of the training on perceived barriers and clinical practice.

CHAPTER 3

METHODS

Philosophical Foundation

Every human being is influenced by a particular worldview or paradigm (Creswell & Plano Clark, 2007). One's worldview is shaped by personal experiences and culture, among other factors, and impacts how one lives and the choices that are made. These authors state that "all research needs a foundation for its inquiry, and inquirers need to be aware of the implicit worldviews they bring to their studies" (p. 21). The four worldviews used in research, according to Creswell and Plano Clark, are postpositivism, constructivism, advocacy and participatory, and pragmatism. The following study was shaped by a worldview of pragmatism.

Research that is guided by pragmatism is focused on the importance of the research problem and questions rather than the methods used (Creswell & Plano Clark, 2007). The philosophy of pragmatism allows the researcher to use multiple methods, and to combine both deductive and inductive thinking. Creswell (2003) states that "pragmatism is not committed to any one system of philosophy and reality" (p. 12). The researcher acknowledges the existence of "singular and multiple realities" (Creswell & Plano Clark, 2007, p. 24), meaning some research questions may be amenable to tests of absolute truth, such as hypothesis testing, while others are not. Researchers operating from this point of view tend to collect both quantitative and

qualitative data, and attempt to include both biased and unbiased perspectives. They often use a writing style that reflects both formal and informal styles. Because pragmatism allows multiple approaches and values “both objective and subjective knowledge” (Creswell & Plano Clark, 2007, p. 26) it is well-suited as a worldview to guide mixed methods research.

Mixed Methods Research

Mixed methods research emerged in the 1950s as researchers began to explore and debate if it was possible to collect both quantitative and qualitative data (Creswell & Plano Clark, 2007). After many years of argument and debate, mixed methods research is beginning to experience wide-spread acceptance among researchers; Johnson and Onwuegbuzie (2004) refer to it as the “third research paradigm in educational research” (p. 14) and state that they “hope the field will move beyond quantitative versus qualitative research arguments because, as recognized by mixed methods research, *both* quantitative and qualitative research are important and useful” (p. 15).

Current Study Design

Creswell and Plano Clark (2007) describe four types of mixed methods designs: Triangulation, Embedded, Explanatory, and Exploratory. This study is a Triangulation Design. The Triangulation Design is used when the researcher desires to combine the strengths of both quantitative and qualitative methods, and wants to “compare and contrast quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data” (p. 62). The Triangulation Design allows all data to be collected within one phase of the study and equal weight is given to each type of data. In addition, a particular type of Triangulation Design, the *convergence model* (Creswell & Plano Clark, 2007), was utilized for

this study. In this model, “the researcher collects and analyzes quantitative and qualitative data separately on the same phenomenon and then the different results are converged (by comparing and contrasting the different results) during the interpretation” (p. 64).

Johnson and Onwuegbuzie (2004) provide further detail regarding types of mixed method research designs. They distinguish between a *mixed-method* design, in which there is a quantitative phase and a qualitative phase, and a *mixed-model* design, which allows the researcher to use “qualitative and quantitative approaches within or across the stages of the research process” (p. 20).

The current study was conducted utilizing a within-stage, mixed-model, repeated-measures (time-series), quasi-experimental design. For the purposes of this study, the mixed-model design was important to record both changes that were easily quantifiable (i.e., self-efficacy scores) and those that required some explanation (i.e., impact on practice). In addition, the convergence model of the Triangulation Design was followed so that both quantitative and qualitative results could be compared. Heppner, Wampold, and Kivlighan (2008) state that the time-series design allows for “multiple observations over time and the introduction of a treatment at a specified point in time” (p. 180). This design is also considered quasi-experimental as random assignment was not utilized. According to Heppner et al. “Quasi-experimental designs, like true experimental designs, involve the manipulation of one or more in-dependent [*sic*] variables, but not the random assignment of participants to con-ditions[*sic*]” (p. 176). No control group was utilized in this study because of potential hardships for participants; they may have decided to attend a conference a day early specifically for a songwriting training session

and would be upset if told they would have to wait until a later date to receive the training. Random assignment was not possible due to the exclusion of a control group from this design.

Data were collected in the form of a questionnaire containing both quantitative and qualitative items and were collected before a songwriting training session, immediately after the session, and six weeks after the session. The independent variable was *observation period*, and the dependent variables were *songwriting knowledge*, *songwriting behavior*, and *songwriting self-efficacy*. Observation period had three levels: pre-training (OP1), post-training (OP2), and follow-up (OP3). The qualitative portion of the questionnaire consisted of several open-ended questions meant to elicit information regarding: (a) what participants viewed as barriers to the use of songwriting as a clinical intervention; (b) how those perceived barriers changed after training; and (c) what impact the training had on clinical practice.

Informed Consent

Prior to recruiting participants, the researcher submitted an application to the Institutional Review Board (IRB) of Indiana State University. The IRB determined this study was exempt from IRB oversight. This statement was included on the Consent to Participate in Research form (see Appendix D) which was completed by each participant.

The Consent to Participate in Research form contained information regarding the purpose of the study, the procedures, the anticipated risks and benefits, and the voluntary nature of participation. Participants were assured (a) of confidentiality regarding their individual data, (b) that information obtained in connection with this study and that could be identified with the individual would remain confidential, and (c) that such information would be disclosed only with the individual's permission or as required by law.

Participants

The population for this study consisted of board-certified music therapists (MT-BCs). The number of MT-BCs is estimated to be over 5,000 (CBMT, 2009a). Board-certified music therapists (a) reside predominantly (95%) in the United States (AMTA, 2009), (b) hold at least a bachelor's degree, (c) have passed a national board certification examination, and (d) must obtain additional training or retake the certification examination every five years.

The sample was identified through purposive sampling. Participants were MT-BCs who chose to attend a songwriting training session at a national, regional, or state music therapy conference from November 2009 through April 2010. The researcher attended those conferences for the express purpose of acquiring a sample of music therapists. The total number of participants in the sample was anticipated to be over 100; it was expected, though, that not all participants would complete all three phases of the study by submitting the six-week follow-up questionnaire. It was predicted that about 50% would persist until the six-week follow-up with the goal of obtaining complete data from approximately 50 participants. However, the total number of participants who consented to participate in the study was 32, all of whom completed the pre-test and post-test. Only 17 of the 32 persisted through all phases of the study by completing the follow-up test.

Questions regarding demographic information were included on the pre-test only and were open-ended as opposed to forced-choice questions. Demographic information was gathered from 32 participants. Participants were asked to report age, number of years in the field (see Table 1), primary population served, and highest degree completed.

Table 1

Description of Sample: Age and Number of Years in Field

Characteristics	Range	<i>M</i>	<i>SD</i>
Age (in years)	24.0 - 65.0	42.28	14.14
Number of years in field	0.5 - 36.0	11.14	10.76

N = 32

Most participants indicated that the *highest degree completed* was a bachelor's degree (*n* = 25). Four participants reported a master's degree and two reported a doctoral degree as the highest degree completed. One participant gave no response.

Although participants were asked to list the *primary population* with which they worked, most participants listed more than one population. In an effort to accurately portray the populations with which the participants worked, all responses were counted, and the number of responses therefore exceeded the number of participants. Some participants included an age descriptor along with the population or diagnosis (e.g., children with autism), while others did not. In those cases where an age descriptor was included, both age and population or diagnosis were counted as populations. The researcher determined that the categories displayed in the *AMTA Member Sourcebook* (AMTA, 2009) would be used to categorize participants' responses. Responses that did not exactly match categories from the *AMTA Member Sourcebook* were recoded to fit existing AMTA categories based on the researcher's professional judgment: "children" was recoded as "school age population"; "special education" was recoded as "developmentally disabled" and "school age population"; and "emotionally handicapped" was recoded as "mental health" and "emotionally disturbed." A category labeled *other* was created to capture populations that were listed by only one participant. The other category included

populations such as forensic, deaf, and survivors of domestic violence. The populations reported most frequently were developmentally disabled clients ($n = 15$), followed by school age population ($n = 10$), and mental health ($n = 6$; see Table 2). Ten of the 32 participants reported they worked with: (a) school age population or children, and (b) developmentally disabled, persons with Autism, or special education.

Table 2

Primary Populations with which Participants Reported Working

Population	$n = 52^a$
Alzheimer's/Dementia	2
Autism Spectrum Disorders	4
Developmentally Disabled	15
Elderly Persons	3
Medical/Surgical	3
Mental Health	6
School Age Population	10
Terminally Ill	3
Other	6

^aMost participants reported working with more than one population. All responses were counted; therefore the number of responses exceeds the number of participants. Category names listed above are the same categories used in the *AMTA Member Sourcebook* (AMTA, 2009).

Participants' responses were recoded, if necessary, to match the above categories.

Note. The category of *Other* includes those populations reported by only one participant each. Populations included deaf, forensic, survivors of domestic violence, students, emotionally handicapped, and preschool.

Materials and Instruments

The songwriting training program used in this study was a refined version of an existing songwriting training program developed by the researcher. In order to be effective, Kirkpatrick and Kirkpatrick (2007) stated a training program must be designed carefully with attention given to the following: (a) determine participants' needs, (b) set objectives, (c) determine schedule, (d) select facilities with necessary amenities, (e) select participants, (f) choose effective instructors, (g) use appropriate techniques, (h) accomplish objectives, (i) satisfy attendees, and (j) evaluate the training program. The songwriting training program developed for this study was reviewed and revised using Kirkpatrick and Kirkpatrick's recommendations.

Materials required to conduct the songwriting training included handouts for participants, a laptop with a PowerPoint presentation, projector, screen, a room with ample physical space for small group work, and several musical instruments. The musical instruments included two keyboards with stands and pedals and at least four acoustic guitars with straps, picks, and stands. The researcher provided all materials except the musical instruments, physical space, screen, and projector.

The measurement instruments used in this study were researcher-designed. Schuh and Upcraft (2001) state that several reasons support the use of researcher-designed instruments, including purpose of the study and match between instrument and purpose. If the purpose of the study is to understand a particular group, and no existing instrument can be used to gather the specific information needed, a researcher-designed instrument is appropriate.

The two-page researcher-designed pre-test (see Appendix A) consisted of the following components:

1. A multiple choice examination consisting of eight questions designed to measure songwriting knowledge. Each item had three or four possible answers, with only one answer being correct. The range of possible scores on this instrument was zero to eight; the higher the score, the higher the level of songwriting knowledge.
2. Five items measuring degree of songwriting self-efficacy. Each item utilized a 10-point Likert scale that measured degree of songwriting self-efficacy. The range of scores on each item was from 1 to 10, for a total score ranging from 5 to 50. Higher scores indicated higher levels of songwriting self-efficacy.
3. One open-ended question regarding perceived barriers to the use of songwriting as a clinical intervention. Participants were free to write anything regarding perceived barriers.
4. One forced-choice question regarding songwriting frequency. Participants were asked to circle the choice that best described how many times they had used songwriting as a clinical intervention in the past six weeks. The choices provided were 0, 1-3, 4-6, 7-9, 10-2, and 13+.
5. Demographic data (age, number of years as a music therapist, primary population served, and highest degree completed).

The post-test (see Appendix B) was given after the conclusion of the training session and included the following components:

1. The eight-item songwriting knowledge test (identical to pre-test version).
2. The five-item songwriting self-efficacy measure (identical to pre-test version).

3. Nineteen questions measuring degree of satisfaction with the training program. Each item was rated on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The range of scores for any given participant was 19 to 95. Higher scores indicated higher satisfaction with the songwriting training program.

4. An open-ended question regarding any change in perceived barriers to the use of songwriting as a clinical intervention.

The follow-up test (see Appendix C) was sent to participants six weeks after the training session and consisted of the following:

1. The eight-item songwriting knowledge test (identical to pre-test version).
2. The five-item songwriting self-efficacy measure (identical to pre-test version).
3. One forced-choice question regarding songwriting frequency (identical to pre-test version).
4. An open-ended question regarding any change in perceived barriers to the use of songwriting as a clinical intervention.
5. An open-ended question regarding how the training impacted clinical practice.

Although the instruments do not have published analyses of the reliability and validity, several assumptions can be made. The instruments are assumed to have construct-related validity in that the variables have been defined, the hypotheses have been formed concerning how participants may respond, and the researcher planned to test the hypotheses (Fraenkel & Wallen, 2000). No existing definitions for the dependent variables (songwriting knowledge, songwriting self-efficacy, and songwriting behavior) could be located in the literature. Therefore the researcher used related definitions from the literature (e.g., self-efficacy) and clinical

experience to create operational definitions for this study. The definitions as well as the measurement tools were pilot tested with a small group of content experts (MT-BCs) prior to the initiation of the study. The questions relating to self-efficacy and barriers are assumed to have content-related evidence of validity. Those items were given to a group of 18 content experts in March 2009 and were refined based on feedback.

A few potential threats to validity may be present in this study. In the case of internal validity, a testing effect may exist because participants were asked the same questions two or three times. In addition, because the study spanned a six-week period, a history effect may be present; scores on the dependent variables may have been impacted by some event that took place between the posttest and follow-up periods.

Procedures

From April 2009 to December 2009, the researcher contacted several state, regional, and national music therapy organizations by phone and/or email to request permission to present a five-hour songwriting training session at the upcoming conferences. The appropriate paperwork (e.g., submission of a “Call for Papers”) was completed, with the researcher then following through with each organization with a brief written summary of the research proposal, making it clear that data would be collected from consenting participants only. Extra effort was made to ensure that organizations knew that no attendee would be denied inclusion in the training session for refusal to take part in the study.

At the beginning of each training session, the researcher read a brief introductory protocol statement inviting the training session attendees to take part in the research study. The researcher made it clear that participation in the study was separate from attending the training;

attendees could still take part in the training even if they did not want to be research participants. The researcher outlined the span of the study and elaborated on the required pre-training, post-training, and follow-up training tests. The researcher instructed those who were interested to take a pre-training packet, to read the consent form, and to fill out the pre-test, all to be completed while the researcher left the room for 10 minutes. The pre-training packet consisted of an envelope which contained: (a) a consent form with a space for signature, email address, and mailing address; (b) the pre-test; and (c) a reminder card with the participant's code number on it, as the packet and all its contents were coded by number. Participants were instructed to keep the reminder card and to return the consent form and pre-test to the envelope and deposit them in a shallow box (provided) before the training session began. The researcher then re-entered the room, and the training session was conducted.

At the end of the training session, the researcher instructed those who wished to continue participating in the study to look at the number on the reminder card and to take a post-training packet with the same number as was on the pre-training packet. Participants were asked to complete the post-test, return it to the envelope, and place it in a shallow box. The researcher again left the room for 10 minutes and then returned to collect all materials.

Six weeks after the training, the researcher sent the follow-up test to all participants via e-mail attachment. Each participant was e-mailed individually so that the follow-up tests contained the individual participant's code number. To eliminate potential communication errors, the researcher used the consent forms to know which e-mail address was assigned to each code number. The researcher explained in the e-mail how to complete the forms and to return them via e-mail and also gave the participants the option to request a copy by mail, though no

participants asked for a mail copy. Between one and three reminder e-mails were sent to participants; the first two training groups received three reminder e-mails whereas the third and final group received only one reminder due to researcher oversight.

Ethical Considerations

The researcher utilized a within-subjects repeated-measures design. A requirement of this design is the observation of differences within each participant's scores across time, and because of this, participants did not have complete anonymity. Each participant submitted a consent form associated with a code number, but that form also contained the participant's name and e-mail address (and in some cases, the mailing address was also included).

Confidentiality was maintained by coding the tests with numbers instead of names and by keeping the consent forms (containing names, e-mail addresses, and mailing addresses) and tests in separate locked cabinets. Only the researcher had access to the data and e-mail addresses.

When the follow-up tests were sent to participants by e-mail, a confidentiality statement was included at the bottom of the e-mail. Follow-up tests were submitted to the researcher by e-mail and were printed and then deleted from the researcher's e-mail inbox. E-mail addresses of participants were used only for the purpose of sending the follow-up test and reminder e-mails.

Participants were informed of the following confidentiality procedures: (a) all data and consent forms would be kept in locked cabinets in the researcher's locked office for a period of four years after the data collection was complete; (b) after four years, the data and consent forms would be destroyed; (c) no individual data would be released; and (d) overall results from the study would be used for completing this researcher's dissertation and for publication and educational presentations.

Data Management

Demographic and quantitative data were entered in an Excel spreadsheet and then into PASW (Predictive Analytics SoftWare). The appropriate statistical tests, including analysis of variance (ANOVA), *t*-test, linear regression, and descriptive statistics were conducted for research questions one through five. In addition, multiple regression and correlation were used to address follow-up questions.

Questions six and seven resulted in qualitative data. Bogdan and Biklen (2007) discuss the importance of creating a “filing scheme that is not confusing” (p. 185). Thus, the researcher compiled the qualitative data by creating a table for each participant in a Word document using the following column titles: (a) Participant Number; (b) Pre Barrier; (c) Post Barrier; (d) Follow-up Barrier; and (e) Impact. The researcher recorded the exact words of each participant in the appropriate columns. The only piece of information used to identify each participant was the code number.

The researcher reviewed the data from the Pre Barrier column several times, underlining repeated words and phrases and making notes in the margins regarding possible coding categories that might apply to the data (Bogdan & Biklen, 2007). Next the researcher copied the underlined words and phrases into a coding notebook and assigned abbreviations to the codes. The researcher then looked for similarities among the words and phrases and began grouping similar units of data together. Glesne (2006) called this “putting like-minded pieces together into data clumps” (p. 152). The researcher reviewed the groups of data and took note of themes that emerged. This process was then repeated for the other columns (Post Barrier, Follow-up Barrier, and Impact). Themes emerged in the data for each time period.

CHAPTER 4

RESULTS

The purposes of this study were to: (a) investigate the impact of a songwriting training session on the songwriting knowledge, self-efficacy, and behavior of music therapists; (b) evaluate the songwriting training program; and (c) explore the impact of the training on perceived barriers and clinical practice. This study was conducted utilizing a within-stage, mixed-model, repeated-measures design. The researcher used quantitative and qualitative data analysis procedures. Quantitative procedures included analysis of variance (ANOVA), *t*-test, linear regression, and descriptive statistics. Qualitative procedures included reading and coding of data and identification of themes.

Five research questions were analyzed quantitatively, and two were analyzed qualitatively. The research questions were as follows:

1. Is songwriting knowledge different at pre-training, post-training, and follow-up?
2. Is songwriting self-efficacy different at pre-training, post-training, and follow-up?
3. Is songwriting behavior at pre-training different from songwriting behavior knowledge at follow-up?
4. Can change in songwriting self-efficacy be predicted by change in songwriting knowledge?

5. How satisfied with the training were the participants?
6. How did the training impact perceived barriers to songwriting as a clinical intervention?
7. What impact did the training have on clinical practice?

Quantitative Data

Before analyses were conducted the data were examined by visual inspection for missing cases and accuracy. If a participant did not answer a particular question, the cell was left empty when entering data in PASW. The missing data were analyzed to see if there was a pattern of non-response; no pattern was detected. Data were considered to be missing completely at random. To preserve the integrity of the data the researcher did not replace missing data.

The independent variable for this study was observation period (OP). This variable has three levels: pre-training (OP1), post-training (immediately after training; OP2), and follow-up (six weeks after training; OP3). The dependent variables were songwriting knowledge, songwriting self-efficacy, and songwriting behavior. The distribution of scores for each dependent variable was inspected for normality. Normality plots, along with skewness and kurtosis statistics, were requested in PASW and were viewed for each distribution. Field (2009) states that skewness and kurtosis values should be close to zero and that “the further the value is from zero, the more likely it is that the data are not normally distributed” (p. 138). Skewness is a “measure of the symmetry of a frequency distribution” (p. 794); a distribution can be symmetrical (a skew of zero), positively skewed (a skew of +1.0), or negatively skew (a skew of -1.0). Kurtosis “measures the degree to which scores cluster in the tails of a frequency distribution” (p. 788). A distribution with too many scores in the tails and with too high of a

peak of scores is leptokurtic (the kurtosis is greater than zero) whereas a distribution with too few scores in the tails and with a flat distribution is platykurtic (the kurtosis is less than zero).

The assumption of normality was met for the variable of knowledge at OP1 (skewness = -0.41, kurtosis = -0.81), OP2 (skewness = 0.45, kurtosis = 0.31), and OP3 (skewness = -0.75, kurtosis = 0.16). For the variable of self-efficacy, the assumption of normality was met at OP1 (skewness = -0.27, kurtosis = -1.08). Even though kurtosis was slightly greater than -1.0, this is still considered within the normal range. Normality was met for self-efficacy at OP2 (skewness = -0.66, kurtosis = -0.58). At OP3 the distribution was moderately negatively skewed (skewness = -1.33, kurtosis = 1.34). Data were transformed by using the square root of the data, but the result did not affect normality. The assumption of normality was met for the variable of frequency at OP1 (skewness = 0.71, kurtosis = -0.52) and OP3 (skewness = 0.59, kurtosis = -0.72). No frequency data were collected at OP2. In addition, the assumption of normality was met (skewness = 0.59, kurtosis = 0.50) for the change in frequency (follow-up frequency minus pre-test frequency).

Data from research questions one through five were analyzed using several statistical tests including the within-subjects repeated-measures ANOVA, the paired sample *t*-test, and a linear regression. Each of these tests has certain assumptions which are further discussed. In addition, descriptive data were analyzed quantitatively. The repeated-measures analysis of variance (ANOVA) was used to analyze data from questions one and two, which asked if there were differences in songwriting knowledge and self-efficacy across three observation periods. The assumptions that must be met in order to use the repeated-measures ANOVA are normality and sphericity. The assumption of normality is met when scores are normally distributed;

however ANOVA is fairly robust to violations of normality. The more critical assumption to be met is that of sphericity. Sphericity occurs when the differences between treatment levels are equal in variance (Field, 2009) and it is checked by looking at Mauchly's test of sphericity in PASW. In order for this assumption to be met, sphericity must not be significant. If the assumption of sphericity is not met, the researcher must apply a corrective technique, such as the Greenhouse-Geiser correction, in order to "produce a valid F -ratio" (p. 461). The strength of the repeated-measures ANOVA is that it removes individual differences and thus decreases error variance. Thus there is an increase in power (ability to find differences when they exist), and therefore a repeated-measures ANOVA requires fewer participants than a non-repeated design to achieve a given power level.

Question one asked the following: Is songwriting knowledge different at pre-training, post-training, and follow-up? The researcher used a repeated-measures ANOVA in order to determine whether there was a significant difference in the dependent variable of knowledge across the independent variable of observation period (OP). The assumption of normality was checked by viewing skewness and kurtosis at each time period and was met. Mauchly's test indicated sphericity had also been met: $\chi^2(2) = 1.74, p = .419$, two-tailed. There were three levels of observation period: (a) pre-training (OP1), (b) post-training (immediately after training/OP2), and (c) follow up training (six weeks after training/OP3). Descriptive statistics for knowledge among the three observation periods, with $n = 17$, were: OP1 ($M = 3.88, SD = 1.49$); OP2 ($M = 6.18, SD = 0.81$); and OP3 ($M = 5.40, SD = 1.87$) (see Figure 1).

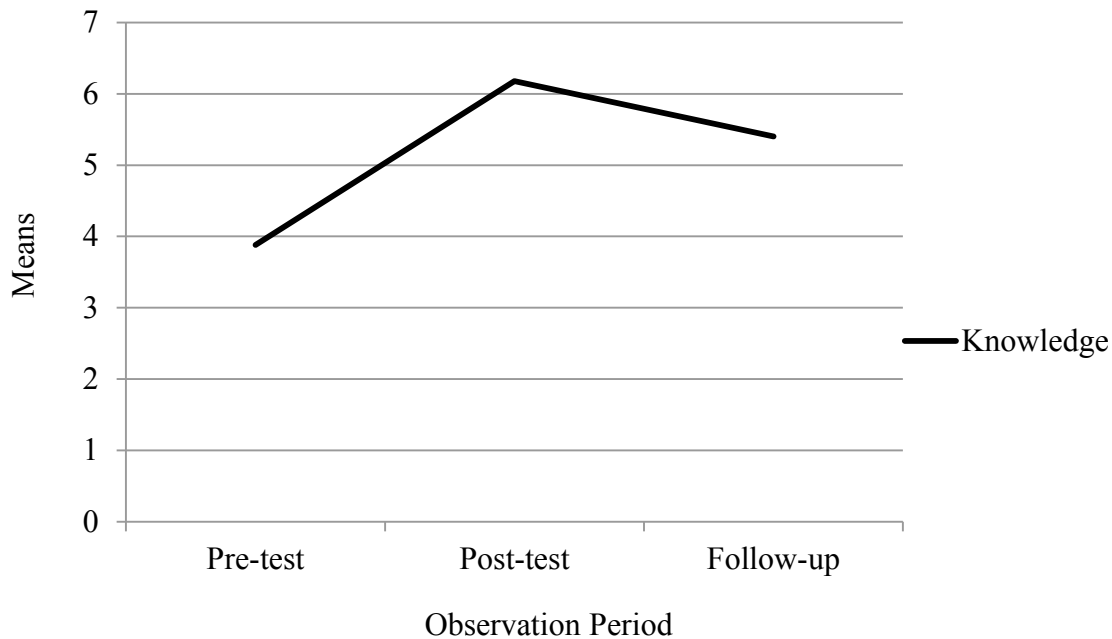


Figure 1. Means of knowledge scores at pre-test, post-test, and follow-up.

Results showed that songwriting knowledge increased significantly over the three observation periods, $F(2, 32) = 13.172, p < .001, (\omega^2 = 0.59)$. Observed power for the test was 0.99. Because the results were significant, post hoc analyses were needed to investigate where those differences occurred. Field (2009) states that although Tukey's and Bonferonni's tests both control Type I error rate, Bonferonni's test "has more power when the number of comparisons is small" (p. 374). Bonferonni's test indicated a significant difference in knowledge between OP1 and OP2, $p < .001, d = 1.91$. The increase in knowledge from OP1 to OP2 was almost two standard deviations, which, according to Cohen (1992), is a very large effect. There was not a significant difference between OP2 and OP3, $p = 0.278, d = 0.54$. There was also a significant difference between OP1 and OP3, $p = .031, d = .90$, indicating a significant increase

in knowledge over the course of the study and a large effect size. The hypothesis, that songwriting knowledge differs significantly among observation periods, was supported.

Question two asked the following: Is songwriting self-efficacy different at pre-training, post-training, and follow-up? A repeated-measures ANOVA was used to determine whether a significant difference in the dependent variable of songwriting self-efficacy across the three levels of the independent variable of observation period exists. The assumption of normality was checked by viewing skewness and kurtosis at each time period and was met for OP1 and OP2; the distribution was moderately negatively skewed for OP3. However, the ANOVA is robust to violations of normality. Mauchly's test was non-significant, indicating sphericity had been met: $\chi^2(2) = 4.24, p = .120$. Descriptive statistics for self-efficacy among the three observation periods, with $n = 17$, were: OP1 ($M = 6.69, SD = 2.39$); OP2 ($M = 7.98, SD = 1.59$); and OP3 ($M = 8.27, SD = 1.68$) (see Figure 2).

Results showed that self-efficacy changed significantly over the three observation periods, $F(2, 32) = 10.749, p < .001, (\omega^2 = 0.53)$. Observed power for this ANOVA was 0.98. The Bonferonni correction indicated a significant difference in self-efficacy between OP1 and OP2, $p = .011, d = 0.63$. There was not a significant difference between OP2 and OP3, $p = .875, d = 0.18$. There was a significant difference between OP1 and OP3, $p = .006, d = .76$, indicating an increase in self-efficacy over the course of the study and a large effect size. The hypothesis, that songwriting self-efficacy differs significantly among observation periods, was supported.

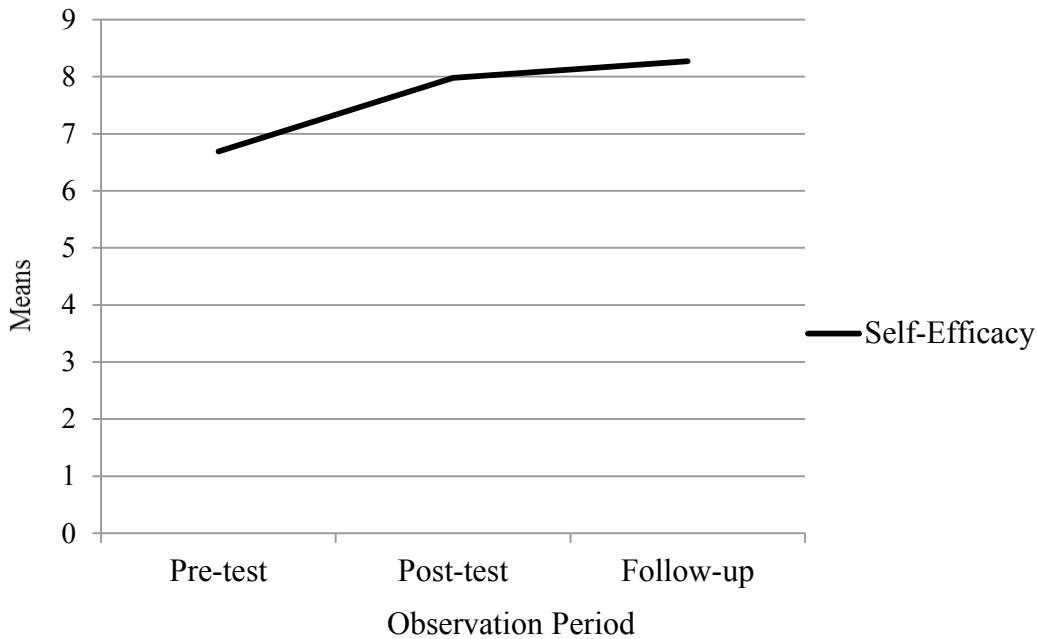


Figure 2. Means of self-efficacy scores at pre-test, post-test, and follow-up.

Question three asked: Is songwriting behavior at pre-training different from songwriting behavior knowledge at follow-up? This question was investigated using a paired samples *t*-test. A *t*-test is appropriate when the independent variable has only two levels. The use of a repeated-measures, or paired samples, *t*-test allows the researcher to measure each participant “more than once on the same dependent variable” (Gravetter & Wallnau, 2004, p. 343). According to Field (2009,) two assumptions must be met when using a dependent *t*-test. The data must be “measured at least at the interval level” (p. 326) and the “distribution of the differences between scores should be normal” (p. 326). Both assumptions were met; data were measured at the interval level and normality was checked by viewing skewness and kurtosis.

The purpose of question three was to test for differences in frequency of songwriting behavior between the six weeks prior to training (reported on the pre-test) and the six weeks

from training to follow-up (reported on the follow-up test). The question regarding actual frequency of songwriting behavior was not asked in the post-test (taken immediately after the training) because the results would presumably be the same as in the pre-test. An ANOVA, therefore, was not the appropriate test for this question as it lacked three levels. There was a statistically significant increase in frequency of songwriting from OP1 ($M = 3.88$, $SD = 3.38$) to OP3 ($M = 5.69$, $SD = 4.11$), $t(15) = -2.67$, $p = .017$, two tailed. There was a medium-sized effect, $r = .57$. The hypothesis, that songwriting behavior is significantly different at follow-up as compared to pre-training, was supported.

Question four asked: Can change in songwriting self-efficacy be predicted by change in songwriting knowledge? These data were analyzed utilizing linear regression. Linear regression has several assumptions (Field, 2009): (a) normally distributed errors, (b) homoscedasticity of errors, (c) independence of errors, and (d) linearity. The linear regression met these assumptions. Normality of error distribution was checked with histograms and normality plots. Scatterplots of errors displayed no patterns and errors were all within an acceptable range, indicating homoscedasticity and independence of errors. Linearity was checked using a scatterplot of scores; linearity was met. Results indicated that change in knowledge from pre-test to follow-up test was not a significant predictor of change in self-efficacy from pre-test to follow-up test, $F(1,15) = .59$, $p = .456$. Change in knowledge was not significantly correlated with change in self-efficacy, $r = +.19$, $n = 17$, $p = .456$.

An additional linear regression was conducted to see if change in knowledge from pre-test to post-test could be used to predict the change in self-efficacy from pre-test to post-test. All assumptions were met. Results suggest that change in knowledge did appear to predict change in

self-efficacy, $F(1,30) = 20.608, p < .001$. The adjusted R^2 ($R^2 = .387$) indicates that 39% of the variance in change in self-efficacy could be accounted for by change in knowledge. The unstandardized regression coefficient reveals that for every point of increase in change in knowledge, the change in self-efficacy increased by 0.55 points. Change in knowledge was highly correlated with change in self-efficacy, $r = +.64, n = 32, p < .001$. This information could be used to predict specific change in self-efficacy from change in knowledge. For example, utilizing the regression equation $Y^1 = a + b(x)$, it could be predicted that a five point increase in knowledge would result in a 2.522 increase in self-efficacy as $2.522 = -.233 + .551(5)$. Therefore the hypothesis, that change in songwriting knowledge will predict change in songwriting self-efficacy, was only partially supported.

Question five asked: How satisfied with the training were the participants? In this analysis participants were treated as a group. The data for this part of the study were drawn from the 19 *satisfaction* statements on the post-test. Participants were given a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) for each of the 19 satisfaction statements and were asked to circle the degree of agreement with each statement. Aggregate results indicated that participants were highly satisfied with the training ($M = 4.54, SD = 0.26$). In addition, the mean and standard deviation of each of the 19 questions was recorded (see Table 3). The statement that participants most strongly agreed with was statement 11: The presenter's style was conducive to learning ($M = 4.97, SD = 0.18$). The statement that participants most strongly disagreed with was statement 8: The physical environment (temperature, lighting, etc.) was conducive to learning ($M = 3.97, SD = 1.17$). The hypothesis, that participants would be satisfied with the training, was supported.

Table 3

Ratings of Satisfaction with Various Aspects of the Songwriting Training

Statement	<i>M</i>	<i>SD</i>
1. The course objectives were clearly stated.	4.91	0.30
2. The course objectives were met.	4.91	0.30
3. The handout contained useful information.	4.91	0.30
4. The presentation was well-organized.	4.91	0.30
5. The instruments provided were adequate for the session.	4.38	1.04
6. Working in small groups was helpful.	4.88	0.34
7. Performing group songs and getting feedback from the other group was helpful.	4.84	0.37
8. The physical environment (temperature, lighting, etc.) was conducive to learning.	3.97	1.17
9. The audiovisual aids were helpful.	4.77	0.43
10. The presenter demonstrated thorough knowledge of the subject.	4.94	0.25
11. The presenter's style was conducive to learning.	4.97	0.18
12. Modeling of musical examples was helpful.	4.94	0.25
13. The pace of the session was about right.	4.75	0.44
14. The amount of time provide for this session was about right.	4.60	0.61
15. The amount of time for breaks was about right.	4.75	0.44
16. This session was important in terms of my professional growth.	4.72	0.58
17. Overall, I was very satisfied with this session.	4.94	0.25
18. I learned new information about songwriting.	4.81	0.47
19. I learned to apply information I already know.	4.81	0.47

Note: $N = 32$. Participants scored each statement on a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Qualitative Data

Two qualitative research questions were formed so participants could respond in their own words and so that this data could be compared to the quantitative data gathered. Those questions were: How did the training impact perceived barriers to songwriting as a clinical intervention? and What impact did the training have on clinical practice? Over the course of the study,

participants responded to three open-ended questions regarding perceived barriers to using songwriting as a clinical intervention and to one question related to the impact of the training on clinical practice. On the pre-test (OP1), the question read: *What do you perceive as the barriers to your use of songwriting as a therapeutic intervention?* On the post-test (OP2), the question was: *Prior to the training session you were asked to discuss what you perceive as barriers to your use of songwriting as a therapeutic intervention. Please describe any change you perceive in those barriers after having received this training.* On the follow-up test (OP3), the first question was: *Describe any change that has occurred in what you perceive as barriers to your use of songwriting as a therapeutic intervention in the weeks since the training.* The second question at OP3 was: *What impact did the songwriting training session have on your clinical practice?* Data were analyzed by treating each time period separately.

Four themes emerged in participants' responses to the barriers they perceived prior to the songwriting training session (OP1): (a) lack of knowledge, (b) lack of skill and experience, (c) lack of confidence, and (d) external factors.

Lack of knowledge was evident in statements such as "I don't know enough accompaniment patterns" and "limited knowledge of chords on guitar." Most responses in this category related to specific aspects of musical knowledge that participants felt they lacked including a perceived lack of knowledge in such areas as accompaniment patterns, chord progressions, melody writing, harmonizations, choice of key, and arrangement of words.

Lack of skill and experience was evidenced by statements such as "not skilled enough to write spontaneously," "lack of experience," and "I just don't do it enough." This theme seems to

be highly related to lack of knowledge. If people lack knowledge in an area, they cannot practice and therefore build skill and experience.

Lack of confidence was identified in such quotes as “I don’t feel confident” and “scared to try.” Some participants described a lack of confidence in a specific area, such as spot songwriting. Others made more general and pervasive statements, such as “my confidence in myself,” regarding the barriers to using songwriting as a clinical intervention.

While these first three themes are areas in which a music therapist can strive to improve, the category of external factors emerged to encompass the aspects that a music therapist cannot change. Some of the external barriers described by participants included “amount of time,” “client participation,” and “client’s needs.”

Following the training session (OP2), participants were asked to describe changes to those barriers they perceived prior to the training. Five themes emerged in participants’ responses: (a) increased knowledge, (b) increased skill and practice, (c) increased confidence, (d) changed expectations, and (e) continuing barriers.

Increased knowledge was evident in statement such as “I gained knowledge of new accompaniment patterns” and “Different accompaniment styles, chord progressions, and situations were presented that will help me ‘put it all together.’” One participant described the increase in knowledge by asserting that “using the McHose classification was presented in a more comprehensive, confident way than how I was taught or approached chord progressions.”

Increased skill and practice were displayed in statements such as “this was good practice to renew skills” and “[I] will practice using these skills/tips so as to gain experience in songwriting.” The connection between knowledge and skills was made evident in several

participants' responses. One person stated "I now have more information and ideas about songwriting and will practice using these skills/tips so as to gain experience in songwriting."

Increased confidence was exhibited in statements such as "I feel more confident in approaching clients with songwriting" and "I feel more confident to apply what I've learned to a group songwriting session." One participant described feeling "much better about songwriting now; before I was very uncertain about my ability."

Participants also described a sense of changed expectations in statements such as "I've realized it is okay to include the client in the editing process," "keeping it simple with repetition is not only ok, but preferred," and "it doesn't have to be top 40 perfect to be good therapy."

Finally, participants mentioned several continuing barriers such as time ("time restraint with clients is still my primary issue"), client issues ("accessing client involvement and ownership in the process"), and personal issues ("self-judgment").

Two open-ended questions were asked on the follow-up test (OP3). First, participants were asked to once again describe changes to the barriers they perceived prior to training. Themes that emerged were (a) increased knowledge, (b) increased confidence, (c) increased skill, (d) continuing barriers, and (e) next steps.

Increased knowledge was displayed in comments such as "I learned new piano techniques," and "the workshop also offered additional information for me to experiment with, such as the various types of chord progressions and classification systems."

Increased confidence was demonstrated in comments such as "I feel MUCH more comfortable with songwriting and have increased my use of spot, process, and strategic

songwriting in therapy” and “I am more confident that I can include songwriting in my practice because I have concrete guideposts to draw on.”

Increased skill was evident in comments such as “Since the training I have used it twice and have felt much better equipped to do this” and also in clinical examples of how songwriting had been used effectively with clients.

Participants recognized continuing barriers in comments such as “The one style I am still afraid of and have not made much attempt at is spot songwriting” and “I also don’t have a great space to play the piano, and I think I would do more songwriting with original lyrics/words if I had a better place to practice.”

Finally, next steps was a theme that encompassed statements made regarding what participants planned to do in the future. Some statements in this category were “I feel sometimes there’s too much of *me* in the song . . . I need to broaden my skill ability to become much more inclusive of different styles, etc.,” “I have invested in a keyboard learning system for myself . . .,” and “I feel much more comfortable using familiar tunes, but have been trying to step out of my comfort zone and attempt some new tunes.”

A second open-ended question was asked at OP3: What impact did the songwriting training session have on your clinical practice? The four themes that emerged from participants’ responses were (a) more comfortable and confident with songwriting, (b) new perspectives on songwriting, (c) increased frequency of songwriting, and (d) increased songwriting knowledge.

More comfortable and confident with songwriting was displayed in statements such as “It [the training] gave me more confidence . . .”, “Made me feel more confident overall in my

songwriting abilities,” and “I’m more comfortable with writing songs after learning various types of song writing.”

New perspectives on songwriting were evident in statements such as “looking forward to using songwriting more frequently . . .,” “It inspired me to begin using songwriting in my personal life as a way to cope with the stressors of the job,” “I am not as concerned about rhyming lyrics . . .” and “I realize the songs don’t have to be complex to be useful.”

Participants also discussed an increased frequency of songwriting in such statements as “Came back to work and my Handbell group wrote a new song to play,” “I am probably using spot songs a little more often, however these are still very simple in nature. I have used the process songwriting about 2 times since the training session,” and “I actually engage in songwriting to a limited degree, whereas before I avoided it.”

Increased songwriting knowledge was evident in statements such as “I . . . learned a good bit more insight on how to structurally set up a song,” “the theory was presented in a manner that was clear, and relatable to actual playing (rather than just bombarding us with theory),” and “The training session really helped to spark new ideas for songwriting interventions.”

Most participants who responded at OP3 wrote significantly more than they did at OP1 or OP2. In addition, most participants wrote responses that were very detailed and specific in nature, such as “the information on McHose’s chord classification system filled in several gaps in my understanding of theory, thus I am more likely to explore beyond the I-IV-V7-I structure.” At least one person appeared to misunderstand the question yet confirmed the training was helpful: “If I am understanding [*sic*] this question correctly it seems that you are asking if the

training put any sort of constraints or limits on my songwriting. My answer to that is that I feel it has only enhanced my skill.”

Additional Analyses

When analyzing the data the researcher decided to further explore relationships between variables as well as possible predictors of change in self-efficacy and change in songwriting frequency. Therefore, additional analyses were performed.

Correlations were run on both knowledge and self-efficacy at OP1, OP2, and OP3. Assumptions which accompany correlation are that the data are interval in nature and the sampling distribution is normally distributed. Both assumptions were met. Post-test (OP2) knowledge was inversely correlated with pre-test (OP1) self-efficacy, $r = -.41$, $n = 32$, $p = .020$, two-tailed, indicating that low self-efficacy at pre-test was correlated with high knowledge at post-test; those with the lowest self-efficacy at pre-test learned more during the training (see Table 4).

Table 4

Correlation Matrix of Knowledge and Self-efficacy at Pre-test, Post-test, and Follow-up

Measure	1	2	3	4	5	6
1. Pre-test Knowledge	--					
2. Pre-test Self-Efficacy	.25	--				
3. Post-test Knowledge	.40**	-.41*	--			
4. Post-test Self-Efficacy	.12	-.83***	.26	--		
5. Follow-up Knowledge	.07	.11	.20	.28	--	
6. Follow-up Self-Efficacy	.17	.69**	-.38	.78	-.03	--

* $p < .05$; ** $p < .01$; *** $p < .001$.

A simultaneous multiple regression was conducted to look for predictors of change in self-efficacy. Change in knowledge, pre-test self-efficacy, age, and number of years in the field were used as predictors of post-test self-efficacy. Multiple regression has several assumptions which must be addressed (Field, 2009) including: (a) linearity, (b) normally distributed errors, (c) homoscedasticity of errors, (d) independence of errors, and (e) no perfect multicollinearity (the predictor variables should not correlate with each other). These assumptions were met. Linearity was checked by viewing a scatterplot of residuals; thirty of 32 residuals were within ± 2 .

2. Predictors that showed linear displays of data were change in knowledge and pre-test self-efficacy; age and years in the field were not linear. A histogram and normality plot of residuals displayed normally distributed errors. Homoscedasticity and independence of errors was confirmed in scatterplots; there was no discernable pattern. Multicollinearity was checked with Tolerance statistics. Tolerance statistics that are large (approaching 1.0) mean low multicollinearity. The tolerance statistics for the four variables used in this multiple regression ranged from .49 to .74, therefore the assumption of no multicollinearity was met. Two of the predictors, change in knowledge and pre-test self-efficacy, accounted for a significant amount of the variance in change in self-efficacy, $F(4, 27) = 12.49, p < .001$. Sixty-five percent of the variance in change in self-efficacy was accounted for, $R^2 = .65$. Change in knowledge was shown to be a significant predictor of change in self-efficacy, $\beta = .35, t(27) = 2.57, p = .02$, two tailed. Pre-test self-efficacy was found to have a negative relationship with change in self-efficacy, $\beta = -.56, t(27) = -4.28, p < .001$, two tailed. Age ($\beta = .00$) and years in field ($\beta = .03$) were not predictors of change in self-efficacy.

Finally, it was thought that change in knowledge might lead to a change in self-efficacy, and that the change in self-efficacy might lead to an increase in songwriting frequency. To test this model an additional correlation was performed (see Table 5). Change in songwriting frequency was not correlated with any variable.

Table 5

Correlations of Knowledge, Self-efficacy, and Frequency with Follow-up Frequency and Frequency Change

Measure	Follow-up Frequency	Frequency Change
1. Pre-test Frequency	.75**	-.10
2. Pre-test Self-Efficacy	.60*	.21
3. Pre-test Knowledge (Total)	.43 [†]	.27
4. Post-test Self-Efficacy	.43 [†]	.24
5. Post-test Knowledge (Total)	-.14	-.16
6. Follow-up Knowledge (Total)	.23	.20
7. Change in Knowledge at Post-test	-.46 [†]	-.32
8. Change in Self-Efficacy at Post-test	-.46 [†]	-.07
9. Change in Knowledge at Follow-up	-.06	.04
10. Change in Self-Efficacy at Follow-up	-.48 [†]	.15

[†] $p \leq .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Conclusions

This mixed methods study was designed to gather both quantitative and qualitative data within each stage of the study. Both types of data were utilized to answer the research questions. In addition, the qualitative data were used to validate and enrich the understanding of the quantitative data.

Several hypotheses were formed to guide the quantitative data analysis. First, it was hypothesized that songwriting knowledge would differ significantly among observation periods. This hypothesis was supported by the data; songwriting knowledge increased significantly from pre-test to follow-up. Second, it was hypothesized that songwriting self-efficacy would differ significantly among observation periods. This hypothesis was supported by the data; songwriting self-efficacy increased significantly from pre-test to follow-up. Third, it was hypothesized that songwriting behavior would be significantly different at follow-up as compared to pre-training. This hypothesis was supported by the data. Songwriting behavior increased significantly from pre-test to follow-up. Fourth, it was hypothesized that the change in songwriting knowledge would predict change in songwriting self-efficacy. This hypothesis was only partially supported. Change in knowledge from pre-test to follow-up test was not a significant predictor of change in self-efficacy; however change in knowledge did appear to predict change in self-efficacy from pre-test to post-test. Finally, it was hypothesized that participants would be satisfied with the training. This hypothesis was supported by the data.

Two questions, investigating perceived barriers to songwriting and impact of training, were not amenable to quantitative analysis and were therefore investigated through open-ended questions. Results showed that perceived barriers shifted from pre-test (lack of knowledge, lack of skill and experience, lack of confidence, and external factors) to follow-up (increased knowledge, increased confidence, increased skill, continuing barriers, and next steps). In addition, at follow-up participants stated the training impacted practice in that they were more comfortable and confident with songwriting, had new perspectives on songwriting, had increased frequency of songwriting, and had increased songwriting knowledge.

CHAPTER 5

DISCUSSION

The purposes of this study were: (a) to investigate the impact of a songwriting training session on the songwriting knowledge, self-efficacy, and behavior of music therapists; (b) to evaluate the songwriting training program; and (c) to explore the impact of the training on perceived barriers and clinical practice. Results indicated that training was an effective tool for increasing songwriting knowledge, self-efficacy, and behavior in music therapists. In addition, the participants evaluated the training as highly satisfactory. Finally, the training appeared to have a positive effect on both perceived barriers to songwriting as a clinical intervention and clinical practice. This discussion provides a summary of the findings, relationship to theory, implications, limitations, and recommendations.

Summary of Findings

Songwriting Knowledge, Self-Efficacy, and Behavior

The first question posed was: Is songwriting knowledge different at pre-training, post-training, and follow-up training? The results showed that songwriting knowledge increased between pre-training (pre-test) and post-training (post-test), then decreased between post-training and follow-up training (follow-up test). However, when comparing pre-test scores with follow-up test scores, there was an overall increase in knowledge, indicating that participants retained much of the knowledge gained during the training over a six-week period following the training.

The magnitude of difference between pre-test and follow-up test scores was great. These findings suggest that the training was a very effective method for increasing songwriting knowledge in music therapists.

This increase in songwriting knowledge was substantiated in participants' open-ended statements. At pre-test, participants indicated that lack of knowledge was one of the major barriers to the use of songwriting in therapy. Lack of knowledge was evident in statements such as "I don't know enough accompaniment patterns" and "limited knowledge of chords on guitar." Most responses included a perceived lack of knowledge in such areas as accompaniment patterns, chord progressions, melody writing, harmonizations, choice of key, arrangement of words, etc. At follow-up, however, participants reported an increase in perceived knowledge, displayed in comments such as "I learned new piano techniques," and "the workshop also offered additional information for me to experiment with, such as the various types of chord progressions and classification systems."

The second research question asked: Is songwriting self-efficacy different at pre-training, post-training, and follow-up? The results showed that songwriting self-efficacy increased between pre-test and post-test, but did not increase significantly between post-test and follow-up. However, there was an overall increase in songwriting self-efficacy from pre-test to follow-up indicating that participants retained much of the songwriting self-efficacy gained during the training over a six-week period following the training. The magnitude of difference between pre-test and follow-up test scores was great. These findings suggest that the training was a very effective method for increasing songwriting self-efficacy in music therapists.

The increase in participants' songwriting self-efficacy was supported by open-ended statements. At pre-test, participants indicated that lack of confidence was one of the major barriers to the use of songwriting in therapy. This was indicated in statements such as "uncertain about my abilities" and "I don't feel confident to use spot songwriting. . ." At follow-up, however, participants reported an increase in perception of confidence in statements such as "I am more confident that I can include songwriting in my practice because I have concrete guideposts to draw on" and "I feel the workshop helped me to feel more confident with my songwriting skills, particularly in the area of process and spot songwriting techniques."

The third research question asked: Is songwriting behavior at pre-training different from songwriting behavior at follow-up? The results showed that participants' songwriting behavior (as measured by self-reported number of songs written) increased from pre-test to follow-up. The participants reported that they wrote more songs in the six weeks after the training than in the six weeks prior to the training.

The fourth research question asked: Can change in songwriting self-efficacy be predicted by change in songwriting knowledge? Results indicated that change in knowledge did not predict change in self-efficacy between pre-test and follow-up test; however when comparing only pre-test and post-test data the change in knowledge did appear to predict change in self-efficacy. In accounting for the difference between these two results, it is logical that change in knowledge would serve as a decent predictor of change in self-efficacy during the period from pre-test to post-test (a five-hour period of training) partially because the training was specifically designed to increase both knowledge and self-efficacy. Since data were collected immediately before and after the training, participants' responses reflected a change in both areas. Change in

knowledge was not a good predictor of change in self-efficacy between post-test and follow-up (six-week period). One possible explanation for this finding is that perhaps the participants who chose to complete the follow-up test were somehow different from the larger group who completed only the pre-test and post-test.

Songwriting Training

Question five asked: How satisfied with the training were the participants? Participants reported they were very satisfied with the training. Participants seemed most satisfied with the presenter's style followed by the modeling of musical examples, the presenter's knowledge of the subject, and overall satisfaction. The participants were least satisfied with the physical environment (temperature, lighting, etc.) being conducive to learning. Physical conditions were similar in two out of the three training sessions; however, during one training session the room provided was poorly lit and somewhat warm. These conditions were beyond the researcher's control and may have contributed to this dissatisfaction.

The fact that the songwriting training session was (a) evaluated as highly satisfactory and (b) effective in increasing participants' songwriting knowledge and behavior is consistent with the work of Kirkpatrick (1998). He stated that trainings that are designed carefully, with consideration of participants' needs, pre-established objectives, use of appropriate techniques, and so forth, are the most effective. He also emphasized the value of evaluating training sessions so that future trainings could be improved.

Impact on Perceived Barriers and Clinical Practice

Question six asked: How did the training impact perceived barriers to songwriting as a clinical intervention? During the pre-test, the barriers described by participants fell into four

categories: lack of knowledge, lack of skill and experience, lack of confidence, and external factors. Also at pre-test, participants reported using songwriting as a clinical intervention fewer than four times during the previous six weeks. These findings (perceived barriers and amount of songwriting) confirm Bandura's (1994) statement that "people who doubt their capabilities shy away from difficult tasks which they view as personal threats" (p. 421). Music therapists may avoid using songwriting as a clinical intervention due to perceived lack of knowledge, skill, experience, confidence, and other factors.

It is important to note that in response to this pre-test question about perceived barriers, several participants wrote sentences or phrases that included the word "enough." For example "my product won't be good enough," "[I] don't know enough accompaniment patterns," and "the harmony and melody won't be interesting enough." It appeared that many participants felt that there was an absolute standard for how much they should know or should be able to do, and that in assessing themselves, they felt they did not meet that standard.

It is interesting that during the pre-test participants reported lacking songwriting knowledge, skill, and confidence. On the post-test and follow-up test participants described an increase in those areas. This finding provides confirmation that the songwriting training was effective in those areas. In the area of knowledge, several participants made reference to the information regarding the chord classification system by McHose (1947) in statements such as "the classification of songwriting and McHose's work make the task easier to understand." One person described the effect of writing songs in small groups as being extremely helpful: "Collaboration with the rest of the group was great and really boosted my confidence."

Question seven asked: What impact did the songwriting training session have on your clinical practice? The four themes that emerged from participants' responses were (a) more comfortable and confident with songwriting, (b) new perspectives on songwriting, (c) increased frequency of songwriting, and (d) increased songwriting knowledge. These findings are encouraging in that it appears participants felt more fully equipped and confident to use songwriting as a clinical intervention after the training session.

Several additional questions arose during data analysis. The first additional question was: Is there a relationship between knowledge and self-efficacy at pre-test, post-test, and follow-up? The findings suggested that those who had low self-efficacy at pre-test had high knowledge at post-test and thus learned the most during the training. One might wonder if those with low self-efficacy at pre-test also had very low knowledge at that point as well. In other words, was the increase in knowledge real, or did those participants with low self-efficacy also start with low knowledge? However, pre-test self-efficacy and pre-test knowledge were not correlated. The findings suggest that those who felt the least amount of songwriting self-efficacy at pre-test may have been the most eager to learn and therefore gained the most knowledge. A second additional question was: Are there any variables from this study that are predictors of change in self-efficacy? Two of the predictors, change in knowledge and pre-test self-efficacy, emerged as good predictors of change in self-efficacy. The final additional question was: Is change in songwriting frequency correlated with any other variable? No correlations were found.

Relationship to Theory

The primary theory upon which this study was based was Bandura's (1977; 1994) theory of self-efficacy. According to his theory, self-efficacy impacts human action by impacting our cognitive, motivational, affective, and selection processes. Bandura described four ways of increasing self-efficacy: mastery experiences, vicarious experiences, social persuasion, and altering stress reactions. The songwriting training session used in this study was designed to include three of these experiences: (a) brief songwriting experiences in small groups (mastery experiences); (b) watching the instructor as songwriting techniques were modeled (vicarious experiences); and (c) persistent encouragement from the instructor and other participants (social persuasion). The findings of this study support Bandura's theory. After participants engaged in a songwriting training session designed in conjunction with Bandura's principles, their self-efficacy increased as did their frequency of using songwriting as a clinical intervention.

Larson (1998) used Bandura's social cognitive theory and self-efficacy theory (1977; 1994) to develop a theory to guide counselor training. She called this theory the Social Cognitive Model of Counselor Training (SCMCT). Bandura (1989) originally described the complex interaction between personal agency, action, and the environment as "triadic reciprocal causation" (p. 1175). Larson used this model to describe how counselor variables and environmental variables interact to impact a counselor's ability to be effective with clients. Counselor variables, such as *personal agency* (self-efficacy beliefs as well as cognitive, motivational, and affective processes) and *actions* (what the counselor does in counseling and supervision sessions) impact and are impacted by environmental variables (those occurring in the counseling session as well as in supervision). Larson and Daniels (1998) stated that "persons

with higher CSE [counseling self-efficacy] would be more likely to view their anxiety as challenging; to set realistic, moderately challenging goals; and to have thoughts that are self-aiding” (p. 181). Bandura’s concept of triadic reciprocal causation was supported by the findings of this study in that the participants’ songwriting self-efficacy (personal agency) and songwriting behavior (action) seemed to be impacted by the training session (environment). In addition, participants’ open-ended responses indicated that environmental variables present in clinical sessions, such as clients’ participation and amount of time with clients, also impacted whether or not participants chose to engage in songwriting interventions. Finally, although Larson and Daniels’ statement about self-efficacy was directed toward counselors, it seems to be reinforced in the present study in that as participants gained songwriting self-efficacy, and shifted their expectations regarding clinical songwriting, they reported more attempts at using songwriting interventions with clients.

Limitations

Several limitations were evident in this study. Although the predicted number of participants was 100 or more, only 32 people actually agreed to take part in this study. Thirty-two participants completed both the pretest and posttest; however, only 17 of that 32 completed the follow-up test as well. The sample size may preclude generalizing the findings to all music therapists.

A second limitation is that small variations may have existed between training sessions. Although the researcher used the same training outline each time, since the training sessions were designed to be interactive, participant comments and questions were particular to each group. These questions and comments, as well as the researcher’s responses to them, may have

resulted in differences in quantity or detail of information covered in each session. In addition, differences in number of participants and the dynamics among the small groups during the small group songwriting experiences may have led to differences between training sessions. The differences among training sessions could have impacted the results of the study.

A third limitation, due to researcher oversight, is that the third group that attended the songwriting training session received only one reminder e-mail after receiving the follow-up test, whereas the first two training groups received three reminder e-mails. It is possible that results may have been different if more participants from the third group would have completed the follow-up test.

Another limitation is that the data collection instruments were researcher-designed, so no published information regarding reliability or validity exists. There are some potential threats to validity in this study. In the case of internal validity a testing effect may exist due to the fact that participants were asked to answer the same questions two or three times. Also, because the study spanned a six-week period, a history effect may exist as well: scores on the dependent variables may have been impacted by some event that took place between the post-test and follow-up periods. In addition, providing forced choices for all demographic questions might have led to clearer information on such questions as primary population worked with.

Finally, the participants were neither randomly selected nor randomly assigned to groups. Participants were board-certified music therapists who voluntarily elected to attend a training session. If random sampling had been utilized the composition of the sample may have differed. It is possible that the people who elected to attend the training did so because they felt a lack of songwriting self-efficacy, knowledge, and behavior. Therefore, the sample may have differed

from the population which would make results not generalizable to the population. In addition, those music therapists who hold a different credential than MT-BC (e.g., those who completed their training abroad) were not included. If non-MT-BCs had been included, results may have shifted due to differences in curricula in other countries. Finally, no control group was utilized. If a control group had been used, and if the groups differed significantly on test scores after the training, the results would be more conclusive.

Implications for Education and Clinical Practice

Songwriting is an effective clinical intervention. Although many music therapists use it routinely in practice, many other music therapists seem to avoid it, perhaps due to a lack of songwriting knowledge or self-efficacy. One possible way to alleviate this situation would be to require additional songwriting training and experiences in the curricula of music therapy students. Most music therapy educational programs do cover songwriting within the curriculum, but perhaps students could be given additional training and experiences within both courses and clinical training opportunities. Another way to improve songwriting self-efficacy might be through continuing education experiences; for those who are already board-certified music therapists, participating in the songwriting training presented in this study, or a similar training, may help to improve songwriting knowledge, self-efficacy, and behavior.

Counselors and psychologists who are also songwriters sometimes use songwriting in their clinical practices (Elligan, 2001; Gladding et al., 2008; Mayers, 1995). They may be interested in receiving additional training to increase their clinical songwriting abilities and self-efficacy. However, it is possible that the songwriting training utilized in this study may need to be altered to fit the needs of counselors. For example, music therapists have, as a common trait,

specific training in music theory. The songwriting training session used in this study includes music theory concepts that may not be familiar to counselors with no formal music training.

In addition, counselor training programs should investigate the idea of adding elective tracks to the curricula in order to train future counselors in the use of songwriting and other creative methods. This would necessitate that the counselor educators teaching those courses are knowledgeable and competent in such approaches, and that clear guidelines are established regarding competent practice. Lumadue, Munk, and Wooten (2005) stated:

As more and more consumers of mental health services and wellness programs seek alternative and complementary treatment, we believe that it is imperative that we (counselor educators, licensing boards, ACA [American Counseling Association], and its affiliated organizations) act consciously, ethically, and with adequate knowledge in determining guidelines to assist students and professionals seeking information and training in these approaches, and to address both ethical and competency guidelines. (p. 16)

The music therapists who participated in this study improved in songwriting self-efficacy, knowledge, and behavior. Additionally they reported feeling more comfortable with using songwriting as a method of music therapy. The implication for clients is important in that a music therapist who possesses songwriting self-efficacy will be more likely to use songwriting as a clinical method. Those clients who need help with developing skills in problem solving, improving organization, promoting exploration of themes, and communicating inner experiences (Bruscia, 1998), among other needs, will have an additional creative method with which to address their problems.

It is important to note that music interventions, such as songwriting, are contraindicated for certain people. Some clients may suffer from congenital or acquired brain damage that impairs the ability to benefit from music interventions. Hodges (1996) described several such conditions including amusia (loss of music skills caused by brain damage), musicogenic epilepsy (music-induced seizures), and auditory hallucinations (uncontrollable onset of a particular piece of music). Other clients may have had negative experiences with certain pieces of music, musical styles, instruments, and so forth; in such cases, music may not be contraindicated but the music therapist needs to be keenly aware of the client's experiences with music before deciding treatment. Therefore, it is imperative that music therapists follow good standards of practice regarding assessment which should include gathering information regarding the client's: (a) abilities and limitations in physical, psychological, cognitive, communicative, and social domains; and (b) music background, music preferences, and prior experiences with music.

Recommendations

The results of this study indicated that music therapists who participated in a five-hour songwriting training session improved songwriting self-efficacy and knowledge, and increased songwriting behavior. In addition, the perceived barriers to using songwriting as a clinical intervention changed in a positive manner over a six-week period of time, and participants noted positive implications for clinical practice. To verify these findings this study should be replicated with a larger sample and a control group. Replicating the study with more participants using an experimental (as opposed to quasi-experimental) design would lead to more conclusive results. It is this researcher's opinion that the mixed-model design was valuable in learning

about perceived barriers and implications for practice, and that this design should be considered for future studies.

In addition, the measurement tools used (pre-test, post-test, and follow-up test) were researcher-designed and therefore reliability was not established. The reliability of the tools could be accomplished by using the test-retest method (Fraenkel & Wallen, 2000) with a group of board-certified music therapists. Content and construct validity were assumed for the measurement tools due to (a) pilot testing of the instruments with feedback from content experts (content validity) and (b) definition of variables, formulation of hypotheses, and testing of hypotheses (construct validity).

Future research should also focus on music therapists' knowledge, self-efficacy and behavior regarding other aspects of clinical practice. Are there other areas in which music therapists are trained but which are commonly avoided or neglected in clinical practice? The answer to this question could be used to develop continuing education opportunities that are specifically designed to meet areas of need.

Finally, researchers could focus on how the training could be adapted to fit the needs of other helping professionals. Interest in the use of creative and expressive methods within mental health practices has grown in recent years, as is evidenced by publications such as the *Journal of Creativity in Mental Health* which was first published in 2005. Research should inform how we proceed with the training of helping professionals to incorporate these creative and expressive methods into competent and ethical practice.

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APPENDIX A: PRE-TEST

Please circle the best answer to each question.

1. The type of songwriting that typically requires the LEAST client involvement is:
 - a. Strategic songwriting
 - b. Process songwriting
 - c. Spot songwriting
2. The type of songwriting that typically requires the MOST skill on the part of the therapist is:
 - a. Strategic songwriting
 - b. Process songwriting
 - c. Spot songwriting
3. In McHose's Chord Classification System, the chord(s) with the weakest "pull" toward the tonic are:
 - a. vi
 - b. V, vii°
 - c. ii, IV
 - d. iii, I7
4. In McHose's Chord Classification System, the chord(s) with the strongest "pull" toward the tonic are:
 - a. vi
 - b. V, vii°
 - c. ii, IV
 - d. iii, I7
5. In McHose's Chord Classification System, movement downward toward the tonic, but skipping a class or classes, is called:
 - a. Altered Motion
 - b. Retrogression
 - c. Normal Motion
 - d. Elision
6. The first step in using songwriting as a clinical intervention is:
 - a. Choosing a musical style
 - b. Considering the clinical goal
 - c. Creating lyrics
 - d. Creating a melody
7. In general, when using songwriting as a clinical intervention the therapist should strive to:
 - a. Keep the melody line simple
 - b. Make the melody similar to a song the clients know
 - c. Choose a chord progression first
 - d. a and b
8. A common name for the piano accompaniment pattern when the left hand plays the chord root on beat 1, and the 5 of that chord on beat 3 (in 4/4 time) is:

- a. Walking bass
- b. Waltz
- c. Block chord
- d. Country

Please rate how certain you are that you can perform the tasks below **right now**. Rate your degree of certainty by recording a number from 1 through 10 using the scale given below. You may use all numbers between 1 and 10.

1 10

Not at all certain
I can do this task

Moderately certain
I can do this task

Highly certain
I can do this

Degree of Certainty

STRATEGIC songwriting: writing a song <i>outside</i> the therapy session. The song is written entirely by the music therapist (perhaps using words or phrases from previous sessions with the clients) to meet a specific client goal, and is used as a therapeutic intervention.	
PROCESS songwriting: writing a song <i>during</i> a session with some degree of collaboration between the music therapist and client(s). The song may take more than one session to complete, and is used as a therapeutic intervention.	
SPOT songwriting: writing a song “on the spot” to meet a need that emerges <i>during</i> the session. The song is typically written primarily by the music therapist. The song is used as a therapeutic intervention.	
PERSONAL songwriting: writing a song for your own pleasure or as a creative outlet. The song is not intended to be used as a therapeutic intervention.	
LYRIC writing: creating words for personal or clinical songs.	

What do you perceive as the barriers to your use of songwriting as a therapeutic intervention?

Please circle one answer that best describes the **frequency** of your use of songwriting as a clinical intervention in the past 6 weeks:

I used songwriting as a clinical intervention approximately ____ times in the past 6 weeks:						
0	1-3	4-6	7-9	10-12	13+	

Please provide your information in the blanks:

Your age: _____

Primary population you work with: _____

Years as a MT-BC: _____

Highest degree completed: _____

APPENDIX B: POST-TEST

Please circle the best answer to each question.

1. The type of songwriting that typically requires the LEAST client involvement is:
 - a. Strategic songwriting
 - b. Process songwriting
 - c. Spot songwriting
2. The type of songwriting that typically requires the MOST skill on the part of the therapist is:
 - a. Strategic songwriting
 - b. Process songwriting
 - c. Spot songwriting
3. In McHose's Chord Classification System, the chord(s) with the weakest "pull" toward the tonic are:
 - a. vi
 - b. V, vii°
 - c. ii, IV
 - d. iii, I7
4. In McHose's Chord Classification System, the chord(s) with the strongest "pull" toward the tonic are:
 - a. vi
 - b. V, vii°
 - c. ii, IV
 - d. iii, I7
5. In McHose's Chord Classification System, movement downward toward the tonic, but skipping a class or classes, is called:
 - a. Altered Motion
 - b. Retrogression
 - c. Normal Motion
 - d. Elision
6. The first step in using songwriting as a clinical intervention is:
 - a. Choosing a musical style
 - b. Considering the clinical goal
 - c. Creating lyrics
 - d. Creating a melody
7. In general, when using songwriting as a clinical intervention the therapist should strive to:
 - a. Keep the melody line simple
 - b. Make the melody similar to a song the clients know
 - c. Choose a chord progression first
 - d. a and b
8. A common name for the piano accompaniment pattern when the left hand plays the chord root on beat 1, and the 5 of that chord on beat 3 (in 4/4 time) is:

- a. Walking bass
- b. Waltz
- c. Block chord
- d. Country

Please rate how certain you are that you can perform the tasks below **right now**. Rate your degree of certainty by recording a number from 1 through 10 using the scale given below. You may use all numbers between 1 and 10.

1 10
 Not at all certain Moderately certain Highly certain
 I can do this task I can do this task I can do this task
 task
 Degree of Certainty

STRATEGIC songwriting: writing a song <i>outside</i> the therapy session. The song is written entirely by the music therapist (perhaps using words or phrases from previous sessions with the clients) to meet a specific client goal, and is used as a therapeutic intervention.	
PROCESS songwriting: writing a song <i>during</i> a session with some degree of collaboration between the music therapist and client(s). The song may take more than one session to complete, and is used as a therapeutic intervention.	
SPOT songwriting: writing a song “on the spot” to meet a need that emerges <i>during</i> the session. The song is typically written primarily by the music therapist. The song is used as a therapeutic intervention.	
PERSONAL songwriting: writing a song for your own pleasure or as a creative outlet. The song is not intended to be used as a therapeutic intervention.	
LYRIC writing: creating words for personal or clinical songs.	

Prior to the training session, you were asked to discuss what you perceive as barriers to your use of songwriting as a therapeutic intervention. Please describe any change you perceive in those barriers after having received the training:

For each statement please circle one number that represents your degree of agreement.

Key: Strongly Disagree Disagree Not sure Agree Strongly Agree

1 2 3 4 5

1.	The course objectives were clearly stated.	1	2	3	4	5
2.	The course objectives were met.	1	2	3	4	5
3.	The handout contained useful information.	1	2	3	4	5
4.	The presentation was well-organized.	1	2	3	4	5
5.	The instruments provided were adequate for the session.	1	2	3	4	5
6.	Working in small groups was helpful.	1	2	3	4	5
7.	Performing group songs and getting feedback from the other groups was helpful.	1	2	3	4	5
8.	The physical environment (temperature, lighting, etc.) was conducive to learning.	1	2	3	4	5
9.	The audiovisual aids were helpful.	1	2	3	4	5
10.	The presenter demonstrated thorough knowledge of the subject.	1	2	3	4	5
11.	The presenter's style was conducive to learning.	1	2	3	4	5
12.	Modeling of musical examples was helpful.	1	2	3	4	5
13.	The pace of the session was about right.	1	2	3	4	5
14.	The amount of time provide for this session was about right.	1	2	3	4	5
15.	The amount of time for breaks was about right.	1	2	3	4	5
16.	This session was important in terms of my professional growth.	1	2	3	4	5
17.	Overall, I was very satisfied with this session.	1	2	3	4	5
18.	I learned new information about songwriting.	1	2	3	4	5
19.	I learned to apply information I already know.	1	2	3	4	5

APPENDIX C: FOLLOW-UP TEST

Please circle the best answer to each question.

1. The type of songwriting that typically requires the LEAST client involvement is:
 - a. Strategic songwriting
 - b. Process songwriting
 - c. Spot songwriting
2. The type of songwriting that typically requires the MOST skill on the part of the therapist is:
 - a. Strategic songwriting
 - b. Process songwriting
 - c. Spot songwriting
3. In McHose's Chord Classification System, the chord(s) with the weakest "pull" toward the tonic are:
 - a. vi
 - b. V, vii°
 - c. ii, IV
 - d. iii, I7
4. In McHose's Chord Classification System, the chord(s) with the strongest "pull" toward the tonic are:
 - a. vi
 - b. V, vii°
 - c. ii, IV
 - d. iii, I7
5. In McHose's Chord Classification System, movement downward toward the tonic, but skipping a class or classes, is called:
 - a. Altered Motion
 - b. Retrogression
 - c. Normal Motion
 - d. Elision
6. The first step in using songwriting as a clinical intervention is:
 - a. Choosing a musical style
 - b. Considering the clinical goal
 - c. Creating lyrics
 - d. Creating a melody
7. In general, when using songwriting as a clinical intervention the therapist should strive to:
 - a. Keep the melody line simple
 - b. Make the melody similar to a song the clients know
 - c. Choose a chord progression first
 - d. a and b
8. A common name for the piano accompaniment pattern when the left hand plays the chord root on beat 1, and the 5 of that chord on beat 3 (in 4/4 time) is:

- a. Walking bass
- b. Waltz
- c. Block chord
- d. Country

Please rate how certain you are that you can perform the tasks below **right now**. Rate your degree of certainty by recording a number from 1 through 10 using the scale given below. You may use all numbers between 1 and 10.

1 10

Not at all certain
I can do this task

Moderately certain
I can do this task

Highly certain
I can do this task

Degree of Certainty	
STRATEGIC songwriting: writing a song <i>outside</i> the therapy session. The song is written entirely by the music therapist (perhaps using words or phrases from previous sessions with the clients) to meet a specific client goal, and is used as a therapeutic intervention.	
PROCESS songwriting: writing a song <i>during</i> a session with some degree of collaboration between the music therapist and client(s). The song may take more than one session to complete, and is used as a therapeutic intervention.	
SPOT songwriting: writing a song “on the spot” to meet a need that emerges <i>during</i> the session. The song is typically written primarily by the music therapist. The song is used as a therapeutic intervention.	
PERSONAL songwriting: writing a song for your own pleasure or as a creative outlet. The song is not intended to be used as a therapeutic intervention.	
LYRIC writing: creating words for personal or clinical songs.	

Please circle one answer that best describes the **frequency** of your use of songwriting as a clinical intervention in the past 6 weeks:

I used songwriting as a clinical intervention approximately ____ times in the past 6 weeks:					
0	1-3	4-6	7-9	10-12	13+

Describe any *change* that has occurred in what you perceive as barriers to your use of songwriting as a therapeutic intervention in the weeks since the training.

What impact did the songwriting training session have on your clinical practice?

APPENDIX D: CONSENT TO PARTICIPATE IN RESEARCH

The Impact of Training on Music Therapists' Songwriting Knowledge, Self-Efficacy, and Behavior

You are being asked to participate in a research study conducted by Tracy Richardson, doctoral student at Indiana State University (and Debra Leggett, Ph.D., NCC, LMHC, faculty sponsor) from the Department of Communication Disorders and Counseling, School, and Educational Psychology. This research is being conducted as part of a dissertation. Your participation in this study is entirely voluntary. Please read the information below and ask questions about anything you do not understand before deciding whether or not to participate. You have been asked to participate because you are a board certified music therapist and you have decided to attend a songwriting training session for music therapists.

PURPOSE OF STUDY

The purposes of this study are (a) to investigate the impact of a songwriting training session on the songwriting knowledge, self-efficacy, and behavior of music therapists; (b) to evaluate the songwriting training program, and (c) to explore the impact of the training on perceived barriers and clinical practice.

PROCEDURES

If you volunteer to participate you will be asked to do the following things:

- Complete and submit a pre-test (before the songwriting training session)
- Attend the songwriting training session
- Complete and submit a post-test (after the songwriting training session)
- Complete and submit, by email or mail, a follow-up test six weeks after the songwriting training session. This test will be emailed to you six weeks after the training with instructions for completing and submitting it by email or mail. You will receive one reminder email if you have not submitted the follow-up test four weeks after it is sent to you.

This study is expected to last for six weeks. You will be given short tests to complete at three times: before the training, immediately after the training, and six weeks after the training. Each test should take about 10-15 minutes to complete. You may attend the training without being in the research study with no consequences. In order for your data to be included in this study, you must submit all three tests in the timeframe outlined above.

POTENTIAL RISKS OR DISCOMFORTS

The study involves no more than minimal risk. You may feel uncomfortable with the fact that you do not know some of the information provided in the training. You may feel overwhelmed with the thought of learning to write songs for therapeutic purposes. The researcher/presenter will attempt to structure the session so that participants learn in successive steps, in a safe environment. If uncomfortable feelings persist during or after the training, the researcher will assist you in locating a helping professional in your geographic area.

POTENTIAL BENEFITS

There are no anticipated benefits to you for participating in this research project. However, it is possible that your participation in the training session could result in changes in your songwriting knowledge, behavior, and/or self-efficacy.

CONFIDENTIALITY

Due to the nature of this study, there is no promise of anonymity; the researcher will have access to data that can be associated with particular participants. However, any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by coding the tests with numbers (instead of names) and keeping the consent forms (containing names and email addresses) and tests in separate locked cabinets. Only the researcher will have access to the data and email addresses.

When the follow-up tests are sent to participants by email, a confidentiality statement will be included at the bottom of the email. Follow-up tests that are submitted to the researcher by email will be printed then deleted from the researcher's email inbox. Email addresses of participants will be kept in a locked cabinet as stated in the paragraph above. Email addresses of participants will be used only for purposes of sending the follow-up test and a reminder (if needed).

All data and consent forms will be kept in locked cabinets in the researcher's locked office for a period of four years after the data collection is complete. After four years, the data and consent forms will be destroyed. No individual data will be released. Overall results from the study will be used for completing this researcher's dissertation and for publication and educational presentations.

PARTICIPATION AND WITHDRAW

You may choose whether or not to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind or loss of benefits to which you are otherwise entitled. You may also refuse to answer questions you do not want to answer.

ALTERNATIVES TO PARTICIPATION

You may choose to attend the training session without participating in this study. Participation in the research study is voluntary.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about this research, please contact:

Principal Investigator: Tracy Richardson, M.S., MT-BC 1000 Ridge Road Terre Haute, IN 47803 812-249-4290 trichard@indstate.edu	Faculty Sponsor: Debra Leggett, Ph.D., NCC, LMHC Department of CDCSEP Bayh College of Education, ISU Terre Haute, IN 47809 812-237-7762 Debra.leggett@indstate.edu
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RIGHTS OF RESEARCH PARTICIPANTS

If you have questions about your rights as a participant in this research, you may contact the Institutional Review Board (IRB) in the Office of Sponsored Programs at Indiana State University at (812) 237-3088 or email the IRB at irb@indstate.edu. You will be given an opportunity to discuss any questions about your rights as a research participant with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with ISU. The IRB has reviewed this study and has determined that it is exempt from IRB oversight.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____	_____
Printed name of Participant	Signature of Participant
_____	_____
Email Address	Date

Mailing address (if you do <u>NOT</u> have email)	

APPENDIX E: GRAND CORRELATION MATRIX

Table E1

Grand Correlation Matrix

Measure	1	2	3	4	5	6	7	8	9
1. Pre Freq	--								
2. Follow Freq	.75**	--							
3. Freq chg	-.10	.57*	--						
4. Pre SE	.54**	.60*	.21	--					
5. Post SE	.37*	.43 [†]	.24	.83***	--				
6. Follow SE	.07	.34	.44 [†]	.68**	.78***	--			
7. Pre KN	.02	.10	.27	.26	.04	.00	--		
8. Post KN	-.37*	-.14	-.16	-.40*	-.23	-.38	.22	--	
9. Follow KN	.11	.23	.20	.13	.21	-.06	.19	.38	--

Table E1 (Continued)

Grand Correlation Matrix

Measure	1	2	3	4	5	6	7	8	9
10. Post KN chg	-.27	-.46 [†]	-.32	-.49**	-.19	-.19	-.77***	.46***	-.19
11. Post SE chg	-.50**	-.46 [†]	-.07	-.74***	-.25	-.25	-.40*	.42*	.01
12. Follow KN chg	-.12	-.06	.04	-.23	.09	-.12	-.41	.22	.79***
13. Follow SE chg	-.70**	-.48 [†]	.15	-.71**	-.30	.03	-.62**	.19	-.24
14. Satisfaction	.25	.18	-.09	.19	.36 [†]	.02	-.19	-.15	.51 [†]
15. Age	-.18	-.45 [†]	.06	-.17	-.09	.34	-.29	-.11	-.13
16. Years	.02	-.07	.32	-.17	-.05	.22	-.44*	-.14	-.31

Table E1 (Continued)

Grand Correlation Matrix

Measure	10	11	12	13	14	15
10. Post KN chg	--					
11. Post SE chg	.64***	--				
12. Follow KN chg	.48 [†]	.44 [†]	--			
13. Follow SE chg	.66**	.79***	.19	--		
14. Satisfaction	.07	.12	.58*	-.11	--	
15. Age	.19	.18	.07	.59*	-.07	--
16. Years	.31 [†]	.23	.02	.72**	.07	.69

Note. Pre = pre-test; Freq = frequency; Follow = follow-up; chg = change; SE = self-efficacy; Post = post-test; KN = knowledge.

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$