

Chapter 3

THE RELATIONSHIP BETWEEN RESEARCH AND PRACTICE

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A fundamental difference between objectivist and interpretivist research, as discussed in Chapter 11, is that each tradition holds distinct philosophical positions on the nature of truth and reality. Objectivist and interpretivist researchers not only gather different types of information, but also may hold unique views on how *evidence* or *knowledge* is defined within their chosen methodology. Consequently, they may also hold differing views on how their research may be applied to practice.

Music therapy emerged as a practice-based discipline thanks to the pioneering clinical work of practitioners such as Paul Nordoff, Clive Robbins, Mary Priestley, Juliette Alvin, and Helen Bonny. Through their clinical experiences and in-depth observations, these clinicians developed interventions and subsequently theories around the therapeutic benefits of music that led to the development of clinical training programs. These pioneers' approaches inspired clinicians to reflect on their own practices and draw on their emerging expertise and intuition to guide future practice.

Since the earliest writings of Gaston (1968), the music therapy discipline has evolved as a result of the dynamic relationships that exist among research, theory, and practice. Wheeler (1983, 2005) and Bruscia (2005) have also suggested that reciprocal relationships exist among these three areas. Questions that arise through engagement in clinical practice

generate a theory, which then can be tested through research studies (*deductive reasoning*). Alternatively, theories may emerge from research and then inform clinical practice (*inductive reasoning*; see Figure 1).

"The type of evidence [knowledge] sought by clinicians varies according to the clinical question; and the nature of the intervention, activity, or phenomenon of interest" (Pearson, Wiechula, Court, & Lockwood, 2007, p. 86). Research indicates that health care professionals are essentially interested in four major areas of evidence [knowledge]: (a) feasibility—whether an activity or intervention is physically, culturally, or financially practical or possible within a given context; (b) appropriateness—how an activity or intervention relates, culturally or ethically, to the context within which care is given; (c) meaningfulness—how an activity or intervention relates to the personal experience, opinions, values, thoughts, beliefs, and interpretations of patients or clients [or clinicians]; and (d) effectiveness—the relationship between an intervention and clinical or health outcomes (Pearson et al., 2007, pp. 86–87).

The purpose of this chapter is to succinctly describe how evidence and knowledge produced by objectivist and interpretivist inquiries is conceptualized and to discuss within each of these research traditions the dynamic relationships that exist between research and practice. The

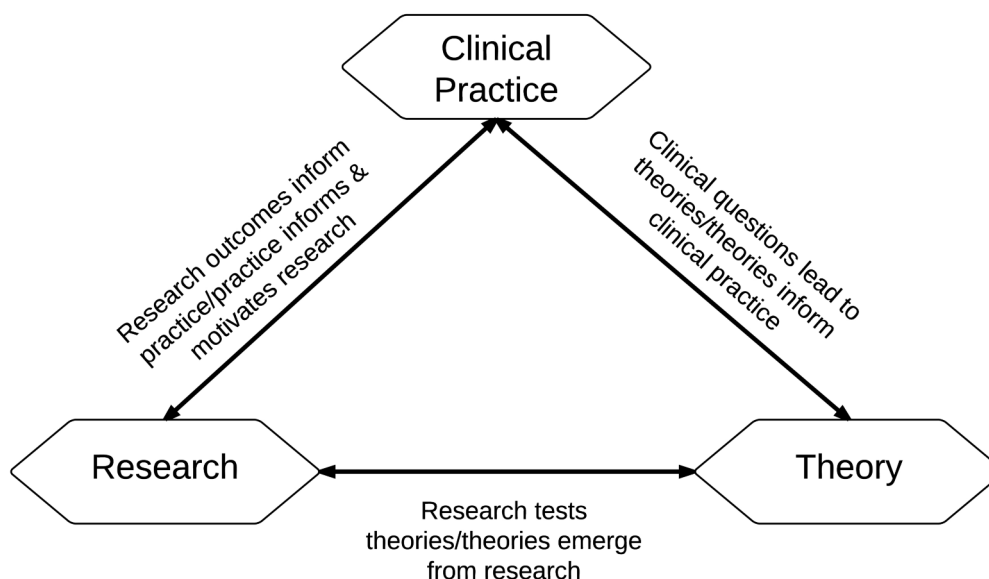


Figure 1. Dynamic Relationships Among Research, Theory, and Practice

authors identify gaps that often exist between music therapy research and practice at large and propose some potential solutions. The chapter culminates with a brief discussion on how multiple epistemological domains of evidence can contribute to an inclusive and integral understanding of music therapy research as it relates to practice.

Defining Evidence Within the Objectivist Tradition

Today, many practitioners employed in traditional medical settings (such as hospitals, nursing homes, and palliative care facilities) or education and special education settings are expected to design therapy programs that are appropriate for a client's specific needs and that are informed by an evidence base. Fortunately, the growing body of rigorous music therapy research enables clinicians to undertake this process so that they can systematically collect and appraise current and relevant research as a means to formulate conclusions about the effectiveness of interventions and make predictions on therapeutic outcomes for their own clients. Such evidence-based practices are the norm in many medical settings, and many music therapy services will not be funded unless there is a strong evidence base to indicate its effectiveness in outcomes and, in some cases, in cost-effectiveness.

Evidence-based practice (EBP) is "the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett, Rosenberg, Gray, & Richardson, 1996, p. 71). It downgrades intuition and unsystematic clinical experience, suggesting they are inadequate for clinical decision-making. Practice is only ethical and efficacious practice when informed by research evidence (Howick, 2011).

The Six Steps of Evidence-Based Practice

EBP is guided by six specific steps:

1. Posing the question,
2. Locating relevant research,
3. Critically appraising the quality and applicability of located knowledge,
4. Discussing the research results with the client when possible and appropriate and assessing the *fit* of effective options with the client's values and goals,
5. Collaboratively developing a plan of intervention, and
6. Implementing the intervention.

Following the clinician's assessment of a client, a clinical issue that would benefit from an intervention emerges. For the clinician to arrive at a clinical decision, she or he may need to pose a clinical question and systematically consult the literature to answer it. Questions posed are guided by the clinical assessment of the client and context and may focus on one or more components of practice:

- The clinical intervention type that would most efficaciously address the client's therapeutic needs,
- The clinical context where the intervention should be practiced,
- Dosage (the frequency and total number of therapy sessions),
- Therapeutic orientation,
- Expected outcomes, and
- Contraindications and considerations.

Level	Therapy Outcomes
1a	Systematic reviews of several experimental research studies showing homogeneity of results
1b	Individual randomized control trials with narrow confidence interval that show that results of treatment are better than no treatment
2a	Systematic reviews of several quasi-experimental or cohort studies where there is no control group or retrospective control group and where results show homogeneity
2b	Single cohort study including low-quality randomized control trial
2c	Outcomes research or observational studies based on retrospective matching of clients; lacks random assignment
3a	Systematic review with homogeneity of results of case-control studies
3b	Single case-control study
4	Case-series, poor-quality cohort, and case-control studies
5	Expert opinion

Table 1. Hierarchies of Evidence

Adapted from Oxford University Centre for Evidence-Based Medicine's Levels of Evidence (2009). Used with permission of the Centre for Evidence-Based Medicine, Oxford, UK, and Guilford Press, where the table, adapted by F. Baker, was printed in B. L. Wheeler (Ed.), *Music Therapy Handbook* (2015)

These questions then guide the clinician to search and locate literature that will be used to answer the clinical questions. Once the research literature has been located and collected, perhaps the most important step in EBP is to review and appraise the research according to two criteria—its validity (closeness to the truth) and applicability (relevance to practice). It is here that the relationship between research and clinical practice may be misaligned. At times, the clinician will need to reflect deeply on research findings to understand how research and practice are linked.

Appraising the quality of the literature is also a key step in the EBP process. There has been extensive debate about what makes good evidence, particularly when multiple studies are examining the same phenomenon, intervention, or clinical outcome. While numerous *hierarchies of evidence* are described in the literature, one of the most widely accepted hierarchies is that formulated by the Oxford University Centre for Evidence-Based Medicine (2009; Table 1). According to best practice, only studies at the Level 1 hierarchy can reliably indicate that an intervention has a direct cause-and-effect relationship. Reflections on the relevance of the hierarchical system are detailed later in this chapter.

Following synthesis of the literature, potential treatment options should be presented to the client with consideration given to cultural, religious (Baker, 2014), and pragmatic challenges (Drisko & Grady, 2012). A treatment plan grounded in a strong evidence base is then devised and subsequently implemented.

Cochrane Reviews and Systematic Reviews

Only studies ranked Level 1 allow us to reliably conclude whether a cause-and-effect relationship exists between music therapy and outcomes. However, one should not overlook the findings of studies ranked at Levels 3 and 4. A research agenda often begins with exploratory studies and case studies, which investigate the effect of the intervention on a specific individual or small group of individuals. It assists us to clarify what constitutes a treatment approach. These exploratory studies are often inspired by clinical observations in the field.

Similarly, controlled trials are often designed to study a single variable and its effect, include participants with a specific set of diagnoses or narrow sociocultural backgrounds, and exclude multiple, comorbid disorders that relate more to clinicians' practice. Further challenges arise when reviewing the protocols of randomized control trials. Protocols of trials and the contexts where they are implemented may be vastly different from the clinical context or orientation of the clinician searching for an intervention grounded in evidence. For example, a systematic review and meta-analysis of music therapy for people with serious mental disorders concluded that the largest clinical change occurs when clients receive between 16 and 51 sessions (a dose-response relationship [Gold, Solli, Krüger, & Lie, 2009]).

In some contexts, therapy programs may operate on a brief treatment model where funding is provided only for a small number of sessions. Clinicians may question the relevance of Gold et al.'s (2009) findings for their context.

The Reciprocal Relationship Between Music Therapy Practice and Objectivist Research

We approached a number of experienced researchers to source examples of how objectivist research has influenced their practice (their own research or that of others) and how clinical practice has informed their research.

Objectivist Research Can Test the Effectiveness of Protocols Developed from Practice. First and foremost, objectivist research can test the effectiveness of protocols that evolved from the clinical practice of clinicians. Carefully controlled studies can verify and, when statistically significant, can predict changes in future clients seen in practice, provided they resemble the characteristics of those in the research studies and the intervention is conducted according to the same protocol.

Music therapist Blythe LaGasse recounted how neuroscience research has impacted how she views and treats people with autism. As an outcome of her review of research on rhythm in motor rehabilitation (Hardy & LaGasse, 2013), LaGasse has drawn on non-music therapy literature to influence her treatment approach and her research with people with autism spectrum disorder. Similarly, she reports that practice has impacted her research. She is currently setting up pilot studies and developing protocols to use in her research based on anecdotal evidence from her practice. At the same time, the use of a protocol within her practice may be different to that used in research because of the lack of flexibility when conducting objectivist research. She states:

When I practice, I am often looking at the protocols I am using and determining if they would be appropriate for research. For example, I have been working with children with ASD who have auditory hypersensitivity. I have a protocol that I have been using with several children with success in behavioral changes. My research team will now be testing this protocol using electroencephalograph equipment. This is where my practice has influenced research. (B. LaGasse, personal communication, July 2, 2013)

Objectivist Research Can Determine What Constitutes Best Practice. Clinicians often seek to provide therapy under the conditions that will lead to the best clinical outcomes. Objectivist research can examine outcomes under different conditions; at different stages of onset of illness or recovery; and with different ages, therapeutic orientations, and

intervention types. This enables the clinician to assess the best course of intervention for the client for whom she or he is providing services. Robert Krout's research grew out of his clinical practice. His work with adolescent bereavement groups raised questions about what constituted *best practice*, which he subsequently studied in his research with colleague Tom Dalton (Dalton & Krout, 2005, 2006). In coming full circle, the results of these studies then informed changes that Krout made to his clinical practice with bereaved adolescents. He explained:

I inherited an adolescent bereavement group program at a hospice in Palm Beach County, which was designed to run for 7 weeks. The 7 weeks comprised an introductory session, 5 process weeks (including songwriting), and then a final closing session. We (Tom and I) were not using any standardized measures to assess growth. So, we asked the questions:

1. Is a 7-session treatment model with adolescents best practice, or would more or fewer sessions be better?
2. Is songwriting an effective treatment model for adolescents?
3. What "best practice" grief models are out there in the literature, and how do they relate to our 5-group process/session model (which was not formalized and did not have a name)?
4. What do the many songs written with adolescents at the hospice tell us about their grief journeys?
5. What tool might we use to best measure progress in their grieving/adjustment?

We started with the lyric analysis project (Dalton & Krout, 2006), which yielded our 5-process step teen grief model, and then moved into the grief songwriting process/grief process scale project (Dalton & Krout, 2005). Most of the solid adolescent grief models did have 5 steps, and the treatment model we ended up with did indeed retain the 7-week/session progression, but the 5 process sessions were much better designed after the literature review, analysis of the lyrics, and the formalization of the group songwriting protocol, along with outcome data on its effectiveness. So, the whole project encompassed the clinical to research back to clinical cycle. It really brought theory into it, too, as we surveyed all of the grief models we could find to see how they were structured. So it was really clinical to theory to research back to clinical. (R. Krout, personal communication, June 22, 2013)

Objectivist Research Can Lead to Policy Changes Concerning Clinical Practice. With objectivist research asserting it has the capacity to predict clinical outcomes, it has the capacity to influence key policy changes at local, state, or national levels. Gold, Solli, Kruger, and Lie's (2009) systematic review and meta-analysis on the relationship between music therapy dose and response for people with serious mental disorders has influenced policy in Germany and therefore impacted practice. Gold reports that other Cochrane reviews he has undertaken with various colleagues has led to changes in the guidelines for the treatment of people with psychosis where music therapy is now recommended. National Institute for Health and Care Excellence (UK) guidelines for schizophrenia also mention music therapy referring to systematic reviews of music therapy studies (C. Gold, personal communication, June 24, 2013).

Research Shapes a Clinician's Practice and Practice Shapes a Clinician's Research. The connection between an objectivist researcher influencing clinical practice and vice versa is integral when the researcher is researching issues and practices in which she or he is actively engaged. The work of Danish researcher-clinician Hanne Mette Ochsner Ridder is a fine example of this. Ridder has worked for more than 20 years with people who have dementia. In our correspondence with her, she reported how her own experience as a clinician influenced her research approaches and the music interventions she used with her research participants. Later, one of her master's students (Østerhagen, 2011) wrote her thesis about how Ridder's research (Ridder, Stige, Qvale, & Gold, 2013) influenced music therapy practice. The title of the thesis was *A Qualitative Study About How a Research Project Can Influence Music Therapy Practice* (in Danish). Østerhagen's interview-based study concluded that clinicians who participated in the quantitative pilot project perceived this to positively influence their practices.

Defining Knowledge Within the Interpretivist Tradition

As noted above, gathering different types of information requires different forms of inquiry. In many instances, an interpretivist research paradigm may be the most logical, feasible, and methodologically appropriate approach.

An interpretivist methodology is required when one is studying phenomena that cannot be reduced or divided into discrete, decontextualized variables. The overarching purpose is to fully explicate, describe, and understand a phenomenon in its wholeness and within a *real world* or *natural* context (Aigen, 1995; Bruscia, 1995a, 1995b; Wheeler & Kenny, 2005). The goal is not to identify *cause-and-effect* relationships between or among predetermined variables but rather to allow contextually relevant variables (or *realities*) to *emerge* in order to generate theoretical constructs and build

theory that can potentially be further refined by subsequent studies. The constructs that emerge from any single study are believed to be a co-creation of the participant(s), the researcher(s), the phenomenon, and the audience of that study (Bruscia, 2005) and are not considered to be generalizable in an objectivist sense. However, interpretivist studies must contain detailed information about the researcher(s), the participant(s), the research context, and, when applicable, the interactions that occur between the researcher(s) and the participant(s). This knowledge helps the reader to engage with the material at multiple levels and potentially relate it to his or her own experiences (Aigen, 1996). This, in turn, also helps the reader to infer how the study's findings may *transfer* into other relevant settings or situations. The value of any interpretivist research study is determined in great part by its *usefulness*; in other words, the practical applicability of the results (i.e., knowledge) to a discipline or to real-life [clinical] contexts (Abrams, 2005; Aigen, 1996; Stige, Malterud, & Midtgarden, 2009).

For example, Hudgins (2013) conducted a study in which she examined the shared lived experiences of the termination of a limited-term music therapy group in a community mental health setting. Individual interviews with the adult participants as well as an analysis of the last session revealed four overarching theme categories: (a) participants' recognition of their accomplishments in music therapy, (b) participants' recognition of challenges that occurred during music therapy, (c) negative feelings experienced by the participants in response to termination, and (d) participants' ways of coping with termination. The theme category descriptions are grounded in a *real-life* clinical setting and also provide useful information on how music can be used to facilitate a constructive, meaningful, and personalized termination process. As all music therapists experience termination in their work, those who read Hudgins' study may be able to relate, apply, or adapt these results in ways that are relevant to their own clinical contexts. Furthermore, in spite of the obvious importance of this topic, very little research has been conducted in this area. Hudgins' study provides music therapists with some much-needed practical guidance.

The Reciprocal Relationship Between Music Therapy Practice and Interpretivist Research

Although music therapy is gaining increased recognition as a scholarly discipline in its own right (Aigen, 2014; Wheeler & Kenny, 2005), it is first and foremost a service-oriented profession that helps individuals to live better lives through purposeful engagement in music experiences and in the relationships that develop through them (Bruscia, 1998a, 2014). Music therapy researchers have an obligation to conduct studies that are relevant to the contexts within which music therapists work and that will help them, directly or indirectly, in their work with clients (Aigen, 1996). The

following paragraphs describe key elements of the reciprocal relationship that exists between interpretivist research and music therapy practice and illustrate how these unique elements contribute to or modify existing knowledge or practice (Bruscia, 2014).

Interpretivist Research Provides Rich Descriptions of Music Therapy Practice as It Occurs in Real-World Contexts. Music therapy practice is incredibly diverse. The goals and methods employed may vary according to the setting, the client population, and the clinical orientation of the music therapist (Aigen, 2014; Bruscia, 2014; Wheeler, 2015; Wigram, Pederson, & Bonde, 2002). Clinicians need descriptive evidence that will help them to identify, adapt, implement, and integrate relevant interventions within the realities of varying practice contexts. Interpretivist research can help to generate clinical knowledge that clinicians will find interesting, comprehensible, and applicable because they are able to relate it to key aspects of their own experiences (Aigen, 1996). Therefore, interpretivist inquiries have a vital role to play in defining, building, or expanding upon existing music therapy practices, experiences, and contexts, and, by doing so, they incorporate practice-based knowledge into the evidence base for practice (Leeman & Sandelowski, 2012).

Two examples of interpretivist studies that provide descriptions of music therapy practice in real-world clinical contexts include: "Not Bad for An 85-Year-Old!—The Qualitative Analysis of the Role of Music, Therapeutic Benefits and Group Therapeutic Factors of the St. Joseph's Alzheimer's Adult Day Program Music Therapy Group" (Ahonen-Eerikainen, Rippin, Sibille, Koch, & Dalby, 2007) and "The Therapeutic Potentials of Creating and Performing Music with Women in Prison: A Qualitative Case Study" (O'Grady, 2011).

Interpretivist Research Involves Values and Procedures That Are Similar to Process-Oriented Clinical Approaches Widely Used in Music Therapy. As Aigen (1993) and Wheeler and Kenny (2005) discuss, in process-oriented clinical approaches, the music and the therapeutic relationship are considered to be primary mediums of experience that either contain intrinsic therapeutic benefits (in and of themselves) or are the means by which contextually relevant outcomes are allowed to emerge. Similarly, interpretivist research that seeks to more fully understand the meaning or essence of clinical music experiences or therapeutic relationships (including interpersonal, intrapersonal, intermusical, or intramusical relationships) approaches inquiry from an emergent and flexible process-oriented perspective. Therefore, knowledge obtained through these studies is highly relevant to the work of process-oriented clinicians.

For example, Sorel (2010) examined both music experiences and relational processes in a naturalistic study that involved a mother-son therapy dyad in a Nordoff-

Robbins Music Therapy context. This study was unique in that up to this point in time, parents did not usually play active roles in Nordoff-Robbins Music Therapy sessions. Therefore, Sorel's methodology needed to be flexible in order to allow relevant knowledge to emerge as the therapy process also emerged. She studied the sessions from personal, clinical, musical, and interpersonal angles, which enabled her to clearly demonstrate how Nordoff-Robbins Music Therapy practices could be applied to a new treatment context. This information likely also contains elements of applicability to other process-oriented music therapy practices.

Interpretivist Research Can Give Voice to, Empower, and Inspire Client and Clinician–Researcher Participants. The research process may be viewed as a joint venture or collaboration between the researcher(s) and the participant(s) to varying degrees, depending upon the methodology being employed. This is similar to humanistic clinical approaches where the client and therapist are viewed as collaborative partners (or fellow musicians) within the music therapy process (Aigen, 1996, 2002; C. Lee, 1996).

Member checking is a process employed in some interpretivist methodologies where participants are provided with the opportunity to provide feedback on the researcher's interpretations of their views, feelings, and experiences. For example, in "A Phenomenological Study of the Interpersonal Relationships Between Five Music Therapists and Adults with Profound Intellectual and Multiple Disabilities" (J. Lee, 2014), the music therapist participants were provided with the opportunity to validate their individual interview transcripts as well provide feedback on the researcher's distilled essence of their transcripts. Within the context of a book titled *Paths of Development in Nordoff-Robbins Music Therapy*, Aigen (1998) presented a comprehensive qualitative study that examined the archived clinical work of Paul Nordoff and Clive Robbins. In one case, Robbins (as a research participant) did not agree with Aigen's initial analysis of a course of therapy that had taken place with a child named Loren (see Chapter 6 in *Paths of Development in Nordoff-Robbins Music Therapy*). Here, Aigen details the process of *negotiating the outcomes* with Robbins, providing a clear example of how a researcher's conclusions can be altered through active engagement with research participants. Empowerment of participants as *co-researchers* is also a central tenet of action research. See Chapter 39 in this book for a detailed description of this facet of action research, along with relevant examples.

Ultimately, it is incumbent upon the professional research partner(s) to make ethically sound decisions with regard to the norms and rules of the research context and to ensure that the participants (especially those who are in inherently vulnerable positions such as clients) are not compromised in any way before, during, or after the research process (Bergold & Thomas, 2012). As collaborative research methods become more common, institutional review boards are adopting

policies to help guide ethical reviews of this type of research (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2010). As long as appropriate ethical measures are in place, clients who participate in collaborative research processes may feel a sense of empowerment, improved sense of agency, or increased self-esteem through the experience of participating in the process and having a voice in the professional literature (Silverstein, Auerbach, & Levant, 2006). This, in turn, may inspire music therapists who work with similar types of clients to adopt more collaborative approaches in their clinical work and research.

Clinician participants (e.g., music therapists who are being interviewed or those who facilitate the clinical components of a study) may also derive direct benefits from their participation in interpretivist research. In an interpretivist study that examined an adolescent Creative Music Therapy group, Aigen (2000) interviewed the two therapists who facilitated the group as part of his research process. These therapists later reported to Aigen that being interviewed gave them an opportunity to think about their work in a more in-depth way, which in turn led to increased insight that might not have otherwise occurred. Similarly, in a phenomenological study conducted by one of the present authors, eight music therapists were interviewed about their experiences as clients during the postlude discussion phase of Guided Imagery and Music (GIM) sessions (Young, 2012). During these interviews, several of the participants expressed that: (a) They had gained new insights into their own GIM experiences (as clients), (b) they had gained new insights into their own work as music therapists/GIM facilitators, and (c) they hoped that their stories (contained in the publication) would increase GIM therapists' understanding of how to effectively facilitate GIM sessions/postlude discussions.

Ultimately, clinician participants may be inspired to think about their own work in new ways, thereby resulting in changes and insights that may benefit their clients. Furthermore, research participants' (clients' and clinicians') perspectives on clinical music therapy experiences, interventions, and research processes are a rich source of data, which may not only empower participants and lead to constructive changes in practice, but may also be viewed as legitimate evidence from both service user and service provider perspectives (Ansdell, Pavlicevic, & Procter, 2004).

Interpretivist Research Can Accommodate the Dual Role of Music Therapy Clinician–Researcher. Although some research methodologies do not support the idea of a clinician studying his or her own clinical work, some interpretivist methodologies view the dual role of clinician–researcher as an advantage as long as the necessary reflexive measures are in place (i.e., the researcher acknowledges and fully explicates his or her assumptions, motivations, and values in relation to the research, and all ethical issues are fully addressed). In fact,

this emphasis on self-reflection parallels the way in which some music therapists monitor countertransference in their therapy practice. From this point of view, it seems that clinicians are often in an ideal position to know what information may be most relevant and useful for other clinicians. "One of the tasks of the researcher in a qualitative [interpretivist] approach is to make tacit knowledge, as a therapist, available as propositional knowledge. The purpose of some research is indeed to find out what we [therapists] know" (G. Aldridge, 2005, p. 35). Many music therapist researchers choose interpretivist methods because these descriptive means of gathering data directly correspond to their experiences with clients (Wheeler & Kenny, 2005). Furthermore, being in the clinician-researcher role can lead to in-depth reflection and insights that effect change in one's own clinical practice. "This, in turn, causes a ripple effect whereby all persons who come into contact with these *revised* practices (e.g., clients, students, other professionals) are affected in multiple ways" (Young, 2013, n.p.). The clinician-researcher's personal and authentic connection to the material may also help him or her to produce a research report that resonates deeply with other clinicians.

For example, in order to better understand her own clients' lived experiences of serious mental illness, Vander Kooij (2009) conducted a hermeneutic phenomenological study in which she interviewed her clients about songs that they had written in music therapy. A particularly salient outcome of this study was Vander Kooij's realization that by initially defining her clients' songs as *illness narratives*, she had inadvertently overlooked how these songs also contained material related to her clients' experiences of recovery. This insight helped her to understand that her clients' lived experience of mental illness was inextricably interwoven with that of mental health. This changed Vander Kooij's own approach to practice, and other music therapists who work in similar contexts and with similar clients, or who use songwriting, might easily relate this finding to their own practices. They may be inspired to utilize a more resource-oriented approach in their work and, like Vander Kooij, become more aware of their own assumptions about their clients or their clients' creative expressions.

Finally, it is also important to note that some interpretivist research methodologies may be more logistically and financially feasible for clinicians to conduct than some of the more traditional (objectivist) methodologies. Psychology researchers Silverstein, Auerbach, and Levant (2006) believe that clinicians often shy away from research because their work cannot meet the criteria of certain quantitative paradigms (e.g., sample size, randomness, generalizability). They suggest that if more practitioners were trained in qualitative research methods, they would be more likely to conduct systematic investigations of their own clinical work, which in turn would have direct benefits for clients (as described above). This suggestion may be particularly relevant for the field of music therapy as an increasing

number of music therapists complete master's and PhD programs that include training in interpretivist research methodologies.

Interpretivist Research Can Be Used to Help Translate Evidence Obtained from Objectivist Research into Practice.

An increasing number of clinicians and researchers believe that a more comprehensive model of EBP must include qualitative [interpretivist] methodologies in order to "address the broad evidence interests of policy and clinical decision makers" (Pearson, 2010, p. 490) as well as to ensure that clients receive services that are relevant to their needs and devised according to *all* of the best available information (Aigen, 2015; D. Aldridge, 2005; Edwards, 2012). Britten (2010) stated that the translation of Evidence-Based Medicine (EBM) into practice "involves subjective and social processes best investigated by qualitative [interpretivist] methods" (p. 543).

Qualitative meta-synthesis is an umbrella term used to describe methods that combine, integrate, or synthesize the findings of independent qualitative [interpretivist] studies (A. Meadows, personal communication, June 15, 2014). The Cochrane Collaboration outlines four ways in which qualitative meta-synthesis can be incorporated into the Cochrane Intervention reviews for health policy and practice: (a) informing reviews by using evidence from qualitative research to help define and refine the question; this ensures that the review includes appropriate studies and addresses important outcomes, allowing the review to be of maximum relevance to potential users; (b) enhancing reviews by synthesizing evidence from qualitative research identified while looking for evidence of effectiveness; qualitative evidence associated with trials can be used to explore issues of implementation of the intervention; (c) extending reviews by undertaking a search and synthesis specifically of evidence from qualitative studies to address questions directly related to the effectiveness review; and (d) supplementing reviews by synthesizing qualitative evidence to address questions on aspects other than effectiveness (Popay, 2006, as cited on the Cochrane website). See Chapter 60, *Synthesis of Interpretivist Research* in this book, for a comprehensive overview of this methodology and applications to music therapy.

The music therapy literature also contains examples of *mixed methods* studies where qualitative data were used to help interpret, clarify, and contextualize quantitative results. In a mixed methods RCT, Schwantes and McKinney (2010) implemented a music therapy program with Mexican migrant farmworkers, with objectivist outcome measures focusing on levels of depression, anxiety, and social isolation. However, they also conducted focus group interviews, which revealed important information about how the music therapist's role facilitated the development of relationships between the participants. This information helped to contextualize the positive quantitative outcomes, which clarified how they may be applied in *real-life* practice situations.

Caveat

The value and practical applications of knowledge obtained through interpretivist research, as outlined above, are presented under the assumption that the research has adhered to an acceptable standard of rigor. Although music therapist authors/researchers have indicated that a clinically relevant database of interpretivist music therapy research is being created, they have also identified that a significant number of publications are lacking in epistemological and methodological clarity (Aigen, 2008a, 2008b; Edwards, 2012). Furthermore, processes of interpretation can vary in interpretivist research, and if these are not clearly explicated within the context of a particular study, the relevance of the results may not be obvious for those who are unfamiliar with the philosophical underpinnings of a particular methodology (Miller & Fredericks, 2003). This lack of clarity may be due in part to the fact that scholarly journals often lack sufficient space for interpretivist studies or lack specific standards for the evaluation of interpretivist research. Standards for interpretivist research have been slow in developing, not because they are regarded as unimportant, but because they are very difficult to formulate given the myriad of philosophies that are included under the umbrella of interpretivist research (Bruscia, 1998b). Please see Chapter 66 in this book for information on the most current standards for evaluation of interpretivist research.

Bridging the Gap Between Music Therapy Research and Music Therapy Practice

While a more complete review of the history of music therapy research is outlined by Merrill in Chapter 2 of this book, it is important to briefly state that there has been a long history of disconnect between research and practice, and presently it is unclear as to whether this is changing. Since the inception of the *Journal of Music Therapy* in 1964, there has been a rapid increase in music therapy research. Early reviews of clinicians' perspectives of the relevance of music therapy research suggest that their awareness of new knowledge and research was limited and not perceived as relevant to practice (Braswell, DeCuir, & Maranto, 1980; Nicholas & Gilbert, 1980). Perhaps one reason for the perceived lack of relevance was that the earlier studies were not focused on populations with whom most clinicians worked and that the clinical issues addressed were not connected to the clinical challenges that practitioners faced (Gfeller, 1995).

Qualitative (interpretivist) research in music therapy emerged in the late 1980s due in large part to the identification of a need for more research that was directly relevant to clinical practice (Aigen, 2008a, 2008b). Although the amount of interpretivist music therapy research being conducted and published overall has been increasing steadily since that time (Aigen, 2008a, 2008b; Brooks, 2003; Garwood, 2013), it is in some ways still a relatively new endeavor. In

fact, a recent investigation into publication trends of English language music therapy journals suggest that over time, there has been a decrease in clinical reports and studies conducted within clinical settings (Garwood, 2013) and more of a focus on quantitative studies conducted by university academics. This suggests that the divide between research and practice may be growing.

Lastly, it is important to acknowledge some additional barriers that may impede the successful application of research results to music therapy practice. Although open-access journals are becoming more common, it is still often the case that clinicians do not have easy or affordable access to the academic journals that contain relevant research. It may also be the case that some research terminology or methodologies are not well understood by some clinicians (or by their clinical managers), thus making the research seem inapplicable or irrelevant to day-to-day practice. Furthermore, clinicians may not have the means (e.g., time, skills, authority) to make the systemic changes needed to implement new practices—even when these practices are supported by strong research evidence (Dozois, 2013; Silverstein, Auerbach, & Levant, 2006; Young, 2013). Although it goes beyond the scope of the current chapter to explore potential solutions in great detail, there are a few ways in which music therapy researchers, educators, and advocates can begin to address these issues.

Aigen (2008b) suggested that all universities that offer doctoral studies in music therapy make their studies available (with the permission of the authors) through inexpensive or free digital downloads (as is already being done by Aalborg University in Denmark). The present authors would also like to suggest that music therapy professional associations publicize the availability of these studies (and other accessible music therapy research such as *Barcelona Publishers' Qualitative Inquiries in Music Therapy* or other open-access journals) to their members on an ongoing basis, thus making *all* research feel like a more integral and relevant part of the profession. Plain-language summaries of clinical research could help to make research seem more accessible and applicable to frontline clinicians. Regional, national, and international music therapy conference organizers need to ensure that their programs contain a balanced representation of clinical music therapy research and not privilege certain methodologies over others. Finally, those individuals who are in a position to actually conduct music therapy research need to: (a) consult with other researchers when doing their own projects and be willing to act as consultants or mentors to up-and-coming music therapy researchers (both quality-assurance measures); (b) conduct research that is directly relevant to the reality of current music therapy clinical practice; for researchers who no longer do clinical work, this may involve creating research partnerships with clinicians; and (c) organize and communicate findings (in reports and presentations) that are directly applicable to clinical settings. An authentic researcher

must communicate all that the audience needs to know in order for them to engage with the data and [apply] the findings (Bruscia, 1996); (d) whenever possible, researchers need to try to take responsibility to ensure not only dissemination but also implementation of their findings.

Promoting an Integral Perspective

It is the opinion of the current (and other) authors (Abrams, 2010; Aldridge, 2005; Bruscia, 2014) that music therapy practice is too broad, diverse, and complex to be limited to one type of epistemology or philosophical paradigm. The same can be said for music therapy research and the multiple epistemological domains of evidence or knowledge that can be gathered through research. Best practice must be informed not only by the more commonly accepted notions of evidence (e.g., RCTs), but also by knowledge obtained in real-world practice contexts where client, therapist, cultural, or community perspectives are considered (Aigen, 2015; Aldridge, 2005). Here, music therapist clinicians and researchers embrace a pluralistic or integral view where all methodologies or types of evidence [knowledge] are considered as equally valued options from which to choose based upon the particulars of a given situation (Abrams, 2010; Aldridge, 2005; Bruscia, 2014). It is only in this way that we can truly achieve standards of best music therapy practice for the diverse spectrum of clients that we serve.

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