Barbara Wheeler is a name synonymous with research in the profession of music therapy. In 1995 she was the sole editor of the second edition of *Music Therapy Research*, which contained 24 chapters exploring quantitative, qualitative, historical, and philosophical approaches to research. Twenty-one years later she brought on Kathy Murphy as co-editor for the release of the third edition. This updated edition includes an impressive 68 chapters that situate music therapy research into objectivist and interpretivist paradigms, outline research ethics and multicultural considerations, and provide an impressive number of research designs and approaches that can be employed toward the deepening of our understanding of music therapy.

Wheeler begins the preface by identifying the “tremendous growth” of the music therapy profession over the “last 65 years,” and firmly establishes that “our research” allows us to “understand how music is used within the context of a therapeutic relationship” (p. xvii). Given the breadth and scope of this text, it is clear that research in music therapy is alive and well, and that we are moving into an era where we are now, more than ever, using research to generate an evidence base that is currently serving us and will serve us into the future.

One of the most impressive features of this text is that each chapter is tied to the extant music therapy research. Well-established research methodologies such as survey research (Chapter 27), longitudinal designs (Chapter 31), factorial designs (Chapter 36), phenomenological inquiry (Chapter 40), hermeneutic inquiry (Chapter 42), and historical research (Chapter 62) are clearly defined and articulated. Within each chapter, the authors have provided examples from the music therapy literature and guidelines for implementation of the methodology. It is apparent that the authors and editors took great care in outlining the powerful ways in which each research design has been used and can be used to further explore questions that arise through the practice of music therapy. Each
chapter includes resources from eminent researchers and theorists both inside and outside of the profession of music therapy. When reading about interpretivist case-study research (Chapter 53), I expect to see names such as Yin, Corbin and Strauss, and Creswell, as they are experts in interpretivist research and in case-study design. What makes this book exciting is that these important figures are sharing the page with influential music therapy researchers such as Aigen, Bruscia, McFerran and O'Grady. While I struggle with our propensity to define music therapy through the lens of other professions, I find this approach of connecting researchers inside and outside of the discipline to be highly satisfying, as it aligns the expertise of music therapy researchers with a larger community of researchers and research experts while acknowledging the unique demands that are faced by music therapy researchers.

Wheeler and Murphy’s dedication to the inclusion of research designs that are coming to the fore within our profession and within medical and humanities research is encouraging, as it helps the reader to seek the design that best answers the research question, rather than using a research design that is perceived to have more value. This also provides researchers with new and emerging research approaches in order to avoid “methodolatry or the habitual attachment to a particular method” (Darrow, p. 47). A professional emphasis on evidence-based practice could sway music therapists to only consider the “gold standard” of research, the randomised controlled trial, as the best or most important research when reading or designing a study. Felicity Baker and Laurel Young address the relationship between research and practice in Chapter 3, where they outline a hierarchy of evidence adapted from the Oxford University Centre for Evidence-Based Medicine’s Levels of Evidence. At the top of this list is the “systematic review of several experimental research studies showing homogeneity of results,” (p. 27), such as the Cochrane reviews. Toward the bottom of the list one finds the “single case-control study” (p. 27). In a section on the Cochrane reviews and systematic reviews, Baker and Young write “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” (p. 28).

The 3rd edition highlights that high quality research can occur through a wide variety of practices and that in combination these practices provide a foundation of evidence that is as rich and fertile as the profession itself. The inclusion of single-subject and small n approaches (Chapters 24-26), arts-based research (Chapter 44), grounded theory (Chapter 49), thematic analysis (Chapter 52) and microanalysis (Chapters 54 and 55) are just an example of the diverse array of research methodologies that are outlined, allowing researchers and clinicians access to theoretical paradigms and research processes that can lead one to discover the inherent depth of the practice of music therapy. Of note is Michael Viega and Michelle Forinash’s definition of arts-based research; a research method and an overall methodology “where a creative worldview forms the philosophical foundation for an inquiry” (p. 491). It is through these diverse lenses that music therapists can explore and develop theory and practice, create protocols that best meet the needs of clients, honour the art and science of the profession, and grow the research base to meet the ever-changing needs of a rapidly evolving culture of healthcare.

In the 3rd edition Wheeler and Murphy decided to move from identifying research as either quantitative or qualitative and redefining the paradigms as objectivist or interpretivist. This change in terminology is important, and is consistent within the third edition as well as within the condensed
**Introduction to Research** (Wheeler, & Murphy, 2017). Rickson (2018) interviewed Wheeler to discuss her choice of using objectivist and interpretivist language over quantitative and qualitative. It is Wheeler’s hope that this move will increase our opportunities to converse in multi- and interdisciplinary settings rather than hinder those opportunities.

In order to address the move to objectivist and interpretivist language, the editors have included several chapters that prepare the reader for engaging with these concepts before delving into the many research designs that are outlined within the next 40 chapters of the book. Winter (2017) offers a further review of these preparatory chapters, as they are also included in the *Introduction to Research* book by Wheeler and Murphy (2016). The format for both of these books is in line with the “educational theory of a spiral curriculum in which key concepts are introduced and then repeated in ever increasing degrees of complexity” (Winter, 2017, p. 2). The spiral is “iterative rather than linear and contributes to a further deepening of the reader’s understanding not only of the research paradigms but also the many ways in which these paradigms have already been at play in the music therapy literature” (p. 2).

Some additional features that prepare the reader to engage with research include chapters on the relationship between research and practice (Chapter 3), the relationship between research and theory (Chapter 4), developing a topic (Chapter 5), reviewing the literature (Chapter 6) and funding research (Chapter 10). These highly accessible chapters are useful for new or novice researchers who are planning to conduct research, for a senior-level or introductory graduate-level research course, or for those who are skilled at research but may need to engage with updated literature on the topic.

Chapter 5, developing a topic, provides a useful overview of the processes one may use to hone a research question into a feasible research study. Alice Ann Darrow’s focus on the sincerity and trustworthiness of a “good” researcher is a powerful statement that emphasizes the incredible responsibility researchers have to clients/participants and to the profession. I do, however, challenge Darrow’s statement that we are to have a “mind free of biases and preconceived notions of where the research will lead” (p. 47). I have to wonder if it is possible to approach research without some preconceived notions of where the research may lead? Is it possible to have a mind free of biases? In Chapter 20, *Data Collection in Interpretivist Research*, Doug Keith writes, “when researchers collect data, their method flows from a purpose. This is true irrespective of the theoretical orientation of the researcher […] each purpose is rooted in a particular epistemology and theoretical perspective” (p. 231). This may imply that researchers come to the research question(s) already situated within an orientation, and that that orientation can create notions of where the research may lead. It may be more helpful to explain that researchers and clinicians come to research questions with biases, some of which lead us to the research question in the first place. The possibility that our findings will align with our hypothesis can be exciting and often sustains our engagement with a project that may be difficult, frustrating and challenging. In Chapter 40, *Phenomenological Inquiry*, Nancy Jackson describes the importance of the epoché and bracketing to help the researcher recognise and move away from “one’s own beliefs, judgments, prejudices, biases, and preconceptions about the phenomenon being studied” (p. 442) and to serve as tools to help us “consciously put aside identified biases, assumptions, and so forth” (p. 442). Through the removal of these preconceived ideas the “researchers can be open to as many different variations of the phenomenon as the data
One potential notion that we bring to our research is that music is powerful and that music therapy changes people behaviourally, physically, cognitively, and spiritually. Within the third edition there are two chapters with a dedicated focus on the handling of musical data. In Chapter 15, *Measurement of Musical Responses*, Jörg Fachner offers approaches for measuring musical responses within an objectivist paradigm through the identification of dimensions of the music experience that include temporality, personal meaning and universal responses, emotional intensity, and expectations. Some of the methods for gathering and handling this information include participant self-report, researcher analysis of musical material, brain imaging via EEG, and analysis of biomarkers such as “neurotransmitters, hormones, cytokines, lymphocytes, vital signs, and immunoglobulins” (p. 159). Fachner examines the impact of music on the body and the mind, and presents research strategies that can help to access this powerhouse of information.

Chapter 21, *Analysing and Interpreting Musical Data in Interpretivist Research*, written by Lars Ole Bonde, is the companion chapter to Fachner’s. Ole Bonde begins the chapter with a wake-up call to music therapists: “the music itself in music therapy could be given much more attention than is often the case in research studies” (p. 245). He then follows with the statement “given that music is the core medium of music therapy, it is surprising that only a few studies report more than superficially about the music itself” (p. 245). Ole Bonde articulates that analysis of music within music therapy is not an “end in itself” (p. 245). He then offers a list of several areas music therapists can evaluate in their research, such as inter- and intra-musical interactions, inter- and intra-personal interactions, influence of music on “body, mind, and soul” (p. 245), and changes in behaviour as a result of the music experience. Ole Bonde includes a chart of music therapy research articles from the *Nordic Journal of Music Therapy* and the *Journal of Music Therapy* from 2012-2015. Of the 46 research articles in the *Nordic Journal* and the 59 research articles in the *Journal of Music Therapy* only nine included a “minimum of phenomenological description of analysis of one musical episode/syntax-semantics” (p. 246). This information is quite shocking, and serves as a strong reminder to consider what I emphasise and what I report when designing and conducting research.

Music therapy is a music-based profession and it would stand to reason that we would be reporting on the music as an essential component of our clinical work. Ole Bonde refers to Ansdell’s (1999) “music therapist’s dilemma” (as cited in Bonde, p. 245), suggesting that it is difficult to discuss what happens in music therapy but that this discussion is essential to music therapy. Within Chapter 21 Ole Bonde suggests several methods for discussing the music that happens in music therapy, and conceptualises this process on a spectrum. His inclusion of a decision tree, “the spectrum of music analysis” (p. 247), positions research on a continuum rather than as an either/or phenomenon. This spectrum provides a number of options for researchers to consider when interpreting musical data, thereby uniquely visioning the handling of musical data through “more quantitative, mixed, or more qualitative” methods (p. 247), lending itself to an understanding of the various shades of researching music rather than as a rigidly defined, black and white, event involving music. Some of Bonde’s recommendations for handling musical data include heuristic music analysis, phenomenological
approaches: an interdisciplinary journal of music therapy

winter

301

descriptions, body listening, Bruscia’s Improvisation Assessment Profiles, and microanalysis of traditional and graphic notation.

These two chapters are within Unit 4 and Unit 5 respectively. The two units address methodological concerns that emerge within each paradigm, and they contain chapters on measuring, analysing, and interpreting clinical data (Chapters 16 and 22), potential problems in objectivist research (Chapter 17), and software programs to help with the analysis of data (Chapters 19 and 23). Gene Ann Behrens’ introduction to SPSS (Chapter 19) is notable in that it provides an incredibly user-friendly overview of a not-so-user-friendly system. She begins the chapter with two decision trees that the researcher can use to select the proper inferential or descriptive statistics for the research question. On the next page, Figure 3 outlines a case scenario which leads the reader through the kinds of research questions one may ask when designing a study. On the following pages there is a table that summarises the research questions from the previous figure, type of variables, levels of measurement, and statistical analyses for SPSS (pp. 206-207). Behrens has also included screen captures of an SPSS data set and screen captures of different parts of the SPSS program as she works through several different statistical analyses. These tools are incredibly useful, and I know that these pages especially will be the most worn, dog-eared, highlighted pages in my copy of the book. While I enjoy objectivist data analysis, I do not do it often enough to have this information stored handily in my brain, therefore I typically have had to turn to several different books and YouTube videos to find this level of support. Now all of this information is in one convenient location. Not only will I use this chapter to teach a graduate-level introduction to research course, to advise graduate-level theses and undergraduate research projects, but I will turn to it for my own decision-making when handling data for objectivist research studies.

Chapter 23, Software Used in Data Analysis of Interpretivist Research, by Felicity Baker, is the companion chapter to 19, and includes information that is equally as helpful. She highlights several interpretivist data-handling programs, including MAXQDA, ATLAS.ti, and NVivo. The inclusion of screen captures from each interface helps the reader to get a sense of the functionality of each program as she describes the types of features available within each one. While I know it is impossible to cover all of the data-analysis software programs, I would have included the cloud-based program Dedoose, which is user-friendly, well-suited for interpretivist research, and very well-suited for mixed-methods research as it provides options for mixing objectivist and interpretivist data sets.

Units 4 and 5 prepare the reader to engage with individual research designs, which are then outlined in Units 6-8. These subsequent units include designs within the objectivist and interpretivist paradigms, as well as chapters on other types of research such as mixed-methods designs, systematic reviews, historical research, and philosophical inquiry. The book concludes with a section on evaluating the reliability and validity of objectivist research (Chapter 65), evaluating the rigor and integrity of interpretivist research (Chapter 66), and reading, writing, and submitting objectivist and interpretivist research (Chapters 67 and 68).

The third edition of Music Therapy Research is what music therapy clinicians, researchers, academics, and students have needed. The editors have tapped into the international music therapy community as a resource for the incredibly rich research that has already been published within the profession. These authors have provided resources for research that include strategies and
guidelines for the creation, design, and implementation of ethical, culturally sensitive, and rigorous research. Within this book there are also guidelines for how one may engage with published research as an evidence base that drives clinical decision-making. After reading this book, I am excited about what the next 21 years of music therapy research will look like and how we will be better positioned to understand the true potentials of music therapy as a result of the collective voices of the music therapists who contributed to the third edition. As I conclude this review, I am left with a sense of pride in the profession, in our dedication to our clients, and our passion to seek the evidence that leads to ethical and culturally competent practice. I will use this book as an educational tool for undergraduate and graduate research, as a personal resource in both clinical work and research endeavours, and as a weighty reminder of our tremendous professional growth over the past 65 years.

REFERENCES

