Suggested Guidelines for Conducting Music Therapy Literature Reviews & an Introduction to Systematic Reviews in Music Therapy

This paper describes the kinds of literature reviews found in music therapy writings and offers ideas for authors preparing literature reviews related to their clinical practice and research. It includes a description of systematic review and lists samples of literature reviews and systematic reviews conducted in music therapy.

What is a Literature Review?
A literature review is an “explicit and reproducible method for identifying, evaluating, and synthesising the existing body of completed and recorded work produced by researchers, scholars, and practitioners” (Fink, 2005, p. 3) related to a specified area of inquiry. In music therapy a literature review can be found in: (a) a section within a research paper which informs the research conducted; (b) a stand-alone narrative summary of relevant research and/or theory (see Table 1); or (c) a systematic synthesis of research findings (also called a systematic review) to explain a music therapy phenomenon, including the effects of music therapy interventions, and to inform future research.

Table 1. Sample of Narrative Summary Literature Reviews in Music Therapy

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Journal/Publication Details</th>
</tr>
</thead>
</table>
What is a Systematic Review?

As mentioned, a systematic review is one kind of literature review. "A systematic review attempts to identify, appraise, and synthesize all the empirical evidence that meets pre-specified eligibility criteria to answer a given research question" (Cochrane Library, 2013). Specified methods are used in systematic reviews, which are aimed at minimizing bias to enable more reliable findings that can inform practice. Systematic reviews should be guided by the PRISMA (preferred reporting items for systematic reviews and meta-analyses) guidelines (Liberati, Altman, Tetzlaff, et al, 2009). A widely used systematic review procedure in music therapy is the Cochrane review (see below). Final publication may be under the Cochrane Collaboration (Table 2, part i) or as stand-alone articles in academic journals that use other systematic review procedures (see Table 2, part ii).

Table 2. Sample of Systematic Reviews in Music Therapy and Music Interventions

(i) Research using the Cochrane Systematic Review Procedure (hence called, “Cochrane Reviews”)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title and Details</th>
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(ii) Research using other Systematic Review Procedures

<table>
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<tr>
<th>Reference</th>
<th>Title and Details</th>
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Systematic approaches to literature reviews include the following components: Specification of the planned review methods; a focused question; criteria for including and excluding literature; documentation of the search strategies including data sources; inclusion of tables and boxes which present the research methods examined; inclusion of tables to detail study characteristics; a description of how the quality of the studies is examined; discussion of limitations; inclusion of tables and graphics to illustrate data interpretation; appendices which include search strategies; samples of data extraction and methods of quality assessment; and declaration of author interest (Booth, Papaioannou, & Sutton, 2012).

**What is a Meta-Analysis (quantitative research)?**
When a systematic review in quantitative research uncovers good or high quality studies, reviewers may conduct a meta-analysis on those studies. In quantitative research, a meta-analysis uses various statistical methods to derive pooled summary estimates in order to produce an overall quantitative estimate for the intervention’s effect. A meta-analysis does not proceed when the systematic review does not meet specified criteria, for example, the study participants were not randomised, or it was a music therapy review but the study used only music as the intervention, not a therapeutic relationship. Meta-analyses should only be conducted on good or high quality studies, otherwise, they may produce biased estimates of treatment effect.

**What is a Cochrane Review?**
The Cochrane Collaboration disseminates reviews reporting on what is asserted as the best available information about healthcare interventions. A Cochrane review is a systematic assessment of a health care intervention consisting of: (a) a systematic review of literature (usually randomized or controlled clinical trials) related to the intervention and, if appropriate, (b) a meta-analysis of eligible trials (Higgins & Green, 2008). Guidelines for conducting Cochrane systematic literature reviews on quantitative research, including criteria for determining whether a trial is eligible for meta-analysis, can be found in the Cochrane Handbook (Higgins & Green, 2008). These reviews are usually conducted by a research team.

**Systematic Reviews, Meta-analyses, and Qualitative Research**
The aim of a qualitative systematic review is to integrate findings from studies by examining themes in and across studies (Booth, Papaioannou, & Sutton, 2012). The Cochrane Collaboration is currently considering standards for conducting systematic reviews on qualitative research. Although guidelines for conducting qualitative syntheses of the literature are found at the Cochrane collaboration website [i.e., http://cgim.cochrane.org/resources-conducting-qualitative-syntheses/ accessed 1st June 2014], and it is acknowledged that qualitative research can contribute to Cochrane Interventions reviews, no template is currently available to allow a Cochrane review solely of qualitative evidence (Noyes, Popay, Pearson, Hannes, & Booth, 2011).

**Cochrane Reviews and Music Therapy**
A sample list of music therapy Cochrane reviews is in Table 2. These and more music therapy Cochrane reviews can be accessed by going to the Cochrane Library (2013) website and searching through using the review’s title or keywords. The website is: http://www.thecochranelibrary.com/view/0/index.html

While the Cochrane systematic reviews are helpful in promoting awareness of music therapy it is important to remember that they exclude much important research, including qualitative and most mixed method studies. Furthermore, high quality findings from music therapy Cochrane systematic reviews are not possible given that the Cochrane group states that any non-blinded, subjective research potentially has a “high bias risk” (Higgins & Green, 2008, p. 199): In music therapy studies it is not possible to blind participants and those providing the intervention (Bradt & Dileo, 2010, p. 6). This can be a problem. For example, a Cochrane review summary needed to state that there is, “insufficient evidence of high quality to support the effect of music therapy on quality of life of people in end-of-life care” (Bradt & Dileo, 2010, p. 2), even when the systematic meta-analysis in this Cochrane review found significant improvements in functional, psychophysiological, and social-spiritual quality of life outcomes.
Shouldn’t all Literature Reviews be Systematic?
All literature reviews should be systematic but there are varying degrees and types of systematization evident in the varied kinds of literature reviews (Booth, Papaioannou, & Sutton, 2012). Cooper (1988) identifies four approaches to literature reviews: exhaustive coverage (all relevant literature); exhaustive coverage with selected citation; representative coverage; and coverage of pivotal works. Selective citation is regarded as potentially biased (Song, Parekh, & Hooper, 2012). In current academic literature reviews tend to be either narrative reviews which encompass available knowledge at the time it was written, or systematic reviews which aim to monitor the current state of the field and be periodically updated with new knowledge (Booth, Papaioannou, & Sutton, 2012).

What Does a Literature Review Contain?
A literature review can include the:
1. Introduction which outlines the focus of inquiry or “problem statement”. It is often helpful to explain the importance of the inquiry, including how it is filling a gap, that is, investigating something that has not been examined previously.
2. Presentation of research and theory related to the inquiry.
3. Critical appraisal (evaluation) and comparison of available information.
4. Depending on the literature review’s purpose, the literature review can
   • inform research questions, if it is used to introduce research
   • lead to a conclusion with implications for practice
   • lead to recommendations for further inquiry and/or
   • report on the effectiveness of an intervention (in a meta-analysis, for example, where the results of studies are combined and statistical techniques are used to analyse data)

Conducting a Literature Review
1. Decide on the topic.
   Make sure you have a specific focus for your review. If the topic is too broad the literature review could be unmanageable.

2. Identify keywords and search databases.
   A database is a comprehensive collection of data related to a usually broad area of inquiry, and organized for easy, usually computerised access. These are available through many libraries. Keywords and terms are used to inform the search for relevant literature in electronic data bases and elsewhere. For example, if your topic is music therapy for pre-school children with autism spectrum disorder your keywords or terms would be “pre-school children”, “autism spectrum disorder”, and “music therapy”. If your topic is music therapy with children of alcoholics, your keywords and terms might be “families with an alcoholic caretaker” and “children who are psychologically abused”. These can be entered into computerised databases. One place to start is Google Scholar: http://scholar.google.com.au/schhp?hl=en&as_sdt=0,5.
   Other data bases useful for searching for selected music therapy works follow. They have been grouped into related fields. Some will give you access to abstracts directly. Others will need to be accessed through a library service.
   • Music Therapy; Created by Lars Ole Bonde for the Center for Music and Health in Oslo: http://www.refworks.com/refworks2/?site=041541163653200000%2fRWWSSA78380%2fMusic+Therapy+Literature+September+2012
   • Education: ERIC
   • Medicine and health: MEDLINE, PubMed, EMBASE, LILACS, CANCERLIT, Scopus
   • Nursing and allied health CINAHL
   • Behavioral sciences and mental health: PsycINFO
   • Social and natural sciences: Arts and Humanities Citation Index; Web of Science, Scopus
   • Natural Sciences: Science Citation Index
   • Theses: CAIRSS, Proquest Digital Dissertations

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1 If you publish the research in an academic journal you will also likely be asked to provide key word descriptors of your article so that others may use keywords to find your article in the future.
2 The United States National Library of Medicine also manages a controlled vocabulary thesaurus called “Medical Subject Headings” (MeSH®) which assists searching in medical journals. See http://www.nlm.nih.gov/pubs/factsheets/mesh.html
• Information on ongoing clinical studies: ClinicalTrials.gov, Current Controlled Trials, National Research Register,
• Library of database services: EBSCO

Another source is Ken Aigen’s (2008a, b) comprehensive review of English language qualitative and mixed methods music therapy studies, published up until 2006. Aigen updated this list in 2012 and kindly agreed to its inclusion, made available to the WFMT website (http://www.wfmt.info/wp-content/uploads/2017/08/Aigen-Comprehensive-Review.pdf).  

Some important music therapy literature may not be found through existing data bases and you may need to conduct a further search by hand. This means you need to go through library catalogues and find music therapy textbooks, conference proceedings including the World Federation of Music Therapy congress proceedings (www.wfmt.info/music-therapy-today/), and bulletins. The lists of references in articles, theses, or dissertations that you review also can be valuable in tracking down additional sources. If you have time constraints and/or word limitations on your literature review, you may consider containing the literature review by further specifying its parameters or scope, for example, listing the specific data bases or publication dates searched. Even if you search for specific information, for example, published in the previous 10 years, it can be important to also seek and acknowledge the seminal writings in the field. For example, it is usually important to point to the pioneers in the field, such as Susan Munro if one is doing a review on music therapy and palliative care, and Paul Nordoff and Clive Robbins if one is doing a review on improvisational uses of music therapy. It is also important to analyze and cite original work and to avoid using secondary sources whenever possible. It is also essential to provide the details of data bases searched, and search terms used, to allow others to reproduce research findings.

3. Organize literature collected.
Various methods can be used to organize your literature as it is collected. An EndNote or Refworks bibliographic library can be useful for storing articles/book chapters, etc, and notes kept on the literature can be inserted and easily retrieved. EndNote or Refworks on your own computer systems can be used to create or import folders of articles on specific subtopics, which can ultimately inform subsections in literature reviews. For example, subtopics for the literature search on pre-schoolers, children, and autism spectrum disorder could include: description of condition, music therapy goals and techniques used, work with patients and families, theoretical frameworks, clinical vignettes, research findings, and related work (e.g., related music education papers).

When compiling research findings a Table can be helpful which separates the different kinds of findings. For example, qualitative, quantitative, and mixed methods findings may be placed in different Tables. Table 3 offers a possible template:

Table 3. Template Example for Recording Literature Collected for a Literature Review

<table>
<thead>
<tr>
<th>Author(s)/ Year/ Source</th>
<th>Participants</th>
<th>Question /focus</th>
<th>Context</th>
<th>Research design: sampling; MT intervention; outcome measures; analytic procedure</th>
<th>Results</th>
<th>Conclusions</th>
<th>Critique</th>
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4. Writing up the literature review

Please note that inclusion of this list is for readers’ interest. It is important to remember that qualitative, quantitative, and mixed methods research all have merit. There was no comparable quantitative research list in music therapy when this document was prepared. Readers are welcome to volunteer to update the research lists referenced, and to commence a list on music therapy quantitative research. Please contact the Chair of the Research and Ethics Commission if interested.

A secondary source is a description of research, theory, or case study written by someone who did not write the original work. When writing academic work authors should cite the primary source whenever possible. The primary source is the original description of the material.
The introductory paragraphs usually introduce the topic or problem statement, and highlight the proposed aim of the review, including whether it is to present an overview of available information on a topic, or to address a knowledge gap (which in turn provides a rationale for research that follows). The author then presents related information in sections, ensuring that transitions from paragraph to paragraph include a clear logical progression and justification about why the examined is important (Dileo, 2005). Authors may include discussions on limitations in existing research or theory (for example research findings based on small sample sizes), or contrasts in research findings on related areas. The writing should be concise and clear and use professional language. If the literature review informs a research study, the information should culminate in a statement of research aim/s or hypotheses.

Please note, the word limit will determine how much you elaborate on the study rationale and presentation and critique of the findings.

When Do I Start Conducting a Literature Review?

A comprehensive literature review for a research project will ensure that you do not duplicate previously conducted research (and possible consequent imposition on research participants). When applying a quantitative research method, the literature review is conducted before the study. While the study progresses, however, researchers also need to check for ongoing publication of new research findings, theory, or case studies that relate to the study, and integrate these references into the literature review when appropriate. It is assumed that the researchers’ understanding of the literature before the study will not affect data analysis.

When using a qualitative research method, researchers tend to familiarise themselves with the research topic enough to understand knowledge gaps, but not so much that it hinders the open manner in which qualitative data can be examined. This includes a literature review of the available empirical or quantitative research within their clinical focus area. Authors of qualitative study designs, however, can disagree about the literature review’s scope (Bryant & Charmaz, 2007). For example, when conducting grounded theory research, Strauss and Corbin (2008) state that familiarization with relevant literature before data is collected can help researchers to clarify interview questions and to sensitively analyse data. Charmaz (2008), however, recommends that literature reviews are delayed until after the analysis. Researchers will inevitably have preconceived understandings related to their research topic. Importantly, qualitative researchers must endeavour to not impose their views and related research findings and theories on their emergent findings (Bryant & Charmaz, 2007). This may be avoided through researchers detailing their pre-existing values by outlining their personal position and assumptions at the beginning of the study (Amir, 2005).

Further Information and References


