Develop Professional Expertise
HLTCOM502C

Student Assessment Guideline

Semester Two, 2015.

Diploma of Remedial Massage
HLT 50307
Introduction to research: Literature Search. *Elements 1 & 4.*

This assessment may be done individually, in pairs or a group of 3.

Find 3 different types of research articles about massage therapy. They must be from a scientific journal, preferably one that is peer-reviewed. The articles must be:

1. A Randomised Controlled Trial
2. A Systematic Review.
3. A qualitative article.

Please email or print Marguerite out a copy of the articles you find.

In order to find these articles you will need to conduct a literature search. The session on using search engines in the library with Lesley Smith will help. **Hint:** the AMT website section on research has direct links to articles on massage. [www.amt.org.au](http://www.amt.org.au) Under Practice Resources then Research

If possible, try and find all 3 articles on a similar topic. For example: Massage and headaches, Massage and Cancer, Massage and Sporting Performance. It is not essential that you do this so don’t worry if it’s not possible. The topics might also be linked.

Some examples of researched topics related to Massage Therapy are:

<table>
<thead>
<tr>
<th>Immunity</th>
<th>HIV</th>
<th>Scar release</th>
<th>Neurological disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>Women’s Health issues</td>
<td>Cancer</td>
<td>Pregnancy/labour</td>
</tr>
<tr>
<td>Geriatric</td>
<td>Arthritis</td>
<td>Pain</td>
<td>Headaches</td>
</tr>
<tr>
<td>Mental health</td>
<td>Infants/Children</td>
<td>Nausea</td>
<td>Adolescents</td>
</tr>
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</table>
What is ...  

- It’s the process where manuscripts submitted to a journal are assessed and evaluated for their **quality, value and credibility**.

- Journal editors select subject experts to review and evaluate submitted manuscripts before accepting (or rejecting) them for publication.

- Authors are required to respond to feedback provided by peer reviewers and manuscripts must pass the peer review process in order to be published.

**Why do journals conduct peer review?**

- to protect and maintain the quality of material they publish

- generally peer review articles are of a higher quality than those published in other types of publications
Typical peer review process

1. Editor receives manuscript
2. Reviewers read and provide the editor with comments
3. Decision made by editor: accept with minor/major amendments or reject
4. Revisions made by author
5. Final decision to accept or reject made by editor
6. If accepted, final proofreading & publication of the manuscript

How to tell if a publication is peer reviewed?

• It will usually include a listing of editorial board members and their responsibilities for the journal.

• Information regarding the scope of a journal may indicate that it is peer reviewed.
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Part A.) Critique a Randomised Controlled Trial. (Quantitative research)

Part B: Critique the Systematic Review.

Part C: A qualitative study or article.
Quantitative Research

“Randomized controlled trial RCT [is] a specific research design in which participants are randomly assigned to a treatment or control group. RCTs are very useful because they have the greatest potential to reduce the influence of extraneous and confounding variables so that the true effect of a treatment can be most accurately determined.” (page 39)

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. Researchers conducting systematic reviews use explicit methods aimed at minimizing bias, in order to produce more reliable findings that can be used to inform decision making.

(www.thecochranelibrary.com/view/0/AboutCochraneSystematicReviews.html, accessed 12/10/2013)
Part C: A qualitative study or article.

Qualitative Research

“Researchers use qualitative data collection methods to obtain detailed, rich, narrative data about participants, their contexts, their perceptions and their experiences.” (page 49)

Research – using AMT Association of Massage Therapists
Go to AMT - Members Research resources - AMT Classified Research January 2015
Remember that you can link to the AMT in the Massage Libguide (under the Websites tab)

1. Search: the document for your keyword
   (i.e. on a PC use the Ctrl and F keys to bring up the find search box)
2. Locate: the full text of the document
   a) Free full text available
   b) title of the Research article
   c) Use the Library’ TAFENSW Library Network eJournal A-Z
      (ask library staff for help with this.)

<table>
<thead>
<tr>
<th>AUTHORS</th>
<th>STUDY</th>
<th>HIERARCHY OF EVIDENCE</th>
</tr>
</thead>
</table>

See page 36 of online report
The next bit...

Using databases PubMed and Cochrane avoiding a brain explosion
Part A.) Critique a Randomised Controlled Trial. (Quantitative research)

Quantitative Research

“Randomized controlled trial RCT [is] a specific research design in which participants are randomly assigned to a treatment or control group. RCTs are very useful because they have the greatest potential to reduce the influence of extraneous and confounding variables so that the true effect of a treatment can be most accurately determined.” (page 39)

To more precisely test the effect of MT itself, we need a different research design. We need to arrange for some people to receive MT just as they have in the within-group example, but we also need some people to experience as many of those confounding variables—attention, placebo, and the passage of time—as possible without getting MT. If the only difference between our two groups is whether or not they received MT, any difference in outcomes would have to be the effect of MT. This is the logic behind a between-groups study, which is also referred to as a randomized controlled trial or a randomized clinical trial (Both of these terms are abbreviated as RCT, which is how we will refer to this study design). Because an RCT has the greatest potential to reduce the influence of extraneous and confounding variables (Hymel 2006), it is widely regarded to be the gold standard for treatment research (Creswell 2009).

The randomization in RCT refers to the method for forming groups. Consider for a moment what might happen if we used a nonrandom, systematic approach to forming groups. For example, what if we let research participants decide for themselves whether they would prefer to be in the group that will receive MT or in the group that will receive some other treatment or no treatment at all? It is very possible that people with the greatest enthusiasm for MT would choose to be in the MT group, and those with apprehension about receiving MT would opt to be in the other group to which MT will be compared. The two groups would differ in an important way before any treatment is even administered. This means we could not be sure at the end of the study that any difference in outcomes had not been caused by a preexisting difference in our participant groups. To eliminate this possibility, it is always preferable, when possible, to use a random process for the creation of groups. Using the flip of a coin or a similarly random process gives us the greatest chance that our groups will not be systematically different from each other in a way that could influence their response to treatments.

A control group is the other main key component of an RCT. Its inclusion in the study controls for the possible influence of attention, placebo, time, or any other confounds that otherwise prevent us from seeing the precise effect of the treatment we are studying. At the conclusion of our study, we can compare the group that received treatment with the control group. Note that this is fundamentally different from the comparison we made in the example of the within-group study, where the same participants were compared to an earlier version of themselves.
"Whenever you can, count." So said Sir Francis Galton (1822-1911), a titanic figure in the history of science and statistics, in what is essentially an endorsement of quantitative research methods. Galton’s advice recognizes that there will be a time when counting does not make sense. For these instances, we have qualitative (see chapter 4) and mixed methods (see chapter 5) approaches. But when counting, or quantification (to use the more technical term), does make sense, it offers clear advantages. Most modern researchers would agree with his assertion that we should count when we can.

**WHY USE QUANTITATIVE METHODS?**

Quantification—to assign meaningful and appropriate numerical values to what is observed—should be used whenever possible because it has inherent strengths and makes important scientific procedures possible. Key among its strengths are objectivity and precision; two of the scientific procedures it makes possible are replication and cumulation.

**Objectivity**

Imagine that we ask someone how much he slept last night. “I was really tired. I slept a really long time last night,” he replies. This answer may be true, but how useful is it? Their answer is subjective; it is based on and framed by that person’s inner experience, which is not something we can examine directly. As such, we do not know if the “really long time” that the person slept was 4 hours, 8 hours, 12 hours, or some other duration. A different question, based on a widely understood approach for quantifying sleep—How many hours did you sleep last night?—would potentially yield a more objective answer, based on observable phenomena in the world outside of himself. Assuming the person has a reasonably accurate clock and took notice of it, he might tell us, “Oh, I slept about 7 hours last night, which is a lot more than my usual 5 hours of sleep.” Even this very basic objective measurement gives us the possibility of checking its accuracy or comparing it directly with something else, such as the amount a different person slept last night. We would not have to depend on the idiosyncratic and unobservable inner experience of the person.
Quantitative Research
“Randomized controlled trial RCT [is] a specific research design in which participants are randomly assigned to a treatment or control group. RCTs are very useful because they have the greatest potential to reduce the influence of extraneous and confounding variables so that the true effect of a treatment can be most accurately determined.” (page 49)

Keywords that may help you find RCT research;

<table>
<thead>
<tr>
<th>RCT</th>
<th>Statistics AND research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomised control trial</td>
<td>Data AND research</td>
</tr>
<tr>
<td>Randomised clinical trial</td>
<td>Variables AND research</td>
</tr>
<tr>
<td>Sampling</td>
<td></td>
</tr>
<tr>
<td>Empirical research</td>
<td></td>
</tr>
<tr>
<td>Quantitative Research</td>
<td></td>
</tr>
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</table>

Sources to use to locate RCT research;
Library eResources
- CINAHL with full text
Example finding a Randomized controlled trial RCT - i.e. Quantitative Research

1. Go to CINHAL

2. Keywords: massage AND (migraine* OR headache*)

3. Limit: Randomised Control Trial (see under Publication Types)

4. Limit: full Text

Note: While you’re using CINHAL, keep your search the same but do change the *Publication Type* to Systematic Review.
Example finding a Randomized controlled trial RCT - i.e. Quantitative Research

1. Go to CINHAL
2. Keywords: massage AND (migraine* OR headache*)
3. Limit: Randomised Control Trial (see under...Publication Types)
4. Limit: full text
5. Limit: peer review

Note: While you’re using CINHAL, keep your search the same but do change the Publication Type to Systematic Review.

But also in CINHAL you can find a Systematic Review

1. Go to CINHAL

2. Keywords: massage AND (migraine OR headaches)

3. Limit: Systematic Review (see under...Publication Types)

4. Limit: full Text

Note: While you’re using CINHAL, keep your search the same but do change the Publication Type to Systematic Review.
Part B: Critique the Systematic Review.

Systematic 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. Researchers conducting systematic reviews use explicit methods aimed at minimizing bias, in order to produce more reliable findings that can be used to inform decision making.

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(www.thecochranelibrary.com/view/0/AboutCochraneSystematicReviews.html accessed 12/10/2013)

Keywords that may help you find a Systematic Review;

*Your topic keywords* e.g. back pain
AND
You might also try using the following;
• Systematic review
• Literature review
• Literature

*Use Boolean operators*
AND OR

*Use Phrase Searching*
“lower back pain”

Sources to use to locate a Systematic Review;
• [Cochrane Library](#) - evidence based [systematic reviews](#) Includes the Cochrane Database of Systematic Reviews (CDSR)
• [PubMed](#) - free Medline. Index of medical journals. Some articles are available free

• And don’t forget you can use [CINHAL](#) as we did in the example on slide 13
Systematic Review – using the Cochrane Library

1. Go to the Cochrane Library
2. Click on Advanced Search
3. Keywords: massag* and (pregan* OR labour OR labor) Click on Go
4. Search Limits under **All Results**, select **Review**
Systematic Review – using Pubmed

1. Go to PubMed
2. Click on Advanced
3. Keywords: massag* AND cancer
   Note: I change the search field to Title/Abstract. This may also work for you, if not, leave at All Fields.
   Search Limits under Product Type, select Review
Some articles are available in full text in Pub Med.

Many articles in PubMed are not available in full text.

Options to try and find the full text
1. Use a search engine and search by the title of the Review
2. Use the Library’ TAFENSW Library Network eJournal A-Z (ask library staff for help with this.)
Qualitative Research

“Researchers use qualitative data collection methods to obtain detailed, rich, narrative data about participants, their contexts, their perceptions and their experiences.” (page 49)

Qualitative Research Methods

Carla-Krystin Andrade, PhD, PT
Paul Clifford, BSc, RMT

Massage is a complex intervention with physiological, psychological, social, and spiritual components (Andrade and Clifford 2008). Consequently, researchers need to be able to study both the specific effects of massage, such as neurological or cardiorespiratory effects, and the nonspecific effects, including the therapeutic relationship and environment. Qualitative methods are particularly well suited to the study of the psychosocial outcomes and nonspecific effects of massage. This chapter provides an overview of the theory underlying qualitative research and of selected qualitative research methods. It then expands on the methods and uses of qualitative research within massage therapy (MT).

WHY DO WE NEED QUALITATIVE RESEARCH?

Qualitative research uses rich narrative data and a flexible research design to provide in-depth descriptions and insight into phenomena in their natural context (Andrade and Clifford 2008; Bryman 2004; Cassiday 2002; Denzin and Lincoln 2005; Kania, Porcino, and Verhoeft 2008; Lincoln and Guba 1985; Pope and Mays 1995; Verhoeft, Casebeer, and Hilsden 2002). It explores, documents, and focuses on people’s perceptions, experiences, and views, as well the meanings that they give to them. Its goal is to provide a deep understanding of clients’ experiences, rather than a quantified answer to a question, a confirmation of a hypothesis, or generalizable laws.

Qualitative research methods have been invaluable in the social sciences, where the goal is often to explore and document psychological and social processes involved in human interactions. By contrast, quantitative research methods have been more dominant in health care, which has its roots in the basic sciences (Andrade and Clifford 2008; Cassiday 2002; Grypdonck 2006; Kania, Porcino, and Verhoeft 2008; Pope and Mays 1995; Verhoeft, Casebeer, and Hilsden 2002). Recently, health care researchers have begun to accept the value of qualitative methods for expanding our understanding of the human interactions and experiences within the field. Furthermore, they are recognizing that qualitative research can enable us to study complex topics in areas where there is little prior investigation and where quantification alone cannot increase our understanding of the issues.
Paradigms

A paradigm is a world view, or a set of beliefs and rules, that guides the decisions that researchers make (Bryman 2004; Kuhn 1970). For some researchers, qualitative research is based on a different, and mutually exclusive, paradigm than quantitative research (Armitage and Keeble 2007; Bryman 2004; Denzin and Lincoln 2005; Lincoln and Guba 1985). Consequently, they see them as having two incompatible paradigms that researchers cannot combine. Other researchers argue that this polarized view of two different paradigms unnecessarily limits the ways in which we can combine qualitative and quantitative research (Pope and Mays 1995; Tashakkori and Teddlie 2002; Tashakkori and Teddlie 1998). Another position taken by some researchers is that we need a third research paradigm, such as pragmatism, to support a framework that integrates the best of qualitative and quantitative research (Armitage and Keeble 2007; Creswell 2003; Onwuegbuzie, Johnson, and Collin 2009). Regardless of one’s philosophical position, there is value in understanding the basics of the qualitative and quantitative paradigms.

The Quantitative Paradigm

The quantitative paradigm suggests that there is a single reality that exists independently of people and a single truth or accurate representation of this reality (Denzin and Lincoln 2005; Lincoln and Guba 1985; Pope and Mays 1995). The extension of this belief is that researchers can stand back from reality in order to observe and measure it using objective instruments. As a result, the goal of quantitative researchers is to test hypotheses about how things work and to generate laws that they can apply to other situations.

The Qualitative Paradigm

By contrast, the qualitative paradigm, which is intended for studying human interactions and social constructs, proposes that people define reality; reality does not exist separately from people (Denzin and Lincoln 2005; Kanter, Porcino, and Verhoef 2008; Lincoln and Guba 1985; Pope and Mays 1995). Qualitative researchers focus, therefore, on capturing each subject’s point of view, with as much rich description as possible, and on analyzing that information within that person’s social context. They use subjective measures and tolerate, or actively seek, different perspectives on the phenomena they are studying. They do this with the goals of gaining a deep understanding of the person or phenomenon that is being studied.
Qualitative Research

“Researchers use qualitative data collection methods to obtain detailed, rich, narrative data about participants, their contexts, their perceptions and their experiences.” (page 49)

Keywords that may help you find a Qualitative Research article;

| Interview | Case study |
| Observation | Grounded theory |
| Focus group | Ethnomethodology |
| also document analysis | Phenomenology |

Sources to use to locate a Qualitative Research article;

Library eResources
- CINAHL with full text
- ProQuest

Websites
- AMT Association of Massage Therapists [Practices Resources]
- AMT Classified Massage Therapy Research
1. Go to ProQuest
2. Select Health & Medicine
3. Select Advanced Search
4. Keywords: massag* [I’ve asked for this word to be searched in the **Abstract**]
5. Keywords: “qualitative research” [I’ve left this to be searched **Anywhere** in the document]
6. Limit to: Peer Reviewed
7. Limit to: full Text
8. Click on: search
A qualitative study of changes in expectations over time among patients with chronic low back pain seeking four CAM therapies

Eaves, Emery R; Sherman, Karen J; Ritenbaugh, Cheryl; Hsu, Clarissa; Nichter, Mark; et al. BMC Complementary and Alternative Medicine 15 (2015).

... [43] Malterud K, Qualitative research: standards, challenges, and
References (58)
Citation/Abstract  Full text - PDF (384 KB)

The effectiveness of traditional Malay massage: A narrative review


...Two case studies and one qualitative research study about TMM for chronic
...which are of two case studies and one qualitative research. RESULTS
Cited by (1) References (19)
Citation/Abstract  Full text - PDF (383 KB)

Cognitive interviews guide design of a new CAM patient expectations questionnaire

Sherman, Karen J; Eaves, Emery R; Ritenbaugh, Cheryl; Hsu, Clarissa; Cherkin, Daniel C; et al. BMC Complementary and Alternative Medicine 14 (2014): 39.

... [27] Strauss AL, Corbin JMIn Basics of Qualitative Research: grounded theory
Cited by (1) References (41)
Citation/Abstract  Full text - PDF (262 KB)

New perspectives on patient expectations of treatment outcomes: results from qualitative interviews with patients seeking complementary and alternative

... (Available at: http://www.ncbi.nlm.nih.gov/pubmed/24908628)
9. Click on: Subject and then click on More options... (under Subject)
10. Make your results very relevant by selecting as many or as few by ticking *Include (or exclude)* depending on your research needs.
The effectiveness of traditional Malay massage: A narrative review


...Two case studies and one qualitative research study about TMM for chronic...

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New perspectives on patient expectations of treatment outcomes: results from qualitative interviews with patients seeking complementary and alternative medicine treatments for chronic low back pain

Hsu, Clarissa; Sherman, Karen J; Eaves, Emery R; Turner, Judith A; Cherkin, Daniel C; et al. BMC Complementary and Alternative Medicine 14 (2014): 276.

...Doing Qualitative Research Edited by: Crabtree B, Miller W Thousand
Cited by (1) References (41)
Citation/Abstract Full text - PDF (176 KB)

Antenatal education and the birthing experience of Brazilian women: a qualitative study

Miquelutti, Maria Amelia; Cecatti, José Guilherme; Makuch, Maria Yolanda. BMC Pregnancy and Childbirth 13 (2013): 171.

...during labor and delivery. Qualitative research in health settings considers the...Designs and Data CollectionIn Qualitative research and evaluation methods
References (21)
Citation/Abstract Full text - PDF (176 KB)