



# Value of Qualitative Research in the Study of Massage Therapy

Ania Kania, RMT, BSc; Antony Porcino, BSc; Marja J. Vehoeft, PhD

*Department of Community Health Sciences, University of Calgary, Calgary, AB, Canada*

**Qualitative inquiry is increasingly used in health research because it is particularly suited to the study of complex topics or issues about which little is known and concerning which quantification cannot easily create or effectively convey understanding. By exploring the lived experience of people providing and receiving massage therapy and the meaning that those people ascribe to those experiences, in-depth understanding of the nature of massage therapy and of how it affects people's lives is possible. Qualitative research may also provide insights into the outcomes, process and context of massage therapy that cannot be fully achieved through quantification alone.**

**The purpose of the present article is to describe qualitative research and to discuss its value to the massage therapy profession. The target audience is massage therapists who want to be able to better understand the research literature, novice massage therapy researchers who are unfamiliar with qualitative research, and teachers of research methods courses in massage therapy training programs who want to include qualitative research methods in their curriculum.**

**KEYWORDS:** Qualitative research; methodology, massage therapy

## INTRODUCTION

Awareness of the need for evidence-informed practice has been growing within the massage therapy profession in North America. The need for high-quality research has increased as well. Initiatives such as the Canadian Massage Therapy Research Network<sup>(1)</sup> and the Massage Therapy Foundation ("the Foundation")<sup>(2)</sup> have been launched to promote and support research literacy and capacity within the massage profession.

"Research literacy" is defined as the ability to find, understand and critically evaluate research evidence for application in professional practice. "Research capacity" is the ability to conduct research<sup>(3,4)</sup>. In line with its mission to advance the knowledge and practice of massage therapy through research, education and community service<sup>(5)</sup>, the Foundation actively

provides educational opportunities designed to enhance research literacy and capacity among members of the profession. For example, at the annual American Massage Therapy Association (AMTA) conventions, the Foundation has sponsored and organized research-focused workshops.

At the 2008 AMTA national convention, the Foundation hosted its first workshop on qualitative research methods (Introduction to Qualitative Research for Massage Therapists, presented by Ania Kania and Antony Porcino). The present article is based on that workshop. It describes the nature of qualitative research and discusses the value of qualitative research to the massage therapy profession. The target audience for this article is massage therapists who want to be able to better understand the research literature, novice massage therapy researchers who are unfamiliar with qualitative research, and teachers of research methods courses in massage therapy training programs who want to include qualitative research methods in their curriculum.

## DISCUSSION

Research methodology can be generally distinguished as quantitative and qualitative. Quantitative research investigates phenomena that require precise measurement and description<sup>(6,a)</sup>, often with the goal to describe and predict outcomes in a larger population of interest or to examine the strength of relationships between variables of interest. Quantitative research designs are highly controlled: for example, surveys and randomized controlled trials. Qualitative research investigates phenomena in an in-depth and holistic fashion, through the collection of rich narrative materials in a flexible design<sup>(7)</sup>. The two approaches differ with respect to paradigmatic assumptions (see Table 1), are used to answer different types of research questions (see Table 2) and produce different types of information.

To date, research in the field of health and medicine (including the field of complementary and alternative medicine) has been dominated by quantitative research approaches. Historically, qualitative research was the domain of social scientists such as anthropologists and

<sup>a</sup> p. 407.

TABLE 1 Comparing the Broad Paradigmatic Assumptions of Qualitative and Quantitative Research

<i>Qualitative research</i>	<i>Quantitative research</i>
Reality is socially and experientially constructed, resulting in multiple realities of a phenomenon.	There is one concrete reality that is governed by unchanging natural laws that can explain any given phenomenon.
Reality is context-specific.	There is one true reality regardless of context.
A phenomenon can be understood only when it is studied as a whole.	A phenomenon can be understood by studying its component parts.
The researcher is part of the context and intrinsically linked to the findings, not a separate and removed observer.	The researcher is an objective observer.
Concerns of bias are not part of the qualitative discourse because the researcher is transparent about this. Bias does not invalidate the findings of a qualitative study.	Conditions must be carefully controlled to prevent unwanted influences (bias) on the outcome measures. Bias results in invalid study findings.

Sources: Guba and Lincoln (1994)<sup>(8)</sup>, p. 105–117, and Bowling (2002)<sup>(9)</sup>, p. 118–131.

TABLE 2 Examples of Research Questions

**1. General observation: Many people are receiving massage therapy**

*The quantitative researcher asks:*

- What are the most common reasons for referrals for massage therapy by family physicians?
- To what degree does massage therapy increase physical function?

*The qualitative researcher asks:*

- Why do people receive massage therapy?
- What type of benefits from massage therapy do patients experience?

**2. Massage therapy is being integrated into the hospital setting**

*The quantitative researcher asks:*

- How many hospitals offer massage therapy to their patients?
- Does massage therapy reduce pain in hospitalized motor vehicle accident patients?

*The qualitative researcher asks:*

- What is the experience of patients who receive massage therapy in hospital? How is it different from the experience of patients who do not receive massage therapy?
- What is the experience of massage therapists working in a hospital-based practice?

sociologists, but increasingly, quantitative research is being used in health research<sup>(10)</sup>. Qualitative research is particularly suited to the study of complex topics or issues about which little is known and concerning which quantification cannot easily create or effectively convey understanding<sup>(11,b;12)</sup>.

**What Is Qualitative Research?**

Broadly defined, qualitative research is “used in understanding and describing the [subjective] world of human experience”<sup>(13)</sup>. It provides a way of understanding the worlds inhabited by study participants, because it is grounded in their lived experience. It is a form of inquiry that brings the perspective of each

<sup>b</sup> p. 43.

participant to the forefront. More specifically, qualitative research methodologies provide a way to gain rich and in-depth insights about phenomena as they occur in their natural context by exploring and discovering people’s perceptions and the meaning that they ascribe to those perceptions<sup>(7,14)</sup>. Quantitative research can describe *how many* people feel, do or think a certain way, but qualitative methods describe *how* people feel, do and think, or *why* people do so. Qualitative research is exploratory and descriptive; it follows an inductive process with regard to how information is gathered, analyzed and interpreted<sup>(9,c)</sup>.

For example, consider a study that aims to evaluate the effectiveness of massage therapy as a pain management strategy for people with chronic pain. The

<sup>c</sup> p. 118.

objective of a qualitative study would not be to determine whether massage therapy reduces the symptomatic pain or to quantify by how much. Rather, it would be to discover what “I have less pain” or “functional level of pain” or “I feel better” means to the person and how that meaning relates to the person’s life and their overall sense of self. The objective of qualitative inquiry could also be to explore the full range of outcomes of massage therapy in the treatment of chronic pain, rather than to assess predetermined outcomes as in quantitative research. People may, for example, identify feelings of peace, specific changes in energy level or an overall sense of well-being that would otherwise have been missed.

### Conducting Qualitative Research

It is beyond the scope of the present article to provide a detailed overview of how qualitative research is conducted, but here, we outline the key distinguishing characteristics of qualitative research.

Qualitative research is conducted in a systematic and rigorous way. However, it is more **flexible** than quantitative research. It usually follows an **iterative process**, meaning that data collection and analysis occur simultaneously. That is, ongoing data collection is informed by data already collected, and the researcher uses knowledge already gained to try to fill gaps or to sort out potential contradictions as data collection continues<sup>(6,d)</sup>.

Given that the purpose of qualitative research is to develop an in-depth understanding of phenomena and not to describe quantitative characteristics or to establish associations between variables, it focuses on gathering information from people who can provide the richest insights into the phenomenon of interest. As a result, **small samples** are commonly used in qualitative research, and study participants are usually selected in a **purposive** manner, using only those for whom the topic under study is relevant. Furthermore, the sample size is not necessarily set at the beginning of the study. Usually, the researcher continues to collect data until **saturation** is reached, saturation being the point at which no new information is revealed with respect to the key themes emerging from the data<sup>(15;16,e)</sup>.

Qualitative data collection examines everyday life in its natural context—that is, in an **uncontrolled naturalistic setting**. Data collection of this kind can use interviews, focus groups, recordings of conversations, observations and documents of all kinds. The choice of a data collection strategy is determined by the research question. The personal interview is the most common technique used by qualitative researchers. Interview techniques vary from the semi-structured interview (following a predetermined interview

guide that ensures all participants are asked to discuss the same topics) to completely unstructured interviews or narratives (each participant primarily determines the topics of discussion). Focus group interviews are also commonly used because they are less expensive and time-intensive. Focus groups are useful for gathering a wide range of opinions quickly, for exploring how members of a group interact, or for developing group consensus on a particular topic. Observation is another way to explore the interaction of participants<sup>(9,f)</sup>.

The specific type of analysis is guided by the various qualitative research traditions. However, the basic steps of the analysis process involve

1. examining the data to develop an in-depth understanding (“comprehending”),
2. identifying categories and themes in the data and developing an understanding of the nature of the phenomenon and the identity of the participants (“de-contextualizing” or “synthesizing”),
3. sorting and re-sorting the data to develop alternative explanations of the phenomenon (“theorizing”), and
4. further developing a theory in terms of its applicability to other settings or contexts (re-contextualizing)<sup>(6,g)</sup>.

This process is demanding and requires a considerable amount of time and skill.

### Value of Qualitative Research

To study the effects of an intervention, researchers often use standardized outcome measures (for example, the McGill Pain Questionnaire) or direct measures (for example, blood pressure) to **quantify** the effect of an intervention. Although such measures can provide important information, the limitation is that they are preselected by the researcher and restricted in their scope of understanding to the defined outcomes. Qualitative research can identify new or additionally relevant outcomes of an intervention based on the experiences of the people involved.

For example, using the qualitative research tradition of phenomenology, Billhult et al.<sup>(17)</sup> investigated the experience of massage in breast cancer patients undergoing chemotherapy treatment. Most research on the effects of massage treatment in cancer care has focused on treatment of side effects such as anxiety, pain and nausea associated with conventional treatments of chemotherapy and radiation<sup>(18–20)</sup>. In the qualitative inquiry by Billhult and colleagues, other outcomes were revealed through the lived experience of the participants. Six themes were identified. For the purposes of the present discussion, two themes are highlighted here. One theme was “massage as a distraction

<sup>d</sup> p. 264–265.

<sup>e</sup> p. 118–120.

<sup>f</sup> p. 356–429.

<sup>g</sup> p. 575.

from frightening experiences.” Massage was perceived as valuable to the participants because it was a “retreat from the feeling of uneasiness” associated with receiving the chemotherapy treatment. The association of massage with positive experiences facilitated the shifting of mental processes from negative to positive, which eased the experience of the chemotherapy treatment. A second theme that emerged was the psychological support that was experienced through massage. Given the physical changes associated with chemotherapy, participants expressed feelings of loneliness and ugliness. Massage provided personal confirmation to these women and created a sense of being cared for despite altered body image and vulnerability, a result that was highly valued by the participants.

The value of this qualitative study came from its focus on the lived experience of the participants, which enabled development of a greater understanding concerning the outcomes that are important, relevant and meaningful to the people involved than would be possible by using standardized outcomes that do not capture complex individual details.

Qualitative research can also be used in combination with quantitative research in a mixed-methods study design, adding understanding and meaning to the quantitative data. A design of this kind can provide highly valuable insights and a more complete understanding of the effectiveness of an intervention. Consider the following example: In a study by Brazier et al.<sup>(21)</sup>, the effectiveness of a residential yoga breathing and meditation program in improving well-being for individuals living with HIV/AIDS was assessed. Quantitative and qualitative data were collected using a mixed-methods approach. For the quantitative component, individuals were randomized into two groups: one group received the yoga intervention and one did not (the “control” group). Standardized outcome measures were used to quantify any changes in the mental health (Mental Health Index), health status (MOS-HIV Health Status Survey) and daily stress levels (Daily Stress Inventory) of the patients in both groups. Results for the two groups and for the beginning and the end of the 12-week treatment period were compared.

Based on the quantitative findings, the authors concluded that no statistically significant change had occurred in the standardized outcome measures for the yoga group over the course of 12 weeks. Furthermore, based on the Daily Stress Inventory outcome measure, the stress in the yoga group increased over the 12-week period. In the qualitative component, participants in the yoga group were interviewed in depth to explore their perceptions of the benefits of the program. Analysis of the interview transcripts revealed that the participants experienced a personal growth process that included engaging in life in new ways, being “okay” and living positively. Furthermore, the participants also expressed that positive changes were not always comfortable and can create pain. The insights provided by this qualitative inquiry indicated that the yoga intervention had

positive effects on the participants. The results of the study demonstrate that, although standardized outcome measures are useful, alone they may not capture the broad range of possible outcomes or meaningful effects of an intervention as they are experienced or perceived by individuals.

Qualitative research provides the opportunity to explore not only outcomes, but also the whole system of massage, by investigating factors such as context and process of the intervention. The practice of massage does not take place in isolation; rather, it occurs within a context—a unique environment and set of circumstances—that has nonspecific effects on the overall effect of the intervention. Context refers to such components as the patient–practitioner relationship, the environment or setting within which the treatment occurs, the culture and beliefs that the recipient and therapist bring with them to the treatment or intervention and the expectations that the recipient has of massage and of the treatment they will receive from the particular massage therapist<sup>(22)</sup>. The context may influence the effect of an intervention. As van Weel explained, “non-specific effects work through their integration into the overall treatment approach”<sup>(23)</sup>. By exploring the physical and psychological context within which an intervention takes place, valuable insights can be gained about the therapeutic consequences of context effects and the impact of context effects on outcomes of the massage intervention.

The “process” of the intervention refers to the course of action or sequence of steps taken to complete a particular task. It can also refer to a series of states or to the gradual sequence of changes that a person may move through or experience. In the context of massage therapy research, issues related to process can be studied from the perspective of the recipient of massage or of the massage therapist. Research focused on the evaluation of the massage intervention can include assessment of processes such as learning, personal growth and enablement. Processes related to how people integrate massage therapy into the context of their lives can also be explored. The process concept can also be applied to research on the treatment intervention itself. For example, consideration can be given to the processes involved in adapting or altering a massage session to individualize it to the needs of a particular client. In this way, through qualitative inquiry, important processes involved in receiving and providing massage therapy can be identified.

## SUMMARY

The exploratory and descriptive focus of qualitative research is valuable to the massage profession, for it adds to the knowledge of massage therapy. It illuminates the complexity of the intervention in terms of the range of outcomes that may occur, the contextual factors that affect those outcomes and the processes

involved in a massage intervention. Furthermore, it brings the various perspectives of the people who experience massage to the forefront. Exploring the lived experience of massage therapy and the meaning it holds for people enables the development of a more in-depth understanding of massage therapy. It is difficult or impossible to achieve such an understanding through quantification alone.

Qualitative research has great potential to inform massage therapy practice. Outcomes, context and process factors enable the development and provision of more effective and appropriate treatment plans. Lastly, qualitative research makes a practitioner more aware of the role of massage therapist—how the practitioner's own beliefs and values can affect or influence a client's experience, perceptions and outcomes. The insights provided by an awareness of how others practice can be used to reflect on one's own practice. Qualitative research findings therefore will not only help massage therapists practice more effectively, but also differently, with greater awareness and mindfulness.

## REFERENCES

- Canadian Massage Therapy Research Network. Home page. Canadian Massage Therapy Research Network website. <http://www.cmtrn.ca>. Published n.d. Accessed October 12, 2008.
- Massage Therapy Foundation. Home page. Massage Therapy Foundation website. <http://www.massagetherapyfoundation.org>. Published n.d. Accessed October 12, 2008.
- Mulkins A, Verhoef M. Research literacy and capacity among complementary practitioners in Canada. *J Soft Tissue Manipulation*. 2004; 11(3):4–9.
- Dryden T, Boon H, Verhoef M, Mior S, Findlay B, Baskwill A. *Research Requirement: Literacy Amongst Complementary and Alternative Health Care (CAHC) Practitioners: Phase I Report*. Toronto, ON: Health Canada, Natural Health Products Directorate; 2004. [http://www.hc-sc.gc.ca/sr-sr/alt\\_formats/hpfb-dgpsa/pdf/pubs/research\\_literacy-eng.pdf](http://www.hc-sc.gc.ca/sr-sr/alt_formats/hpfb-dgpsa/pdf/pubs/research_literacy-eng.pdf). Accessed December 1, 2008.
- Massage Therapy Foundation. Mission and History. Massage Therapy Foundation website. <http://www.massagetherapyfoundation.org/mission.html>. Published n.d. Accessed October 15, 2008.
- Polit DF, Hungler BP, eds. *Nursing Research—Principles and Methods*. 6th ed. Philadelphia, PA: Lippincott; 1999.
- Pope C, Mays N. Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ*. 1995; 311(6996):42–45.
- Guba EG, Lincoln YS. Competing paradigms in qualitative research. In: Denizen NK, Lincoln YS, eds. *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications; 1994: 105–117.
- Bowling A. *Research Methods in Health: Investigating Health and Health Services*. 2nd ed. New York, NY: Open University Press; 2002.
- Sandelowski M. Using qualitative research. *Qual Health Res*. 2004; 14(10):1366–1386.
- Morse JM, Richards L. *ReadMe First for a User's Guide to Qualitative Methods*. Thousand Oaks, CA: Sage Publications; 2002.
- Broom A. Using qualitative interviews in CAM research: a guide to study design, data collection and data analysis. *Complement Ther Med*. 2005; 13(1):5–73.
- Myers M. Qualitative research and the generalizability question: standing firm with Proteus. *Qual Rep*. 2000; 4(3/4):n.p. <http://www.nova.edu/ssss/QR/QR4-3/myers.html>. Published March 2000. Accessed October 14, 2008
- Grypdonck MH. Qualitative health research in the era of evidence-based practice. *Qual Health Res*. 2006; 16(10):1371–1385.
- Sandelowski M. Sample size in qualitative research. *Res Nurs Health*. 1995; 18(2):179–183.
- Creswell J. *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publications; 1998.
- Billhult A, Stener-Victorin E, Bergbom I. The experience of massage during chemotherapy treatment in breast cancer patients. *Clin Nurs Res*. 2007; 16(2):85–102.
- Ferrell-Torry AT, Glick OJ. The use of therapeutic massage as a nursing intervention to modify anxiety and the perception of cancer pain. *Cancer Nurs*. 1993; 16(2):93–101.
- Grealish L, Lomasney A, Whiteman B. Foot massage. A nursing intervention to modify distress symptoms of pain and nausea in patients hospitalized with cancer. *Cancer Nurs*. 2000; 23(3):237–243.
- Weinrich SP, Weinrich MC. The effect of massage on pain in cancer patients. *Appl Nurs Res*. 1990; 3(4):140–145.
- Brazier A, Mulkins A, Verhoef M. Evaluating a yogic breathing and meditation intervention for individuals living with HIV/AIDS. *Am J Health Promot*. 2006; 20(3):192–195.
- Verhoef MJ, Casebeer AL, Hilsden RJ. Assessing efficacy of complementary medicine: adding qualitative research methods to the “gold standard.” *J Altern Complement Med*. 2002; 8(3):275–281.
- van Weel C. Examination of context of medicine (Letter). *Lancet*. 2001; 357(9258):733–734.

**Corresponding author:** Ania Kania, Department of Community Health Sciences, University of Calgary, 3330 Hospital Drive NW, Room G-222, Calgary, AB T2N 4N1 Canada.  
E-mail: [akania@ucalgary.ca](mailto:akania@ucalgary.ca)