



Arts in Health: Designing and researching interventions

Daisy Fancourt

<https://doi.org/10.1093/oso/9780198792079.001.0001>

Published online: 20 July 2017 Published in print: 25 May 2017

Online ISBN: 9780191834455

Print ISBN: 9780198792079

Search in this book

CHAPTER

9 An introduction to research

Daisy Fancourt

<https://doi.org/10.1093/oso/9780198792079.003.0009> Pages 191–207

Published: May 2017

Abstract

This chapter explores what we mean by ‘research’ in relation to arts in health: what its purpose is and how it differs from evaluation or audits. It questions whether arts in health research is ‘exceptional’ or different from other sorts of research in health, examining some of the most frequent misconceptions about research in this field. It also considers some of the debates around issues such as whether the arts can be assessed using randomized controlled trials (RCTs) and how quantitative research can capture the essence of an arts intervention. It explores different types of disciplinary working and proposes how the arts and health can be researched effectively together. Finally, the chapter provides top tips for research and recommends journals and conferences for keeping up-to-date with research findings.

Keywords: Arts in health, health care, research, evaluation, audit, randomized controlled trials, quantitative research, qualitative research, interdisciplinary

Subject: Music Psychology

Collection: Oxford Scholarship Online

Why research?

In 2011, journalist Eryn Brown wrote an article in the *Los Angeles Times* entitled ‘“Duh” science: Why researchers spend so much time proving the obvious’.⁽¹⁾ She discussed the issue of why medical researchers who have unlocked the human genome and wiped out smallpox also engage in ‘the practice of hypothesising, testing and publishing the seemingly obvious’. Similar to the examples Brown cites in her article, many research questions in arts in health might appear to have answers so obvious they need not be researched: of course relaxing music calms anxiety in pre-surgical patients; it stands to reason that providing artwork in waiting areas can help to alleviate boredom; and it’s clear that weekly dance classes lead to improved strength in older adults. However, as Brown acknowledges, research is vitally important even for seemingly obvious research questions for a range of reasons, including:

1. **Confirmation**—However obvious something seems in theory or anecdote, it may not be true in practice. A study published in the journal *Injury Prevention* in 2000 looked at whether toughened glasses led to reduced injuries in bars.(2) On the surface, stronger pint glasses logically sound a sensible idea as they will be less likely to smash. However, the study found that people were less careful with toughened glasses and there were in fact nearly double the number of injuries; the exact opposite of what the researchers had hypothesized. This example illustrates how perceived truths or anecdotal reports are insufficient in determining whether an effect is likely to occur and research is needed, even on apparently obvious questions
2. **Influence**—To influence perceptions and policy, there not only has to be proof but repeated proof, again and again. A famous example is the number of studies linking smoking and lung cancer that had to be published before there were significant changes in smoking legislation and public activity. To convince healthcare professionals, funders, and the public of the benefits of the arts, repeated research studies are needed to achieve a general scientific consensus. These may take the form of replications of previous studies to confirm findings, extensions of previous studies with larger groups or in different settings, or studies that approach the same question from different angles
3. **Mechanisms**—Even if the answer to the research question might appear simple, the mechanisms by which this effect is achieved can be complex. For example, for relaxing music to calm anxiety in pre-surgical patients, a cascade of activity must place, including activation of various parts of the brain, and release of a number of hormones and signals across vast networks of nerve cells. The resultant effect is also not confined to a feeling of lower anxiety but involves altered activity within certain organs such as lowered heart rate alongside changes in levels of biomarkers of the endocrine and immune systems.(3) There may be other implications too, such as changes in the levels of induction agents needed for the anaesthetic or reduced quantities of analgesics after surgery. Consequently, research turns the initial simple question as to whether music can reduce pre-surgical anxiety into a much richer topic and has the potential to demonstrate an even greater effect on patient care than initially anticipated
4. **Variation**—It is also important to take into account variation. Artistic experiences are individually, socially, and culturally informed, so a single intervention could have different effects on people of different ages, cultural and socioeconomic backgrounds, and health status. Again, research is vital for characterizing this variation both to understand how the arts can be best tailored to suit different populations and also to be realistic about the impact the arts can have with different participant groups

Consequently, sometimes arts in health research may on the surface address some quite basic or ‘common-sense’ questions. However, systematically investigating arts interventions through research is essential to understand the extent and nature of these effects, produce generalizable knowledge, and engage stakeholders, especially those who may be more cautious as to the potential benefits of the arts for health. Furthermore, not all questions are common sense. Many of the greatest strides forwards in the field have come about through research that has demonstrated benefits of arts engagement that had not previously even been considered to exist. So research can be one of the most powerful ways of supporting development in the field.

Is it research? Evaluation versus research

p. 193

Following on from the discussions in Chapter 6 about evaluation, an important question is how is research different from evaluation? There is often ↴ confusion around the two terms, partly because many aspects of the methods used in research and evaluation are very similar, if not the same. For example, both research and evaluation draw on qualitative methods, such as interviews, focus groups, and observation, and quantitative methods, such as questionnaires and ratings. Although certain specific research methods and types of analysis are more common in research than evaluation (and vice versa), setting clear boundaries between the two can be difficult. Indeed, in an online discussion on the topic led by the American Evaluation Association (EVALTALK), one of the founding theorists of evaluation, William Trochim, argued that in terms of methods there is no difference between research and evaluation:

‘What we do in process-programme-formative-summative evaluation ... is virtually impossible to distinguish ... from what I understand as applied social research.’(4)

Consequently, instead of seeking to draw a distinguishing line between research and evaluation in terms of methods, a simpler way of understanding the distinction is to consider their history, purpose, process, and practicalities.

From a *historical* perspective, research is much older than evaluation. Our earliest recorded use of the term ‘research’ comes from 1577, from the Old French ‘re’+‘cerchier’ meaning to search or seek. The core aim of research across history has been to increase knowledge, either through establishing new facts or confirming previous ones, solving problems, and developing new theories. However, evaluation is a much newer discipline than research. Its genesis is often traced to the United States in the Elementary and Secondary Education Act (ESEA) in 1965, which required account of the use and impact of public funds. Initial efforts by researchers and educational psychologists, however, did not fully capture the effects that funding was having, missing some of the unanticipated but nevertheless valuable effects of funding. Consequently, from the late 1960s to the early 1980s, there was a burgeoning of activity around evaluation, with a reorientation of thinking around what it was important to measure to determine the effectiveness of interventions; something that was identified as being different from setting out to answer specific research questions.(5) This brings us to the issue of *purpose*. One of the founding theorists of evaluation, Michael Scriven, explained:

p. 194

‘Evaluation determines the merit, worth or value of things. The evaluation process identifies relevant values or standards that apply to what is being evaluated, performs empirical investigation using techniques from the social sciences, and then integrates conclusions with the standards into an overall evaluation or set of evaluations. Social science research, by contrast, does not aim for or achieve evaluative conclusions. It is restricted to empirical (rather than evaluative) research, and bases its conclusions ↴ only on factual results—that is observed, measured, or calculated data. Social science research does not establish standards or values and then integrate them with factual results to reach evaluative conclusions. In fact, the dominant social science doctrine for many decades prided itself on being value free.’(5)

Other theorists pointed to the necessity of evaluation to consider factors both internal and external to an intervention (such as the sociopolitical landscape in which the intervention is delivered), as well as capturing how an intervention is oriented towards policy and funding.(5) Seeking to clarify this distinction, in the book *Fundamental Issues in Evaluation*, edited by Nick Smith and Paul Brandon, Sandra Mathison proposed six ways in which the purposes of evaluation and research are different (6):

1. Evaluation particularizes, research generalizes

2. Evaluation is designed to *improve* something, while research is designed to *prove* something
3. Evaluation provides the basis for decision-making; research provides the basis for drawing conclusions
4. Evaluation—so what? Research—what’s so?
5. Evaluation—how well it works? Research—how it works?
6. Evaluation is about what is valuable; research is about what is

Of course, many of these distinctions can be debated, especially as they can become caricatured. For example, evaluation might well focus on the effects of a specific intervention, such as a dance class for older adults in a rural hospital, but the findings of the evaluation are often generalized in the decisions of funders to scale up projects. Equally, research may not be about generalizable findings, but may include specific case studies of individuals involved in an intervention. So while the distinctions relating to purpose can help in orientating the purpose of research and evaluation, they must be interpreted cautiously.

In terms of *process*, evaluation and research tend to happen at different stages in the development of an intervention. As shown in Chapter 6, evaluation can be used to assess an intervention’s design and performance (a formative evaluation), explore the successes and challenges related to how it runs (a process evaluation), and ascertain whether the interventions shows signs of having the desired effects on participants (an outcome evaluation). Following this, research can form a valuable next step to ascertain in more detail the depth and breadth of impact. But equally, if the impetus for a project is an initial research question, it will still be necessary to take some steps backwards to conceptualize, design, and pilot the intervention to ensure it is appropriate to answer the research question (Chapters 5 and 6). If evaluation is not carried out prior to the start of the research project (perhaps because of financial or timing constraints), it is recommended that evaluation questions be included within the research design. This way, if hypothesized results are not found, it will be clear whether this is because they are simply not caused by the intervention, or because the intervention was not received in the way it was intended to be.

Finally, in terms of *practicalities*, an important distinction between research and evaluation is that research projects normally require ethical approval. This is covered in more detail in Chapter 12. However, the UK Medical Research Council has a useful tool for determining whether a project is research or evaluation. The tool asks the following questions:

1. Are participants randomized (allocated not on the basis of their own choice) into different groups?
2. Does the study involve changing patient care or treatment from the accepted standards of any participants involved? (This is as opposed to adding an intervention to usual care)
3. Are your findings going to be generalizable? (In other words, will the findings be extrapolated from participants in the study to apply to a broader participant population, a different setting, or a different project run elsewhere?)

If the answer to any of these questions is ‘yes’, then the project counts as research. However, if the answers to all the questions are ‘no’, the project is not deemed, at least in terms of ethical standards, to be research. Consequently, although separating evaluation and research on the basis of purpose, process, and practicalities might miss the nuances of the theoretical debates around evaluation versus research, it can help when making a decision regarding which is more appropriate during a project.

Evaluation and research versus audits

In addition to questions around the distinction between research and evaluation, it is also important to distinguish both of these terms from audits. In Chapter 5, we discussed the contributions made by Florence Nightingale to healthcare during the Crimean war, including her development of interventions to support health and establishment of a system of auditing these interventions. Since then, audits have been used in healthcare, with increasing consistency since the late twentieth century.

p. 196 The UK Health Research Authority defines clinical audits as ‘a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria’.⁽⁷⁾ Audit cycles involve agreement of standards of best practice up front (before data are collected). These standards may be based on previous evaluation or research data for specific projects (as discussed in Chapter 6), or may be national or international standards. Data are then collected on current practice and compared with the standards. If current practice is found to fall below the levels set by the standards, this can then be investigated and changes planned and implemented. Audits typically take place on a planned regular basis (such as annually).

Audits have enormous value in confirming that best practice is being followed and standards maintained. In addition, they can prompt concerns, complaints, or other views to be aired. They also have quite a distinct role from both evaluation and research. As discussed in Chapter 6, the evaluation of a programme can lead to some expected standards being set. An audit can then be used to check that an intervention is still meeting these expected standards. This process of checking will not normally involve any kind of control group or new intervention, but rather test what is already available and running using pre-set questions. This process of checking standards provided by audits can be helpful alongside research studies too. For example, if a research project contains multiple sites, audits can be used to assess whether interventions are running as planned at each site, meeting the standards expected. This can confirm whether the data being collected from the different sites are going to be comparable.

Consequently, audits are not as exploratory as evaluations, and do not produce completely new knowledge such as can be produced in research. What audits can do is reveal important information on how programmes are running in practice, ensure that new branches of programmes continue to adhere to the core central standards, and flag problems early to ensure programmes operate as planned in meeting the needs of participants. Perhaps most importantly, audit data can be linked straight into an improvement cycle, so that changes can be implemented to bring programmes back up to the expected standards. So audits, evaluation, and research should sit comfortably alongside one another, each with different purposes and implications for programmes.

Q For more information about clinical audits, Robin Burgess’ *New Principles of Best Practice in Clinical Audit* (2011) explores how to undertake an audit and implement sustainable change.⁽⁷⁾

Arts in health ‘exceptionalism’

p. 197 Another issue surrounding arts in health research is how it is positioned in relation to wider health research. Although people generally recognize that arts in health interventions must be rigorously researched to demonstrate their value, what this research looks like and what types of evidence it needs to produce to count as ‘rigorous’ have been hotly debated. In particular there are concerns around experimental scientific methods being used to assess arts in health interventions such as randomized controlled trials (RCTs). RCTs are experimental designs that minimize bias through allocating participants to either the intervention being studied or some form of ‘control’ group (such as either no intervention or a comparison intervention) based not on participant preference but on chance (a process known as ‘randomization’). RCTs are one of the most favoured models in medical research. However, some have questioned whether they are suitable for capturing the multi-faceted effects of arts in health interventions. For example, are arts interventions too complex to be captured with experimental scientific methods? Does the use of biomedical models (such as RCTs) to compare arts interventions and biomedical interventions lend bias in support of the biomedical interventions? And do these methods set up standards that are ‘impossible’ to achieve through arts interventions, meaning that they can only fail and biomedical interventions surface as the only possible option for patients? Can arts in health truly be categorized along with other health interventions or are they not unique or ‘exceptional’?

These questions have been discussed at conferences, roundtable events, at research, funding and grassroots levels, and, perhaps most publicly, in online blogs. As examples, two leading researchers in arts in health have published on their concerns about experimental methods in arts in health research. Dr Mike White, who was a researcher in the Centre for Medical Humanities at Durham University, wrote a high-profile blog for the Centre which included an entry entitled ‘RCTs—The Holy Grail of Arts in Health?’.(8) White had concerns that the emphasis on RCTs within medical research could lead to the application of a ‘one-size experimental design in arts interventions in non-clinical settings’. He wrote:

‘We must not stifle that emergent vision and potential by only seeking a proven evidence base for arts in health that is narrowly defined through “control” based interventions. It reduces the whole arts and health field to being some kind of ancillary treatment in healthcare.’

p. 198 White was not against experimental models, accepting that ‘rigorous evidence gleaned from RCTs of course has a crucial function in convincing health economists and those holding the Treasury Green Book’. But he disliked the idea that there could be a pre-determined ‘common research design for a very diverse field’. Instead, White called for research that integrated experimental models from the medical field with other non-experimental models such as case studies. A similar position to White’s is taken in another blog by Clive Parkinson, Director of Arts for Health at Manchester Metropolitan University. In his blog ‘Fiction-Non-Fiction’, he too opposed the idea of ‘a standardised tool-kit where all the nuance and complexity of culture and the arts can be packaged into a small, instrumental, do-it-yourself kit. A one size-fits-all panacea that can be branded and sold on’.(9) He spoke against the idea that ‘the arts/health movement somehow adopts the clinical objectivity of the pharmaceutical industry’ as he saw this as ‘reducing’ our understanding of arts in health ‘or replacing it with an explanation that omits human experience and its involvement in any understanding’.

However, although these concerns around striking a balance between scientific rigour and the flexibility and creativity essential to arts and finding ways of really capturing the range of benefits of the arts are valid, the field of arts in health is not ‘unique’ or ‘exceptional’ in having these concerns. These same problems are faced in broader fields of public health and social science on a daily basis, such as in testing the impact of new community exercise initiatives among teenagers on fitness and social integration or exploring whether one-to-one therapy sessions can enhance wellbeing and agency in people with chronic health conditions.

These types of interventions, which involve several interacting components, are known as ‘complex interventions’.

It is recognized that researching complex interventions can be challenging as they may have a range of possible outcomes, or there may be variability in the target population, or different participants may receive different tailored versions of the intervention. So in 2000, the UK Medical Research Council published a *Framework for the Development and Evaluation of RCTs for Complex Intervention to Improve Health*.⁽¹⁰⁾ The aim of this was to provide guidelines for how to research interventions that needed robust evidence behind them but did not fit neatly into the normal medical models. The initial guidelines were subsequently updated in 2008, entitled *Developing and evaluating complex interventions: the new Medical Research Council guidance*.⁽¹¹⁾ The guidelines refute some of the ‘blanket’ statements about medical research, such as the ‘assumption that conventional clinical trials provide a template for all the different approaches to evaluation’, and aim to tackle the lack of guidance on how to research interventions that are highly complex or come from outside the health sector, as well as placing more attention on the social, political, and geographical context in which interventions take place.

Arts in health interventions are classic examples of ‘complex interventions’. As a number of people within the field of arts in health have identified, selecting a research design that allows for their complexity can be difficult; certainly RCTs may miss some of these features. This is where the UK guidelines are important, as they do not prescribe that RCTs have to be used. Indeed, they fully support decisions not to use RCTs.

p. 199 However, they call for care in deciding which study design to select and in making the decision to dispense with RCTs altogether, and crucially they take the time to dispel some of the ‘blanket’ statements around RCTs. For example:

1. **Blanket statement 1: some designs are not suitable for certain fields.** The guidelines warn ‘Beware of ‘blanket’ statements about what designs are suitable for what kind of intervention (e.g. ‘randomized trials are inappropriate for community-based interventions, psychiatry, surgery, etc.’) A design may rarely be used in a particular field but that does not mean it cannot be used, and you should make your choice on the basis of specific characteristics of your study’⁽¹¹⁾
2. **Blanket statement 2: randomization removes the essence of the intervention and is unethical.** ‘You should always consider randomisation, because it is the most robust method of preventing the selection bias that occurs whenever those who receive the intervention differ systematically from those who do not, in ways likely to affect outcomes.’⁽¹¹⁾ At a simple level, randomization involves allocating people equally to experimental and control groups, which can lead to discontent among people who hoped to be allocated to a different group. However, there are randomization methods that can reduce potential discontent. The randomization itself can take into account different factors about a person, increasing or decreasing their chance of being in a particular group (see Chapter 11). Or the design of the study can be more sophisticated. For example, wait-list designs mean that everybody receives the intervention, but some participants are randomized to having to wait before receiving it (during which time they form the ‘control’ or ‘non-intervention’ group). Cluster randomized trials randomly allocate at a wider level, such as one hospital or community receiving one intervention and another receiving the control or comparison intervention, preventing jealousy among individuals in close communities. Stepped wedge designs combine wait-list and cluster designs, providing an intervention to all sites (e.g. hospitals or communities) but one by one. Randomization is discussed more in Chapter 11.
3. **Blanket statement 3: RCTs only allow for a single outcome to be assessed.** The guidelines actually clarify that RCTs do not limit outcomes to just one. ‘A crucial aspect of the design ... is the choice of outcome measures. You need to think about which outcomes are most important, and which are secondary, and how you will deal with multiple outcomes in the analysis ... A good theoretical

understanding of the intervention, derived from careful development work is key in choosing suitable outcome measures.’⁽¹¹⁾ While overloading a design with many measures might be unwise, RCTs can measure ↳ multiple constructs within one study, allowing several different facets of an arts in health intervention to be explored.

4. Blanket statement 4: If a chosen research design is an RCT, there can be no other design involved.

The guidelines speak of the value of other models ‘nested within a trial’.⁽¹¹⁾ These can include process evaluations or assessments of cost-effectiveness, or can involve case studies and evaluations alongside the main research questions. This will be discussed more in Chapter 10.

The guidelines offer extensive advice on how to decide which design is best for a complex intervention. However, they also warn that if these more rigorous designs are not followed, reliable estimates of the effect of interventions will be very limited and not easily generalizable, and researchers will have ‘to explain to decision-makers ... the trade-offs involved in settling for weaker methods’.⁽¹¹⁾ Consequently, even if it is not possible to conduct an entirely rigorous RCT that controls for every possible variable in the study, the guidelines advise that “best available” methods, even if they are not theoretically optimal, may yield useful results.⁽¹¹⁾

In truth, this brings us to the core of the issue around experimental designs for arts in health research. RCTs do not provide a perfect model for assessing the impact of arts interventions in health. In certain situations, they are actually very poor fits. For example, in trying to capture the essence of *why* engaging with a drumming group affects wellbeing, a stronger approach than designing an RCT might be to undertake in-depth interviews with participants involved in a drumming group. Decisions about which design is most appropriate for different research questions are explored in the Chapter 10. However, healthcare and medicine are founded on evidence-based models from predominantly experimental methods such as RCTs. Researchers and commissioners within healthcare and medicine will generally look to these experimental methods as the best form of evidence (and attempting to change that would require a seismic shift). This is not because of snobbery or a dislike of more complex interventions, but rather a desire to select the most effective and safe tools for patient care.

Consequently, if arts in health interventions are to be taken seriously within healthcare and medicine, they have to speak the language of health and follow experimental methods wherever possible. However, this need not be a case of ‘either-or’ and certainly should not mean that they restrict the language we use: experimental methods can sit alongside non-experimental methods; research projects can have multiple phases to answer different questions or explore the same question from different angles; and creative RCT designs ↳ and approaches to randomization can be employed. This really provides one solution to the RCT debate: it is not a case that an RCT comes at the expense of other methods, but rather that wherever possible, it too should be involved when researching an intervention. (Issues around designing such studies will be discussed further in Chapter 10). This approach is not novel but is followed by a vast range of other complex interventions including social interventions, public health interventions, and complementary therapies. Arts in health interventions are no different; they are not exceptional and we risk discrediting them if we suggest they are.

QIn 2015, a conference was held in Exeter in the UK entitled ‘Researching Complex Interventions in Health: The State of the Art’. A broad range of topics relating to complex interventions was covered, including use of mixed qualitative and quantitative methods, carrying out pilot and feasibility studies, and use of non-standard experimental designs. The abstracts from the conference which summarize the presentations that were made are published in volume 16 of the journal *BMC Health Services Research* and are available online.⁽¹²⁾

Types of disciplinary working

This brings us to the critical question of *how* to speak multiple languages at once, incorporate different research designs and meet the requirements of perhaps not just one or two fields of research but many more. In 1992, PL Rosenfield proposed three types of disciplinary working: multi-disciplinary, inter-disciplinary, and trans-disciplinary.⁽¹³⁾ These three categories have remained popular among researchers and have been further developed since. Historically, much arts in health research has been ‘multi-disciplinary’: teams from a variety of arts backgrounds and a broad range of health and science backgrounds have approached the topic of arts in health from their own areas of expertise. This has often resulted in research that only ‘speaks’ to the discipline from which it came. For example, rigorously controlled RCTs have been critiqued for missing out on the creative essence of arts interventions, whereas more flexible arts-based studies have not been seen as scientific enough to provide generalizable findings.

p. 202 An alternative type of working is ‘inter-disciplinary’ working. This involves different disciplines providing experts to form a core study team, who then approach a research question in unison. This can help to remove some of the artificial gaps between the disciplines; furthermore such an approach can lead to answers to research questions that speak to both the arts and the health worlds, providing more comprehensive and meaningful data. An important point in this process is not merely to compromise on everybody’s ideal research designs and methodologies but instead to develop more sophisticated methods, perhaps with multi-layered research tools or multi-phase studies to approach the question from different angles. This is likely to produce more thorough and in-depth answers that could have a greater impact on the field. However, it requires strong relationships within teams and an openness to ideas outside individuals’ areas of expertise.

The third type of disciplinary working is ‘trans-disciplinary’. This involves researchers being trained in multiple disciplines so that they contain within themselves the expertise from different fields. Historically, this has been difficult for researchers as many university degrees, especially in the UK, require a focus on one main subject. However, with new courses, especially post-graduate courses, being developed, it is now increasingly possible for researchers to have dual backgrounds, setting them up to develop fully integrated research studies across different fields. With trans-disciplinary working, it is important that researchers maintain strong links back to specific arts or health fields as well as to the field of arts in health, to ensure that research findings feed into new research studies and data continue to be of value to arts, health, and arts in health.

Q Further details on types of disciplinary working in healthcare are given in a paper published in the journal *Health Services Research* in 2007: ‘Defining inter-disciplinary research: conclusions from a critical review of the literature’.⁽¹⁴⁾

Summary

Overall, research is an exciting process for arts in health interventions as it can take a promising intervention to a new level, providing potentially compelling data, increasing the case for support for funding, and expanding the reach of the programme. It is also of vital importance. For although there is increasing research demonstrating clear and significant benefits of the arts within health, at the heart of the need for research and the need for using experimental methods in research is the core fact that not all arts in health interventions will have a tangible benefit for patient experience or outcomes. There is a strategic need to know which interventions work with which participant groups and why they work so that funding is put where it can have the greatest impact. While research may appear daunting because of the many legal, ethical, and methodological complexities, as well as the ‘risk’ that results will not be as promising as anticipated, it is only through research that arts interventions can be effectively and sustainably integrated within healthcare. Chapter 10 will take the form of a step-by-step guide through the research process to demystify some of the stages. However, before we embark on this step-by-step guide, some research tips and resources are presented below.

Research tips and resources

Top tips for research

1. **Know the literature**—One of the challenges with arts in health research is that, because of its multi-disciplinary nature, research can be published in hundreds of journals, including those relating to the arts, medicine, psychology, wellbeing, public health, etc. A question that often arises in the field is ‘where is the research?’. In truth, it is scattered disparately, so the first challenge is to find it. If a particular study is being planned, searches of research databases such as Google Scholar, PubMed, ScienceDirect, PsychINFO, Web of Science, and ProQuest using keywords relating to the topic of interest can help to bring some of the key studies together. Often researchers specialize in one particular topic for a few years (or even longer), so if a good article is found by one researcher it can also be worth searching for the research listings of this researcher through the same databases, or through more general internet searches for their university homepages or through research repositories such as Research Gate or Academia.edu. It is also important to stay up-to-date with recent papers as studies can produce different findings
2. **Use systematic reviews to narrow reading**—For some topics, there may be an overload of relevant research papers. One way to reduce the reading is to search specifically for systematic reviews. These are comprehensive reviews of all papers relating to a specific topic and they often present data in accessible ways such as graphs or tables as well as summarizing common findings. However, systematic reviews date quickly, so they are best when combined with ordinary article searches
3. **Allow for different outcomes**—Many research studies start with very specific research questions or hypotheses. However, it is often advisable to think beyond a narrow scope and consider what other effects an intervention can have. For example, if you are researching whether photography could reduce anxiety in patients with an anxiety disorder, do not confine the study to the single measure of anxiety. It is quite possible that there may not be any significant changes in anxiety because the intervention is not effectively tailored to anxiety, or because the anxiety measure is not well suited to the intervention, or because the patient group chosen is not especially responsive. However, it may be that there are significant improvements in other related constructs, such as social resilience through connecting with others during the project. This could still be of value to people with anxiety in reducing parallel feelings of isolation and helping to build up a social support network for them that could support their mental health further in the future. Previous related studies may give indications as to which additional constructs could be tested. However, it is equally important not to overload a study with measures. This can lead to overburdening of research participants and also have implications when carrying out statistical tests if numerical data are involved. So a select group of measures should be chosen, probably narrowed down from a longer list of potentials, prior to a research study being carried out
4. **Plan for a sufficient sample size**—The ability of a study to find significant results is partly determined by the number of participants included in the study. If the sample is too small, it can look as though there were no significant findings, even if there were (or vice versa). More on choosing the right sample size is provided in Chapter 11. To allow for a sufficient sample size, parallel versions of the intervention may need to be planned, such as back-to-back classes, or more time may be built in for recruitment. Recruitment should not be underestimated in terms of the time it may take nor in terms of the number of dropouts that may occur across the course of a project
5. **Use a computerized online reference manager**—There are a number of software options, both paying and free, available for citing papers including EndNote, RefWorks, and Zotero. These allow readers to capture the details about an article they find online and save it to a database for later use and then allow for the easy citation of papers within documents later. Some even give the option of changing the referencing style with a single click, which can be a helpful way of changing the format of a

document to suit the needs of different journals. This automation can save a lot of time formatting references and bibliographies and also will help gather together research articles in a single place for future reading

6. **Collaborate**—Arts in health research often involves multiple different fields, as discussed earlier in this chapter. Science papers are rarely single-authored because of the breadth of expertise required within studies. Arts in health studies should be treated no differently and support should be sought where expertise is not available within the immediate project team. Researchers may be willing to collaborate and help with study design or statistical analysis or other elements of a study or advise on the overall thrust of the research question
7. **Attend conferences**—One of the best ways of keeping up-to-date with new research is to attend conferences, seminars, and other presentations. This too can be a good way of meeting fellow practitioners and researchers with similar interests and discussing research ideas or potential challenges encountered with others in the field. Some conferences have a specific arts in health focus, whereas others may be broader, for example including more general psychological or social interventions or focusing on specific health conditions. These broader conferences can also be of value as they may reveal specific health challenges where the arts could provide solutions or suggest which measures or research designs are valued most highly within that area of research so you can design future studies in the most effective way. Such events can also be of value in raising the profile of your own work through poster or oral presentations

p. 205

Recommended journals

Research from the field of arts in health tends to be published across a broad spectrum of academic journals. Often, these are not journals specific to the field, but simply journals that overlap with an element of the research study. For example, a study looking at dance for Parkinson's disease could be published in a neurology journal, a rehabilitation journal, a nursing journal, or an arts journal. Consequently, the only way to identify relevant research is to keep track of publications from a whole host of journals related to your area of interest. Nevertheless, some journals do help to bring together studies relating specifically to arts in health. These include:

- ◆ *American Journal of Dance Therapy*
- ◆ *Art Therapy*
- ◆ *Arts & Health, An International Journal of Research, Policy and Practice*
- ◆ *Body, Movement and Dance in Psychotherapy*
- ◆ *Canadian Creative Arts in Health, Training and Education Journal*
- ◆ *Design for Health*
- ◆ *Drama Therapy Review*
- ◆ *Dramatherapy*
- ◆ *Hektoen International: A Journal of Medical Humanities*
- ◆ *International Journal of Art Therapy*
- ◆ *International Journal of Arts Medicine*

- ◆ *Journal of Applied Arts & Health*
- ◆ *Journal of Creativity in Mental Health*
- ◆ *Journal of Medical Humanities*
- ◆ *Journal of Music Therapy*
- ◆ *Journal of Poetry Therapy*
- ◆ ↳ *Medical Humanities*
- ◆ *Music and Medicine*
- ◆ *Musicae Scientiae*
- ◆ *Psychology of Creativity, Aesthetics and the Arts*
- ◆ *Psychology of Music*
- ◆ *The Arts in Psychotherapy*
- ◆ *The British Journal of Music Therapy*
- ◆ *The International Journal of the Creative Arts in Inter-disciplinary Practice*
- ◆ *The Journal of the Irish Association of Creative Arts Therapists*
- ◆ *Voices: A World Journal for Music Therapy*

Recommended conferences

There are also regular conferences in the field. Many are organized nationally through individual arts or health organizations or universities or a consortium of partners. Others are organized on a larger scale through international associations. A list is provided below of just a few examples of international organizations that organize annual, biennial, or triennial conferences:

- ◆ International Music and Medicine Conference organized by the International Association for Music & Medicine
- ◆ International Arts Therapies Conference organized by the European Consortium for Arts Therapies Education
- ◆ Culture, Health & Wellbeing International Conference organized by Arts and Health South West
- ◆ International Health Humanities Conference organized by the International Health Humanities Network
- ◆ The Art of Good Health and Wellbeing Conference organized by the Australian Centre for Arts and Health
- ◆ The International Symposium on Performance Science organized by the Centre for Performance Science

References

1. Brown E. 'Duh' science: Why researchers spend so much time proving the obvious. Los Angeles Times [Internet]. 2011 May 28 [cited 2016 Oct 31]. Available from: <http://articles.latimes.com/2011/may/28/science/la-sci-duh-20110529>.
[WorldCat](#)
2. Warburton AL, Shepherd JP. Effectiveness of toughened glassware in terms of reducing injury in bars: a randomised controlled trial. *Inj Prev*. 2000 Mar 1;6(1):36–40.
[WorldCat](#)
3. Segerstrom SC, Miller GE. Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry. *Psychol Bull*. 2004 Jul;130(4):601–30.
[WorldCat](#)
- p. 207 4. Trochim W. EVALTALK. Archives of EVALTALK@LISTSERV.UA.EDU. 1998.
[WorldCat](#)
5. Coffman J. Michael Scriven on the Differences Between Evaluation and Social Science Research. *Eval Exch Period Emerg Strateg Eval*. 2003 Winter/2004;9(4).
[Google Scholar](#) [WorldCat](#)
6. Mathison S. What is the difference between evaluation and research—and why do we care? In: Smith NL, Brandon PR, editors. *Fundamental Issues in Evaluation*. New York, London: The Guilford Press; 2008. pp. 183–96.
[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)
7. Burgess R. *New Principles of Best Practice in Clinical Audit*. London, New York: Radcliffe Publishing; 2011. 215 pp.
[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)
8. White M. RCTs—The Holy Grail of Arts in Health? [Internet]. Centre for Medical Humanities. 2013 [cited 2016 Oct 31]. Available from: <http://centreformedicalhumanities.org/rcts-the-holy-grail-of-arts-in-health/>.
[WorldCat](#)
9. Parkinson C. arts and health blog: Fiction-Non-Fiction (revisited) [Internet]. arts and health blog. 2015 [cited 2016 Oct 31]. Available from: <http://artsforhealthmmu.blogspot.com/2015/01/fiction-non-fiction-revisited.html>.
[WorldCat](#)
10. Medical Research Council. *A framework for development and evaluation of RCTs for complex interventions to improve health*. London: Medical Research Council; 2000 Apr.
[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)
11. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*. 2008 Sep 29;337(sep29 1):a1655–a1655.
[WorldCat](#)
12. Craig P, Rahm-Hallberg I, Britten N, Borglin G, Meyer G, Köpke S, et al. Researching Complex Interventions in Health: The State of the Art. *BMC Health Serv Res*. 2016;16(1):101.
[Google Scholar](#) [WorldCat](#)
13. Rosenfield PL. The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences. *Soc Sci Med* 1992 Dec;35(11):1343–57.
[WorldCat](#)
14. Aboelela SW, Larson E, Bakken S, Carrasquillo O, Formicola A, Glied SA, et al. Defining Interdisciplinary Research: Conclusions from a Critical Review of the Literature. *Health Serv Res*. 2007 Feb;42(1 Pt 1):329–46.

