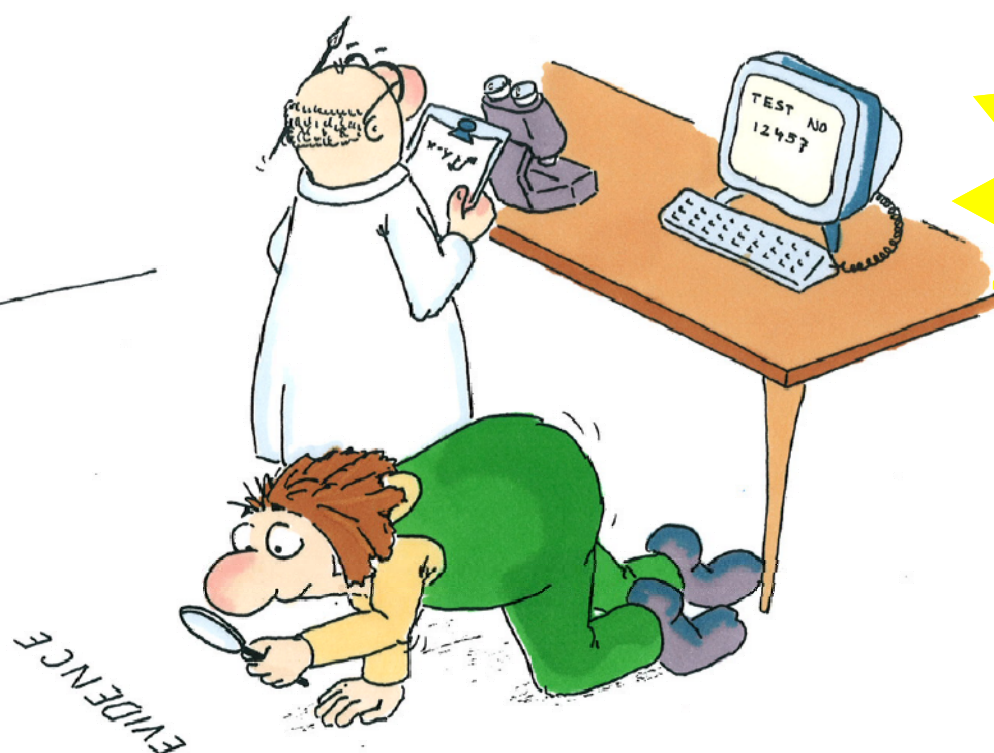




NORDOFF-ROBBINS MUSIC THERAPY

• *RESEARCH DEPARTMENT* •

Presenting the Evidence



SECOND
EDITION
2009

*The up to date guide for Music Therapists
responding to demands for clinical
effectiveness and evidence-based practice*

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<http://www.nordoff-robbins.org.uk/musicTherapy/research/ir>

TABLE OF CONTENTS

| | |
|--|-----|
| <i>Introduction to the Second Edition</i> | 1 |
| Part One: Talking the Talk | 9 |
| <i>Section A: Evidence Jargon</i> | 10 |
| <i>Section B: Arguing and Questioning</i> | 20 |
| Part Two: Building Evidence Platforms | 29 |
| Part Three: Existing Research | 53 |
| <i>Section A: Methodology</i> | 54 |
| <i>Section B: Client Group</i> | 60 |
| Part Four: Resources and References | 98 |
| <i>Conclusion</i> | 102 |

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The Authors.

January 2009: London.



INTRODUCTION TO THE SECOND EDITION



THEN (2004) & NOW (2009)

Welcome to the 2nd Edition of this Guide!

We wrote the first edition of *Presenting the Evidence* in 2004 as a way of responding to the many music and arts therapists who phoned the Research Department of Nordoff-Robbins in a bewitched, bothered and bewildered state, asking:

- Where's the Evidence?
- What do I say if there is none?
- What is a "Cochrane"? ...Where do I get one?

Therapists were asking us for guidance in how to respond to their managers' new demands for evidence of 'clinical effectiveness' – either for the music therapy currently in place, or in support of a new post. They were also asking for help in making sense of 'evidence – speak', which seemed as daunting as the demand itself.....

The 1st edition of *Presenting the Evidence* surprised us by selling out its 2000 printed copies. It's time for an update! Revising the 'Guide' has enabled us to make 'then' and 'now' comparisons – in terms of *what* demands for evidence are made within music therapy; *how* our ability to meet these demands has changed (or not); and what *new developments* have entered the debate.

THEN(2004): THE TIMES THEY WERE A-CHANGING

In 2004, the culture surrounding arts therapists' work was clearly changing, based on the Evidence-Based Medicine (EBM) / Evidence-Based Practice (EBP) movement that was growing mainly (but not exclusively) within medical structures. Employers (especially



statutory NHS services), were increasingly requiring all professions to evaluate existing services, or to justify the creation of new services, with appropriate ‘evidence’. Fundamentally, the driver of EBM/EBP was a political and economic rationale, and the movement provided a way to limit state spending on healthcare. As Bunt and Hoskyns (2002) commented, this was the land of ‘business-speak’, in a marketplace system, referencing ‘audit’, ‘cost-effectiveness’ and ‘quality assurance’.

The demand for Evidence-Based Practice was being mostly driven by healthcare politics, using the medical model as its primary reference. This created problems for many smaller clinical practices such as music therapy, physiotherapy and occupational therapy, all of which lacked a tradition of evaluating their services according to this model. We were not alone.

At the time, there was good reason to respond positively to the ‘evidence challenge’! Music therapists could hardly complain at such a demand, in terms of it being a consequence of achieving legitimacy as a Health Profession (with the relative professional advantage that this continues to provide). We were being called to show that our interventions were rational, accountable and demonstrable.

...RESPONDING TO THE DEMAND

For music therapists, the problem was not the legitimacy of the requirement itself, but rather *the way* in which a small and specialist practice such as music therapy was being asked to present its evidence.

Our 2004 Guide suggested a three-pronged response to the ‘evidence demand’:

- ***Do what you can*** (at a small-scale and local level) in order to demonstrate that your service is needed, used and appreciated.
- ***Access and use others’ evidence***, at a ‘higher’ level of research complexity



- ***Argue and debate*** an informed and robust case for why you can't meet the generalised demands for Clinical Effectiveness / Evidence-Based Practice

We substantiated this strategy with examples from colleagues' work available at the time. We also gave a warning (then very current) about the dangers of ignoring the shift in culture, and emphasised the necessity of responding in some way to the 'evidence demand'. We cited the article in the 'evidence-based healthcare' journal *Bandolier* (2000), entitled 'No evidence for Music Therapy for Dementia'. The *Bandolier* article critiqued the conclusions of a meta-analysis of literature published in the *Journal of Music Therapy*. The JMT article had stated that '... the published literature demonstrates that music therapy is an effective method overall for symptoms of dementia'. *Bandolier* pointed out that out of the 21 studies reviewed '12 studies had fewer than 15 subjects, and only 1 had more than 30' and 'there is no mention in the paper, nor in the titles of the included papers, of the key words "randomisation" or "blinding"'.

Our comments at the time encouraged music therapists to argue back in terms of methodological issues such as sample size. Our stance in 2008 remains unchanged. It may not be to our advantage to 'play the game' of medical-style outcome research, especially since we cannot hope to match the standards of large-scale medical trials. However, we need to be prepared to take alternative paths, if the evidence we provide is dismissed by those demanding it.

In 2004 we suggested that music therapists think about how high to aim in terms of the 'evidence bar' (our cover image on the first edition was a high-jumper trying to vault over the bar that clinical effectiveness had set him). We suggested that we do often have the evidence; but perhaps not in forms acceptable to medical research authorities. While we possess methodologies that help demonstrate the efficacy and quality of our practice, these do not 'fit' with (so-called) 'valid' ways of gathering evidence. Three basic questions, we suggested, should be kept in mind:

- Whose evidence?
- What kind of evidence?
- In what form?



We proposed that music therapists think *locally*, work with what evidence *is* available, and (to bolster morale) remember: *absence of evidence of effectiveness is not the same as evidence of the absence of effectiveness!*

We then crossed our researchers' fingers and hoped...

NOW...(2009)...AND PLUS ÇA CHANGE...

Much has changed since 2004...and little has changed.....

The EBM/EBP 'culture shift' is increasingly permeating the other sectors in which music therapists work – such as special education and social care. An equivalent 'wake-up call' to the *Bandolier* statement happened when Australian researcher Jennifer Stephenson (2006) classified music therapy in special education as 'a controversial practice that lacks an evidence base'¹.

In 2009, music therapy finds itself in increasingly changing professional contexts, with corresponding changes to the 'evidence demand'. One aspect is the expanding 'Arts & Health' sector (and its 'Music & Health' wing), which has grown substantially over the last few years, and is making its own characteristic response to the 'evidence demand'. This response is sometimes similar to that of music therapy, and at other times, strikingly different. It may be too early to predict the precise impact of this emerging sector, both on practical music therapy, and on its evidence base. It could be that both practical and research-orientated collaborations with this larger sector will prove mutually beneficial.

Otherwise, much of the scenario we sketched in the 1st edition has remained the same, in terms of the ways in which music therapists need to be aware of, and respond to, the

¹ Stephenson, J. (2006) 'Music therapy and the education of students with severe disabilities'. *Education & Training in Developmental Disabilities* 41(3): 290-99. See also the dialogue between Stephenson & music therapist Katrina McFerran in the *British Journal of Music Therapy*: K. McFerran & J. Stephenson, 'Music Therapy in Special Education: Do We Need more Evidence?'. *British Journal of Music Therapy*, 20(2), 2006, p.121-8.



‘evidence demand’. Not all is doom and gloom. We are excited by the expansion of what has been done in just three years! Music therapists have woken up to the challenge and are mounting a proactive response, as witnessed by the edition of the British Journal of Music Therapy dedicated to the ‘evidence challenge’ (2006(2)). We’ve woven some of this work into this second edition and hope you’ll find it useful, inspiring and, most importantly, empowering!

AND FINALLY...A GUIDE TO THE SECOND EDITION

For this Second Edition we have kept some of the basic ‘ground-clearing’ information in the early sections, and updated all parts, using newly-available examples drawing from real-life music therapists’ work, made in response to the EBP/EBM demand.

The 2nd edition is in four subdivided parts:

PART ONE

Part One considers the ‘demand for evidence’ from a music therapy position.

SECTION A: Clarifies the Clinical Effectiveness / Evidence-Based Practice demand with the help of some jargon-busting.

SECTION B: Argues robustly for what music therapists can and can’t do to meet EBP/EBM demands.

PART TWO

Part Two ‘*Builds Platforms*’ for Music therapists to embark on *doing* Evidence, by providing guidance through 6 strategies.



PART THREE

Part Three presents a Hit List of music therapy research categorised by a range of different methodologies (section A) and different client groups (section B).

PART FOUR

Part Four provides some resources which can be used by music therapists embarking on their own research.

ACCESSING THIS GUIDE

A major difference between the two editions of this Guide is our decision to go ‘open source’, making this document instantly accessible to our colleagues through the Internet. Having a web-based resource enables us being able to change and update information more easily, especially in Part Three.

More than ever it is important to share our resources, knowledge and perspectives in this area. We look forward to your responses and contributions!

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January 2009.





PART ONE: TALKING THE TALK

SECTION A: EVIDENCE JARGON

The notion of ‘Evidence’ is generally associated with the legal world: where it is sought for proving beyond reasonable doubt that something is ‘true’ and that which is asserted must be proved. The latter aim is not a bad starting point for music therapists wanting to embark on the evidence trail.....

In Healthcare, the Evidence-Based Movement began as a genuine concern by medical professionals that patients might be suffering as the result of being treated in ways which had not been proven to be effective.

The EBM’s values are reflected in its language, some of which has become part of everyday healthcare talk. In this section we unpack some of its phrases. All jargon is value-laden; it is used in a particular context, with a specific purpose. Hence, our own review of the jargon is, equally, value-laden; offering a music therapist’s guide to what’s what (and who says so).

JARGON #1: EVIDENCE-BASED HEALTHCARE MOVEMENT

‘..... encourages a questioning and reflective approach to clinical practice.... (and) improved efficiency in the delivery of healthcare through the identification of effective treatments.’

(Glanville, Haines & Austin 1998: 200)²

The best known proponent of this movement was Professor Archibald Cochrane (1909 - 1988), an eminent epidemiologist. He argued that the limited resources of the National

² Glanville, J., Haines, M., Austin, I. (1998) ‘Finding information on clinical effectiveness’. *British Medical Journal* 317: 200-203

Health Service (NHS) should be used to provide only those treatments which had demonstrated their efficacy in properly designed evaluations (Cochrane 1972)³. He stressed the importance of using evidence from Randomised Controlled Trials (RCTs), arguing that these were likely to provide more reliable information than other sources of evidence. He called on the medical profession to collate an up-to-date summary of all good-quality RCTs in all specialities. This led ultimately to the establishment in 1993 of The Cochrane Collaboration, whose main activity is the publishing of reviews of RCTs in all areas of medicine. These are collated in the Cochrane Library, which is accessible on the internet (see Part Four).

The Evidence-Based Healthcare Movement has been adopted in the UK by the NHS to establish criteria both for investigating the efficacy of treatments, and also consequently for rationing services. In the Clinical Effectiveness culture, 'evidence' is required to guide:

- whether a new intervention should be purchased
- whether an existing intervention should be maintained
- the choice of using one intervention rather than another.

The Evidence-Based healthcare Movement translates directly (if tacitly) into putting a value, usually monetary, on healthcare practices and resources. Both definitions of Evidence-Based Practice, below, convey the responsibility of providing the best possible service and of removing poor or harmful healthcare.

JARGON #2: EVIDENCE-BASED PRACTICE

The most widely used definition of EBP remains this one:

³ Cochrane, A.L. (1972) *Effectiveness and Efficiency: random reflections on health services*. London: Nuffield Provincial Hospitals Trust

'Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients.'

(Sackett et al 1996: 71;)⁴

We also found a more recent definition:

'Evidence-Based Practice (EBP) requires that decisions about healthcare are based on the best available, current, valid and relevant evidence. These decisions should be made by those receiving care, informed by the tacit and explicit knowledge of those providing care, within the context of available resources.'

(Martin Dawes, et al 2005)⁵

There is a strong link in these statements to cost-benefit systems, which has resulted in Evidence-Based Practice effectively becoming a filter-system for making decisions about the cost-value of healthcare. The currency of 'good work', in other words, has been transformed to Pounds and Pennies:

Evidence-based Practice is increasingly applied in order to determine what interventions should be funded, and can be understood as an approach to healthcare that promotes the collection, interpretation and integration of valid, important and applicable patient-reported, clinician-observed and research-derived evidence.

(Wigram et al 2002: 257)⁶

The standards of what counts as 'evidence' within Evidence-Based Practice remain too narrow for music therapists. Arts therapist Andrea Gilroy challenges us to broaden our thinking. She reminds arts therapy practitioners that EBP needs to be seen as a cycle of

⁴ Sackett et al (1996) 'Evidence-based medicine: what it is and what it isn't' *BMJ* 312: 71-72

⁵ Sicily statement on evidence-based practice *BMC Medical Education* 2005, 5:1

⁶ Wigram, T., Pederson, I. N., and Bonde, L. O. (2002) *A Comprehensive Guide to Music Therapy. Theory, Clinical Practice, Research and Training*. London and Philadelphia, Jessica Kingsley

activities that include Evaluations, Professional Development, Audits, Practice Guidelines, as well as Research (see Part Two).

Usefully for music therapists, Gilroy outlines four key principles of EBP (pp9-13)⁷:

- Systematic observations that are reproducible and unbiased can increase confidence in knowledge about practice. The absence of systematic observations must lead to caution about information that is derived from clinical experience and intuition, as it may be misleading.
- The study and understanding of disease are necessary, but insufficient, guides to clinical practice for art(s) therapists.
- Understanding of certain ‘rules of evidence’ is necessary to correctly interpret the clinical research literature.
- Those whose practice is based on an understanding of the underlying evidence will produce superior patient care.

JARGON #3 - LEVELS OF EVIDENCE (and Variations on a Theme by Cochrane)

The Evidence-Based Healthcare Movement has established a hierarchy of evidence, or rather, several variations of the evidence hierarchy, ranking different research methods according to the effectiveness of their methods and findings. As the word ‘hierarchy’ suggests, not all of the levels are necessarily accepted as being of equal value.... and not all the hierarchies look the same! In fact, in doing an informal survey of literature on EBP we found 5 variations on the same theme. Table 1 displays one version of the Evidence Hierarchy, listing the most ‘prestigious’ evidence to the least, as defined by music therapist Tony Wigram (2002: 261).

⁷ Gilroy, A. (2006). *Art Therapy, Research and Evidence-based practice*. London: Sage.

| | |
|---|-------------------------------------|
| 1 | Systematic review |
| 2 | Review |
| 3 | Randomised controlled trials (RCTs) |
| 4 | Case control studies |
| 5 | Case series |
| 6 | Case reports / case studies |
| 7 | Qualitative studies |
| 8 | Expert opinion |

TABLE 1: EVIDENCE HIERARCHY (WIGRAM)

A more finely graded version, from the Scottish Intercollegiate Guidelines Network (SIGN), can also be accessed⁸. In addition, some of the references we provide in the next Section (B) also have variations of the Evidence Hierarchy in their texts.

Recognised sources of evidence apply such hierarchies in developing their criteria for inclusion of studies. For example, as mentioned, only research using Randomised Controlled Trials and above, in terms of the hierarchy of evidence, are included in the Cochrane Library. This principle rules out most of the music therapy research that is currently available. RCTs were designed with drugs and surgical procedures in mind, and the methods are not easily adaptable to music therapy (see Section B). Furthermore, qualitative research, which does suit music therapy practice, features nowhere in common versions of the hierarchy of evidence. The absence of methods suitable for research into music therapy practice, can lead to managers declaring that; ***‘there is no evidence’***, or to comments such as the *Bandolier’s*, that rubbish the evidence on methodological grounds.

⁸ Available online at <http://www.nhsplus.nhs.uk/clinical-guidelines/methodology.asp>.

BROADENING THE EVIDENCE TALK (aka The Empire Strikes Back)

Some developments offer hope; and a direct challenge to music therapists to be proactive:

- (i) In a recent Radio 4 interview⁹, Sir Michael Rawlins, Chairman of NICE (National Institute for Clinical Excellence), made the following comments about drug trials:

“We spend too much attention to the results of Randomised Control Trials, and we’re not looking enough at observational studies; ones where there isn’t necessarily a control.”

“RCTs are very good at looking at [drug] effectiveness among the particular group of people you are studying. But it may not play out quite as well in the real world”

“There are all sorts of observational techniques that we can use, and have been used very satisfactorily over the years...we ought to be prepared to accept the results of those sorts of studies.”

(Rawlins 2008)

- (ii) The recently established **Campbell Collaboration**, can be seen as the counterpoint to the Cochrane Collaboration, with its framework and protocols for systematic reviews of qualitative research evidence (see Part Four).
- (iii) The government’s **Quality in Qualitative Evaluation** report (see page 21), which outlines a framework for evaluating the quality of qualitative empirical research evidence *‘on its own terms’*, rather than on terms imported from other paradigms. Importance is placed on using the framework in the development and implementation of social policy,

⁹ (Interview on the Today programme, BBC Radio 4. 17/10/08. Accessed at http://news.bbc.co.uk/today/hi/today/newsid_7675000/7675335.stm)

and the report is based on a broad consultation with academics, researchers, authors of existing frameworks, commissioners and funders, and policy makers. It points out the general defining feature of qualitative research; its concern with exploring phenomena from the perspective of those being studied. This is kept in mind when trying to reformulate criteria from that used to assess quantitative research, which is not always appropriate for qualitative methods. It is emphasised that the criteria cannot be overly-prescriptive, but should rather aim to aid informed judgement when assessing research

(iv) In a paper that appeared in the *Journal for Clinical Nursing*, entitled '**Hierarchy of evidence: a framework for ranking evidence evaluating healthcare interventions**', David Evans (2003; 12; 77-84) argues for the inclusion of two additional criteria, in order to assess the efficacy of evidence: *appropriateness* (the impact of an intervention on a person, and the acceptability of an intervention and its use by the consumer) and *feasibility* (the impact of an intervention on the provider; the resources needed to implement the intervention). By adding these two criteria, he demonstrates a rather more critical ranking of what constitutes good evidence (see Section B).

(v) Encouraging for music therapists, is that some of the terms that Evans uses are more 'music therapy friendly' in terms of research methodologies. Equally, his uncompromising stance, on positioning poor research methodology at the very bottom of the evidence hierarchy, challenges all music therapists to engage in sound thinking and thorough planning before engaging in evidence activities. A stance unequivocally promoted by this guide. Below is an approximation of his table (Table 2).

| | EFFECTIVENESS | APPROPRIATENESS | FEASIBILITY |
|-----------|---|---|--|
| EXCELLENT | Systematic reviews Multi Centre studies | | |
| GOOD | RCT | | |
| | Observational Studies ** | | |
| FAIR | Uncontrolled trials with dramatic results Before + after studies** Non RCTs | Interpretative Studies** | Descriptive Studies** Action research** Before and After studies Focus Groups** |
| | | Descriptive Studies** Focus Groups** | |
| POOR | Descriptive-Studies Case Studies Expert Opinion | Expert Opinion Case Studies | |
| | | Studies of poor methodological quality | |

At the top and the bottom of the evidence hierarchy, no change in ranking...

Some studies listed under Good and Fair ** are close to MT research practice

TABLE 2: HIERARCHY OF EVIDENCE (EVANS)

JARGON #4 - CLINICAL GOVERNANCE

‘Clinical governance is the system through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care, by creating an environment in which clinical excellence will flourish’

(Department of Health website, accessed 1 October 2008)¹⁰

Clinical Governance encourages clinicians to question what they are doing, whether they should be doing it, and its viability.

¹⁰ Department of Health (2008) *Clinical Governance*
<http://www.dh.gov.uk/en/PublicHealth/Patientsafety/Clinicalgovernance/index.htm>

'Every part of the NHS, and everyone who works in it, should take responsibility for working to improve quality. This must be quality in its broadest sense: doing the right things, at the right time, for the right people, and doing them right - first time.'

(Department of Health 1997)¹¹

Consequently, clinical interventions need to be shown to be:

- Appropriate
- Up-to-date
- Effective
- Relating to consumer preference

There are various procedures for ensuring ongoing quality of services, some of which are well within the domain of music therapy practitioners 'doing it for themselves', (see Part B)

JARGON # 5 - CLINICAL AUDIT

Clinical audit is the overarching quality-improvement process. It is generally carried out by established auditing departments in Health Care Trusts. This is not the remit of music therapy practitioners. It is necessary, however, to understand its function.

Clinical audit seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. It is one of the key processes by which clinical governance monitors, maintains and raises standards of care. The audit cycle collates information cyclically and compares actual performance against a set standard. Clinical audit and outcomes measurements are quality improvement tools that can help to close the gap between what is known to be the best care, and the actual care that patients are receiving. They aim to ensure that all patients receive the most effective, up to date, and appropriate treatments; delivered by clinicians with the right skills and

¹¹ Department of Health (1997) *White Paper 3 Driving Change in the NHS*. London: Crown. <http://www.archive.official-documents.co.uk/document/doh/newnhs/wpaper3.htm>



experience. Clinical audit, measured against good practice criteria or standards, answers the question; ‘are patients given the best care?’ Clinical outcomes measurement answers the questions; ‘are they better, and do they feel better?’ (Department of Health 2008)

In the next section, we will move from thinking about EBM terms, (and their implied political and financial meanings), to developing arguments for music therapists to consider when debating evidence, efficacy, and practicalities.

SECTION B: ARGUING AND QUESTIONING; TOWARDS PRACTICE-BASED EVIDENCE?

‘The arts are not drugs; they are not guaranteed to act when taken’.

(E.M.Forster)

Now that some of the (more meta-level) jargon has been reviewed and some of the demands explicated, it is time to sharpen some arguments. In this section we provide a brief recommended reading list to help substantiate these. As in all good research, a sound argument needs to inform action, and obviously you will need to develop your own arguments for evidence practice in your own particular clinical context.

Anchoring our arguments are three questions, all of which are political:

- Whose evidence counts? (and for whom)
- Who decides what kind of evidence is acceptable?
- What kind of evidence best reflects our practice?

That a small profession such as music therapy could effectively mount such a debate could, we admit, easily be seen as a rather grandiose delusion! However, over the last five years an interdisciplinary cross-section of practitioners and academics have contributed to an increasingly nuanced argument concerning some of these questions.

In considering what good arguments music therapists can make; and what debates can be initiated and developed, we identify three strategies:

- Make a case *for* what is an ‘appropriate’ way of providing evidence for the effectiveness and utility of music therapy, without compromising its key aspects.

- Argue *against* ‘inappropriate’ ways of providing such evidence; why we *can’t* reasonably be expected to provide evidence in a particular way.
- *Re-frame* how music therapy *fits* into changing contexts, health, education and social care cultures such that a different angle is created on the evidence demand, and on our ability to respond to it.

At the end of this section are some examples that we have found useful in our own understanding of the current debate.

TALKING THE TALK: DEVELOPING ARGUMENTS

Although it would be ill-advised to use a one-size-fits-all argument for or against what evidence counts for whom, for what purpose, and so on, here are some essential points around which context-specific arguments need to be developed. These are a composite of some of the texts referenced at the end of the section, and some are in the form of unanswered questions. Unsurprisingly, most of the questions are in relation to the dilemma of finding the fit between different worldviews of what constitutes good work, and good evidence.

(i) **Knowledge systems:** what is lost (and what is gained) when Music Therapy knowledge and know-how gets translated into knowledge systems that are powerful, and distant from the practice? For example, how does Music Therapy work ‘fit’ with absolute and global classification of diseases, such as the DSMIV or ICD10?

(ii) **Standards:** what is the ‘fit’ (and how can we grow one) between music therapy gold standards (our values, world-views, knowledge worlds, and experiential knowledge) and the demands of externally imposed ‘gold standards’, such as Cochrane protocols; RCTs, and the positivist research anchors of generalizability and predictability?

(iii) **Context:** like Music Therapy practice, Evidence is contextual: it is generated with a particular strategy in mind, for a particular purpose. Rather than evidence being produced according to de-contextualised values and methods, it needs to be built on a series of 'evidence platforms'. These need to be in place from the very start of service provision, rather than being hastily generated in response to sudden demand. This means that MT practitioners need to argue for the resources to build evidence platforms as part of their service provision. (see Part Two).

(iv) **Indicators:** growing a sound demand for evidence. Part of providing good evidence is knowing what music therapy does, and is intended to do – in particular sites, with particular client cohorts, using particular formats. Once this knowledge is in place, then practice-based indicators can be developed, and practice-grown evidence can begin to grow. Without these, music therapists are left responding to inappropriate indicators and outcomes dictated by other professions.

(v) **Representation:** does music therapy research, as portrayed through experimental control studies and RCTs, represent how 'everyday' music therapy works? Do clients really attend sessions, and respond to music therapy as represented by the criteria used to measure efficacy? If not, what are the best methods, that do not compromise the everyday music therapy scenarios? In other words, do good statistical results mean that patients feel better? Do poor results mean the contrary? What is the link between measures and statistics, and clients' experiences of music therapy?

(vi) **Fit:** How can the rigour of music therapy work become rigorous evidence? What research methodologies enable the fit between good work and good demand?

..... to be continued.....elaborated.....complexified.....by YOU!

SOME TEXTS SUPPORTING THE KEY ARGUMENTS

(from the general to the specific)

Overleaf, we've found the following texts useful for developing various arguments for various contexts. Some have appeared as a result of serendipity, while looking for sources for other projects. What researchers find is often not quite what they thought they were looking for!

DeNora (2006) 'Evidence and effectiveness in music therapy: Problems, powers, possibilities and performances in health contexts (A discussion paper)'. *British Journal of Music Therapy*, 20(2).

Tia DeNora is a leading sociologist, who has worked on both a sociology of music in everyday life, but also on aspects of the sociology of science. Both perspectives inform this article, which specifically addresses the current situation music therapy finds itself in with regard to EBP. DeNora outlines a detailed critique of the appropriateness of RCTs in relation to music therapy practice – suggesting instead a more 'localist' perspective on evidence. Two Responses by music therapist researchers, Tony Wigram & Gary Ansdell, are printed after this article in the BJMT. These provide further debate with additional perspectives on the issues and complexities that DeNora discusses.

TEXT 1

Rolvjord, R.; Gold, C.; Stige, B. (2005) 'Research rigour and therapeutic flexibility: Rationale for a therapy manual developed for a randomized controlled trial'. *Nordic Journal of Music Therapy*, 14(1).

This group of music therapy researchers have been involved in designing and running an RCT of music therapy with people with mental illness in Norway. This article discusses in detail the 'tensions' between flexible treatment approaches (the approach in question is 'resource-oriented music therapy') and pre-structured research designs – such as the RCT.

TEXT 2

**Andrea Gilroy (2006). *Art Therapy, Research and Evidence-Based Practice*. London:
Sage**

This book-length study casts a useful perspective on the evidence debate from art therapy. It presents the principles, arguments and methods of EBP and a response (practical and rhetorical) from the art therapy profession and discipline. It also usefully outlines the relationship between outcome research and clinical audit.

TEXT 3

PLoS Medicine Editors (2007) ‘*Qualitative research: Understanding patients’ needs and experiences*’. PLoS Medicine 4(8), August 2007.

This short Editorial from an on-line medical journal gives an interesting rationale for why the Journal would accept qualitative research. It perhaps reflects a shifting, more pragmatic culture within the medical establishment in regard to methodological choices, and judgements about their appropriateness.

TEXT 4

David Evans (2003) *Hierarchy of Evidence: a framework for ranking evidence evaluating healthcare interventions*. J. of Clinical Nursing 12: 77-84

This brief paper outlines an argument for the expansion of criteria used to evaluate research and rank this. He proposes a revised hierarchy of research evidence based on the effectiveness, appropriateness and feasibility, and includes an expanded research methodologies to be included.

TEXT 5

Government Chief Researcher's Office (2003) Quality in Qualitative Evaluation: A Framework for assessing research evidence. London: Home Office

Outlines a framework for evaluating the quality of qualitative empirical research evidence 'on its own terms', rather than on terms imported from other paradigms. This report is based on a broad consultation with academics, researchers, authors of existing frameworks, commissioners and funders, and policy makers.

TEXT 6

Other supporting arguments:

Nordoff-Robbins Symposium

In November 2005 the Research Dept of Nordoff-Robbins hosted a Research Symposium entitled 'Evidence-Based Practice & Music Therapy: A Further Perspective', with a key-note presentation by the sociologist Prof Tia DeNora, and responses by Prof Tony Wigram and Dr Gary Ansdell. This Symposium critically explored the relationship between music therapy and the expectations of medical-model EBP.

BJMT Evidence edition

A special edition of the British Journal of Music Therapy in 2006 (Vol. 20(2)) followed-up this Symposium by publishing Prof DeNora's perspective in her article above (Text 1). The volume also included other important perspectives on the debate from different practice areas (Powell, Gold, McFerran and Stephenson).

SYMPOSIUM

..... AND SOME MORE USEFUL TEXTS

Aldridge, David.

(2004) *Health, the Individual & Integrated Medicine*. London: Jessica Kingsley Publishers.

(2005) *Case Study Designs in Music Therapy*. London: Jessica Kingsley Publishers.

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You will be able to add your own texts, which you have come across yourself and found informative on issues of evidence-gathering.



PART TWO: BUILDING EVIDENCE PLATFORMS

We've already hinted at the Evidence Platforms that YOU need to have in place from the very beginning of music therapy service (see Part 1B). In this part of the Guide, we provide guidance as to what these platforms comprise of, and how you might institute these in your place of work. Our position is that if you find yourself reacting to the demand for evidence, it's too late. As a practitioner, you need to be providing evidence before being asked for it, and you need to know:

- what *kind* of evidence is needed
- by *whom*,
- for what *purpose*,
- *when*, at what time.

To do this requires organisation. In contrast to the first edition of the Evidence Guide, here we focus on more basic evidence platforms, now called Strategies 0-5, and less on the more advanced ones (Strategy 6). For the later strategies, you need on-site collaborations with other professionals, and you also need to know what has already been published. We provide some pointers in Part Three.

As a well-trained *reflexive practitioner* you are already halfway to building Evidence Platforms. You are used to examining your work critically and systematically. You've also (hopefully) got robust systems for documenting your practice: logs of attendance, reports, client records, and more. You need to consider what systems are useful for the kind of evidence that you want and need to provide. When reading the rest of Part Two, think about what you have already done and have in place, what you need, and what's being required of you:

- How high are you aiming?
- How negotiable is the evidence?
- What's 'good enough evidence' for YOUR situation?
- What resources (time/money) do you have available?

How could you link what you *need* to do with what you would *like* to do in terms of exploring and reviewing your work? By looking at Clinical Effectiveness from this angle you can turn it from a threat to an opportunity. We now outline a series of platforms to help you become proactive and enthusiastic. Below is a brief timeframe of building platforms when considering evidence. It is intended as a rough guide to what kind of information needs to be collected, and as a reminder that everything cannot be done at once, rather it is necessary to plan information-gathering in stages.

| TIMING | PLATFORM | ACTION | |
|---|-------------------|---|--|
| AT THE VERY BEGINNING..... | STRATEGY 0 | FOUNDATIONAL INFORMATION (this is a one-off strategy that may need updating from time to time) | Have in place information about the workplace; its origins, mission statement, aims and objectives, its programme structures, accountability structures, background about the MT service, etc. |
| ONGOING | STRATEGY 1 | DOCUMENTING all work you do on regular and frequent basis | Clients attending MT; session formats; highpoints; meetings attended, liaisons and networking; |
| | STRATEGY 2 | LOGGING THE UNEXPECTED | collect anecdotes, thanks yous, record peak moments of your service, collect expert evidence if timely, etc |
| AT REGULAR INTERVALS | STRATEGY 3 | INTERNAL SERVICE REVIEW | Ask clients / carers / staff / managers to complete questionnaires / other scales to evaluate MT service |
| | STRATEGY 4 | SERVICE REVIEW | Collating strategies 0-3 in annual/ 6-monthly reviews. |
| AT STRATEGIC TIMES | STRATEGY 5 | SERVICE EVALUATION (e.g., when MT service funding is under review; when the service needs expanding) | More formal use of instruments to collect value judgments from clients / carers / staff members, plus drawing together cumulative information from Service Reviews |
| OCCASIONALLY; WHEN TIME & RESOURCES ALLOW | STRATEGY 6 | CLINICAL EVALUATION | More complex, usually collaborative, research that aims to contribute more widely to published music therapy literature. |

TABLE 3: EVIDENCE PLATFORMS

Since this book is intended as a practical guide for clinicians, we won't be going into more elaborate research-based studies. However, in Part Three we discuss how you can make use of published studies that are already available.

The rest of Part Two talks you through the Strategies and lays out how each one builds on the previous strategy. These are intended to nudge you to consider what kind of information *you* need for *your* workplace, *when* and *why*, and to adapt and expand some of our suggestions.

Good Luck – and Get Going!

STRATEGY 0: FOUNDATIONAL INFORMATION

Here are guiding questions to help you gather background information about the workplace:

Origins and history

- What's the history of the organisation?
- Founding Members? Motives for Founding?
- What are key moments of change in its history?
- Who are the funders / supporters / friends / donors?
- What is the history of music therapy at this workplace?

What does it do and why?

- What are its current values / ethos ? (Global Mission Statement)
- What are its aims and objectives? (to fulfil its ethos / values)
- What strategies to fulfil its aims and objectives? (Services on offer / Client Base / Accountability)
- What structures ensure its strategies are effective? (Organisational Structures / Channels of accountability / Information Flow)

Where is music therapy positioned within the organisation?

- What remit / role / tasks / responsibilities
- What services does it provide, to whom, in what format
- What professional support networks exist?
- What accountability networks exist?
- How does music therapy interface with the workplace's Mission and Vision / Aims / Strategies?

Once you have gathered this, usually at the beginning of your work at a site, you have 'the story' of the place, and of music therapy. Although a one-off strategy, you do need to revisit this when there are major changes that need adding to the narrative.

STRATEGY 1: DOCUMENTING

Most organisations have systems in place for collecting facts and figures on an ongoing basis. This is information that you expect to be documenting, about regular, ongoing events. This usually includes a week-by-week log of how the music therapy service is used. If you're already logging your services for the institutional/departmental database, or service usage figures, make sure that you *also* keep a record for yourself. We stress this since, in our experience, figures, once logged in other systems or databases, can't necessarily be retrieved when *you* need them. For all subsequent strategies, bear in mind that Numeric and Narrative kinds of information complement one another. Neither, on its own, will do justice to the MT service. Be sure to have systems to collect both kinds on an ongoing basis (i.e., daily / weekly).

- (i) **NUMERIC information:** 'Facts and Figures'; information that can be easily translated into numbers, or that is already numeric, that can be easily entered into an excel sheet or a tried-and-tested database.
- (ii) **NARRATIVE / DISCURSIVE information:** used to elaborate one aspect of the numeric information; to give colour and weight to a particular view.

(iii) **MUSIC / MULTI MEDIA INFORMATION:** we all know that it is the immediate experience of Music Therapy work that makes the most direct impact on cynics as well as supporters. It would be foolish to discount recordings of music therapy work (with informed written consent) as part of growing an Evidence Base for your services.

In addition to the above, and at risk of being repetitive, table 4 has some reminders for thinking about what information to collect on an ongoing frequent basis:

- With what services does Music Therapy provide the workplace?
 1. Format and Content of sessions
 2. Timing and frequency of sessions
- Who refers clients to MT (e.g., teachers / nurses / doctors / self-/ carers / social services / ad hoc)?
- Why are clients referred (referral reasons)?
- Who attends?
 3. Profile of client base (incl., age, gender, diagnosis, length of illness / disability / problem / etc)
- With what frequency do clients attend?
 - Weekly / monthly / regularly / sporadically
- For what duration do they have music therapy?
 - Number of sessions over what period of time (e.g. 6 sessions over 12 week school term; 12 sessions in 6 month period etc.)

Any of these bits of information can be entered into an excel sheet, making sure you adhere to institutional guidelines of Data Protection, and that no identifying features of MT clients are entered. This information can then be charted using pie charts, tables, and bar graphs (see Service Review in Strategy 4).

TABLE 4: USEFUL DATA COLLECTION

STRATEGY 2: LOGGING THE UNEXPECTED

Music therapy work is full of unexpected delights (...and pitfalls); all of which need to be documented as being potentially helpful at some point, for some reason.

Be sure to:

- Keep track of any comments about music therapy made by anyone at all – some of which may be pursued in order to provide ‘expert evidence’ (see table 5 below)
- Keep track of thank-you letters, notes of recommendation, any mention of the service in local papers / media, and so on.
- Document unexpected highs..... the Christmas concert..... the performance at the summer barbecue.... something that happened in a session.
- Make a note of any recording that you have, on audio / video, of the work that may be helpful in providing evidence about the service provided. (Make sure that the workplace has rigorous systems in place for obtaining written informed consent).

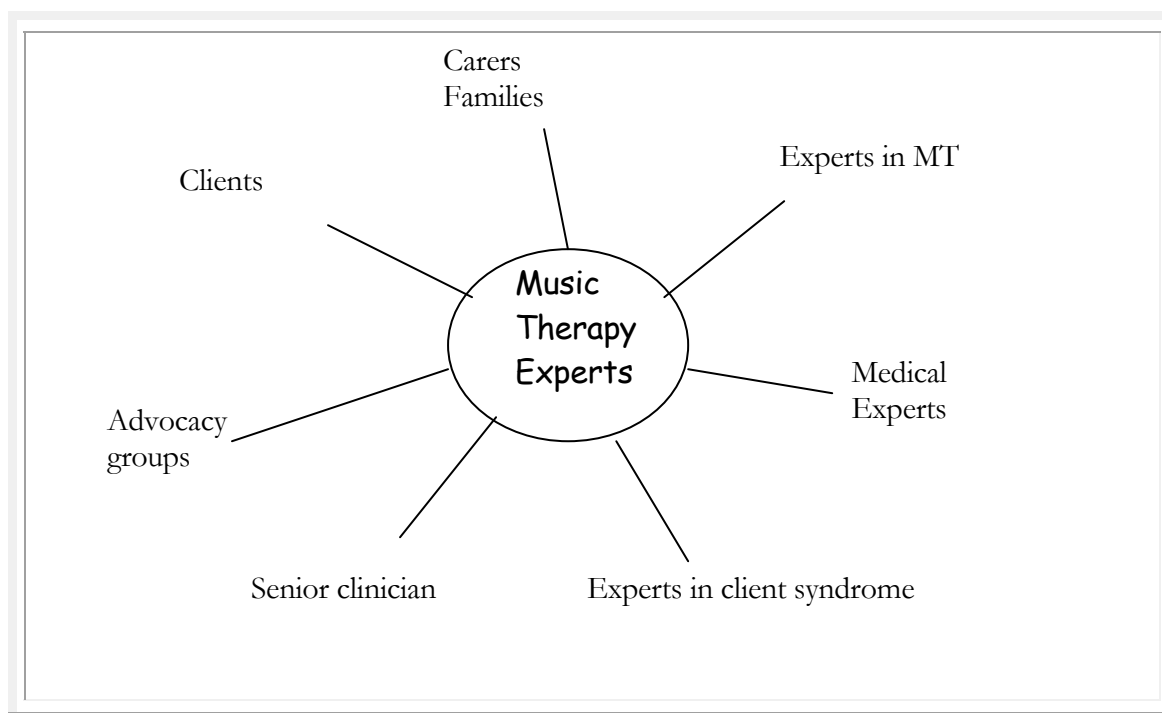


TABLE 5: EXPERT EVIDENCE

Choosing the expert: some ‘expert evidence’ counts for more than others, depending on what is needed and when. Evidence from a leader in the field of your client group syndrome (e.g. Rhetts, ASD, Dementia) or from an eminent medical expert will bear substantial weight in some kinds of evidence demands; whereas that from clients and their families may count for more in others.

Getting your work valued by someone suitably high in the hierarchy of the workplace can work on an informal level. For example, get the support of a ***senior clinician*** who has direct evidence through personal experience of the efficacy of your work. It is important that such clinicians have access to your work through presentations or team meetings.

A more formal version of expert opinion comes when a respected expert, for example in the client syndrome that you work with, gives an opinion as to the value of an intervention within a formal inquiry or review of services. However, as Wigram (2002:261) comments, this is not particularly common in music therapy. Also, as we’ve seen from the Evidence Hierarchy discussion earlier, even ‘expert opinion’ does not count for particularly strong evidence.

Over the page is an example (Table 6) of a letter expressing an expert opinion, provided by a consultant psychiatrist in a London hospital. (We have removed names to preserve confidentiality.)

To whom it may concern,

This is to express my support for music therapy within the psychiatric rehabilitation service of this hospital. As a psychiatrist of many years' standing, I am strongly in favour of using only those interventions which are shown to be effective under experimental conditions. I was therefore originally not predisposed in favour of music therapy, considering it to be yet another trendy but ineffectual fad unrelated to treatment and recovery.

However, I have been impressed by the results of work conducted by the music therapist with one of our long-term patients, previously considered to be almost impossible to discharge, despite the best efforts of myself and my colleagues. Since starting in music therapy he has attended his sessions regularly, has displayed raised levels of motivation and engaged in rehearsals for a community performance. Although it is of course impossible to isolate the causes of this, I am sure that music therapy has made a significant difference to the life of this man – to the extent that he has recently been discharged and is now living in a hostel – something that would have been considered highly unlikely before his music therapy.

Despite the lack of experimental evidence for music therapy, I am convinced of its value in this case and its potential value in similar cases. I therefore strongly support its inclusion within the ward team.

Yours faithfully,

Dr XXXXXXXXXX

TABLE 6: MEDICAL EXPERT

STRATEGY 3: INTERNAL SERVICE REVIEW

In contrast to Strategy 2, where you need to remain alert for unexpected comments and events, in strategies 3 and 4 you *set out* to collect opinions and comments about the music

therapy service. In order to investigate and review a service, it is useful to have a way to systematically gather the knowledge and opinions from a range of people involved and affected by the service.

Strategy 3 is an 'Internal' Service Review; it is for *your* information, and its timing is up to you, rather than being dictated by outside pressures (as in Strategy 5). An efficient way to do this is by asking colleagues, clients and/or carers for their experiences and opinions about the service by responding to questions through a pre-existing or specially designed questionnaire, rating scale or interview. These types of survey instruments come in a range of formats. In terms of building 'good' evidence about your work, questionnaires, rating scales and interview schedules involve careful construction and piloting, to make sure that you maximise the quality of information gathered.

For example, *questionnaires* can be self-administered or can be filled in by you together with the respondent. Questions can involve simply ticking one of a range of pre-determined options or filling in longer responses to more open questions. There are several practical points to take into consideration when designing a questionnaire, in terms of the format, wording and implementation of the questionnaire. For example, it is important to avoid ambiguity in wording as people might interpret the same question differently, which weakens your efficiency drive. You also need to consider the *sequence* of questions, and the mix of checklists, open questions, and simple yes/no options. When giving a range of options from which to choose, it is necessary for these to be discrete (completely separate) eg. 0-4, 5-9, 10-14., rather than 0-4, 4-10, 10-15 etc. When trying to gauge opinion, a range of attitude-measuring techniques are already available for use. The *Likert scale* is the one of the best established way to systematically measure opinion. This involves respondents are being given options such as 'Strongly Agree, Agree, Neither Agree nor Disagree, Disagree and Strongly Disagree' with which to respond to questions. Alternatively, the *Semantic Differential* scale involves respondents putting a cross somewhere on a line, with 'happy' on one end, and 'unhappy' on the other. This allows more detailed opinion data for analysis.

Similarly *interviews* can vary in structure; from an interview schedule with pre-set questions, where you tick pre-determined categories or given answers; to more semi-

structured interviews where questions are designed around general themes, and which is otherwise flexible as to the direction of the dialogue (see strategy 6a).

There are a lot of texts available that give step-by-step guides in designing questionnaires and interviews, including:

B. Gillham's *Developing a Questionnaire (2nd Edition)* (2007 London:Continuum).

G.Green & N. Thorogood's *Qualitative Methods for Health Research* (2006 London:Sage)

C. Robson's *Real World Research (2nd Edition)*. (2002 Oxford: Blackwell).

K.F. Punch's *Introduction to Social Research: quantitative and qualitative approaches*. (1998 London: Sage)

STRATEGY 4: SERVICE REVIEW

In contrast to Strategy 3, which is for your own records, in Strategy 4 the Service Review looks 'outwards'; usually done for a manager or funder who is 'outside' the music therapy service, and possibly even outside the institution.

A Service Review summarises and compacts information about your services at regular intervals. It is usually brief, to the point, and usually no more than two pages. It contains the relevant and readily available information which you are already collecting as part of Strategies 0-3. This provides a 'snapshot' profile of the service over a specific period. By collating a Service Review at regular intervals, say every six months, you are in a position to start accumulating information, and comparing the profile of your service over time. This enables you to show, for example, changes to your service over several years, e.g. by accumulating snapshots taken in June '06, Dec '06, June '07, Dec '07 etc.

Table 7 is an example of a small-scale review, for which the music therapist made use of data routinely collected on attendance and referral patterns. The outcome was a 2-sided document; brief but informative, and featuring colour diagrams, intended to hold a

manager's brief attention span. The therapist was able to present this to the incoming manager and so demonstrate not only the value of music therapy to her service but also his vision for future developments.

While we might be splitting hairs by labouring the distinction between a review and an evaluation (in Strategy 5), remember that we're presenting this guide as a series of evidence platforms. This may mean that the service review and service evaluation are part of *one* procedure. However, *you* need to be clear about the purpose of your evidence-gathering.

St James' Hospital – Music Therapy Service Review

August 2002

1. The need for review at this time

- To assess user involvement and engagement
- To assess compliance with clinical governance requirements
- To tie in with current review of OT service as a whole within the hospital
- To address the outstanding issue of secondment from an outside agency
- To highlight the Trust's continuing non-provision of arts therapies within this borough

2. Current funding arrangements

The music therapist is seconded on a 0.3 basis to the OT Department by a charitable organisation.

This is temporary project funding, with a view to the Trust taking over the post

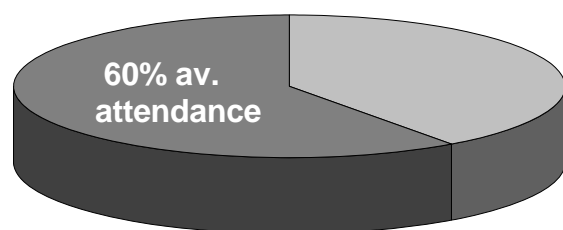
This temporary arrangement has been in place since January 2000.

This is the only arts therapy provision within the Trust's adult services in the borough

3. Current weekly service provision (within 0.3 secondment) & take-up

• Up to 5 individual sessions

- 45 minutes each
- Mainly in-patients
- Some continue as out-patients
- Often with "hard-to-engage" patients
- Available to very few patients at present
- Length of time in therapy: 4 months- 2 yrs
- Diagnoses: Mainly psychoses
- OTs, psychologists, nurses
- DNA rate: 10% over last 12 months

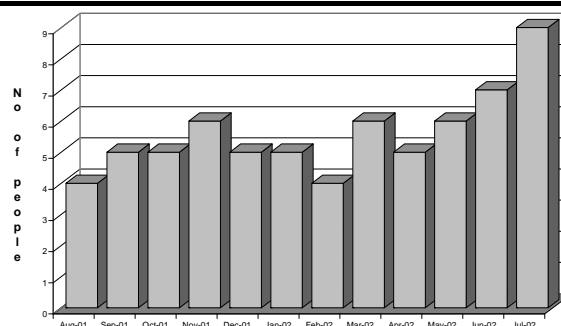


• Ward Group (Devas Ward)

- Open to all ward patients
- Also attended by staff
- Aims to promote community
- 60% patients attend
- Mondays at 3.30pm

• Open Group

- Open to all in-patients
- Held in OT Department
- Thrusdays at 2pm
- AVERAGE attendance shown in chart
- Some recent sessions over 10 people



Exeter Ward Group

- **4-week trial group** run on Exeter Ward, June/July 2002
- Very well attended – up to 9 patients each week
- Demonstrated value of music therapy on ward – individuals drawn into sustained engagement
- No time for this to be continued in present secondment structure

Clinical time ratio

- Currently 50% of time is spent in clinical sessions
- Remaining time is used for moving/setting up instruments, documenting sessions, liaising with other professionals etc.

4. Patient Feedback

During July 2002, inpatients attending the open group were invited to complete a short self-administered questionnaire on various aspects of music therapy provision. 12 patients did so. In general, they said that they enjoyed coming to the group and that they found it helpful. A few asked for the group to be longer, and most asked for more instruments to be available. Further comments offered were:

*Spring, summer, autumn, winter, nice
Place to relax.
Good for me.
Here I can be loud.*

*Keeps me going.
Music gives me energy.
I could do this every day.*

5. Clinical Governance

CPD – undertaken by music therapist, primarily in own time and at own expense, including:

- attending music therapy courses / workshops
- writing for publication
- teaching on training courses
- taking students on placement

EBP – Databases etc not currently available to clinicians: Internet access in future may facilitate this.

Multi-professional audit – an ideal aim for the future

Clinical supervision – unavailable within Trust

Clinical risk management – use of OT Department systems

Information sharing – limited opportunities due to short amount of time available

Critical incident reporting – use of OT Department systems

Effective multi-professional teamwork – restricted to OT Department

Patient feedback systems – use of patient questionnaires

Patient focused approach – inherent in the work

6. Summary and conclusion

The existing music therapy service at St James' is well used with plentiful referrals and evident patient support. However, the ongoing failure of the Trust to fund the service in any form limits not only its scope but also its usefulness in an interdisciplinary environment and its compliance with clinical governance requirements. This needs to be addressed. In part this may entail the Trust either taking over the seconded post or employing a second music therapist to expand the service.

7. Contact

For further information, or for referral purposes, please contact the music therapist at the Occupational Therapist Department (x4509).

STRATEGY 5: SERVICE EVALUATION

Once again, this strategy builds on the solid evidence platforms already in position. In contrast to the service reviews in Strategy 3 and 4 (which, as we have hinted earlier, may well involve some evaluation), a Service Evaluation is an exercise geared explicitly to give a *value judgement* on the Music Therapy service. This may involve a multi-method approach with a range of data collection instruments—as you can see, we’re using ‘research’ speak here. For a Service Evaluation, you need to make a secure link between the main aims/benefits of Music Therapy and a particular client group in this particular context; as well as find ways to connect Music Therapy’s aims and outcomes in a demonstrable way. This generally involves a number of complementary procedures that together can present evidence that the intervention is achieving what it claims; including:

- 1) Formulating the main *aims* of music therapy, on the basis of, for example, the institutions Core Principles, the Trust’s Commissioning Principles, its client group etc (refer to Strategy 0).
- 2) Formulating what the music therapy service provides in order to fulfil its aims (see Strategy 0).
- 3) Formulating the benefits of music therapy on the basis of the above information, and on existing documentation and literature (see Part Three of this Guide).
- 4) Designing evaluation instruments on the basis of 1)-3), and piloting these (refer to Strategies 4 and 6).
- 5) Targeting strategic colleagues, carers, co-professionals (e.g. in MDTs) to respond to evaluation instruments (some may have already contributed to Strategy 2).
- 6) Including participant or non-participant observation based around parameters relevant to clinical aims (e.g. levels of participation, levels of interaction etc).

Table 8 overleaf has a specific brief, which is local, and which the music therapist follows closely, thereby ensuring that there is no waste of time or resources.

Doing a locally-relevant service evaluation

Music therapist Harriet Powell set out to an evaluation of a pilot music therapy service with older people in a non-medical community setting¹². She aimed to demonstrate that this work was effective in its locally-defined aims and context, and warranted further funded and expansion as a project. She succeeded! The service purchasers agreed to fund 3.5 days of work per week for a further 2 years. We consider this a good model for providing a 'good-enough' evaluation for both funding purposes and for exploring what kind of music therapy provision was needed in this particular context. We will outline here the main aspects of the evaluation:

Aims & Agenda:

The aims & agenda of the evaluation were negotiated with the service purchasers (who needed certain information about the pilot, and a certain approach to its evaluation). The evaluation set out to:

- (i) involve service-users in the evaluation and to listen to their voice and experiences
- (ii) to explore the benefits of group music therapy for these clients in this context
- (iii) to suggest recommendation for the service should it continue

The music therapy project had been piloted between October 2005- April 2006 in 7 locations in Hackney, London. The music therapy was provided in groups at supported living centres, with some support staff being part of the groups.

Evaluation Design

Given that the requirement from the service purchasers was that the service users and support staff be involved in evaluating the main benefits of the music therapy service, the evaluation was designed to access and record the experience of:

- 22 service users
- 8 managers and 6 care staff
- 3 music therapists delivering the service

¹² Harriet Powell (2006) *The Voice of Experience: Evaluation of music therapy with older people, including those with dementia, in community locations. British Journal of Music Therapy*, Vol. 20, no. 2

Data Gathering

Data was gathered to address the three requirements (i) compiling basic records of attendance and distribution of attendees (in terms of age, gender & ethnicity) (ii) accessing service-users and support staff evaluations of the benefits of music therapy (iii) gathering music therapists observations of both benefits and their recommendations for future provision (mostly practical considerations that emerged from the pilot).

This data was obtained through (i) therapist reports and ongoing process notes (ii) interviews with service users, managers and care staff. The interviews were designed to have a combination of structure questions to elicit basic information and preferences, but also some semi-structured 'open questions' to elicit more individual responses and information from the interviewees.

Report

The evaluation was written-up in a 14-page report (submitted to the service purchasers), providing

- background to the evaluation
- the relevance of music therapy to non-medical community supported living settings
- aims and descriptions of the music therapy process during the pilot project
- method of evaluation and summary of results
- conclusions and recommendations
- appendix containing therapist reports and fuller data

Outcomes of Evaluation

At one level the evaluation achieved its primary aim: to secure further funding for an expanded service. At another level it provided valuable feedback for what exactly the benefits were in this non-standard delivery of music therapy (the pilot had partly been to see whether and how music therapy could help residents in supported living). The data from both service-users and staff who knew the residents and attended the sessions showed clearly that benefits ranged across physical, psychological and social areas. Additionally, the data from the 3 music therapists gave valuable feedback and recommendations for how the service might be managed and improved should further funding be obtained.

TABLE 8: SERVICE EVALUATION

In this project, there is a local negotiation of both the appropriate form of ‘evidence of effectiveness’, but also local interpretation of the ‘results’ of the investigation, i.e. what mattered where, why and to whom. Crucially, there is a local negotiation of the *relevance* and *meaning* of ‘evidence’. In this example, Music Therapy was not understood within a medical model (and the model’s demands for changes in symptomology or defined outcomes that could prove true *anywhere*). Here, in the context of supported living centres (and the challenges confronting a specific group of older people), Music Therapy was being required to show that it could be helpful in a more locally-defined sense. Its benefits evolved over the time of the pilot project, and needed to be locally interpreted, by both the service users themselves, and the workers who knew them and could identify benefits. For example, in this context, a simple but important benefit, was that music therapy proved successful in getting residents out of their individual flats and socialising together.

A range of benefits were found to address wider concerns than simply the residents: there were positive aspects for staff-user relationships, and for the place itself. Another important benefit (whose measurement was designed into the study) was that the process of interviewing users was experienced as being positive and empowering in itself; the ‘voice of experience’ of these people was listened to (for a change!).

This evaluation project shows how it is necessary to be clear about:

- what ‘level’ of evaluation is being asked of you, and how it relates to local needs, local concerns and local priorities
- what research methods are most appropriate ; in terms of your priorities (e.g. to secure funding) and the research participants (what’s best for *them*?)

“Our evaluation met the needs of this particular Social Services Community Care situation. We gathered the necessary evidence in a way which suited the local purpose and context and, in order to get the result we all wanted, we listened to the voice of experience.”

(Powell: 2006:119)

STRATEGY SIX: CLINICAL EVALUATION

In Strategy 6 we move from evidence for and about the workplace, into that which is usually part of ‘research’; anchored by research questions and disciplinary literature and generally undertaken collaboratively. Such studies aim to contribute to, and participate in, clinical, theoretical and research publications within and around the music therapy disciplinary field. In our opinion it would be unwise to embark on these as a solo enterprise.....

Since research is now part of UK music therapy trainings, in this part of the Evidence Guide we avoid duplicating what already exists in a range of useful research methodology texts. . Instead we’re considering clinical evaluation, which is a specific type of research activity. We talk very briefly about TWO aspects of clinical evaluation research that follow on from the previous platforms, especially since as a practitioner, you may well become part of a clinical evaluation research collaboration that seeks to show the ‘value’ of music therapy work. (How this ‘value’ is conceptualised and defined depends on the research problem, the research paradigm and the questions; this is a discussion much too broad for this modest text).

Here we focus on two aspects to do with clinical evaluation research that may well impact on your practice directly. The first is who to approach for information and opinions about music therapy work (some of which we’ve touched on in Strategies 2 and 5), and the second is to do with what research instruments might be useful for conveying different kinds of ‘values’.

In what we call a Qualitative Outcome Study, below, we turn to the service users- music therapy clients – to consider the first of our discussion points.

A QUALITATIVE OUTCOME STUDY: WHOSE OPINION?

What we call a ‘qualitative outcome’ design, we approach the question of effectiveness of music therapy from the perspective of what users of the service identify as its main benefits

for them. This can mean that the evidence of efficacy is defined in wider terms - in quality of life terms (which may or may not be done through a Quality of Life instrument schedule) as well as in more direct relation to their symptoms. Also, a 'user-perspective' is now often required within modern healthcare (especially in mental health), so there can be a good fit here between what is required in terms of 'evidence' and what patients can provide. Two music therapy studies incorporate qualitative data relating to client experience of process and outcome (Magee 2002; Odell Miller *et al* 2001).

Semi-structured interviews (see Strategies 3-5) with clients can be conducted by the therapist (or other member of the MDT) after a course of therapy (or after an agreed number of sessions). The interviews (which are effectively guided conversations) are designed to explore the outcomes and benefits of the therapy for clients without undue suggestion but using cues to guide the subject matter of the interview; again, there are excellent texts for helping you to design such interview questions and analyse the data collected, not to mention helpful research colleagues with useful expertise. Thematic qualitative analysis can show key facets of therapeutic process and relate these specifically to patients' symptomatic and wider problems.

This form of evidence may be especially appropriate if a music therapist already uses some kind of feed-back/appraisal after a set number of sessions as part of the clinical process of setting aims or deciding whether to proceed with therapy – hence the importance of having all the previous strategies in place! In our experience patients are often keen to help provide the evidence that music therapy is a useful treatment for them. However, ethical approval will be needed in order to use patient material in this way, and most organisations and employers now have stringent research ethics applications procedures to be completed before starting any research project.

Potential problems of such projects are:

- ***Ethical*** – is it right for therapists to interview their clients? Does this interfere with the ongoing therapy process?

- ***Practical/Research*** – are clients (especially the very ill clients that music therapists often work with) able to articulate their experience or the benefits of the therapy? Will they only produce the (positive) answers the therapist wants from them? Is their information reliable or valid?

Cases can be made for and against the above points – there is an ongoing practical and philosophical debate about the value of client perspectives on their treatment. All we can say is that clinical evaluation research using clients as a source of information is one *possible* way of looking for evidence. A further stage of such a study could be to interview referring clinicians to elicit their judgement of the main non-pharmacological needs of patients, then to ‘triangulate’ these with the patients’ experiences of the outcomes of music therapy for them.

In addition, as discussed in Part One of this guide, the issue of validity in empirical qualitative research is now being flagged and debated as part of various evidence debates in the health-care research community. Validity depends on the rigour of the methodology, the richness and quality of the data corpus, the thorough and systematic data analytic work, as well as the rigour of the researcher’s reflexivity.

The second aspect of clinical evaluation research that we address briefly is the notion of evaluation instruments – some of which travel across methodological paradigms.

WHAT KIND OF INSTRUMENTS; FOR WHAT PURPOSE?

Many clinical evaluation studies look for systematic ways of collecting about the ‘value’ of music therapy, which in some instances means considering the use of evaluation instruments as a way of assigning ‘value’ to the work. Of course, having already put into practice strategies 3-5, you’re on the way to being versed in using modest versions of information-gathering instruments, and in designing these. If you are in a position to decide on which pre-existing evaluation instruments to choose, then you need to consider what kind of **value** you want and need for what **purpose**, and what kinds of evaluation instruments best **fit** your need. All too often, especially if your practice forms part of larger

research collaboration, you may not be in a position to decide. However, these guiding questions will help you to keep alert, and to possibly influence some decisions.

Some useful guiding questions are simply:

- 1 – what existing evaluation instruments are appropriate for using as they are?
- 2 – what existing instruments need adapting for these purposes?
- 3 – what evaluation instrument needs to be developed (more or less) from scratch? And what kind of instrument for what purpose?

Once again, get help and advice from colleagues before leaping to conclusive answers! The pros and cons of each are not straightforward.

Any evaluation instrument converts everyday experiences, events and phenomena (e.g., session recordings, clinical notes, observation notes, people's opinions and attitudes) into analysable formats. Some formats, like numbers and codes, are less recognisable, and more distant from the naturally everyday occurrences than others, such an interview transcript or a detailed description of a session recording. This doesn't mean either has more or less research value, but it does mean you need to think about the purpose of using instruments at all, and if so, what kinds of information formats are most useful. (Remember that part of our argument in Part One was to consider how best to portray the work we do).

Standardised instruments have undergone a testing period (generally statistical) to make sure that they do accurately measure exactly what they claim to measure. This is a long and costly exercise, therefore it's unsurprising that these standardised instruments have been developed as part of large research collaborations. The ones that interest music therapists show the benefits of music therapy on aspects of clients' lives; e.g. their mental or physical state, their quality of life, and so on. Examples are the Cohen-Mansfield Agitation Inventory, which measures agitation levels in mental health patients, the Hamburg Quality of Life Questionnaire in Multiple Sclerosis and Dementia Care Mapping.

However, music therapists have developed assessment models that look at music therapy specifically. Examples are Bruscia's Improvisation Assessment Profile, Nordoff-Robbins' Scales of musical communication and musical relationship, Pavlicevic's Music Interaction

Rating Scale for Schizophrenia, and Edgerton's Checklist of Communicative Responses/Acts Score Sheet (CRASS). None of these are standardised, and any one is useful for some kinds of evidence, and not for others.

Finally, Petra Kern's 2007 paper (in Part Three) is an example of a measurement instrument that is very context-specific and, in her instance, developed with colleagues on the multi-disciplinary field.

We've given you some 'points to ponder' when thinking about clinical evaluation. We don't pretend that these are comprehensive – but we hope that they've raised your levels of alertness – and interest.

Part Three of the Guide lists existing research papers as a resource for you as you embark on thinking about how best to assign what kind of value to music therapy practice, for what purpose.



PART THREE: EXISTING RESEARCH

Part Three provides some 'Hit Lists' of published music therapy research using different criteria; methodological (Section A) and client cohorts (Section B). The Hit Lists are in no way definitive: they are simply suggestions of a range of material that may prove useful in attempting to convince managers and funders of the value of music therapy in a range of contexts. It is important to bear in mind that music therapists work across a vast range of settings, each with its own philosophy. Different worldviews have different understandings of what constitutes useful evidence. Therefore no article or publication will convince everyone of the value of music therapy: in each situation it is necessary to consider what the value of music therapy might be in that setting and to identify literature which might address its possibilities for providing this.

SECTION A: HIT LISTS CATEGORISED BY METHODOLOGY

QUALITATIVE METHODOLOGIES

Qualitative methodologies involve collecting empirical information in the form of words, or other non-numerical forms. The material used for qualitative evaluation includes observation notes, recordings and notes, documents and interview notes. The qualitative researcher thus has a wider range of possible empirical material than the quantitative researcher. Whereas instruments such as interview schedules and questionnaires can be used at the beginning to structure the research, sometimes qualitative studies involve starting with no predetermined organisational categories. For example, ethnographic studies can entail observing a situation, and/or talking to participants, over an extended period of time, and looking for a structure to emerge during the following analysis period. The advantage of this type of data-collection is that it allows for themes or variables to emerge which the researcher may not have predicted beforehand. However, it can be difficult to generalise qualitative research, as it is based on information gathered

subjectively in a very specific context. These are the papers listed in the 'Hit Lists' that employ qualitative methods in their evaluation strategy:

- O'Callaghan, C.; Sexton, M. & Wheeler, G. (2007) 'Music therapy as a non-pharmacological anxiolytic for paediatric radiotherapy patients'. *Australasian Radiology* 51(2): 159-162
- O'Kelly, J. (2007) 'Saying it in song: music therapy as a carer support intervention'. *International Journal of Palliative Nursing* 14(6): 281-286
- Daykin, N.; Bunt, L. & McClean, S. (2006) 'Music and healing in cancer care: a survey of supportive care providers'. *The Arts in Psychotherapy* 33(5): 402-413
- O'Callaghan, C. & McDermott, F. (2004) 'Music therapy's relevance in a cancer hospital researched through a constructivist lens'. *Journal of Music Therapy* 41(2): 151-185

QUANTITATIVE METHODOLOGIES

Quantitative data is numerical; information about the world in the form of numbers. Quantitative methodologies use the structure of the number system to bring structure to the data. Measurement involves assigning numbers to things, people, events etc, according to a particular set of rules. This process enables the researcher to lay out information systematically, divided up into specific variables. Each variable can then be manipulated to see what effect it has on the clinical situation. The difficulty with these methodologies is that some things are very difficult to assign into numerical categories. There is a danger that some important elements that affect the music therapy process are discarded because they do not fit easily into a quantitative framework.

- Horne-Thompson, A. & Grocke, D. (2008) 'The effect of music therapy on anxiety in patients who are terminally ill'. *Journal of Palliative Medicine* 11(4): 582-590
- Nicholson, J.M.; Berthelsen, D.; Abad, V.; Williams, K. & Bradley, J. (2008) 'Impact of Music Therapy to Promote Positive Parenting and Child Development'. *Journal of Health Psychology* 13(2): 226-238
- Särkämö, T.; Tervaniemi, M.; Laitinen, S.; Forsblom, A.; Soinila, S.; Mikkonen, M.; Autti, T.; Silvennoinen, H.M.; Erkkilä, J.; Laine, M.; Peretz, I. & Hietanen, M. (2008) 'Music listening enhances cognitive recovery and mood after middle cerebral artery stroke'. *Brain* 131: 866-876

- Walworth, D.; Rumana, C.S.; Nguyen, J. & Jarred J. (2008) 'Effects of live music therapy sessions on quality of life indicators, medications administered and hospital length of stay for patients undergoing elective surgical procedures for brain'. *Journal of Music Therapy* 45(3): 349-59
- Bergström-Isacson, M., Julu, P.O.O. & Witt-Engerström, I. (2007) 'Autonomic Responses to Music & Vibroacoustic Therapy in Rett Syndrome' *Nordic Journal of Music Therapy* 16(1): 42-59
- Gold, C.; Wigram, T. & Voracek, M. (2007) 'Effectiveness of music therapy for children and adolescents with psychopathology: a quasi-experimental study'. *Psychotherapy Research* 17(3): 289-296
- Gold, C.; Wigram, T. & Voracek, M. (2007) 'Predictors of change in music therapy with children and adolescents: the role of therapeutic techniques'. *Psychology and Psychotherapy: Theory, Research and Practice* 80: 577-589
- Ledger, A.J. & Baker, F.A. (2007) 'An investigation of long-term effects of group music therapy on agitation levels of people with Alzheimer's Disease'. *Aging and Mental Health* 11(3): 330-338
- Suzuki, M.; Kanamori, M.; Nagasawa, S.; Tokiko, I. & Takayuki, S. (2007) 'Music therapy-induced changes in behavioral evaluations, and saliva chromogranin A and immunoglobulin A concentrations in elderly patients with senile dementia'. *Geriatrics and Gerontology International* 7(1): 61-71
- Hilliard, R. E. (2006) 'The effect of music therapy sessions on compassion fatigue and team building of professional hospice caregivers'. *The Arts in Psychotherapy* 33: 395-401
- Odell-Miller, H.; Hughes, P. & Westacott, M. (2006) 'An investigation into the effectiveness of the arts therapies for adults with continuing mental health problems'. *Psychotherapy Research* 16(1): 122-139
- Talwar, N.; Crawford, M.J.; Maratos, A.; Nur, U.; McDermott, O. & Procter, S. (2006) 'Music therapy for in-patients with schizophrenia. Exploratory randomised controlled trial'. *British Journal of Psychiatry* 189: 405-409
- Talwar, N, Crawford, M et al (2006) 'Music therapy for in-patients with schizophrenia' *The British Journal of Psychiatry* 189: 405-409
- Baker, F.; Wigram, T. & Gold, C. (2005) 'The effects of a song -singing programme on the affective speaking intonation of people with traumatic brain injury'. *Brain Injury* 19(7): 519-528
- Aldridge, D.; Schmid, W.; Kaeder, M.; Schimdt, C. & Ostermann, T. (2005) 'Functionality or aesthetics? A pilot study of music therapy in the treatment of multiple sclerosis patients'. *Complementary Therapies in Medicine* 13(1): 25-33
- Nobuko, S. & Kuniaki, S. (2005) 'The effectiveness of music therapy approach focused on "subjective tempo"'. *Music Therapy Today* 6(4): 1412-1429
- Baker, F. & Wigram, T. (2004) 'The immediate and long-term effects of singing on the mood states of people with traumatic brain injury'. *British Journal of Music Therapy* 18(2): 55-64
- Suzuki, M.; Kanamori, M.; Watanabe, M.; Nagasawa, S.; Kojima, E.; Ooshiro, H. & Nakahara, D. (2004) 'Behavioral and endocrinological evaluation of music therapy for elderly patients with dementia'. *Nursing and Health Sciences* 6: 11-18

- de l'Etoile, S.K. (2002) 'The effectiveness of music therapy in group psychotherapy for adults with mental illness'. *The Arts in Psychotherapy* 29(2): 69-78
- Magee, W. & Davidson, J.W. (2002) 'The effect of music therapy on mood states in neurological patients: a pilot study'. *Journal of Music Therapy* 39(1): 20-29.
- Gallagher, L.M.; Huston, M.J.; Nelson, K.A.; Walsh, D. & Steele, A.L. (2001) 'Music therapy in palliative medicine'. *Support Care Cancer* 9:156-161
- Krout, R.E. (2001) 'The effects of single-session music therapy interventions on the observed and self-reported levels of pain control, physical comfort, and relaxation of hospice patients'. *The American Journal of Hospice & Palliative Care* 18(6): 383-90
- Yasuhara, A. & Sugiyama, Y. (2001) Music therapy for children with Rett syndrome. *Brain & Development* 23: S82-S84
- Nayak, S.; Wheeler, B.L.; Shiflett, S.C. & Agostinelli, S. (2000) 'Effect of music therapy on mood and social interaction among individuals with acute traumatic brain injury and stroke'. *Rehabilitation Psychology* 45(3): 274-283
- Pacchetti, C.; Mancini, F.; Aglieri, R.; Fundaro, C.; Martignoni, E. & Nappi, G. (2000) 'Active music therapy in Parkinson's Disease: an integrative method for motor and emotional rehabilitation'. *Psychosomatic Medicine* 62:386-393
- Pavlicevic, M.; Trevarthen, C. & Duncan, J. (1994) 'Improvisational music therapy and the rehabilitation of persons suffering from chronic schizophrenia' *Journal of Music Therapy* XXXI (2): 86-104

MIXED METHODOLOGIES

By combining quantitative and qualitative methodologies, it is possible to gain the advantages of both, and thereby build up a more detailed picture of the situation being studied. For example, an RCT of music therapy sessions with autistic children can be complemented with narratives of specific case studies, giving both a general and a specific picture of music therapy work. These studies employ a mixture of methods in their research:

- Kern, P. (2007) 'Improving the Performance of a Young Child with Autism during Self-Care Tasks Using Embedded Song Interventions: A Case Study' *American Music Therapy Association*
- Jacobsen, S. & Wigram, T. (2007) 'Music Therapy for the Assessment of Parental Competencies for Children in Need of Care' *Nordic Journal of Music Therapy* 16(2): 129-143
- Oldfield, A.; Adams, M. & Bunce, L. (2003) 'An investigation into short-term music therapy with mothers and young children'. *British Journal of Music Therapy* 17(1): 26-45

REVIEW METHODOLOGIES

Reviews look at available pre-existing research on a particular issue, in order to get an overview of research findings. There are different types of reviews. They can come in the form of literature reviews, which are unsystematic, where the researcher includes all the literature that he or she can find and relates and discusses the different conclusions found in these pieces. Systematic reviews set up criteria for which studies should be included in the review, such as only including certain types of studies, sample sizes, client groups etc. The choice of criteria is subjective; different researchers will choose different criteria according to what they think will best address their overall question. Meta-analyses go one step further. They also attempt to do a systematic review of available studies, but in addition they re-analyse all the statistical data put together, in order to gain a more accurate results. However, in order to do this, quite rigid criteria for inclusion is imposed; studies have to be as homogenous as possible in order for a meta-analyses to be able to make comparisons. The Hit Lists highlight how Cochrane reviews (the database of meta-analyses on clinical practice), that only include studies using valid RCTs, discards many music-therapy papers as they fail to meet their criteria for inclusion in their overviews.

- Dileo, C.; Bradt, J.; Grocke, D. & Magill, L. (2008) 'Music interventions for improving psychological and physical outcomes in cancer patients'. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD006911. DOI: 10.1002/14651858.CD006911
- Dileo, C. & Bradt, J. (2008) 'Music therapy for end-of-life care'. *Cochrane Database of Systematic Reviews* 2008, Issue 2. Art. No.: CD007169. DOI: 10.1002/14651858.CD007169
- Maratos, A.S.; Gold, C.; Wang, X. & Crawford, M.J. (2008) 'Music therapy for depression'. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD004517. DOI: 10.1002/14651858.CD004517.pub2.
- Crawford, M.J. & Patterson, S (2007) 'Arts therapies for people with schizophrenia: an emerging evidence base'. *Evidence Based Mental Health* 10: 69-70
- Gold, C.; Voracek, M. & Wigram, T. (2004) 'Effects of music therapy for children and adolescents with psychopathology: a meta-analysis'. *Journal of Child Psychology and Psychiatry* 45(6): 1054-1063
- Bedfordshire and Hertfordshire Priorities Forum (2006) *Music therapy in children*. Available online at <http://www.bhprioritiesforum.nhs.uk/Documents/Music%20therapy%20in%20children.pdf>
- Edwards, J. (2006) 'Music therapy in the treatment and management of mental disorders'. *Irish Journal of Psychological Medicine* 23(1): 33-35

- Gold, C.; Wigram, T. & Elefant, C. (2006) 'Music therapy for autistic spectrum disorder'. *Cochrane Database of Systematic Reviews* 2006, Issue 2. Art. No.: CD004381. DOI: 10.1002/14651858.CD004381.pub2
- Joske, D.J.L.; Rao, A. & Kristjanson, L. (2006) 'Critical review of complementary therapies in haemato-oncology'. *Internal Medicine Journal* 36: 579-586
- Wigram, T. & Gold, C. (2006) 'Music therapy in the assessment and treatment of autistic spectrum, disorder: clinical application and research evidence'. *Child: Care, Health and Development* 32(5): 535-542
- Hilliard, R.E. (2005) 'Music therapy in hospice and palliative care: a review of the empirical data'. *Evidence-based Complementary and Alternative Medicine* 2(2): 173-178
- Gold, C.; Heldal, T.O.; Dahle, T. & Wigram, T. (2005) 'Music therapy for schizophrenia or schizophrenia-like illnesses'. *Cochrane Database of Systematic Reviews* 2005, Issue 2. Art. No.: CD004025. DOI: 10.1002/14651858.CD004025.pub2
- Magee, W.L. (2005) 'Music therapy with patients in low awareness states: approaches to assessment and treatment in multidisciplinary care'. *Neuropsychological Rehabilitation* 15 (3/4): 522–536
- Pothoulaki, M.; MacDonald, R. & Flowers, P. (2005) 'Music interventions in oncology settings: a systematic literature review'. *British Journal of Music Therapy* 19(2): 75-83
- Ball, C.M. (2004) 'Music therapy for children with autistic spectrum disorder'. In Bazian Ltd (ed) *STEER: Succinct and Timely Evaluated Evidence Reviews* 4(1). Bazian Ltd and Wessex Institute for Health Research & Development, University of Southampton.
- Gold, C.; Voracek, M. & Wigram, T. (2004) 'Effects of music therapy for children and adolescents with psychopathology: a meta-analysis'. *Journal of Child Psychology and Psychiatry* 45(6): 1054-1063
- Whipple, J. (2004) 'Music in intervention for children and adolescents with autism: a meta-analysis'. *Journal of Music Therapy* 41(2): 90-106
- Vink, A.C.; Birks, J.S.; Bruinsma, M.S. & Scholten, R.J.P.M. (2003) 'Music therapy for people with dementia'. *Cochrane Database of Systematic Reviews* 2003, Issue 4. Art. No.: CD003477. DOI: 10.1002/14651858.CD003477.pub2.
- Newell, S.A.; Sanson-Fisher, R.W.; Savolainen, N.J. (2002) 'Systematic review of psychological therapies for cancer patients: overview and recommendations for future research'. *Journal of the National Cancer Institute* 94 (8): 558-584
- Vickers, A.J. & Cassileth, B.R. (2001) 'Unconventional therapies for cancer and cancer-related symptoms'. *Lancet Oncology* 2(4): 226-232
- 'Moments Musicaux: Music Therapy in Palliative Care'. Special issue of *Journal of Palliative Care* 17(3) – Autumn 2001 (collection of qualitative studies)
- Koger, S.M.; Chapin, K. & Brotons, M. (1999) 'Is music therapy an effective intervention for dementia? A meta-analytic review of the literature'. *Journal of Music Therapy* 36(1): 2-15

SECTION B: HIT LISTS CATEGORISED BY CLIENT SPECIALISMS

CANCER CARE

Watch this space – protocol for a forthcoming Cochrane review:

Dileo, C.; Bradt, J.; Grocke, D. & Magill, L. (2008) 'Music interventions for improving psychological and physical outcomes in cancer patients'. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD006911. DOI: 10.1002/14651858.CD006911

1. O'Callaghan, C.; Sexton, M. & Wheeler, G. (2007) 'Music therapy as a non-pharmacological anxiolytic for paediatric radiotherapy patients'. *Australasian Radiology* 51(2): 159-162

This highly accessible article is essentially a case study of the use of active music therapy for paediatric radiotherapy patients. It includes the stories of three contrasting patients and also comments on the impact of the provision on the service as a whole. It concludes:

Invitational, open-ended sessions, wherein a variety of music therapy techniques are offered to young participants who are free to come and go, are an efficacious supportive method in cancer care waiting contexts.

2. Daykin, N.; Bunt, L. & McClean, S. (2006) 'Music and healing in cancer care: a survey of supportive care providers'. *The Arts in Psychotherapy* 33(5): 402-413

This article draws together and collates the view of service providers employing music therapists within their services. Whilst it sets out primarily to highlight the challenges facing music therapy, the data analysis outlined within the article throws up themes which effectively capture ways in which providers experience music therapy as beneficial within their services.

3. Hilliard, R. E. (2006) 'The effect of music therapy sessions on compassion fatigue and team building of professional hospice caregivers'. *The Arts in Psychotherapy* 33: 395-401

In this controlled (but non-randomised) small-scale study of 17 hospice staff, those participating in music therapy displayed an apparently significant increase in team building. Interestingly this was more strongly the case in the group where the music therapist took a strong didactic role. These claims are disputable on methodological grounds, but the study remains useful in its focus on professional hospice caregivers.

4. Joske, D.J.L.; Rao, A. & Kristjanson, L. (2006) 'Critical review of complementary therapies in haemato-oncology'. *Internal Medicine Journal* 36: 579-586

This review reviews a good range of relevant music therapy literature, including 3 RCTs. Despite covering complementary therapies generally, it nevertheless devotes a substantial section to music therapy, which it defines broadly enough to include both 'active and passive music-based experiences, which can be either live or recorded, in the context of a therapeutic relationship'. It concludes that *'there is an emerging body of good evidence to support the use of acupuncture, music therapy, massage and touch therapies and psychological therapies as adjuncts to mainstream treatments for the improvement of symptoms and quality of life in cancer patients'*.

4. Nobuko, S. & Kuniaki, S. (2005) 'The effectiveness of music therapy approach focused on "subjective tempo"'. *Music Therapy Today* 6(4): 1412-1429

This article reports on a study of 70 people with dementia who received weekly music therapy sessions which consisted of finding their "subjective tempo" and then teaching them an unfamiliar song in this tempo. It concludes that this approach is effective in supporting and maintaining the learning abilities of elderly people with dementia.

Whilst this approach may be considered rather unusual, there is clearly a connection with the principles of co-improvisational music therapy, where the therapist can be said to be attuning to the subjective tempo of the client in order to facilitate maximally the opportunities for improved quality of life.

5. Pothoulaki, M.; MacDonald, R. & Flowers, P. (2005) 'Music interventions in oncology settings: a systematic literature review'. *British Journal of Music Therapy* 19(2): 75-83

This review collates findings from 24 studies, most of which use quantitative methodology, amongst them two RCTs. Outcomes are reported in the following areas:

- reduction in anxiety
- reduction in side-effects of chemotherapy
- physiological effects
- psychological effects
- behavioural improvements
- communication and expression improvements

6. O'Callaghan, C. & McDermott, F. (2004) 'Music therapy's relevance in a cancer hospital researched through a constructivist lens'. *Journal of Music Therapy* 41(2): 151-185

This qualitative study collates accounts of the relevance of music therapy provided by patients, visitors and staff from five separate studies. Music therapy's offering of an experience of "aliveness" at a time of such "vulnerability" is widely acknowledged as a key factor in its relevance to users (rather than any impact on symptomology).

7. Newell, S.A.; Sanson-Fisher, R.W.; Savolainen, N.J. (2002) 'Systematic review of psychological therapies for cancer patients: overview and recommendations for future research'. *Journal of the National Cancer Institute* 94 (8): 558-584

This systematic review of a wide range of therapies includes two studies of music therapy and finds that music therapy can be "**tentatively recommended**" both for reducing patients' anxiety levels and for improving patients' general affect levels. Both music therapy studies included are of receptive music therapy consisting of the delivery of taped music via earphones.

8. Vickers, A.J. & Cassileth, B.R. (2001) 'Unconventional therapies for cancer and cancer-related symptoms'. *Lancet Oncology* 2(4): 226-232

This review is not systematic, but is consequently more readable: being in this specialist medical journal also lends it weight in clinical circles. It explains that music therapy ‘is ideally provided live by trained therapists, but ... commonly takes the form of recorded music, particularly in the research setting’.

‘There is evidence ... that music therapy is beneficial for acute pain, such as postoperative pain. However, there are insufficient data specifically for cancer-related pain. In a small trial of 15 patients, improvements in cancer pain scores taken during music therapy were twice those found with non-music sound’

‘In a study of the effects of music therapy on the mood of patients with cancer, 50 hospital inpatients were randomly assigned either a live music therapy session or tape-recorded music. Patients receiving live music reported significantly lower anxiety scores than the other group.’

‘Music has been investigated for the treatment of nausea and vomiting in patients undergoing bone-marrow transplantation, who receive particularly high doses and emetogenic regimens. Patients assigned antiemetic drugs plus music distraction reported significantly less nausea and vomiting than those assigned antiemetics alone.’

DEMENTIA CARE

Dementia care is a major field of employment for music therapists: this is perhaps due in part to the fact that issues such as quality of life and the honouring of clients’ personhood is valued in this field over and above symptomological change. However, this may also explain why there is so little “hard evidence” in the literature. This is potentially problematic for music therapy and more work needs to be done on documenting the value of music therapy in these settings which is persuasive to funders and managers of such services.

1. Ledger, A.J. & Baker, F.A. (2007) 'An investigation of long-term effects of group music therapy on agitation levels of people with Alzheimer's Disease'. *Aging and Mental Health* 11(3): 330-338

This study took place over the course of one year in a nursing home environment with a treatment group of 26 receiving music therapy and a control group of 19 receiving standard care. The design was non-randomised. Agitation levels were measured using the Cohen-Mansfield Agitation Inventory. The study finds short-term reductions in agitation in the treatment group but no significant differences between the groups in the long term. The authors conclude that more work using a wider range of outcome measures is required in order to document the effects of long-term music therapy.

2. Vink, A.C.; Birks, J.S.; Bruinsma, M.S. & Scholten, R.J.P.M. (2003) 'Music therapy for people with dementia'. *Cochrane Database of Systematic Reviews* 2003, Issue 4. Art. No.: CD003477. DOI: 10.1002/14651858.CD003477.pub2.

This is a Cochrane review and thus sets the tightest criteria for evidence. Only five published studies meet the inclusion criteria for this review, and although all five claim to have found evidence of effectiveness of music therapy in dementia care, their claims are found methodologically wanting:

Five studies have been included in this review which claim to have found evidence for music therapy being beneficial in the treatment modality of elderly people with dementia. The methodological quality of these studies, however, was generally poor, as was the presentation of results. No useful conclusions can be drawn.

Nevertheless, as the Cochrane review on depression above, this is a useful review for music therapists in terms of its collation of the available literature. The included studies are:

Brotons, M. & Koger, S.M. (2000) 'The impact of music therapy on language functioning in dementia'. *Journal of Music Therapy* 37(3):183-195

Clark M.E.; Lipe, A.W. & Bilbrey, M. (1998) 'Use of music to decrease aggressive behaviors in people with dementia'. *Journal of Gerontological Nursing* 24(7): 10-17

Gerdner L.A. (2000) 'Effects of individualized versus classical "relaxation" music on the frequency of agitation in elderly persons with Alzheimer's disease and related disorders'. *International Psychogeriatrics* 12(1):49-65

Groene, R.W. (1993) 'Effectiveness of music therapy 1:1 intervention with individuals having senile dementia of the Alzheimer's type'. *Journal of Music Therapy* 30(3):138-157

Lord, T.R. & Garner, J.E. (1993) 'Effects of music on Alzheimer patients'. *Perceptual and Motor Skills* 76(2):451-455

3. Koger, S.M.; Chapin, K. & Brotons, M. (1999) 'Is music therapy an effective intervention for dementia? A meta-analytic review of the literature'. *Journal of Music Therapy* 36(1): 2-15

This study concludes that music therapy is "beneficial" for people with dementia, but as the infamous Bandolier critique points out, this is not specific enough to constitute evidence at the highest level (see <http://www.medicine.ox.ac.uk/bandolier/band71/b71-4.html>) Bandolier also attacks the small size and lack of blinding and randomization in the trails reported. However, the study retains value since it brings together available literature which does attest to ways in which music therapy is valued within this area.

4. Suzuki, M.; Kanamori, M.; Watanabe, M.; Nagasawa, S.; Kojima, E.; Ooshiro, H. & Nakahara, D. (2004) 'Behavioral and endocrinological evaluation of music therapy for elderly patients with dementia'. *Nursing and Health Sciences* 6: 11-18

This is a small-scale study of only 10 patients with either Alzheimer-type dementia or vascular dementia who had 2 music therapy sessions per week for 8 weeks. Scores on the language subscale of the Mini-Mental State Examination are reported to have improved significantly whilst scores for irritability on the Multidimensional Observation Scale For Elderly Subjects (MOSES) decreased significantly.

5. Suzuki, M.; Kanamori, M.; Nagasawa, S.; Tokiko, I. & Takayuki, S. (2007) 'Music therapy-induced changes in behavioral evaluations, and saliva chromogranin A and immunoglobulin A concentrations in elderly patients with senile dementia'. *Geriatrics and Gerontology International* 7(1): 61-71

A follow up to the above study, this follows a group of 8 patients in the treatment group plus a control group of 8 more. The treatment group received 25 twice-weekly hour-long sessions of music therapy comprising song singing and handbell playing. It is not clear who is facilitating this intervention, but the study draws heavily on literature on music as a

nursing intervention. The authors conclude that music therapy has a valuable role in reducing stress amongst elderly people with dementia: however, these findings are precarious given the small sample size.

PALLIATIVE CARE

1. Watch this space – protocol for a forthcoming Cochrane review

Dileo, C. & Bradt, J. (2008) 'Music therapy for end-of-life care'. *Cochrane Database of Systematic Reviews* 2008, Issue 2. Art. No.: CD007169. DOI: 10.1002/14651858.CD007169

2. Horne-Thompson, A. & Grocke, D. (2008) 'The effect of music therapy on anxiety in patients who are terminally ill'. *Journal of Palliative Medicine* 11(4): 582-590

This study employs a randomised-controlled pre-test-post-test design within which treatment group patients received a single session of music therapy with a trained music therapist using whatever methods (active and passive) seemed appropriate. Control group patients received a single volunteer visit. The results suggest that the music therapy group experienced significant reductions in anxiety, pain, tiredness and drowsiness. The authors conclude that further studies are required to examine the effect of music therapy over a longer time period, as well as addressing other symptom issues

3. O'Kelly, J. (2007) 'Saying it in song: music therapy as a carer support intervention'. *International Journal of Palliative Nursing* 14(6): 281-286

This article, primarily concerned with caring for the carers of the terminally ill, includes an outline of the evidence base for music therapy in palliative care. This is complemented by a case study documenting the author's song-writing work with a carer. A case is then made for music therapy being a useful tool for supporting carers. Based on work in a UK

hospice, this article will be particularly useful for music therapists wishing to develop similar services.

4. Hilliard, R.E. (2005) 'Music therapy in hospice and palliative care: a review of the empirical data'. *Evidence-based Complementary and Alternative Medicine* 2(2): 173-178

Although music therapy is an established allied health profession and is used with increasing frequency in the treatment of those with a terminal illness, there is a real dearth of empirical research literature supporting the use of music therapy in end-of-life care. This article reviews the empirical studies found in the literature and documents the emergence of an evidenced-based approach to the use of music therapy in hospice and palliative care. A total of 11 studies are reviewed; of these, six show significant differences supporting the use of music therapy in this area. Dependent variables positively affected by music therapy include pain, physical comfort, fatigue and energy, anxiety and relaxation, time and duration of treatment, mood, spirituality and quality of life. Guidelines for future research are considered, and variables that need to be controlled are presented. The need to create an evidence-based approach to hospice and palliative care music therapy is articulated, and future researchers are empowered to continue to conduct investigations among this population.

5. Gallagher, L.M.; Huston, M.J.; Nelson, K.A.; Walsh, D. & Steele, A.L. (2001) 'Music therapy in palliative medicine'. *Support Care Cancer* 9:156-161

This article describes work undertaken to establish the relevance of establishing music therapy provision within a palliative medicine clinic, making us of what it describes as “specific, defined music therapy interventions”, including “listening”, “participation”, “life review”, lyric analysis” and “song writing”. Hence a mixture of active and passive approaches were used, although it is not clear whether or not there was any improvisatory element. Rather than using standardised outcome measures, data was collected regarding referral source, reason for referral, nature of participation, style of music used etc. Whilst this would be unacceptable as a means of data generation to a Cochrane review, and whilst the style of provision might be unfamiliar to many European music therapists, it is nevertheless a good example of locally appropriate data being generated in locally appropriate ways to satisfy local needs.

6. Krout, R.E. (2001) 'The effects of single-session music therapy interventions on the observed and self-reported levels of pain control, physical comfort, and relaxation of hospice patients'. *The American Journal of Hospice & Palliative Care* 18(6): 383-90

This article reports on a three-month music therapy clinical effectiveness study conducted with terminally ill patients with the aim of quantifying and evaluating the effectiveness of *single-session* music therapy interventions with hospice patients in three patient problem areas: pain control, physical comfort and relaxation.

Data from a total of 90 sessions conducted with a total of 80 subjects were included in the study. Music therapy services were provided by trained music therapists. Both behavioural observation and the subjects' self-reporting were employed as data sources. Subjects were observed for, or self-reported, their levels of pain control, physical comfort, and relaxation, both before and after each music therapy session.

Music therapy services included live active and passive music-based experiences. These were designed to build and to establish rapport with patient or family, to facilitate family interaction and patient control, to provide support and comfort, to facilitate relaxation, to enable reminiscence and life review, to provide a frame-work for spiritual exploration and validation, and to encourage the identification and expression of feelings of anticipatory mourning and grief.

The author finds that single-session music therapy interventions appear to be effective in increasing subject pain control, physical comfort, and relaxation during both data collection scenarios.

7. 'Moments Musicaux: Music Therapy in Palliative Care'. Special issue of *Journal of Palliative Care* 17(3) – Autumn 2001

From time to time academic journals will devote an entire issue to a particular theme: the fact that the *Journal of Palliative Care* chose to devote this issue to music therapy (and to issue a CD of extracts to boot) is testament to the interest in music therapy within the field of palliative care as a whole. In this sense, then, simply the fact that this issue exists at all is testament to the value ascribed to music therapy. None of the articles set out to "prove" the effectiveness of music therapy as such: taken as a whole, however, they paint a rich and diverse picture of the many ways in which music therapy can contribute to palliative care services. The articles contained include:

- Aasgard, T. (2001) 'An ecology of love: aspects of music therapy in the pediatric oncology environment'.
- Gallagher, L.M. & Steele, A.L. (2001) 'Developing and using a computerized database for music therapy in palliative medicine'.
- Hartley, N.A. (2001) 'On a personal note: a music therapist's reflections on working with those who are living with a terminal illness'.
- Hilliard, R.E. (2001) 'The use of music therapy in meeting the multidimensional needs of hospice patients and families'.
- Magill, L. (2001) 'The use of music therapy to address the suffering in advanced cancer pain'.
- Mramor, K.M. (2001) 'Music therapy with persons who are indigent and terminally ill'.
- Nicholson, K. (2001) 'Weaving a circle: a relaxation program using imagery and music'.
- O'Callaghan, C. (2001) 'Bringing music to life: a study of music therapy and palliative care experiences in a cancer hospital'.
- Rykov, M. (2001) 'Facing the music: speculations on the dark side of our moon'.
- Salmon, D. (2001) 'Music therapy as psychospiritual process in palliative care'.

ASD

The autistic spectrum is another major arena for the practice of music therapy, and one in which music therapy has a very high reputation. It may therefore seem surprising that there is relatively little in the way of evidential support for music therapy here. This situation may be inevitable, given the gap between the values of "gold standard research" as embodied by the RCT and those of practitioners who see music therapy as a developmental, musical or inter-personal process. Nevertheless, it also poses the question as to whether it might be possible to design an RCT which would on the one hand be considered rigorous enough for inclusion in high-level systematic reviews and meta-analyses, and yet on the other hand also be faithful to the kind of practice which music therapists recognise.

1. Kern, P. (2007) 'Improving the Performance of a Young Child with Autism during Self-Care Tasks Using Embedded Song Interventions: A Case Study' *American Music Therapy Association*

This systematic single case study investigated the effectiveness of adding songs embedded in ongoing classroom routines as structural prompts, to increase the independence of a 3-year-old boy with autism during multi-step self-care tasks (i.e. hand-washing, toileting and cleaning up). The music therapist (researcher) worked together with the child's occupational therapist and classroom teacher. The effectiveness of using musical, versus verbal presentations of the task sequence, was compared by alternating the two methods across the three tasks each day. The teacher effectively embedded both forms of sequencing in classroom routines and the results indicated that the implementation of both forms of the intervention were successful in increasing the child's independent performance, noting task-specific differences.

This study shows the advantages gained from working together in a MDT to better understand which aspects were useful to measure. It picked out three specific tasks, part of everyday routines, which act as the dependent variables (which can be measured) in the study. The tasks have then been divided up into a sequence, thus constructing a frame, which can be used to measure behaviour. Conducting repeated measures allows a more accurate picture to be built of the boy's behaviour. The study suggests that because music is a natural part of children's lives, it may be used to motivate and enliven engagement in challenging tasks, including activities of daily living.

NB. The author does note that it is difficult to generalise from a single case study. However, systematic case studies can be extremely useful in providing exploratory evidence of the effectiveness of a particular treatment or working practice. They are also easier to conduct for music therapists with limited time and resources.

2. Bedfordshire and Hertfordshire Priorities Forum (2006) *Music therapy in children*. Available online at

<http://www.bhprioritiesforum.nhs.uk/Documents/Music%20therapy%20in%20children.pdf>

This is a report from an agency responsible for funding local healthcare provision, following on from a detailed literature survey. Because of its provenance, this report will carry more weight with similar healthcare funding bodies than an average literature review. It is also very short and to the point, which makes its findings more powerful. It starts by pointing out that in general the evidence base for music therapy is generally poor, but that the literature review has identified evidence of effectiveness in certain conditions. In relation to autism, it states that: In children with autism, individual music therapy can improve communication, development, and might improve behaviour and interaction. The report recommends that music therapy should be funded for children below the age of five who have a diagnosis of autism, Asperger's syndrome, or atypical autism AND a specific problem with one of the following:

- Communication
- Behaviour
- Socialisation and isolation
- Failure to meet developmental potential

3. Gold, C.; Wigram, T. & Elefant, C. (2006) 'Music therapy for autistic spectrum disorder'. *Cochrane Database of Systematic Reviews* 2006, Issue 2. Art. No.: CD004381. DOI: 10.1002/14651858.CD004381.pub2

This review set out to analyse RCTs and CCTs comparing music therapy (or music therapy plus standard care) with “placebo” therapy, no treatment or standard care. Only 3 studies (with a total of 24 subjects) met its inclusion criteria. All three of these were from the USA and provided receptive music therapy daily for one week, supplemented in one case with access to instruments, although it is not clear what was done with these instruments, and in particular what the role of the therapist was. Hence, as the authors themselves state, “the included studies were of limited applicability to clinical practice”. Nevertheless, the authors were able to conduct a meta-analysis and conclude:

- *The findings of this review indicate that music therapy may have positive effects on the communicative skills of children with autistic spectrum disorder.*

- *Music therapy has been shown to be superior to similar forms of therapy where music was not used, and this may be indicative of a specificity of the effect of music within music therapy.*
- *As only short-term effects have been examined, it remains unknown how enduring the effects of music therapy on verbal and non-verbal communicative skills are.*

4. Wigram, T. & Gold, C. (2006) 'Music therapy in the assessment and treatment of autistic spectrum, disorder: clinical application and research evidence'. *Child: Care, Health and Development* 32(5): 535-542

This article is in effect an accompaniment to the Cochrane Review listed earlier: it guides the reader accessibly through an overview of the current evidential literature in this field, including not only RCTs and CCTs but also case series. It is therefore more able to acknowledge some of the complexities of clinical practice in this field. Findings include the following:

Music therapy intervention offers structure in improvisation that can provide a framework for the development of learning and adaptability. More creative skills are noted to emerge when a structure is given, in contrast with what one might see from an entirely free form of improvisation, where a lack of direction and model may leave the 'non-musician' child struggling to find out how they can 'create' music. To date, research provides some evidence of effect, and in secondary and tertiary diagnostic services, child development centres and clinical and educational milieus where music therapy is an included part of the multidisciplinary services, the contribution of this intervention is most notable in promoting interpersonal communication, reciprocity and the development of relationship-building skills.

5. Ball, C.M. (2004) 'Music therapy for children with autistic spectrum disorder'. In Bazian Ltd (ed) *STEER: Succinct and Timely Evaluated Evidence Reviews* 4(1). Bazian Ltd and Wessex Institute for Health Research & Development, University of Southampton. Available online at: <http://www.signpoststeer.org>

This brief review set out to include RCTs and CCTs as well as case series, but found only 3 studies that met its criteria (all from the USA and published in the Journal of Music

Therapy). Importantly, it did not discriminate between interventions provided by a trained music therapist and others.

In general, the quality of evidence was found to be poor due to methodological flaws in the identified studies, including biased selection methods, small numbers, contamination from cross-over designs, and the questionable relevance of the measures used. The key conclusions are:

- Children with autism may demonstrate slight improvements in speech and imitation during music therapy sessions, but the clinical importance of these changes may be negligible.
- The impact of music therapy on behaviour and social functioning is unclear, and the long-term effects are uncertain.
- Whether music therapy is better than other forms of behavioural therapy for children with autism is unclear.

The last of these points to a trait of this review: due to the inclusion criteria, the entire evidence base is taken to be three American studies – some (but not all) of which might give the impression that music therapy is inherently behavioural in nature. However, many music therapists would disagree with this and join the reviewer in questioning whether the outcome measures being used to assess effectiveness here are in fact able to capture significant aspects of the outcome of music therapy processes.

6. Whipple, J. (2004) ‘Music in intervention for children and adolescents with autism: a meta-analysis’. *Journal of Music Therapy* 41(2): 90-106

The author set out to analyse only studies of USA origin which featured no-intervention controls, and the 10 studies identified (with a total of only 76 subjects) were drawn from music therapy, occupational therapy, education or psychology practice. Some of the intervention was active, and some passive, with a variety of theoretical models being identified.

The author concludes that *all* music interventions are effective for children and adolescents with autism, with the proviso that further research is required. However, a number of weaknesses in the analysis, including the variation between the studies, the low number of participants per study and the lack of identification of review method make this finding vulnerable to critique.

The report also provides a flowchart for music therapy referrals, suggesting 10-week blocks of music therapy up to a maximum of 40 weeks.

It should be noted that the recommendation that music therapy should be funded only for children under the age of five arises because it is assumed that educational services will take over responsibility for provision once the child is in full-time education. As many parents of children with autism will attest, this is not necessarily the case: however, this report might be useful as a lever in making a case for such educational provision for children aged 5 and over.

MENTAL HEALTH

1. Watch This Space:

[Erkkilä, J.](#); [Gold, C.](#); [Fachner, J.](#); [Ala-Ruona, E.](#); [Punkanen, M.](#) & [Vanhala, M.](#) (2008) 'The effect of improvisational music therapy on the treatment of depression: protocol for a randomised controlled trial'. *BMC Psychiatry* 8:50

This protocol for a single-blinded RCT is particularly interesting for a number of reasons. It seeks to examine "improvisational, psychodynamically oriented music therapy in an individual setting" which makes it relevant to many practitioners in Europe. As well as using standard assessment measures for outcomes related to depression, it seeks to make use of EEG recordings in order to explore emotional dimensions of patients' experiences within the trial and possibly to draw conclusions linking these to outcomes. The authors also hope that the sample size will be sufficient to allow generalisation of its findings.

2. Maratos, A.S.; Gold, C.; Wang, X. & Crawford, M.J. (2008) ‘Music therapy for depression’. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD004517. DOI: 10.1002/14651858.CD004517.pub2.

This review identified a total of five studies which met its inclusion criteria, only one of which involved the use of an active music therapy approach – in this study, from *The Chinese Journal of Neurology and Psychiatry*, the teaching of simple melodies as well as dialogue about how the patient was feeling in up to 20 90-minute sessions occurring 6 times per week. Meta-analysis was not possible in this review as a result of the wide variation encountered in the interventions, populations and outcome measures used in the five studies.

Predictably, the review concludes that “the small number and low methodological quality of studies means that it is not possible to be confident about” music therapy’s effectiveness in treating people for depression. However, it does usefully point out that the dropout rate for music therapy does appear to be low (i.e. it is a “well-tolerated intervention”) – a finding that may be of significance on the ground, particularly to managers of services within which music therapy is offered to people with depression, where the ability to engage clients (and keep them engaged) is often highly prized.

3. Crawford, M.J. & Patterson, S (2007) ‘Arts therapies for people with schizophrenia: an emerging evidence base’. *Evidence Based Mental Health* 10: 69-70

This article from a highly respected journal in the evidence field usefully introduces the various arts therapies to a psychiatric audience (even though not all may be entirely comfortable with their account of the mechanism of action) before going on to review the available evidence pertaining to the arts therapies for people with schizophrenia. Music therapy emerges relatively well from this, and the Cochrane review by Gold *et al* is cited. However, the authors also point out the methodological weaknesses that tend to limit the reliability of studies conducted into the effectiveness of the arts therapies in this field: typically, they suffer from small sample sizes, short follow-up periods, single-centre settings, and control provisions which are hard to compare.

Nevertheless, the authors’ conclusions make for encouraging reading:

An evidence base for the effectiveness of arts therapies in the treatment of people with schizophrenia is beginning to emerge.... They appear to be popular with patients and may result in improved mental health, especially reductions in negative and general symptoms of schizophrenia, which are those least responsive to pharmacological interventions.

4. Edwards, J. (2006) 'Music therapy in the treatment and management of mental disorders'. *Irish Journal of Psychological Medicine* 23(1): 33-35

‘Objectives: An increasing number of research studies support the benefits of providing music therapy in addition to standard treatment for people who have mental disorders. The objective of this paper was to review and summarise recent research findings in relation to this work.

Method: A review of music therapy studies published since 1994 was undertaken. Criteria for including papers were that they a) were published in English in an indexed, peer-reviewed journal, and b) were conducted as a randomised controlled trial (RCT) or a controlled trial (CT), or c) provided a meta-analysis of existing studies. The large number of papers pertaining to music therapy for older adults who have mental disorders, including Alzheimer’s disease and other types of dementia was not included.

Results: The findings support a role for music therapy as a structured interaction that patients are able to use to participate successfully, manage some of their symptoms, and express feelings relating to their experiences. Music therapy is demonstrated to be a beneficial intervention for people who have enduring mental illness. Music therapy invites and encourages participation from people of lower functioning levels and employs a non-verbal medium with which people have prior positive associations and in most cases have lifelong experience of using music for self-expression and pleasure. Additionally, the available peer reviewed literature supports the proposition that clinical outcomes are available through the use of music therapy intervention in conjunction with standard, well-established treatment methods.

Conclusions: Music therapy is beneficial for patients receiving care for mental disorders and establishing this therapy within mental health service provision should be considered.'

5. Talwar, N.; Crawford, M.J.; Maratos, A.; Nur, U.; McDermott, O. & Procter, S. (2006) 'Music therapy for in-patients with schizophrenia. Exploratory randomised controlled trial'. *British Journal of Psychiatry* 189: 405-409

In this single-blind RCT of active, improvisation-based music therapy, 81 patients were randomised into a treatment group which received weekly music therapy sessions plus standard care for up to 12 weeks, and a control group which received standard care only. The Positive and Negative Symptom Scale (PANSS) was used as the primary outcome indicator, with baseline assessment and follow-up after the treatment period of 3 months. There is an attempt to demonstrate treatment fidelity in a way which might make sense to music therapists: simply by measuring the amounts of time in sessions spent talking, improvising, singing songs etc. (80% of time is reported to have been dedicated to musical co-improvisation.)

The conclusion is necessarily cautious although generally optimistic about music therapy, particularly for patients with chronic schizophrenia:

Referral for music therapy was associated with short-term reductions in general and negative symptoms of schizophrenia, although differences in baseline characteristics of the sample may have been responsible for these apparent differences.... It is interesting that in this study we saw the greatest differences in general and negative symptoms, and it is possible that music therapy has particular effects on these symptoms, effects which are likely to be most apparent when the intervention is used among people with chronic schizophrenia.

It is also usefully pointed out that patients randomised to music therapy attended it much better than they had attended other interventions previously.

6. Odell-Miller, H.; Hughes, P. & Westacott, M. (2006) 'An investigation into the effectiveness of the arts therapies for adults with continuing mental health problems'. *Psychotherapy Research* 16(1): 122-139

This randomised controlled trial assigned 10 patients to a treatment group and 15 to a control group. Patients in the treatment group were given a routine assessment and on the basis of this allocated to receive one of music therapy, art therapy, drama therapy or dance movement therapy, on either an individual or a group basis. (Because of this method of allocation, only one patient received dance movement therapy and none received drama therapy). Three patient-completed questionnaires and one completed by a key worker (which yielded data on separate validated quantitative scales) were complemented by a qualitative interview at the end of the six months of treatment.

It is important to recognise that this is not an attempt to establish the effectiveness of music therapy *per se*: rather, this study examines the effectiveness of a mixed modality arts therapies department, and some may wish to dispute the usefulness of this in research terms. Perhaps unsurprisingly, the statistical outcomes were inconclusive, due at least in part to the small sample size. Nevertheless, the authors make effective use of the qualitative interview data, usefully quoting individual patients on the benefits they feel their therapy has brought. They also conclude that patients “value and use the different arts therapies well”, as well as pointing out that patients’ and therapists’ perceptions of the therapeutic are noticeably consistent with each other.

7. Gold, C.; Heldal, T.O.; Dahle, T. & Wigram, T. (2005) ‘Music therapy for schizophrenia or schizophrenia-like illnesses’. *Cochrane Database of Systematic Reviews* 2005, Issue 2. Art. No.: CD004025. DOI: 10.1002/14651858.CD004025.pub2

This review identified four studies which met its inclusion criteria (including Talwar *et al* (2006) and Tang *et al* (1994) outlined below). All four compared music therapy plus standard care to standard care alone and made use of active music therapy techniques (including improvisation in three), plus passive techniques to varying extents. Sessions occurred from once to six times weekly over a period of one to three months. Despite this variation, as well as the diversity of outcome measures used and the differences in the range of diagnostic criteria used to determine eligibility for the trials, the authors were able

to conduct a meta-analysis and were thus able to produce a conclusion which might be considered unusually straightforward in its support of music therapy:

Music therapy as an addition to standard care helps patients with schizophrenia to improve their global state over the short to medium term. There is also some evidence of positive effects on mental state and functioning; however, these effects seem to depend highly on the number of music therapy sessions provided. A certain minimum 'dosage' of music therapy seems to be required for music therapy to achieve beneficial and clinically meaningful effects. The exact minimum 'dosage' is difficult to determine at this point and will probably vary from patient to patient, but it seems from the results of this review that at least 20 sessions may be needed. All these effects concern short to medium term effects. No long term results are available at this point.

This review is particularly useful in that the included studies are broadly reflective of the working practices of many European music therapists and hence the findings are also likely to be of relevance. The authors also interestingly raise the issue of the significance of the number of sessions provided: a useful point for those seeking to establish or develop a music therapy service for people with schizophrenia.

8. Pavlicevic, M. & Trevarthen, C. (1989) 'A Musical Assessment of Psychiatric States in Adults'. *Psychopathology* 22: 325-334

Pavlicevic, M.; Trevarthen, C. & Duncan, J. (1994) 'Improvisational music therapy and the rehabilitation of persons suffering from chronic schizophrenia' *Journal of Music Therapy* XXXI(2): 86-104

The first study pilots a new music therapy rating scale (the Music Interaction Rating or MIR), and shows its sensitivity in distinguishing between the music therapy engagement of adults – divided into groups of patients suffering from depression, from schizophrenia, and a non-patient group - in a one-off individual music therapy session. The second study is experimental, with a pre- and post- treatment measures for both treatment and control groups, using standardised instruments rating psychiatric status and negative symptoms. The treatment and control groups are matched as closely as possible for age, duration and

severity of chronic schizophrenia, musical background and initial MIR(S) score – the latter refined from the MIR, for use with sufferers of chronic schizophrenia. Results show the effectiveness of individual music therapy sessions, with improvements in the treatment group's MIR(S) ratings as well as in the scores of their dependent measures (the BPRS and Scale for Assessment of Negative Symptoms) in comparison to the control group.

The sample size (44 altogether) of the second study is large enough to show statistically significant changes in the social behaviour of those patients who received music therapy. This study is useful as evidence of the effectiveness of individual music therapy with this client group, although according to its criteria, Cochrane would criticise the matching of treatment and control groups, rather than blind random allocation of patients to either group.

9. de l'Etoile, S.K. (2002) 'The effectiveness of music therapy in group psychotherapy for adults with mental illness'. *The Arts in Psychotherapy* 29(2): 69-78

This study follows 8 participants through six weeks of once-weekly hour-long group music therapy sessions based on Thaut's music psychotherapy model (consisting of Introduction, Therapeutic Music Experience [active and passive], Stimulus Reflection, Transfer, Planning and Review).

A battery of three different self-report measurement tools was used on three occasions (pre-, during and post-treatment) to collect data. Participation in the music therapy sessions was found to be associated with significant decreases in hostility and paranoid ideation.

NEUROLOGY

1. In the press – something to note!

Särkämö, T.; Tervaniemi, M.; Laitinen, S.; Forsblom, A.; Soinila, S.; Mikkonen, M.; Autti, T.; Silvennoinen, H.M.; Erkkilä, J.; Laine, M.; Peretz, I. & Hietanen, M.

(2008) 'Music listening enhances cognitive recovery and mood after middle cerebral artery stroke'. *Brain* 131: 866-876

This single-blind RCT set out to examine the effectiveness of listening to music in the acute recovery phase after a middle-cerebral-artery (MCA) stroke. A sample of 60 patients were randomly assigned to listening to music, listening to language tuition materials, or no listening activities on a daily basis over two months. Detailed neuropsychological assessments, including a wide range of cognitive tests as well as mood and quality of life questionnaires, were conducted at baseline (1 week after the stroke), 3 months after the stroke, and 6 months after the stroke. The researchers conclude:

Results showed that recovery in the domains of verbal memory and focused attention improved significantly more in the music group than in the language and control groups. The music group also experienced less depressed and confused mood than the control group. These findings demonstrate for the first time that music listening during the early post-stroke stage can enhance cognitive recovery and prevent negative mood.

These findings have provoked considerable interest, not only in the medical press but also in the general media. *The Lancet*, for example, has this to say:

Despite these findings, whether music affects patients' behaviour and improves their function (e.g. relevance and speed of conversation, quicker or fuller recovery of independence) remains unclear. Additionally, measures of memory function are influenced by mood. So music might have improved the patients' mood and subsequently their cognitive function rather than having a direct effect. However, the investigation of music in a stroke trial is new and interesting. And research into stroke rehabilitation, once a neglected area, should only be encouraged.

Worryingly, a 2005 study showed that patients in European stroke rehabilitation centres typically spend most of their day in non-therapeutic activities. Asking early-stage stroke patients to listen to music could therefore offer a simple way in which to improve their care and aid their recovery.

(The Lancet 371: March 1 2008: 698)

And the UK's National Library for Health says:

The results show that all three groups improved with time. Although an appropriate technique was used to randomly allocate the patients to their groups, there were differences between the music and control groups at the beginning of the study that could account for the small differences in improvements. For example, the music group were younger, started treatment earlier, and had fewer strokes in the temporal region of the brain.

It is not clear from this study how much benefit music therapy has. In the meantime, those who enjoy listening to music should continue to do so, and those who feel it may benefit them in other ways will obviously find no harm in it.

(Taken from

<http://www.nhs.uk/News/2007/January08/Pages/Musicaidsstrokerecovery.aspx>)

Whilst this study is of music listening (which is relatively easy to organise in an acute hospital environment and also straightforward to research with this methodology), it nevertheless has relevance to the use of music more generally within post-stroke rehabilitation.

The mainstream press has given a significant profile to this research and so this study can be said to have upped the profile of musical intervention in neurological rehabilitation, thus contributing to the development of a medical interest in the opportunities that music might present for aiding in patients' recovery from stroke. It is for music therapists to make use of this interest in developing services in this area.

2. Walworth, D.; Rumana, C.S.; Nguyen, J. & Jarred J. (2008) 'Effects of live music therapy sessions on quality of life indicators, medications administered and hospital length of stay for patients undergoing elective surgical procedures for brain'. *Journal of Music Therapy* 45(3): 349-59

In this small-scale trial, the treatment group received a live music therapy session pre-surgery and then daily sessions until discharge, whilst the control group received standard care with no additional intervention:

Anxiety, mood, pain, perception of hospitalisation or procedure, relaxation, and stress were measured using a self-report Visual Analog Scale (VAS) for each of the variables. The documented administration of postoperative pain medications; the frequency, dosage, type, and how it was given was also compared between groups.

Whilst no significant differences were found between groups for length of hospitalisation, the study nevertheless concludes that:

... live music therapy using patient-preferred music can be beneficial in improving quality of life indicators such as anxiety, perception of the hospitalization or procedure, relaxation, and stress in patients undergoing surgical procedures of the brain.

Whilst this study reflects a style of practice more commonly found in the USA, nevertheless practitioners in Europe may be able to make use of its findings, not least in arguing for the value of music therapy in such services to be conceived of in terms of quality of life rather than in terms of speed of discharge or symptomological change.

3. Coming soon: Protocol for a Cochrane Review

Bradt, J.; Magee, W.L.; Dileo, C.; Wheeler, B.L. & McGiloway, E. (2007) 'Music therapy for acquired brain injury'. *Cochrane Database of Systematic Reviews* 2007, Issue 4. Art. No.: CD006787. DOI: 10.1002/14651858.CD006787

4. Jacobsen, S. & Wigram, T. (2007) 'Music Therapy for the Assessment of Parental Competencies for Children in Need of Care' *Nordic Journal of Music Therapy* 16(2): 129-143

The assessment for parenting competencies for parents of children potentially in need of care involves an evaluation of their relationship with their child, and the interaction that underpins that relationship. The 'Assessment of Parenting Competences' (APC) music therapy assessment provides a structured series of interactional exercises that allow the therapist to explore the nature of the relationship both as a tool in everyday clinical work and as a research method. The assessment in this study, focusing on a single case study, uses both quantitative and qualitative methods. The music therapist sets the parent and child

a series of exercises to carry out together. These involve free improvisation, turn-taking, and following-leading exercises. By observing the way that the parent and child interact, and systematically recording observations through quantitative mapping of events, an analysis of turn takings and a qualitative categorisation, the music therapist can create nuanced record of the parent-child relationship. By welcoming and setting up the environment and acting as a role-model by participating in exercises before handing them over to the parent and child, the music therapist acts as both participant in a parent-child interaction, and as an observer.

The study concludes that musical improvisation and interaction through a protocol-based intervention can provide information about the autonomy relationship between parent and child, and show how a parent responds to the child's needs and initiatives. Long-term studies, comparing parents' development over time, as well as comparisons with 'normal' families, would be a useful follow-up to the study.

We like the range of methods used in this study. Evaluating a relationship using different rating scales allows a multiple perspectives that provide a more detailed picture, and valid conclusion. The author suggests future research involving comparisons of results with those of psychometric tests, could provide internal and external validity.

5. Bergström-Isacsson, M., Julu, P.O.O. & Witt-Engerström, I. (2007) 'Autonomic Responses to Music & Vibroacoustic Therapy in Rett Syndrome' *Nordic Journal of Music Therapy* 16(1): 42-59

This study investigated the influence of music and vibroacoustic therapy (VT) on the autonomic nervous system in persons with Rett syndrome (RTT). The research was undertaken because professionals and families often claim that music plays a very important role in the lives of these people. There were 21 participants in the study, all with RTT, who were studied in 2003 and 2004. These were patients coming to the Swedish Rett Centre in Östersund for routine brainstem assessment. The control status (for comparison) was the subject's own baseline autonomic function during rest. Subjects were stimulated using horn music, 'calming' and 'activating' music, then using VT and VT with calming music embedded in it. The calming and activating music was chosen by consulting the subjects' families and carers.

The study concluded that music and VT have measurable effects on brainstem autonomic functions in persons with RTT. The effects are diverse and difficult to detect by observation of behaviours alone, therefore would require formal and clinical monitoring of brainstem autonomic functions. This presents a new area for further research, with hope that a clear understanding of the diverse effects of music and VT on autonomic functions will be helpful when forming the bases of rational uses of music in clinical management of persons with RTT.

This study is interesting in term of using the participants themselves as the ‘control’, measuring the effects of music therapy as changes from the patients’ baseline autonomic function. The advantage of this method is that a smaller client cohort is needed to conduct the research, and the research process is thus quicker and more cost-effective. It also avoids the ethical dilemma of refusing one group treatment in order to carry out research. However, this study would have greater validity if the tests were repeated; if the same patient showed similar brain responses in different sessions, the researchers could conclude with more certainty that music therapy had a positive effect. This would entail having a separate group as a control, as a previous session might influence the patients’ baseline autonomic functions in subsequent sessions.

6. Aldridge, D.; Schmid, W.; Kaeder, M.; Schimdt, C. & Ostermann, T. (2005) ‘Functionality or aesthetics? A pilot study of music therapy in the treatment of multiple sclerosis patients’. *Complementary Therapies in Medicine* 13(1): 25-33

In this matched control trial, 20 MS patients were assigned to treatment (three 8- to 10-week blocks of individual active music therapy based on the Nordoff-Robbins approach over a period of one year) or control (waiting list with treatment offered after the trial). Outcomes were measured before therapy started, every three months thereafter and within a six-month follow-up without music therapy. Measures used included the Beck Depression Inventory, the Hospital Anxiety and Depression Scale, the Scale for Self-Acceptance and the Hamburg Quality of Life Questionnaire in Multiple Sclerosis.

The results are not straightforward: however, the use of qualitative techniques alongside validated quantitative measures enrich and complexify the findings of this study. The authors conclude that:

A therapeutic concept for multiple sclerosis, which includes music therapy, brings an improvement in mood, fatigue and self-acceptance. When music therapy is removed, then scale scores worsen and this appears to intimate that music therapy has an influence.

7. Baker, F.; Wigram, T. & Gold, C. (2005) ‘The effects of a song -singing programme on the affective speaking intonation of people with traumatic brain injury’. *Brain Injury* 19(7): 519–528

This study pools data from four case studies of individual music therapy. Each of the four patients diagnosed with traumatic brain injury (TBI) received 15 sessions of individual music therapy over a 5–8 week period, during which the subjects sang three songs they had chosen themselves, the same music selections being used for all 15 sessions. The music therapist sang along with the subjects and accompanied their singing on guitar.

Three consistent tasks were used pre- and post-session: the first to assess their “expression in intonation”, the second to assess their voice range, and the third to assess their mood state. Whilst the VAMS scale used to assess mood state is a standardised instrument, the other two tasks are not. In particular, the technique used to assess “expression in intonation” might be questioned in terms of both reliability and validity.

The study draws positive conclusions about the role of song-singing for patients with TBI:

Improvements in intonation are likely to occur, these enhancing clients’ potential for more engaging and expressive conversations. Therefore, song singing is recommended as a treatment intervention appropriate for addressing intonation impairments in this population.

It also valuably addresses how music therapists can ensure that their practice is most likely to produce positive outcomes, thereby promoting best practice:

Clinicians need to consider selecting songs that provide the greatest opportunity to extend voice range and improve vocal control. Clinicians should introduce a graded programme whereby the range, melodic difficulty and proportion of large intervals contained within a varied song programme is steadily increased.

This study is significant in that it chooses not simply to assess music therapy's ability to produce symptomological change in TBI patients, but focuses on inherently musical aspects of TBI patients' experiences which might be aided by musical therapy. Thus, although the specific practice described may not accord with that encountered routinely in European settings, there is still clear relevance since it is rooted in musical phenomena.

Despite the statistical rigour of this study, its design, the very small number of participants and the unconventional outcome measures used limit its appeal as far as the Cochrane Library etc are concerned. However, it may well be of significant use to music therapists seeking to communicate to service providers and funders something of what music therapy is able to offer in this field.

It may be used in conjunction with the following article, which presents another set of findings from the same dataset:

8. Magee, W.L. (2005) 'Music therapy with patients in low awareness states: approaches to assessment and treatment in multidisciplinary care'. *Neuropsychological Rehabilitation* 15 (3/4): 522–536

This is not a trial, nor a systematic review. Rather it is an attempt to outline for a primarily medical and managerial audience a role for music therapy within MDT rehabilitation settings for people in low awareness states. It emphasizes both the assessment and the treatment potentials. Referral criteria are presented along with a case study of a client whose initial diagnosis of Permanent Vegetative State (PVS) was brought into question and ultimately changed to one of Minimally Conscious State (MCS) as a result of music therapy treatment. It includes a thorough review of the literature in this field and concludes that music therapy is a "viable intervention" since music is a non-invasive medium offering patients opportunities for enablement and expression of a wide range of emotional states. It is also seen as a vital source of hope not only for the patient, but also for their family and

for the MDT. Magee closes with an apposite quote on the nature of effectiveness in this field:

Malec (1996) proposes that “effectiveness should be taken to mean that the treatment will improve the quality of the patient’s relationships” (Malec, 1996, p. 788). This paper puts forward the case that music therapy is a highly effective intervention in enabling the patient to relate to others within the clinical and social forums, bearing wider impact on their rehabilitation overall.

*[Reference: Malec, J.F. (1996) ‘Ethical conflict resolution based on an ethics of relationships for brain injury rehabilitation’. *Brain Injury* 10(11): 781-795]*

9. Baker, F. & Wigram, T. (2004) ‘The immediate and long-term effects of singing on the mood states of people with traumatic brain injury’. *British Journal of Music Therapy* 18(2): 55-64

Here the focus is on mood changes, another clinically significant concern in this field. Songs written in sessions were analysed and classified in terms of the predominant mood they conveyed. The authors conclude that immediate effects of song-singing intensify and provide cathartic experiences for people with TBI who may have no other space for which to express negative emotions, and that long-term effects of sing singing can have a positive effect on mood state.

Although clearly subjective, this can be seen to complement the first study by demonstrating that there is an important affective dimension to music therapy in work with people with TBI.

10. Magee, W. & Davidson, J.W. (2002) ‘The effect of music therapy on mood states in neurological patients: a pilot study’. *Journal of Music Therapy* 39(1): 20-29.

This pilot study looks at pre-and post test measures of mood states in 14 participants with acquired neuro-disabilities, using the Profile of Moodstates (Bipolar) (POMS-BI). The participants have two individual music therapy sessions within a two week period, using

pre-composed songs in one, and spontaneous improvisation in the other, in random order. The study shows that short-term music therapy can effect improvement in the negative moodstates of adults with chronic neuro-disabilities, although it does not establish the difference between using pre-composed songs and improvisation techniques.

This study shows statistically significant changes in aspects of mood-states within a small group of subjects, using a pre- and post- test design, with no control group. Useful as evidence for the effectiveness of individual music therapy with neuro-rehabilitation patients, while also not establishing which specific technique (pre-composed songs or improvisation) is the more effective.

12. Nayak, S.; Wheeler, B.L.; Shiflett, S.C. & Agostinelli, S. (2000) 'Effect of music therapy on mood and social interaction among individuals with acute traumatic brain injury and stroke'. *Rehabilitation Psychology* 45(3): 274-283

The objective of this study was to investigate the efficacy of music therapy techniques as an aid in improving mood and social interaction after traumatic brain injury or stroke. Eighteen individuals with traumatic brain injury or stroke were assigned either standard rehabilitation alone or standard rehabilitation along with music therapy (3 treatments per week for up to 10 treatments). Pre-treatment and post-treatment assessments of participant self-rating of mood, family ratings of mood and social interaction, and therapist rating of mood and participation in therapy. The results showed that there was a significant improvement in family members' assessment of participants' social interaction in the music therapy group relative to the control group. The staff rated participants in the music therapy group as more actively involved and cooperative in therapy than those in the control group. There was a trend suggesting that self-ratings and family ratings of mood showed greater improvement in the music group than in the control group. Therefore, the researchers concluded that there was preliminary support to the efficacy of music therapy as a complementary therapy for social functioning and participation in rehabilitation with a trend toward improvement in mood during acute rehabilitation.

11. Pacchetti, C.; Mancini, F.; Aglieri, R.; Fundaro, C.; Martignoni, E. & Nappi, G. (2000) 'Active music therapy in Parkinson's Disease: an integrative method for motor and emotional rehabilitation'. *Psychosomatic Medicine* 62:386-393

This is a randomised controlled, single-blinded study in which 32 patients with Parkinson's Disease (PD) were randomly assigned to two groups of 16 patients each. One group had 3 months of music therapy and physiotherapy whilst the other had 3 months of physiotherapy only. . Music therapy sessions consisted of choral singing, voice exercise, rhythmic and free body movements, and active music involving collective invention. Physiotherapy sessions included a series of passive stretching exercises, specific motor tasks, and strategies to improve balance and gait.

Three separate assessment measures were used: the Unified Parkinson's Disease Rating Scale for severity of PD, the Happiness Measure, and the Parkinson's Disease Quality of Life Questionnaire.

The authors found that music therapy had a significant overall effect on bradykinesia and post-MT session findings were consistent with motor improvement, especially in bradykinesia items. Over time, changes on the Happiness Measure confirmed the beneficial effect of music therapy on emotional functions. Improvements in activities of daily living and in quality of life were also documented in the MT group. The authors conclude that music therapy has positive effects on motor, affective, and behavioural functions, and recommend the inclusion of active music therapy within PD rehabilitation programmes.

Part of the value of this article for music therapists is that it is written by doctors specialising in this field: it is therefore couched in terms that are familiar to other clinicians. But at the same time it is also specific about what the music therapy consisted of – in particular it emphasises the role of the music therapist as someone able to facilitate active improvisational music making.

CHILDREN'S SERVICES

This area is by nature something of a mixed bag, and relevant material to a specific paediatric client group may also be found in preceding sections.

1. Nicholson, J.M.; Berthelsen, D.; Abad, V.; Williams, K. & Bradley, J. (2008) 'Impact of Music Therapy to Promote Positive Parenting and Child Development'. *Journal of Health Psychology* 13(2): 226-238

This study examining the effectiveness of a 10-week group music therapy programme facilitated by trained music therapists for “marginalized” parents and their children aged 0-5 years has data from an impressive 358 participant parents and their children attending 37 implementations of the programme. The musical activities used to promote positive parent-child relationships and children’s behavioural, communicative and social development are described in close detail.

Selected items from a range of published outcome measures were used via a questionnaire to assess such aspects as parental responsiveness, irritable parenting, parenting self-efficacy, play and incidental teaching activities, parental mental health, child behaviour, social play skills and receptive communication skills as well as family demographic details. In addition, the music therapists completed a six-item observational checklist for each parent–child pair attending the first two and last two sessions of the programme using an adaptation of published rating scales. 10% of these observational assessments were independently moderated with high levels of consistency.

The authors conclude:

Significant improvements were found for therapist-observed parent and child behaviours, and parent-reported irritable parenting, educational activities in the home, parent mental health and child communication and social play skills. This study provides evidence of the potential effectiveness of music therapy for early intervention.

Nevertheless, the size of this study and the fact that it is multi-site affords it some authority and hence considerable usefulness to music therapists working in this field. The findings

are also usefully non-simplistic, for example emphasising that group numbers do seem to matter, as does programme length – again, useful findings for music therapists seeking to make a case for the development of appropriate and cost-effective provision within comparable services.

2. Gold, C.; Wigram, T. & Voracek, M. (2007) 'Effectiveness of music therapy for children and adolescents with psychopathology: a quasi-experimental study'. *Psychotherapy Research* 17(3): 289-296

Music therapy has been found to be effective for children and adolescents with psychopathology, but its effectiveness in routine practice is unknown. The aim of this study was to examine whether individual music therapy as provided in outpatient services is an effective treatment for this group of clients and to examine potential predictors of its effectiveness. The authors assessed symptoms, competencies, and quality of life in children and adolescents with psychopathology (N=136) before and after up to 25 weekly sessions of individual music therapy or corresponding waiting time. No significant interaction effects were identified, although quality of life showed a tendency in favor of music therapy. Effect sizes were smaller than in previous experimental research. Effects on symptoms depended on the presence and severity of comorbid medical conditions. The results suggest that music therapy as provided in routine practice is effective for some but not all groups of clients.

3. Gold, C.; Wigram, T. & Voracek, M. (2007) 'Predictors of change in music therapy with children and adolescents: the role of therapeutic techniques'. *Psychology and Psychotherapy: Theory, Research and Practice* 80: 577-589

'Music therapy has been shown to be efficacious in experimental studies. However, there is little empirical research knowledge about what elements of music therapy influence its effectiveness in clinical practice. Children and adolescents with psychopathology (N = 75) were assessed before and after participating in individual music therapy with 1 out of 15 music therapists in the Vienna region. Relationships between outcomes (as evaluated by parents) and therapy contents (as reported by therapists) were examined using general linear modelling. Results indicated that clients' symptoms

and burdens on their social environment showed greater improvement when music therapy was limited to discipline-specific music therapy techniques and did not include other media such as play therapy elements. The findings indicate the importance of being aware of a therapy method's specific strengths and limitations.'

4. Gold, C.; Voracek, M. & Wigram, T. (2004) 'Effects of music therapy for children and adolescents with psychopathology: a meta-analysis'. *Journal of Child Psychology and Psychiatry* 45(6): 1054-1063

The authors seek to review the evidence for music therapy as an intervention for children and adolescents with psychopathology. Eleven studies (one from Austria, one from Germany, one from the UK and the remainder from the USA) met the inclusion criteria. These featured a mixture of group and individual music therapy employing a range of approaches with children with a wide range of clinical diagnoses including developmental disorders and conduct disorders and featuring a range of outcome measures. In total these studies yielded 188 subjects for the meta-analysis.

The authors conclude:

The clinical implication of this meta-analysis is that music therapy is an effective intervention for children and adolescents with psychopathology. Music therapy produces a clinically relevant effect of a considerable size and is therefore recommended for clinical use.

Specifically, clients with behavioural or developmental disorders, or with multiple psychopathologies, may benefit from music therapy. Music therapy for children and adolescents with psychopathology appears to be especially helpful when techniques from different music therapy approaches are combined.

These are usefully positive findings. The analysis is sufficiently complex to exclude an outlying study in calculating effect size, thus adding to its credibility. It is also transparent regarding its own limitations, acknowledging that Cochrane-level inclusion criteria could not be applied due to the lack of compliant studies in this area: thus, for example, non-randomised studies are included here. The bias towards American studies and hence

American practice (often significantly different from European practice) is also pointed out.

Although this review has been criticised for methodological limitations (see <http://www.crd.york.ac.uk:80/crdweb/ShowRecord.asp?View=Full&ID=12004006583>) it remains the most thorough review of evidence for music therapy in this field.

Related publications, which may be of use to clinicians in conjunction with this review, include:

5. Bunt, L. (2003) ‘Music therapy with children: a complementary service to music education?’ *British Journal of Music Education* 20(2): 179-195

This article, aimed deliberately at an education sector audience, outlines the nature and scope of music therapy as it is generally practised within UK education settings and summarises some of the literature in this area. Valuably, the author examines ways in which music therapy can be part of broadly conceived educational provision (with the music therapist and music teacher working closely together in order to provide maximal benefit to children) and provides testimony to the value of music therapy within education services from leading figures within music education. This article may be of significant use to music therapists seeking to establish or develop services within schools or local education authorities.

6. Oldfield, A.; Adams, M. & Bunce, L. (2003) ‘An investigation into short-term music therapy with mothers and young children’. *British Journal of Music Therapy* 17(1): 26-45

This article documents some of the pioneering work of Amelia Oldfield in this area. Rather than simply aiming to demonstrate “effectiveness”, the authors set out to investigate music therapy’s “fit” within the multidisciplinary team (MDT) approach commonly adopted within child development services, and to see how music therapy sessions might contribute to the overall provision in distinctive ways.

Data was collected from mothers and children attending a mother and toddler group and a parenting project (both of which were part of the provision of a unit for child and family

psychiatry and included music therapy provision) and a mainstream nursery group (not part of the unit: this included a music group facilitated by a music therapist rather than music therapy sessions and was used as a control).

Analysis of video recordings of sessions, audio recordings of verbal reviews of sessions, as well as questionnaires completed by parents led the authors to the following findings (amongst others):

- Music therapy sessions consistently demonstrated high levels of engagement of mothers and their children, and no difference was found between the levels of engagement in the psychiatric settings and those in the mainstream nursery group, which is seen as a highly positive outcome
- Very low levels of “negative” behaviour (on the part of children or mothers) were observed in music therapy sessions

Whilst this study does not yield the sort of evidence usable in a Cochrane review, and whilst its methodology is open to criticism (for example, for its use of individualised questionnaires and the validity of the “control”), it is nevertheless potentially useful to music therapists working in this field who wish to demonstrate the degree of analysis already applied to the pioneering work in this field. The article is couched in terms that relate immediately to the priorities of practitioners and managers in this area: it is therefore highly relevant.

7. Yasuhara, A. & Sugiyama, Y. (2001) Music therapy for children with Rett syndrome. *Brain & Development* 23: S82–S84

This article is essentially a quantitative evaluation of the individual active music therapy processes of three children (aged 4, 5 and 6) with Rett Syndrome. The outcome measures used are not standardised but do relate well to the areas of functioning usually focused on by therapies for children with this condition, such as purposive hand use. The authors concluded that music therapy:

- improved purposive hand use

- aided development of language comprehension
- enabled the children to become mentally stable and physically active with the aid of music

Whilst this is a very small-scale, non-experimental study, it does give an indication of the “usefulness” of music therapy in this field. It could be used in conjunction with the following case study, which outlines the process of working with one child in more detail:

Wigram, T. & Lawrence, M. (2005) ‘Music therapy as a tool for assessing hand use and communicativeness in children with Rett Syndrome’. *Brain & Development* 27: S95–S96



PART FOUR: RESOURCES & REFERENCES

In Part Four are listed some places where further studies and resources can be accessed:

ACADEMIC DATABASES

These are online reference libraries for academic papers. They are useful for identifying paper titles available in a specific area, and provide an abstract and option to buy the full paper. Several of these restrict access to only allow those with an Athens password (i.e. those affiliated to a UK university)

| | |
|--|--|
| Cochrane Library | - www.cochranelibrary.com |
| JSTOR Music Collection | - www.jstor.org |
| NHS National Library for Health | - www.library.nhs.uk |
| ScienceDirect | - www.sciencedirect.com |
| Web of knowledge | - www.isiwebofknowledge.com |

JOURNALS AND THEIR PUBLISHERS' WEBSITES

Music Therapy Journals

| | |
|---|---|
| Australian Journal of Music Therapy | - www.austmta.org.au |
| British Journal of Music Therapy | - http://www.bsmt.org/journal.htm |
| Canadian Association for Music Therapy journal | - http://www.musictherapy.ca/journal.htm |
| Journal of Music Therapy | - http://www.musictherapy.org/products/pubs.html |
| Music & Medicine (coming in July 2009) | - www.sagepub.com/journals |
| Music Therapy Perspectives | - http://www.musictherapy.org/products/pubs.html |
| Music Therapy Today (at Music Therapy World website) | - http://www.musictherapyworld.de/ |



New Zealand Journal of Music Therapy

- www.musictherapy.org.uk

Nordic Journal of Music Therapy

- <http://www.njmt.no/>

Arts & Health journals

ArtsPraxis

- <http://steinhardt.nyu.edu/music/artspraxis>

Arts & Health: An International Journal for Research Policy and Practice

- www.informaworld.com

Arts in Psychotherapy

- www.elsevier.com

International Journal of Arts Medicine

- www.barcelonapublishers.com

Disability-based journals

Autism

aut.sagepub.com

Journal of Autism and Developmental Disorders

www.springerlink.com

British Journal of Learning Disabilities

- www.blackwellpublishing.com/journal

Journal of Learning Disabilities

- ldx.sagepub.com

Dementia

- dem.sagepub.com

Journal of Dementia Care

- www.careinfo.org/dementiacare

The Journals of Gerontology

- psychsoc.gerontologyjournals.org

International Journal of Rehabilitation Research

- www.intjrehabilres.com

Rehabilitation Psychology

- www.apa.org/journals

Other Useful Journals

British Journal of Psychotherapy

- www.blackwellpublishing.com/journal

Clinical Child Psychology and Psychiatry

- ccp.sagepub.com

Journal of Child Psychology and Psychiatry

- www.blackwellpublishing.com/journal



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|---|--|
| Journal of Child Psychotherapy | - www.tandf.co.uk/journals |
| Journal of Palliative Care | www.ircm.qc.ca |
| Psychology of Music | - www.pom.sage.com |
| The Family Journal | - tfj.sagepub.com |
| Journal of Adolescent Health | - www.elsevierhealth.com |
| British Journal of Clinical Psychology | - www.bpsjournals.co.uk |
| Community Mental Health Journal | - www.springerlink.com |

Other Useful Websites

| | |
|--|--|
| Health Professions Council | - www.hpc-uk.org |
| Royal Hospital for Neuro-Disability: Brainwaves (research newsletter) | |
| | - www.rhn.org.uk |
| World Federation of Music Therapy | - www.wfmt.info |

CONCLUSION

Our hope is that, having read this second edition, you'll be alert to the pitfalls of waiting to be asked for evidence; you'll be proactive in setting up evidence gathering systems; you'll spot unforeseen opportunities for collecting evidence; you'll be an enthusiastic evidence-gatherer; you'll know what kind of help you need, at what stage and seek it; and you'll share your knowledge and experience with others.

As you know, demands and responses change; new ideas, studies, resources and materials appear - often when we're not searching for any of these. Since we need one another to ensure that our profession portrays its work with the best possible evidence, we invite you to send us contributions which we will upload on a regular basis and share with the music therapy professional community.

These can be emailed to research3@nordoff-robbins.org.uk

Finally we wish you courage, fortitude and luck – and look forward to reading of your evidence endeavours!

Mercédès Pavlicevic, Gary Ansdell, Simon Procter and Sarah Hickey.