

## Chapter 2

# RESEARCH IN PRACTICE

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*‘The novel  
“The curious incident of the dog on the Night-Time”  
tells a lot more on Asperger’s syndrome than the  
case descriptions in the medical textbook DSM-IV.’  
Douwe Draaisma (2004)*

## INTRODUCTION

Douwe Draaisma’s quote illustrates that a narrative description of a phenomenon can tell a lot more than scientific analysis. Theoretical knowledge does not always lead to understanding and removes professionals from the ‘lived experience’. This originates mainly in the fact that theoretical knowledge is of generalising nature and abstracts experiences. The experience from which the particular knowledge is deduced, however, is concrete, variable, rich in nuances, knows width and depths. A novel does not explain such an experience by the means of general regularities, but describes the phenomenon in a way that the reader becomes immersed in the experience. However, the question whether abstract knowledge is worth more than concrete knowledge is an absurd question. Both forms of knowledge help us to understand reality.

Social science, as it has developed from traditional physical scientific thinking, enables us to describe phenomena systematically and objectively, to standardise, classify and generalise. The DSM-IV serves as a collection of items that tells us what a depression is. A questionnaire used to measure depression helps us to grasp this phenomenon. However, sometimes it is only

then that we understand, if we enter into the role of the client, even more, if we have experienced something similar and enter the role of the client based on empathic counter transference. Objectively, we know things, and subjectively we comprehend and feel what it is about.

In research on therapy, this difference in approach is expressed in different research paradigms that are at times specified as ‘quantitative’ and ‘qualitative’, at times as ‘positivistic’ and ‘constructivistic’. A quantitative researcher searches for general regularities that are generally valid. A qualitative researcher seeks to describe the complexity, the subtle differences, width and depth of a concrete experience. A quantitative researcher unravels, the qualitative researcher tells a story.

In addition, those approaches are expressed in different opinions on evidence: on the one hand the *Evidence Based Medicine (EBM)*, which puts the emphasis on controlled experimental research. On the other hand the *Evidence Based Mental Health (EBMH)*, with a strong emphasis on systematised experience knowledge.

This chapter pursues the question how practice-relevant knowledge can evolve through research. Practice relevant knowledge is knowledge that improves, renews and develops professionals competences of acting. Or, in the terminology of Wierdsma & Swieringa (2002), that leads to ‘single loop, double loop and triple loop learning’. It is knowledge that by excellence is suited for the research domain of research centres established at universities where mental health professionals are trained<sup>1</sup>. This chapter tries to describe different paradigms, research types and research methods. It is meant to work out typical characteristics of different approaches in order to clarify which approach leads to which kind of outcomes. It is not about demonstrating that one paradigm is better than the other, it is about demonstrating that they are different, that they ask different questions, deliver different outcomes and score differently with regard to focussing theory or practice. However, practical relevance acts as criterion and it is investigated critically which form

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<sup>1</sup> In the Dutch system there are two types of universities: the scientific universities in which fundamental and applied research is done and the universities of professional education (hogescholen) in which professionals are trained and research in practice is used.

of research is more or less appropriate to improve, renew and develop practice-relevant knowledge.

Research results are not applied in practice automatically, this is meant by the term *theory-practice gap*. On the one hand, this originates in professionals' lack of competence in the evaluation and application of research results. On the other hand research results often are far from practice. Preventing this to happen by choosing a practice-relevant problem and research method is the read line of this chapter.

## **THE UNIVERSITY OF PROFESSIONAL EDUCATION AS A “GATE OF KNOWLEDGE”**

Franssen (2004), chair of the Dutch Foundation for Knowledge Development at Universities of Professional Education (SKO) sees universities of professional education changing from ‘education factories’ into institutions of expertise, regarded by the outside world as a centre for renewal with regard to contents and professional aspects. According to Franssen, pure educational transfer belongs to the past. The university of professional education needs to take into account the curiosity of students and train students to become professionals equipped optimally for developing their professionalism continuously. Franssen points out that this has to happen on a larger scale than before. Universities of professional education need to contribute to the development of the profession by carrying out research in practice. According to Franssen, it is difficult to think of an educational institution that does not perform research.

In order to realise this, universities of professional education need to transform into institutions in which professional development, research in practice, concepts like ‘learning organisation’ and ‘gate of knowledge’ are subsequent aspects. In today’s professional practice, it is more than ever

desired to improve, innovate and develop standards<sup>2</sup> and services and to validate professional acting. In this respect, criteria as transparency, efficiency and efficacy are valid within the Health Services. Research in practice is the tool par excellence for making the professional performance of arts therapists transparent, efficient and effective. This requires that the current *reflective practitioner* grows into a *scientific practitioner*, who does not merely reflect upon his own actions but has the ability to improve, innovate and develop his performance based upon research (if possible carried out by himself).

In a parallel process, the purely (re)producing organisation will evolve into a learning organisation. A learning organisation is characterised by the fact that it improves its standards and services, innovates and develops in a continuous dialogue with its external environment and anticipates developments in the external environment. A learning organisation aims to engage internally and externally in variable expertise-intensive coalitions in order to mobilise its creative and problem-solving potentials.

The university acts as ‘gate of knowledge’ if it turns into a learning organisation that enters a dialogue with practice, among others through performing research in practice. Universities and health organisations together develop the profession and the training programmes by means of research in practice and influence each other, based upon their own expertise, over and over again. Together, they sustain intensive traffic through the ‘gate of knowledge’.

At universities of professional education students should gain competences in carrying out research in practice. The university of the future is a dynamic institution in which research in practice and the development of competences go hand in hand. The university of professional education offers students the opportunity to acquire the most up-to-date professional competence based upon the results of research in practice. In addition, this designated university

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<sup>2</sup> In the Dutch system a standard (product) is a description of goals, interventions, outcomes and rationale used with a particular health problem that is part of a disturbance or handicap. The treatment by means of the standard is limited in time and part of a total treatment program.

enables students to gain competences regarding research so that they can contribute to the development of the profession after their training.

At the university of professional education, educational processes and the development of the profession are integrated. By the means of the educational model called 'reflection on learning' the student learns how he can direct his learning processes in such a way that he can develop and test his own professional performance. Universities of professional education create changing internal and external co-operations in order to develop the student's competences. Students develop their competences, their profession in dialogue with the professional field.

## **RESEARCH IN PRACTICE IN UNIVERSITIES OF PROFESSIONAL EDUCATION**

Research in practice is connected with concepts that describe the university as a 'gate of knowledge' and a 'learning organisation'. The research is preferably research in the service of the *community of practice* (Wenger & Snyder 2000). In those forms of co-operation, people who are confronted with the same problems work together in order to exchange, intensify and develop their knowledge by the means of interaction. Communities of practice are focused on creating and sustaining the *body of knowledge* with the help of participants holding expertise, interest and commitment. In so-called 'ateliers of innovation', different parties meet in order to work on complex and creative solutions (Krogh, Ichijo & Nonaka 2000).

The cooperation between university and practice institution can be regarded as a community of practice where professors, students and professionals from the area of work develop the profession together. By the means of a systematic dialogue, they may analyse problems, consider strategies of solution and develop standards. If this happens by using research techniques, we could talk about a *research based community of practice*. Central to the interaction between professor, students and professionals is the cycle of learning: analysing a problem, designing a solution, applying a solution and evaluating the solution. What is developed in the research community becomes applied in practice and included in training. This two-direction

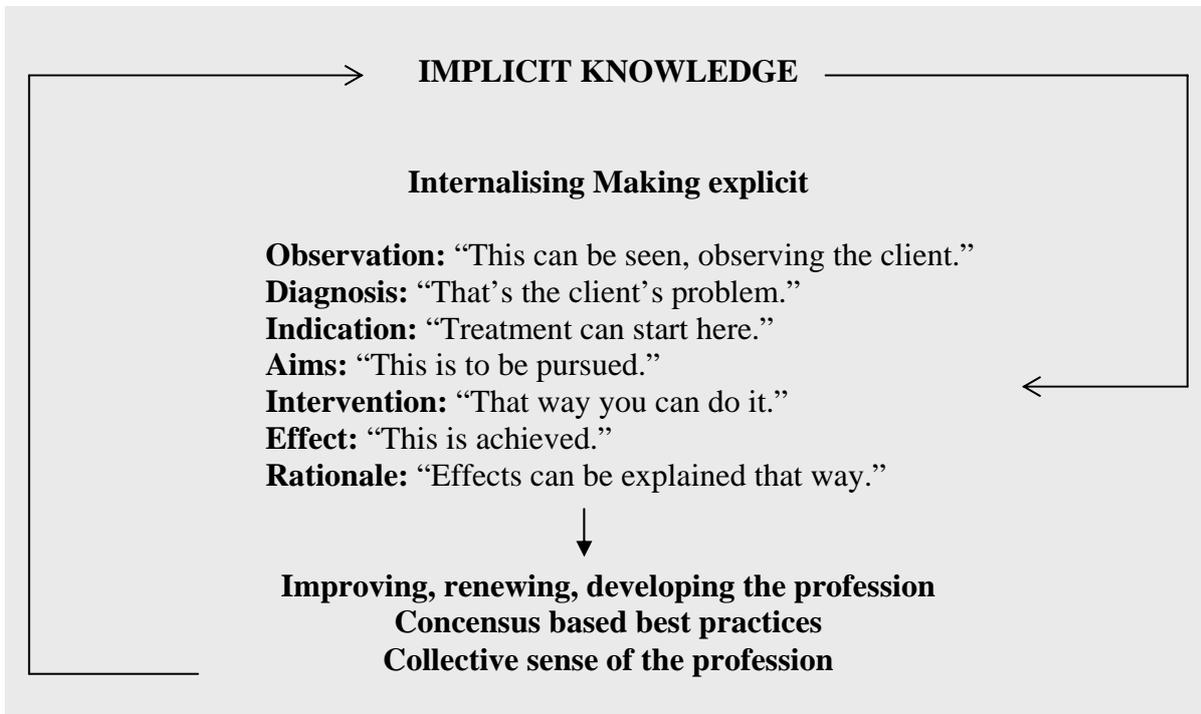
traffic between practice and training illustrates the operation of a ‘gate of knowledge’.

A question that has been discussed during the past years was whether there is a particular research methodology for universities of professional education. Through the discussions that have been conducted on this topic, I came to the conclusion that an exclusive research methodology for universities of professional education does not exist, but that in these universities certain research methods are used more often, because these methods are closely linked to the lived experience in practice. In other words: scientific universities carry out research in practice as well, and scientific and researchers in practice use the same research methods (qualitative and / or quantitative). However, to a high degree, in universities of professional education a practice-focused and practice-relevant research methodology is used. The acknowledgment of its practical applicability in the field of work and the way of co-constructing results together with the field of work are the most important features.

## **THE ARTS THERAPIES AS A LEARNING PROFESSION**

Corresponding to the idea of a ‘learning organisation’ I see a ‘learning profession’ in front of me in which experiential knowledge (implicit knowledge) is made explicit, is analysed, combined, improved and developed and optimises practical acting by the means of education and training. It is about defining the client’s problems, the appropriate aims, specifically arts therapeutic interventions and expected results based upon practice (see Hutschemaekers 2003a). By monitoring process and results, knowledge about delivery and results develops. Figure 1 demonstrates how the cycle of externalising and internalising leads to theoretical and practical innovation. Research in practice is, as we will see later, the motor that keeps the cycle going.

Figure 1 **The arts therapies as a learning profession: making explicit and internalising**



## PARADIGMS

Within the thinking on the topic of research, it is currently differentiated between so-called paradigms, that is essentially different opinions on how research is to be done. Especially the difference between the quantitative and qualitative paradigm can be found back in a lot of research projects and manuals on research. Those paradigms are based upon philosophical conceptions of reality, the way knowledge can be gathered and how reality needs to be studied, respectively ontology, epistemology and methodology. The following description is based on Lincoln & Guba’s publication (2000) as starting point. In first publications, among others Lincoln and Guba (1985), was talked about *naturalistic inquiry*. Naturalistic inquiry, with its emphasis on non-manipulative, open, context-specific, holistic, ‘subjective’ characteristics of research, formed the counterpart to (post-)positivism. Later, the term naturalistic was replaced by the term *constructivistic* in order to

demonstrate that it is a matter of constructing knowledge in dialogue with respondents.

## **Ontology**

Ontology is defined as '*theory of reality*'. It answers questions with regard to what we comprehend as reality. Positivism is often referred to as 'naïve realism'. Positivists are strongly influenced by traditional scientific thinking in physics before quantum physics. They assume that an independent reality outside human beings exists that can be depicted by research. Post-positivists slightly abate this point of view and suggest that the depiction cannot be perfect, but certainly plausible. In the latter we recognise the origin of statistics that calculate probabilities (think of the statistic test that calculates probabilities whether a hypothesis can be true or not).

Constructivists, on the other hand reject the assumption that reality can be depicted objectively. They join in with philosophies as for instance phenomenology and hermeneutics which assume that meaning is not located outside the human being but is given by the human being, therefore it is definitely 'subjective'. Constructivists, however, go a step further than phenomenologists and hermeneutici. Whereas phenomenologists assume that they can get through to the essence of a phenomenon, to the core of the subject, constructivists, strongly influenced by post-modernistic thinking, advocate the idea of relativism. By that, they emphasize that there is nothing like a general meaning, but that meaning always depends on a specific context that determines what meaning people ascribe. Think of a therapist saying that results of experimental research are nice and pleasant but not applicable for individual clients.

In addition, Lincoln and Guba (2000) differentiate between constructivistic and participant research within the constructivistic paradigm. Participant research consists of different forms, among them *action research*, which aims at an improvement of the practical action by means of research (Kemmis & McTaggart 2000). An example from arts therapies is a researcher who is in constant dialogue with the arts therapist during the treatment of the client, aiming to optimise the treatment of the client by the means of a dialogue on an equal level from different perspectives.

Research at universities of professional education, aimed at the improvement of practical acting, innovation and development, benefits from a research methodology in which researcher and professional learn from each other, in which intervention and research, practice and theory fructify each other critically. Research in practice carried out at universities of professional education can by excellence meet the characteristics that Kemmis and McTaggart mention for participant research:

- a social process
- in which respondents with their tacit knowledge participate on an equal level
- focussed on the joined development of practical acting
- by means of a (self)critical and dialectic dialogue
- that runs in a cycle of doing, evaluating, thinking, planning, doing, etc.
- in which both practice and theory transform.

This form of research goes further than learning from practice or learning in practice as it is about research that aims at innovating theory and practice in a continuous circle.

### **Epistemology**

Epistemology is the ‘theory of knowing’ and tries to answer the question how we can get to know reality. *Positivists* handle a dualistic/objectivistic approach, based on the assumption that the researcher is able to state objective truths regarding the reality around him. The researcher positions himself independently and is no more than an observer of the -in his eyes- objective reality. He is positioned opposite to the reality that he researches (dualistic).

*Post-positivists* share this opinion, but dilute it by assuming that as independent researchers, they will not find absolute but plausible truths.

*Constructivists*, on the other hand, propagate that it is only possible to acquire knowledge by entering into a transaction with the environment, which in this case are respondents, and creating knowledge together with them. Therefore, there is no dualism between researcher and research.

## Methodology

Methodology is defined as 'theory of methods' and describes how we approach the acquisition of knowledge. Positivists use a theory from which they deduce a hypothetic causal connection which they try to verify by the means of an experimental design. The experiment is designed artificially in order to be able to research exactly the influence of the independent variable. It is aimed to control all other variables by eliminating them or measuring them so as to be able to state the effect of the independent variable. Dependent variables, that are expected to be influenced by the independent variable, are measured by the means of standardised and objectified measuring instruments to which the researcher applies statistic procedures. Since Karl Popper's example of the impossibility to prove definitely that all swans are white, the *verification principle*, implying the search for evidence to prove the hypothesis that all swans are white, has come under pressure. Popper introduced the *falsification principle*, suggesting that one needs to try to refute the hypothesis (thus search for a black swan). If one does not find a black swan, the hypothesis suggesting that all swans are white, is probably true. In inductive statistics, probability procedures are developed in order to determine, based on a sample, whether a hypothesis can be true (this can be seen in the p-value of statistic tests). Therefore, by the means of an experimental design based on a sample, post-positivists are able to determine the probability whether the results found in the sample are valid for the population.

Thus, post-positivistic research methodology unfolds reality in standardised variables. They enable different situations to be studied with the same instruments. Many clients, therapists and treatments are observed in the same way. The advantage: in the end, it becomes possible to say something in general about a large quantity. In order to enable this, phenomena are simplified and expressed in figures so that they are statistically comparable. Averages, standard deviations, t-tests, analysis of variance, factor analysis, regression analysis etc. are operations that combine a great quantity of simplified phenomena. This form of research is merely possible if phenomena are simplified.

(Post)positivistic research methodology works with comparable facts because unique phenomena have been reduced to comparable variables. Exactly

because data are comparable, a great quantity of the 'same' data arises. This enables statistic processing. In other words: reduction and standardisation are conditions for statistic analysis. If this does not happen, there are unique phenomena that cannot be analysed statistically.

Therapists working with individual clients often oppose themselves suspiciously to the results of quantitative research. However, this form of research is very useful in the medical world and for therapies that are stronger standardised and therefore measurable in this way. A problem arises if this way of researching is declared as the one and only true and other forms of therapy that, on the contrary, draw their strength out of less standardisation, are left aside. As clients differ and problems are complex, treatments often are different. Therapists do not work with abstract regularities, but with a complicated interaction process full of nuances and levels (Buchholz, 1999). The individual, subjective experience of pain, anxiety or grief withdraws from quantification (Aldridge 2004b).

A political-social problem that arises from standardised forms of research possessing the highest status is, that therapies for which standardisation is possible, are considered for funding, both with regard to treatment and research. By this, a reduced picture of effective therapies develops. Aldridge (2004c) criticises the fact that a technocratic elite with a deficit in practical experience set themselves up as inquisitor, judging that merely one form of research leads to evidence.

He claims that inexperienced researchers think that they can set up guidelines based upon reductionistic research outcomes, prescribing experienced professionals how they could act in a better way. Positivistic research however, is not able to resolve the quandary of action that arises for the professional in an un-standardised context.

*Constructivistic* researchers do not think in terms of samples and statistic probabilities. For them, the specific context is the starting point, which they describe in full breadth. Whether the outcomes are usable in another context is something people from another context, can find out for themselves based upon a comparison. Striking in constructivistic methodology is the equivalence of researcher and respondent. The researcher is not the one who, based on theories, formulated questions and research tools, considers himself

able to discover truths on his own. He enters in an equal dialogue with respondents. In this way, a learning process develops which involves three criteria: the researcher learns from the respondent, the respondent learns from the researcher and together they create new practice-focussed knowledge. Equivalence, by the way, does not mean equality, as researcher and respondent enter the dialogue based upon their peculiar competence. This implies dialectics: questioning each other critically from different backgrounds. There is no theory set up in advance, there are no measuring instruments. Research techniques merely serve as support in co-creating subjective knowledge concerning the practice situation as it occurs under normal circumstances. Experimental manipulations are not applied.

One research methodology is not better than the other. It is essential for the researcher to choose a method that fits to his question. Aldridge (2004c) pledges for methodological pluralism: one story can be told in different ways. Manipulations, standardisations and measuring variables delivers other knowledge than the description of natural situations. Certainly in the arts therapies, the art process tells its own story, too. Science and profession are two different, but equivalent sources of knowledge (Buchholz, 1999), and within science, different research methods produce different, equivalent sorts of knowledge.

## **QUANTITATIVE AND QUALITATIVE**

The above paragraph demonstrates that quantitative and qualitative paradigms are narrowly connected with views on ontology, epistemology and methodology. Terms as qualitative and quantitative are currently mainly used in the service of methodology, but we realise that quantification mainly belongs to positivism and post-positivism, whereas qualitative research belongs to constructivism. Qualitative research and constructivism however are not identical. As mentioned before, traditional research methods (think of *phenomenology*, *hermeneutics* and *grounded theory*) assume that it is possible to describe the essence of a phenomenon. Constructivism, on the other hand, assumes that there is no general truth, and ‘truth’ is relative, depending on the

human beings, who construct (their) truth together. Within the qualitative paradigm, which is therefore wider than constructivism, a lot of methods are known and used frequently by arts therapists, e.g. phenomenology, grounded theory, hermeneutics, morphology (see among others Kenny 1989, 1996, 1998; Wheeler 1995/ 2005; Langenberg, Aigen & Frommer 1996; Tüpker 1996a; Smeijsters 1997b; McNiff 1998; Grainger 1999; Kaplan 2000; Petersen 2002; Aldridge 2004a). Discussing them here in detail leads us too far away from the subject. Therefore I merely refer to relevant literature.

The quantitative versus qualitative research debate is carried out in the arts therapies internationally, as well. All positions can be recognised: researchers who swear for quantitative methodology, those who swear for qualitative methodology, those who aim to bridge the gap between both paradigms by connecting them or disapprove speaking of ‘paradigms’. As mentioned before: problems arise if it is forgotten that quantitative and qualitative researchers have a different view on reality, that they ask different questions, use other methods and therefore find other answers. Condemning each other as heretic does not make sense if one person wishes to examine apples and the other one looks at pears. Ignoring the fundamental differences in perspectives and acting as if it is merely about different methods and techniques that fulfil the same quality criteria does not make much sense either. Perspectives differ so much, that it is very much about different quality criteria. This implies that, regardless which form of research is chosen, each research methodology has to fulfil the quality criteria valid for it. Who carries out experimental research needs to meet the quality criteria valid for this kind of research and someone who does hermeneutic research needs to stick to criteria valid for hermeneutic research.

As it is a matter of different approaches, there are different sorts of evidence as well. As a result of the propositions above, neither qualitative nor quantitative researchers can claim ‘truth’ and ‘certainty’. Knowledge that is gained through experimental research by the means of standardised measuring instruments is no closer to ‘the truth’ than knowledge gathered by the means of in-depths-interviews in the natural context (Kemmis & McTaggard 2000).

## SORTS OF EVIDENCE

In this paragraph, I will examine the ‘sorts of evidence’ possible. It is a very recent perspective in which a lot of the matters discussed before, will be risen again. We will see that *Evidence Based Medicine* (EBM) is more of a (post)positivistic-quantitative nature<sup>3</sup>. *Evidence Based Mental Health* (EBMH) is more of a constructivistic-qualitative one. In addition, we will find a third form of evidence, *Cognition Based evidence* (CBM), being possible, a form that is naturalistic (without being a matter of constructivism) and can exist in a qualitative or quantitative design.

With the call for evidence currently being so strong, this paragraph corresponds to the question arts therapists are confronted a lot in practice: ‘Does it really work?’

Ansdell, Pavlicevic and Proctor (2004) describe six forms of evidence that can be developed by professionals in practice:

- *An expert’s opinion*: let your work be validated by a practitioner from another profession (e.g. a psychiatrist) who is able to evaluate your work from a close distance. Such an expert’s opinion influences policymakers.
- *A review of your treatment*: make a review of the dossiers of your clients, describing the target group (age, diagnosis, etc.), how clients have been referred and how assessments have taken place, how many clients you treated individually and in groups, how you evaluated your work and results of your evaluation (interviews, supervision, other professional’s and client’s feedback etc.).
- *Evaluation studies*: apply a number of methods (‘triangulate’) that demonstrate that in practice, there is a relationship between aims and results (e.g. questionnaires filled in by clients and staff, participant observation).

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<sup>3</sup> EBM includes ‘best research evidence’, the therapist’s ‘clinical expertise’, and ‘patient values’. However, in EBM most weight is given to results of quantitative experimental research, and less to qualitative non-experimental experiences of therapists and clients. In forthcoming publications I also introduce the distinction between Evidence Based Practice (EBP) in which practice is influenced by research results and Practice Based Evidence (PBE) in which practice itself leads to evidence.

- *Using assessments*: in this case, an arts therapeutic assessment model accompanies all stages of treatment (e.g. an assessment at the beginning is related to the problem and the expected results; an assessment at the end is compared to an assessment carried out at the beginning and to expectations).
- *Qualitative effect study*: make an extensive description of practice, among others from the client's perspective (e.g. using client interviews).
- *Systematic case study*: a Case Control Study in which the client is matched with a control client, the Case History (the most common case study) and Case Series (several Case Histories). By using the same format (problem – intervention – process) it becomes possible to compare cases to each other and to reveal patterns.
- *Experimental research*: research by the means of an experimental and a control group; randomisation.

By this, they demonstrate that each professional can gather evidence in practice – apart from experimental research. This is important in regard to the validation of indications for arts therapies in clinical practice. Evidence is more than the results of experimental research. Decisive is the credibility arts therapies possess in the eyes of care managers, members of the multidisciplinary team, clients and people from the clients' environment.

I will not discuss all variants proposed by Ansdell et al. I restrict myself to the sorts of evidence I encountered in the course of years and that get a lot of attention in literature.

### **Evidence Based Medicine (EBM)**

EBM is mainly applied in medical science. From there, it gradually swept through to psychotherapy as well. It is applied frequently within cognitive therapy and behavioural therapy, hardly in psychoanalysis. This already tells us something about those therapist's view on reality. Although tacit knowledge from therapists and clients is included, the golden standard of EMB is the *Randomised Controlled Trial (RCT)*. In medical research, the RCT is regarded as the very best way to investigate the effectiveness of a certain treatment. The approach is 'objectivistic' and 'experimental', which means that the researcher is an outsider who designs an experiment in which

he can observe what happens without interpretation. There is a control group that does not receive treatment and an experimental group that does. Members are placed in groups *at random* in order to guarantee that groups are comparable at the start. The experimental group receives a certain medication, the control group receives a placebo. Participants of each group do not know who receives the proper medication and who does not. Even doctors do not know which one is the genuine and the simulated medicament. This is called ‘double-blind’-research. It is meant to prevent doctors and patients – if they could identify the genuine medicament – from suggestive thinking that it helps. The effect is recorded by means of a measuring instrument. The measuring instrument neither leaves space for interpretation or suggestions. The treatment (the medication) is exactly prescribed (standardised). The client’s problems are recorded precisely. In that way, it becomes possible to draw conclusions that the particular medicament in a certain dose and administered for a certain time (the independent variable) for this symptom (the dependent variable) has this kind of effect.

This is a very strong research design from the point of view of post-positivistic methodology. It’s strength is, that to a certain extent of statistic probability, it is possible to state whether one treatment I (intervention), compared to another intervention C (comparison, co-intervention) leads to an effect O (outcome) for a large groups of patients presenting the problem P. This ‘PICO’ line of reasoning can be found in *Cochrane Reviews* and evidence based guidelines. It enables you finding out whether a standardised treatment leads to a standardised effect for a standardised group of patients. Therefore, this design is regarded as ‘golden standard’. Wesseley (2001: 49), a supporter of this design, declares: “If we hadn’t carried out clinical experiments, we still would give insulin to schizophrenic patients”. A convincing argument from medical books is that RCTs detect differences between medicament and placebo and whether treatments have positive or negative effects.

Try to imagine that this is what you need to manage in psychotherapy or the arts therapies. You need to form two groups, both of them including clients with exactly the same problem and the same level of departure; without co-morbidity, because otherwise you won’t be able to find out exactly how

therapy works for a specific problem. You need to divide them into a treatment group and a control group at random. Subsequently, you need to apply the same treatment to every client (same interventions, same intensity, same duration), because only then you will be able to state whether treatment I leads to effect O for client P. The client must not know, whether he receives treatment or placebo; neither the therapist may know whether he carries out treatment or placebo. Afterwards, all clients are measured by means of the same measuring instrument. From this, we can deduce that this research design involves a variety of problems. Do you get clients whose presenting problems are clear, specific and equal? Is it possible in an institution to take clients out of their community and divide them at random in an experimental and a control group? Is it possible to provide the same treatment for every client? Is it therapeutically justifiable for the client not to know what kind of treatment he receives? How do you manage for the therapist not to know whether he actually treats? Questions above questions. By the way, this does not mean that it is not possible to answer some of those questions. It usually leads to some kind of deviation from the original design.

However, as a result of the questions risen just before, carrying out this form of research encounters many critics within psychotherapy. In the previous text, Buchholz (1999) has already been quoted. He clarifies that experimental research provides a simple psychology that cannot replace the complex psychology needed by the professional. In the same way, Seligman (1995) and Rustin (2001) conclude that RCTs cannot demonstrate the effects of psychotherapy as many crucial factors are left out of consideration. In reality, clients are complex; there are no two clients alike; there are no two treatments that can be alike and therefore, there can't be two effects being the same. Every experimental group forms a selected, specific 'non-random' group; its results cannot be generalised (Aldridge 2004b). The most important criticism on RCT is therefore that it is not representative and possesses little external validity (Slade en Priebe 2002).

According to Seligman, the strong *intern validity* of RCT (randomisation, protocol-led treatment, delimited time and standardised effect measures) does not provide insight on the way how the process between therapist and client develops and what actually happens. 'Intern validity' means that you can state whether the effect is caused by the treatment.

RCT is a technical-formalistic way of recording the effect of a treatment. It seems unimportant to know how the treatment took place; every researcher can do the methodological work without having a look at the process of treatment. In reality, insight on why something changes however merely develops by investigating the process, by paying attention to little changes and by recording what is influenced by what. RCT provides laws for big numbers, but no insight in where and why something changes. In addition, the RCT shows afterwards, whether there is a statistic effect on an average score for a standardised treatment. We then know, that on average, something influences something, but we do not know when, how and why the individual client changes. Thus, RCT does not tell us how a treatment works, for whom it works and for whom it does not work (Marshall 2002, Aldridge 2004b). That is why this kind of research is interesting for care managers and care insurances, as they can deduce from results where to spend their money - but less interesting for therapists who want to know how they need to act when confronted with the complexity of the individual client. Arts therapies is not the performance of standardised interventions. Every therapeutic relationship is different and it is a matter of working focussed on the presenting problem (the *treatment package approach*, Edwards 2002).

In order to meet the individual process, the quantitative single case design was developed; it is flexible, focussed on practice and ethically justified (see e.g. Aldridge 1993, 2004b; Smeijsters 2005a).

### **Cognition Based Medicine (CBM)**

The criticism on RCT originates also from the medical perspective. Clinical physicians and specialists wonder, whether they are merely allowed to treat after a RCT having taken place. This approach condemns physicians to the computer where they can search for what is or is not investigated. I think, in this context a distinction needs to be made between the prescription of pills and other medical actions. The first one, I consider as a matter for RCTs. This is different for the other medical actions.

What is practice like? A doctor possesses the competence to formulate individual diagnoses that meet the individual set of problems of the patient. Based on that, he assesses what he needs to do. Naturally, he will prefer

prescribing medicaments that are tested extensively, but what to do if the decisive answers of the RCTs are unsatisfactory? The physician nevertheless needs to act, even more, he needs to invent a combination of remedies and measures that are appropriate for the individual client; no single RCT is able to provide an answer for this. The doctor is supported by two things: his insight in the way of working of the human body and his experience. In order to obtain these insights, he does not necessarily require research with an experimental and a control group. The physician gains insight by thoroughly mapping and following a large number of phenomena and combinations of measures in the case of the individual client. He is able to reliably state for an individual client whether the treatment leads to the desired effect. This may happen qualitative or quantitative (see Smeijsters, 2005a). To a certain degree, the individual doctor ‘experiments’ with the individual client, whereas in RCT, this is done with groups. This is even more observable in the case of a surgeon who acts based upon his competence and not based upon RCTs. Imagine a surgeon only then to be permitted to carry out an operation after an experimental group has been subjected to the same operation and a control group has not. Firstly, not a single fracture of patients from the experimental group is the same; the surgeon needs to adjust his work and needs to figure out per client how he needs to do it. Secondly, you can’t let clients from the control group wander about with broken bones. This maybe is a laughable example, but it demonstrates clearly that the surgeon needs to act; he does it by using his experience and competence adjusted to the situation and by developing it on the spot. This, by the way, characterises a true professional: he is able to act in diverging situations instead of merely being able to carry out standard procedures. Here, we can recognise a discrepancy between EBM and thinking on professionalism.

Through the treatment of individual patients, the physician gathers a treasure of experiential knowledge that enables him to formulate diagnoses and to develop an appropriate treatment quicker for the following patient. In RCT, the doctor is somebody who interprets and applies standardised knowledge; in CBM the doctor is a practice researcher who tries out things in a variable practice.

Kiene (2001), Kienle e.a. (2003) and Petersen (2003) emphasise that EBM underestimates the person of the therapist as a trustworthy research instrument.

The key question in effect research is about whether an effect actually occurs and whether one is able to state with certainty that the effect is a consequence of treatment and not one of other factors (e.g. the weather, the physician's personality, another treatment etc.). It is, as we have seen previously, the question regarding internal validity.

This is solved in EMB by the means of an experimental design. Experimental group and control group are alike. Imagine the treatment being successful for the experimental group but not for the control group. Do you then know with certainty, that this effect is a consequence of the treatment? Yes, according to the reasoning: if anything else had been involved, it would have occurred in the control group, as well and would have caused an effect there, too. The difference of effects between experimental and control group is merely regarded a consequence of a difference in treatment. Ergo: the treatment has caused the effect.

CBM handles another line of reasoning in order to state causality. It is an individual experimental model, based on recording similarities (morphologic and analogous). Adapted to the arts therapies, it means that changes visible in therapy correspond to changes outside therapy in a way that makes it very likely that they are caused by the therapeutic process in art. Take the example of a client who takes more initiative during an arts therapeutic session and does the same in his community during following week, whereas this was not at all the case before; in addition this phenomenon was only visible in other therapies after it had been observed in the arts therapies for the first time. Or, let's turn back to the surgeon, if bones grow together, this is caused by the surgeon who set them well. There is no need for an RCT in order to state this. The causal relationship between the surgeon's therapeutic action and the growing together of bones is evident. The same can be said for processes happening inside and outside the arts therapies. If a beforehand withdrawn client gradually takes more initiative in music therapeutic improvisation, there is a direct relationship to his behaviour in a discussion group when in this group too he takes initiative.

## **Evidence Based Mental Health (EBMH)**

EBMH can be explained in two ways. The first perspective stresses the threefold data that are included in EBM ('best research evidence', 'clinical expertise', 'patient values'). This interpretation makes no fundamental difference between EBM and EBMH, and it brings to the fore that EBM also includes several types of evidence.

The second perspective, which is developed here, stresses the difference between EBM and EBMH because in mental health the subjective knowledge of therapists and clients are much more important in 'constructing' diagnosis and treatment. In mental health, the psyche of the client is the centre of attention, which implies that it is impossible to merely carry out standardised treatments that are the same for everybody. In EBMH, therapists' and clients' knowledge from experience is made explicit, it is analysed and integrated to *best practices*. This concerns all parts of the therapeutic process as observation and diagnosis, aims, interventions, results and rationales. EBMH is interactive and searches together with experts (from experience) for the *collective sense of the profession*. EBMH owns to a smaller or greater extent characteristics of the qualitative paradigm (Lincoln & Guba 1985; Reason & Rowan 1991; Denzin & Lincoln 2000).

The research method is frequently 'open', theories set up in advance move to the background during the research, there is attention for the totality of occurrences; in addition a construction of intrasubject and intersubject experiences takes place. Within EBMH, all sorts of specific qualitative research methods are applied, including phenomenology (Giorgi 1985), hermeneutic (Gadamer 1975), grounded theory (Glaser & Strauss 1967; Strauss & Corbin 1998; Charmaz 2000), constructivism (Gergen 1985, 1994; Denzin 1997) and morphology (Salber 1965).

Instead of the criteria customary within the quantitative paradigm (as internal validity, external validity, reliability and objectivity), criteria of relevance within the qualitative paradigm are:

- *Credibility* (results need to be credible for respondents)
- *Dependability* (results need to be as complete as possible)
- *Confirmability* (an outsider needs to be able to comprehend how results came about)

- *Transferability* (results are processed in a way that enables assessment regarding to what is different or similar in a new context)
- *Authenticity* (respondents have had a fair chance to contribute their point of view)

In order to fulfil those criteria, a qualitative researcher has a large amount of research techniques at his disposal; among those are best known: *thick description*, *memo's*, *iterative analysis*, *member checking*, *peer debriefing*, *auditing* and *triangulation*. A detailed discussion of these methods and techniques would lead too far from the subject. A short description is included to the table at the end of this chapter.

In this chapter, I would like to deal with Miller and Crabtrees' notions (2000) on clinical research at more length. Just like other researchers, they criticise the biomedical paradigm and the RCTs deduced from it; according to both authors, they have as a consequence that the complexity of suffering becomes suppressed and the treatment of suffering is given shape in standardised procedures. What is interesting on Miller and Crabtrees' notion is, that they pledge for a research method in which storytelling, associations and metaphors take up a central role.

If we follow this line, the notion links up to voices within the art therapies, pointing out that it is possible to describe the therapeutic process by taking the art process as a measure of outcome. What happens during therapy after all is visible and audible 'in' art. Therefore, there is no need to 'translate' the art process into another language. As it frequently is difficult for outsiders to 'read' art, work needs to be shifted aiming at an 'intermediary language' that does justice to both art and psyche (Smeijsters 2005b).

Miller and Crabtree mention three criteria for a qualitative clinical *story*:

- *Methodologically convincing* as the 'story teller' gives account to the reader how he gathered and processed his material.
- *Rhetorically convincing* as the reader, based upon personal experiences, becomes convinced that the story is credible.
- *Clinically convincing* as therapists get convinced that the story is clinically credible.

By this, Miller and Crabtree in a certain sense re-establish the position of the case study, which takes up a very humble rank in EBM. But they add something as well: the author needs to use a research method and accounts for the method. Case studies, as we know them, often do not fulfil the criteria valid for research. However, they may be rhetorically and clinically convincing. Their value would increase if authors of case studies made use of research techniques.

## **SCIENTIFIC PRACTITIONER AND REFLECTIVE CLIENT**

In Hutschemaekers' opinion (2003a/b) the original principles of EBM stressed the *collective sense of the profession*, building also upon the implicit knowledge of reflective practitioners when setting up guidelines. Aldridge (2004b) emphasises that it is important to listen to the experience of both therapists *and* clients.

### **From 'reflective' to 'scientific' practitioner**

It is important that the reflective practitioner can develop himself to scientific practitioner. Entering into a critical dialogue with colleagues and researchers facilitates this. With that, among others, it is important to connect the so-called *theory with a small letter t* (work models from practice) with the *theory with a capital letter T* (scientific evidence). This will be worked out further in chapter 3.

### **The 'reflective client'**

Within psychotherapy, research methods have been developed in which the client's experience gets a lot of attention (Elliott, Slatick & Urman 2001). In a *Change Interview*, the therapist/researcher asks whether the client realised changes, what may have caused them, which factors facilitated or hindered the therapeutic process and what had been missed.

The *Helpful Aspects of Therapy Form (HAT)* is comparable to that, but is held at the end of a session. The therapist asks which *event* has helped most during the session, how strong this help had been, when it happened and for how long it lasted.

In a *Brief Structured Recall (BSR)*, tapes of the session are looked at or listened to; the therapist helps the client describing specific events. The client localises the event, describes what helped most during the event, and how the event passed off, explores possible relationships to other situations from every-day reality, describes what was experienced during the event, the most important parts of the event and the effect it.

## **CHARACTERISTICS OF QUALITATIVE RESEARCH IN PRACTICE IN EBMH**

This paragraph accentuates and specifies the preceding with respect to qualitative research in practice in EBMH.

### **Cycle of practice and cycle of research in EBMH**

Within EBMH, there is no big difference between the reflective practitioner who discovers gradually what the problem is, who develops work methods and tests every moment what is appropriate and what is not, and the qualitative practice researcher who by means of qualitative research methods supports and analyses the individual process of the reflective practitioner and integrates it with other reflective practitioner's implicit knowledge as well as findings from theory and research. Qualitative research in practice is focused on the action process as it unfolds in practice. This form of research shows, with regard to the process, similarities with the action process in practice. Practice and research both focus on what the problem is and what needs to be investigated. The research methods are not neatly put together in advance, but get shaped gradually based upon feedback from the practical context. Qualitative research in practice often is as flexible and varied as practice itself.

### **EBMH informed qualitative research in practice in the arts therapies**

In qualitative research in practice in the arts therapies, the following questions are central:

- How is the client's set of problems expressed in art?

- What sort of diagnostic model do arts therapists use with regard to a certain set of problems?
- For which client's set of problems, do arts therapists consider arts therapies indicated?
- Which goals are chosen by arts therapists, connected to the problems they want to focus on?
- Which work modalities, methods, activities and techniques are used by arts therapists to achieve those goals?
- How do they phase their therapy?
- Which effects are perceived by the arts therapists as a consequence of the application of the chosen work modalities, methods, activities and techniques?
- Is there a clear relationship between the client's set of problems, the goals, work modalities, methods, activities, techniques and results?
- How do arts therapists explain the effects occurring? On which theoretical current do they base themselves?

The quality criteria for qualitative research in practice are related to the question whether the facts reflect practice adequately; whether they are understandable, usable, acceptable etc. (see the preceding paragraph as well as Verhoef et al 2004 and Proot et al 2004).

### **Competences of a researcher in arts therapies' practice**

A researcher in practice is someone who is able to pursue a dialogue in which he enters into discussions with respondents, listens well, follows their traces of thinking and clarifies. The researcher creates an atmosphere that enables questioning each other constructively and critically as well as bringing up assumptions for discussion. The discussion enables respondents to develop from reflective to scientific practitioners who integrate theory and practice, who makes implicit knowledge explicit, and brings it up for discussion based upon external sources (theory, research, other experts). A safe atmosphere facilitates bracketing conceptions that don't provide psychological, therapeutic or artistic trustworthiness.

Considering the fact that both respondent and researcher use the clinical process of reasoning in which observation, aims, indication, method, effect

and rational are related to each other, this form of research in practice requires the researcher to know about the subject he talks about and therefore to have deep understanding of the arts therapies. He needs to have at his disposal a wide knowledge concerning the arts therapies he wishes to investigate, so that he is able to drop one-dimensional theoretical and ideological assumptions. Based upon insight, the researcher needs to be able to (re)construct experiential knowledge and to create action knowledge together with the arts therapists; in this, it needs to become clear what can be generalized and what cannot.

Then a content-directed, many-sided dialogue between professional and researcher develops.

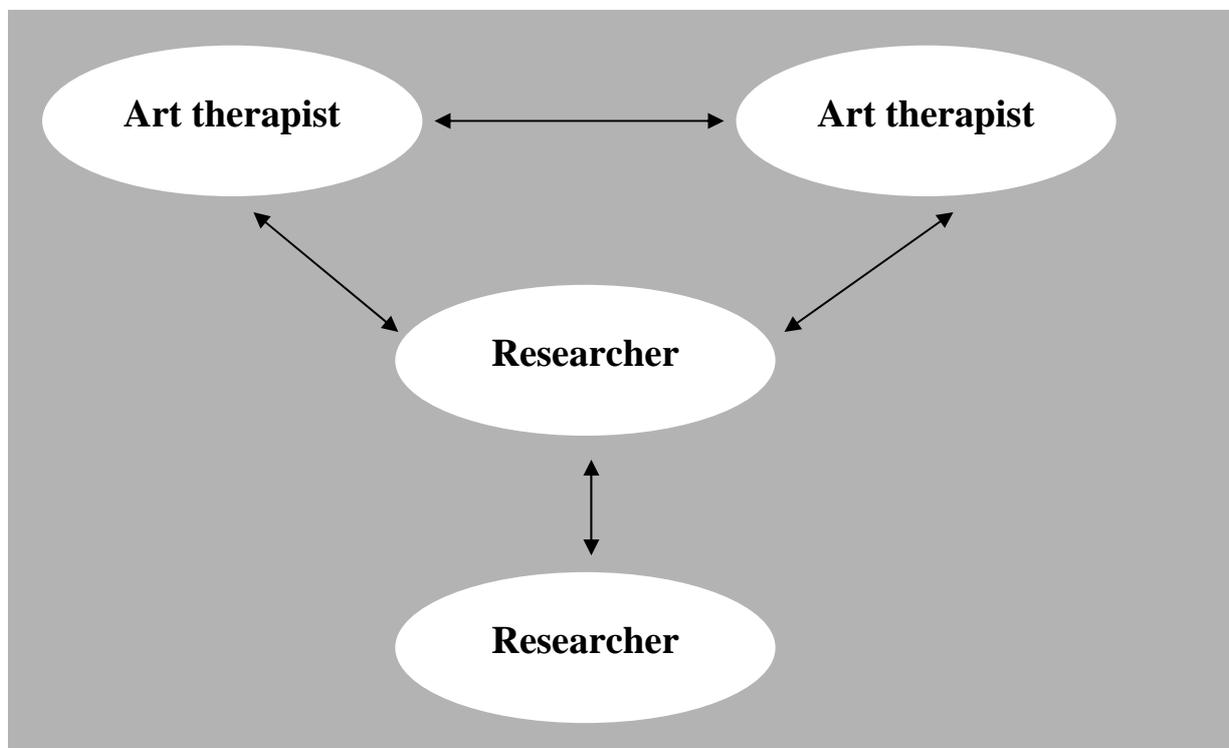


Figure 2 **Dialogue between researchers and arts therapists**

At the end of this chapter, I provide a systematic overview of types, methods and techniques of research. The overview in table 1 is not complete, however it gives an impression of the options among which researchers can choose.

Table 1      **Types, methods and techniques of research**

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*Types of research*

- *Inventory research:* in an inventory research, an inventory is made of how often a phenomenon occurs, which phenomena occur; e.g. which target groups and methods arts therapists work with.
- *Need research:* A need research assesses people's needs. This may include needs for education, facilities and, with regard to clients, needs for treatment.
- *Development research:* A development research project focuses on the development and improvement of (one's own or somebody's else's) treatment method by means of research. The outcome can be assessment tools, a description of indications, goals, interventions, standards, rationales etc. A development research goes further than an inventory research as it brings about new knowledge through analysis and integration.
- *Process evaluation:* A process evaluation aims at investigating how therapy actually takes place. In other words: does actually happen what is written down on paper? For this purpose, it is necessary to describe and analyse the actual acting, with regard to what was supposed to happen. A process evaluation is both related to the quality concerns ('Do we really do what we say we do?') and effect evaluation. When a treatment turns out not to be effective, it is important to know whether it has been carried out the way it was meant to.
- *Effect evaluation:* Effect evaluation aims at evaluating the output of activities.

# RESEARCH DESIGNS

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## QUANTITATIVE

### Survey

By the means of a closed questionnaire, structured in advance, information in figures is collected from a big number of respondents. For instance, respondents record whether something does or does not exist and to which degree. This research is inventory research.

### Correlational

A research aimed at investigating the correlation between variables; it is observed whether one variable scores high or low, in the same direction or the opposite one, or independently if another variable scores high or low.

### *Experimental with groups*

- *Randomized Controlled Trial (RCT)*: effect research in which randomised groups are compared to each other; the experimental group receives treatment whereas the control group does not get treatment or receives a placebo.
- *Controlled Clinical Trial (CCT), cohort studies*: effect research in which non-randomised groups are compared to each other.

### *Outcomes research*

Effect research by the means of a *pretest-posttest* measurement of the treatment group; without control group.

### *Experimental single-case design*

*Case Control Study*: a client is matched with a control client or with himself:

- *Randomised single-case design*: treatment and placebo are applied at random at an individual client.

- *Reversal design*: according to a plan set up in advance, (e.g. ABABA) treatment and placebo alternate in the treatment of an individual client.
- *Multiple baseline design*: a research in which the effect of the treatment is measured in several individual clients. Treatments and measurements proceed parallel to each other, but start and end at different points in time.

### *Non-experimental single case design*

*Quantitative single-case study*: here, by the means of assessments during all stages of treatment, data in figures are gathered for one client. The research can be describing or evaluating nature.

## **QUALITATIVE**

### **Qualitative effect study**

By the means of several methods (e.g. observation, client interview), effects of the treatment in practice for comparable client groups are described; it is demonstrated that there is a relationship between aims, treatment and results.

### **Multiple qualitative case study (case series)**

A combination of several qualitative case studies. The term multiple case study in the narrow sense of the word is used if results from the original case studies remain visible. In a consensus-based multiple case study, data of separate case studies finally become integrated.

### **A treatment review**

A review of the files in which the client group is described (age, diagnosis, etc.), how clients had been referred, how assessments have taken place, how treatments have taken place, how they have been evaluated and the results of these evaluations.

### **Qualitative case study (case study, case history)**

A systematic description of a client's therapeutic process.

### **An expert's opinion**

A validation of the work by a practitioner from another professional group (e.g. a psychiatrist) who is able to judge the effectiveness of the treatment from a close distance.

## **TECHNIQUES FOR DATA COLLECTION**

- Literature study
- Questionnaire
- Interview, among others:
  - Change interview
  - Helpful aspects of therapy form
  - Brief structured recall
- Observation
- Participant observation
- Group technique

## **TECHNIQUES IN WHICH DATA COLLECTION AND DATA-ANALYSIS GO HAND IN HAND**

### **Naturalistic constructivistic inquiry**

- *Member checking*: this technique involves that data collection and data analysis take place in close cooperation with the people from the context to which both data collection and data analysis refer (client and therapist)
- *Peer debriefing*: method of data collection, data analysis and first results are presented to independent experts during the research process.
- *Repeated analysis*: based upon newly collected data, the proceeding analysis is regularly compared to the original data and former analyses.
- *Triangulation* means that different sources are used for data collection (e.g. arts therapists, psychologists, managers), that different types of data collection are applied (e.g. interview, participant observation, questionnaire) and that several theoretical perspectives are given a chance in data-analysis (e.g. creative-process theory, analogous-process model, analytically-orientated arts therapies etc.)

## **Grounded theory**

- In the events you describe, look for *concepts* that give you something to hold on to and describe those concepts.
- Present concepts and original data to *independent reviewers*.
- Look for new material, using the already developed concepts as *sensitising concepts*.
- Carry out *interviews* in order to complete the concepts.

## **Delphi-method**

- Selecting experts, stake holders, clients (diversity of expertise).
- Exploring the theme by the means of literature study and interviews.
- Developing topics for the purpose of interviews and questionnaire.
- Holding interviews and filling in questionnaires (individually and anonymously).
- Content analysis of responses.
- Feedback to respondents: asking respondents to comment earlier answers.
- Several rounds in which respondents are confronted with their own answers and those of others.
- Indirect communication (via researcher).
- Similarity to naturalistic/constructivistic inquiry: application of member checking, peer debriefing and triangulation.

## **QUANTITATIVE METHODS FOR DATA ANALYSIS**

- Meta-analysis of research results
- Data-analysis:
  - Table of frequencies, diagram
  - Mean, modus, median, variance, standard deviation
  - Cross table, correlation coefficient, linear regression,
  - Parametric and non-parametric tests
  - Logistic regression
  - Analysis of variance
  - Factor analysis and cluster analysis.

## QUALITATIVE METHODS FOR DATA ANALYSIS

### Content analysis

- *Select*: delete unimportant passages.
- *Paraphrase*: drop superfluous words in important passages.
- *Synthesize*: integrate passages belonging to each other on a higher level of abstraction.
- *Analyse*: determine relations between kinds of phenomena (e.g. cause–effect, stipulations, conditions, stages etc.)

### Grounded theory

- *Coding*: divide the text into paragraphs dealing with one subject, mark similar paragraphs with the same colour or term (e.g. paragraphs on the diagnosis, the therapeutic relationship, the client’s reaction, etc.)
- *Categorizing*: put all corresponding passages into the same category and give a name to this category (e.g. the category ‘diagnosis’).
- *Conceptualising*: within the categories, develop concepts referring to important topics (e.g. ‘depressed mood’, ‘relational problem’).
- *Axial coding*: determine main- and subcategories (e.g. for the main category ‘interventions’ the subcategories ‘general interventions’ and ‘art therapeutic interventions’; for the main category ‘treatment’ the subcategories ‘cognitive therapy’ and ‘drama therapy’; within the subcategory ‘drama therapy’ the sub-subcategory ‘role method’).
- *Selective coding*: look for relations of topics within and between categories (e.g. the relation between problem, aims, treatment, effect and rationale).

### Phenomenology

- Departs from phenomena as they are experienced by people and the meaning that is given to them.
- Existing theories are bracketed.
- By adding or deleting characteristics, the researcher determines what belongs to the essence of a phenomenon.

This happens by the means of rational reflection, intuition or imagination whether or not in dialogue with others or through document study.

## **Hermeneutics**

- Scrutinizing a phenomenon by the means of a strong form of engagement.
  - Searching for the latent, deeper (unconscious) causes and meaning of a phenomenon.
  - Projecting characteristics onto a phenomenon based upon counter-transference; that way, the phenomenon becomes better comprehensible.
- Matching the meaning of one part with the entity (hermeneutic circle).

## **Qualitative change process research**

Data-analysis methods suitable for *Change Interview (CI)*, *Helpful Aspects of Therapy Form (HAT)* and *Brief Structured Recall (BSR)*:

- Grounded theory analysis of CI and HAT.
- Task analysis of texts concerning significant events.
- Discourse analysis.
- Conversation analysis.
- Comprehensive process analysis.

## **Naturalistic constructivistic inquiry**

*Auditing*: presenting the data-analysis to independent experts who control the chain-of-evidence and who determine whether the research methodology is appropriate and results and conclusions can be deduced from the data.

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For the purpose of this table, the following sources were used: Ansdell, Pavlicevic & Proctor (2004), Baarda & De Goede (2001), Baarda, De Goede & Theunissen (2000), Berger, Imbos & Janssen (2001), Denzin & Lincoln (2000), Frommer & Rennie (2001), Giorgi (1985), Hutjes & Van Buuren (1992), Imbos, Janssen & Berger (2001), Lincoln & Guba (1985, 2000), Mayring (1990), Migchelbrink (2001), Smeijsters (1997b), Smeijsters (2005a), Smeijsters & Aasgaard (2005), Stake (1995), Swanborn (1994), Wester (1995), Wheeler (1995/2005), Yin (2003).

This table is meant to provide an overview that facilitates a first choice, suitable for the presented problem and the formulated question of inquiry. After this choice being made, the researcher needs to work out the research design according to the criteria valid for it with the help of specific manuals.

The research projects carried out by KenVaK<sup>4</sup> concern several of those research types. For instance, an inventory is made of how problems are expressed in the medium. If, based upon those facts, an observation scale is developed by the researcher, it is a matter of development research. Research projects focusing on how art therapists have been trained and what kind of methods and target groups they work with, belong to the type of inventory research.

A need research has been carried out by KenVaK, preparing the master training programme for arts therapies. Managers and arts therapists were asked for which themes they consider themselves most in need for in a master training programme. KenVaK-researchers frequently use development research. They develop observation instruments and treatment methods. Effect evaluation is either about asking arts therapists which effects they perceive or carrying out experimental research, whilst measuring effects.

## CONCLUSION

This chapter illustrates, that, with respect to research, there are many ways to reach evidence, and also, that there are different sorts of evidence. The road to science for the arts therapies requires research on the full breadths of the spectrum, from systematic case studies to RCTs. It is important that arts therapists and arts therapeutic researchers reflect on the typical characteristics of each research paradigm, research type and research method and select what is appropriate with regard to the particular research question. Questions rather differ. Finding out whether a certain intervention has a particular effect with a

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<sup>4</sup> KenVaK (Kenniskring Kennisontwikkeling Vaktherapieën) is the research centre for arts therapies at Zuyd University, Utrecht University of Professional Education and ArtEZ Conservatory Enschede.

large group of clients differs from wanting to know which change occurs at which moment by which interventions in the treatment of an individual client. Research in practice remains close to questions encountered by arts therapists in their daily practice. It concerns questions arts therapists have about their lived experience of acting due to the complexity and variability of practice. By carrying out research in practice that links up with those questions, evidence evolves; evidence that enables the professional to proceed and that makes explicit what often remains implicit and unsaid. What is explicit can be communicated, can be criticised and tested. The professional himself does the road to science of the profession. The investment in professionals' research in practice is the motor of knowledge-productivity that bridges the theory-practice gap. Research in the arts therapies should lead to 'knowledge' in which the 'art', nor the 'subject' of therapist and client have been lost.