
*Sounding Systems - Different Approaches to the
Evaluation of Music Therapy Groups*

Sabine Rittner, Henrik Jungaberle

FIGURE 77.

Music Therapy
N A P O L I
2 0 0 1
in Europe

Sounding systems

Different approaches to the Evaluation
of Music Psychotherapy groups

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Summary. At the Dept. of Medical Psychology (University of Heidelberg) we conducted three short-time group-treatments for outdoor psychotherapy

clients. The clinical focus was on aspects of health and resourcefulness. A systemic perspective guided us, which was well suited to our vocal oriented music therapy approach. As an interdisciplinary team our research included an innovative combination of qualitative and quantitative methods. Some clinical concepts, our empirical strategies and results of the outcome study will be presented. A case illustration will demonstrate our approach.



FIGURE 78.

Structure of the presentation

- 1 Overview: What was the research project about
- 2 Clinical concepts & patient sample
- 3 Research questions & Evaluation methods
- 4 Results - *Global*
- *2 Case illustrations*
- 5 Conclusion

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1. Short overview
 1. Introduction: Who are we?
 2. Project overview: What did we do, when and how?
 - 2.1. Clinical concepts and Structure of the Therapy
 - 2.2. Patient group: Who participated?

- 2.3. Question formulation: What did we want to know in terms of evaluation?
- 2.4. Empirical strategies and methods
3. Results of the outcome study
 - 3.1 Global
 - 3.2 A short case illustration
 - 3.3 Intuitive drawings
4. Conclusion
5. References
6. Short biographies
7. Contact



1. Introduction. In this lecture I will talk about the evaluation of music psychotherapy groups. I focus my presentation on some aspects of the research project and will point out the structure of the presentation now.

First I am going to outline the framework of the research project. Then I give an impression of the therapeutic concept and specify what kind of people participated in the groups. After formulating our scientific questions I will outline the evaluation methods we used. Then I am going to present the results of the evaluation in a global perspective and a case study.

2. Project overview: What did we do, when and how? We conducted three short-time music psychotherapy groups during 1997 and 1999. The project was designed as a pilot-study. This is important to know, because it meant that we didn't receive any money from external sponsors. People who worked with us did this out of their own interest and curiosity, for their doctoral theses in human sciences or their masters' degree in educational science. The research project had an emphasis on vocal aspects of the client-therapist relationship, which I am not going to point out here. At the moment there is still data to be analysed, first of all these vocal characteristics' data.



FIGURE 79.




Project overview

Pilot Study *Voice and Music in Psychotherapy*

Three 12-session music psychotherapy groups between 1997 - 1999

- Vocal characteristics as parameters for change
- Integration of musical and non-musical therapy methods
- Outdoor Clients
- Short-time group treatment (12 sessions, ca. 150 min each)
- Combination of Process and Outcome Research
- Multi-method inquiry

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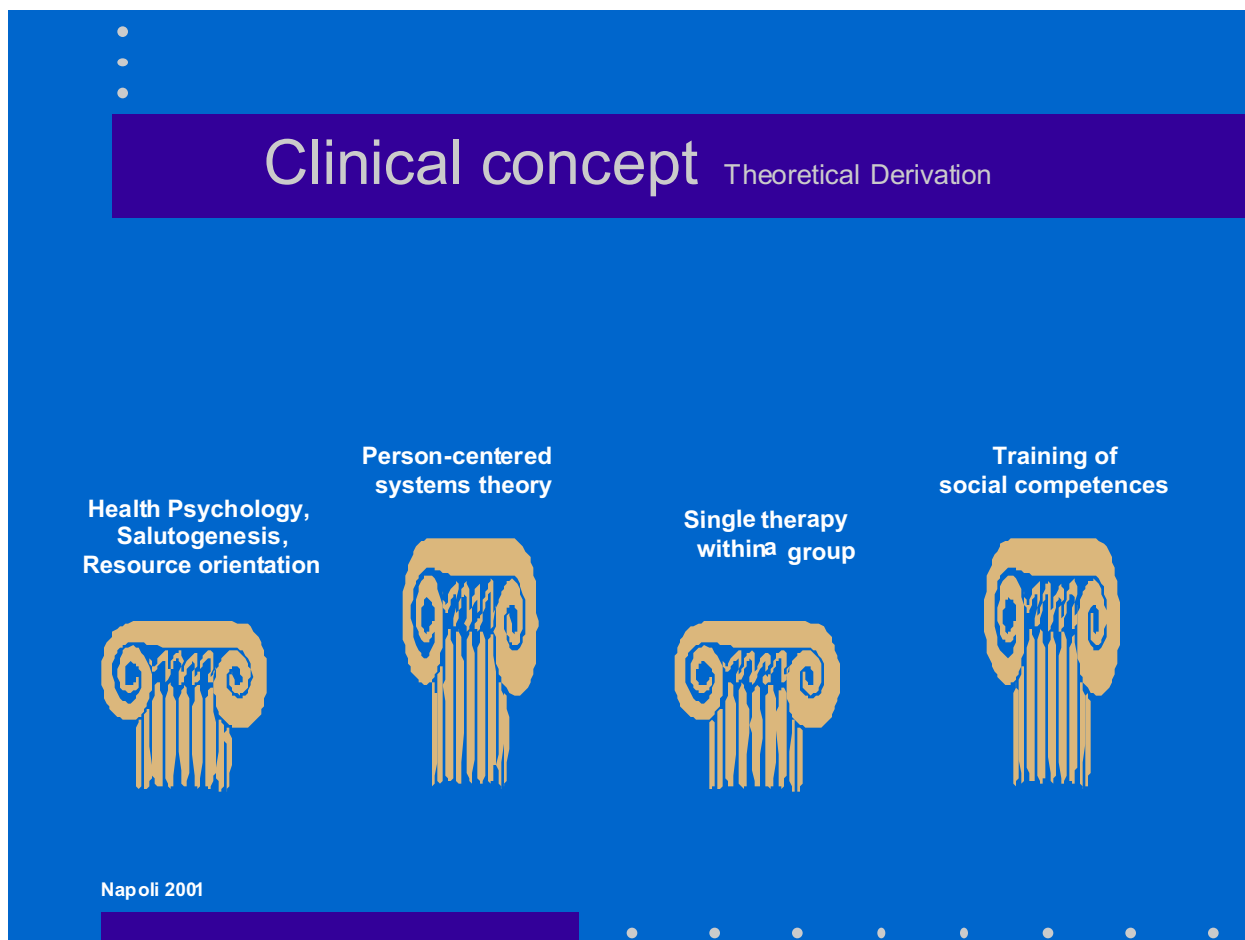


In my opinion the innovative aspects of our project are first of all the special and creative combination of clinical methods. Secondly we conducted and evaluated outdoor client music psychotherapy groups - although in a hospital environment - which is rare in the music therapy research context. Then we had a multimethod approach to evaluation.

2.1. Clinical Concepts and Structure of the Therapy. You can see our main set of ideas on this transparency. The therapeutic model was a newly developed, integrative music therapy-based group concept. Elements of our model were health psychology, person-centered systems' theory, the concept of single therapy within a group and a training of social competencies.



FIGURE 80.



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Here I just want to highlight one central point: *resource orientation*.

Resource orientation can be defined as the assumption, that a system possesses the resources that are necessary for a solution of its prob-

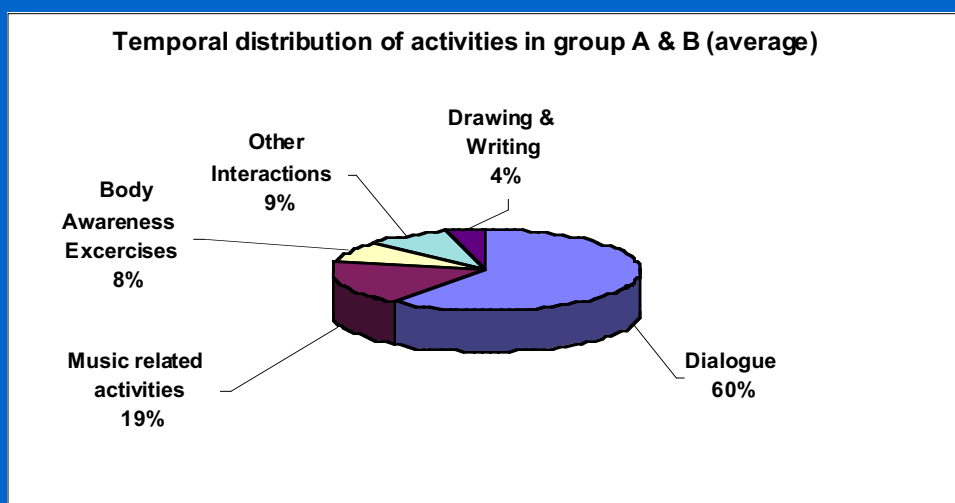
lems. But clients are not able to use them at the moment or they feel that their resources are not approachable. The therapists focus therefore, lies on activating resources, rather than working out problems.

I don't want to go deeper into this here but like to show you another set of data concerning what was actually done for how long during the session times.



FIGURE 81.

What was done for how long in therapy?



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As you can see, music related activities made up 20 % and talking with clients or the group made up 60 % of the therapy time. The body awareness exercises usually introduced the musical and vocal improvisations, e.g.

But let me now come straight to the evaluation issues.

2.2. Who participated? Each of the three conducted groups received 12 sessions of music psychotherapy, each about 3 hours long. Two groups consisted of psychotherapy clients with different psychosomatic symptoms, one group consisted of clients with functional and psychogenic voice disorders. On the whole we treated a number of 30 patients; we had only one dropout. The evaluation I present here relates solely to two of the groups, because the voice disorder clients cannot be compared and therefore merged with the psychotherapy clients. So then we had 21 clients, which is about the number that you need for the application of group statistical methods.

19 of the 21 clients had responded to our ad in the local newspaper, the other two were sent by physicians. We had 12 woman and 9 men and the typical client was about 40 years old, the range was between 27 and 64 years.

In terms of the International Classification of Diseases (ICD-10), 37% of our clients were diagnosed in the category of neurotic disorders (F4), 31% had a personality- or behaviour disorder (F6). In summary we could say that we had a naturalistic sample - and not an experimental, homogenous group of people.

2.3. What did we want to know in terms of evaluation? As I already stated, our design was naturalistic. It was Martin Seligman (1995) who



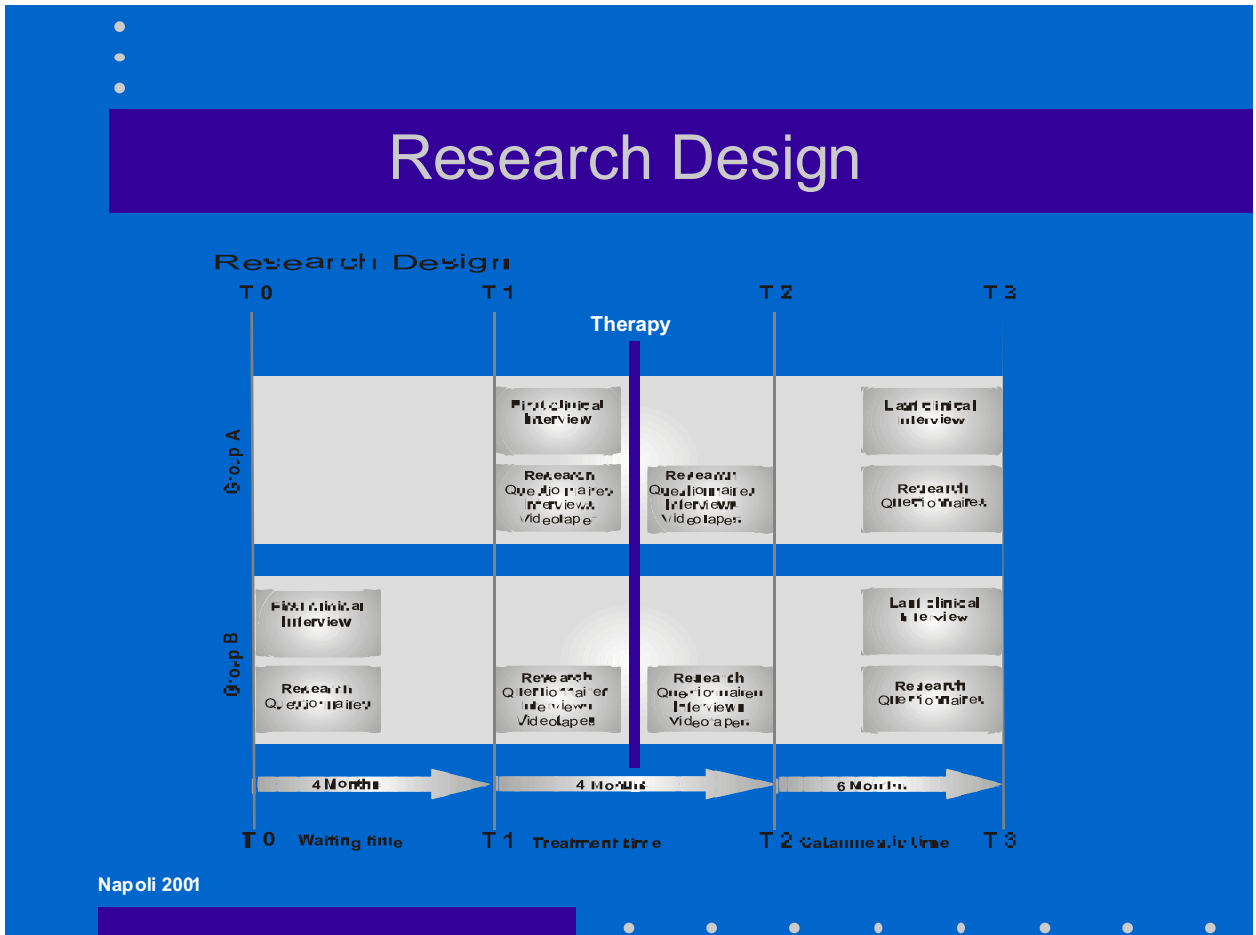
emphasized that we need a differentiation between so called efficacy-studies and effectiveness-studies of psychotherapy. The first relate to the controlled clinical trials, which are conducted under laboratory conditions. Effectiveness-studies on the other hand relate to the effects of real clinical therapy where it is not possible or desirable to randomise a sample of clients. Our group was interested in the effectiveness of the treatment.

We formulated the following hypotheses and qualitative questions:

1. We expected that the symptomatic complaints of our clients, their psychosocial encumbrance (Gesamtbelastung) would decrease significantly.
2. We wanted to know if the change observed would be relevant in terms of the RCI (Reliable Change Index) of Jacobson and Revenstorf (1988).
3. We wanted to know if the clients approached or reached their personal, self-formulated goals for therapy.



FIGURE 82.



2.4. Empirical Strategies and methods. On this transparency you can see our research design. We applied a mixture of questionnaires, interviews and video observation and collected data at three different points of time. For group B, as you can see, we tried something like a waiting control

group. But this construction didn't really work, because we had only ten people waiting.

FIGURE 83.

Research instruments

Quantitative measures

- Symptom Check List (SCL -90-R) (Derogatis & Franke 1994)
- Questionnaire of Psychosocial Complaints
- Well-Being-Scales of the 'Integra Outpatient Tracking Assessment' (Howard et.a. 1995)

Qualitative and experimental measures

- Goal-Attainment-Scaling
- Focussed Guideline Interview (Merton & Kendall (in Flick 1995)
- Intuitive, process-related drawings by the therapist and research team

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For the quantitative measurement of symptoms we used a very well known and reputable instrument, the Symptom Checklist of Derogatis (SCL-90R).

It comprises 90 items. The analysis results in three global measures and nine single scales like for example depression, anxiety or aggressiveness. Additionally we had a Questionnaire of Psychosocial Complaints and a Well-being measure.

Our qualitative measurement comprised goal-attainment-scaling, and evaluation questions in our qualitative interviews.

As statistical methods we used variance analysis. The level of significance was defined at 5 %; we tested with the u-test of Mann-Whitney.

Of the 21 clients we had to exclude three, because their data weren't complete. So we had a statistical sample of 18 persons.

3. Results of the outcome study

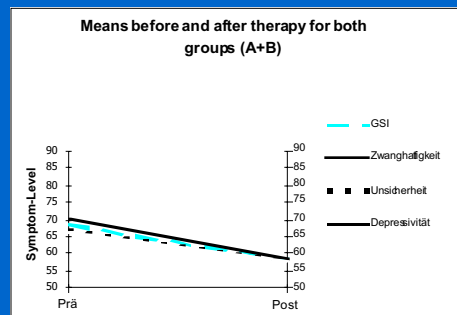
3.1. Global. If we compare the means on the SCL-90-R we get the following results:



FIGURE 84.

Results 1 SCL-90-R

Means before and after therapy for both groups



Obsessiveness
Uncertainty
Depression

*Global Severity Index (GSI), the scales for
Obsessiveness, Uncertainty and Depression*

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We can see, that our hypothesis one, stating that the symptomatic complaints of our clients - as measured on a global severity index - would decrease, is confirmed. This is also the case for most of the other SCL-90-R scales. Most prominent are the changes for obsessiveness, uncertainty and depression. The decrease of uncertainty and depression can be

explained by the stimulating surrounding of a psychotherapy group, while the decrease in obsessiveness may well have a foundation in the playful manner of music therapy techniques like free improvisation.

By the way, a similar decrease can be seen in the outcome of the Questionnaire of *Psychosocial Complaints*.



FIGURE 85.

Results 2 Reliable Change Index

„(...) a change in therapy is clinically relevant, when the client moves from the dysfunctional to the functional range during the course of therapy on whatever variable is being used to measure the clinical problem (...)“ Jakobson & Revenstorf 1988

Individual Reliable Changes (RCI) for SCL-90-R (N=21)				
	Severity Index of the SCL-90-R (GSI)	Obsessiveness	Uncertainty	Depression
Improved	71% (15)	10	11	11
Unchanged	10 % (2)	9	8	6
Worse	19 % (4)	2	2	4

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There is one measure that is most informative for our purposes. It is the so-called Reliable Change Index or RCI, which was constructed by Jakobson and Revenstorf (1988). I will spare us the very complex statistical formula. The measure for success of a therapy is the number of persons

with clinically relevant change. Yet only those with manifestly dysfunctional initial values will show relevant change in this sense.

As you can see on the transparency 71 % of the clients improved significantly concerning the global symptoms' measure of the SCL-90-R. This is a pretty good result for psychotherapy groups, if compared to behavioural or psychoanalytical treatment.

One could ask though, why we have such a high percentage of clients whose symptoms got worse. But this is easy to explain. All four clients whose symptoms increased had not been in a clinically relevant range of symptoms before therapy, two of them were even clearly below the standard (which is 50 points with the SCL-90-R). So changing for worse regarding symptoms may clinically indicate an improvement, regarding self-perception for example.

In general we can say that the 21 clients investigated came with heterogeneous complaints and goals into treatment. Most of them improved significantly concerning symptomatic self-perception measured in questionnaires. And even more clients improved respecting their personal therapy goals.

Let me now come to this more individually based view on therapeutic success.

3.2 A short case illustration (Andrej, group B). Goal-attainment-scaling has been a widely used method throughout the last two decades. The interviewee gets asked to rate an initial number to a situation, a feeling, a state



of mind etc. on a scale. After a period of time she or he is asked again which number would now be appropriate.

Each of our clients was asked about three of his major therapy goals in the first interview and he had to rank those goals. Then, after therapy, he got asked again to evaluate his success in reaching these goals.

Let us now see how one of the clients got along with the therapy and the methods we used.



FIGURE 86.

Case illustration Andrej



Painting by the client after a vocal improvisation

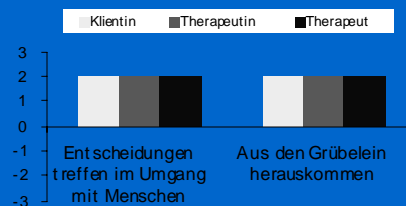
ICD-10: F60.5 Obsessive-compulsive personality,
F 40.1 Sociophobic behaviour on neurotic level of functioning

Specific therapy goals

1. Improve my capability of deciding things
2. Stopping my permanent ruminating about things

Specific therapy results

1. Improved significantly (+2 on the scale)
2. Has almost all gone. „I stopped ruminating“ (+2 on the scale)



In how far did you reach your goals?

- +3 reach it totally
- +2 almost reached it totally
- +1 approached it
- 0 nothing changed
- 1 it got worse
- 2 it got significantly worse
- 3 it got extremely worse

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Andrej contacted us after having read our newspaper article about the music psychotherapy groups. He complained about feeling down and out all of the time. He said that he was permanently ruminating over things, his thoughts spinning around the same issues without being able to decide

upon anything. He was 34 years old and hadn't finished a single of his numerous job trainings and or schoolings.

He painted this picture after his participation in a spontaneous free improvisation session with the whole group, which lasted for about 30 minutes.

As therapy goals he specified two things:

- He wanted to improve his capability of deciding things
- He wanted to overcome his permanent ruminating

Of course during therapy we tried to differentiate between general expectations, among, which might contain unrealistic ideas, and more realistic goals that the clients with help of the therapists and the group could probably achieve.

For each of the clients we created a case sheet, which comprised all the evaluation data in a very dense form, be it qualitative or quantitative. In these sheets we recorded a clinical problem description by the therapists, the diagnosis, the specific goals and the unspecific expectations we could extract from the interview.

You can see the goal-attainment-scaling of Andrej on the right side of the transparency. In his view he improved a lot concerning his capability of deciding things. His ruminating improved equally.

We also let the two therapists rate his improvement on his self-formulated therapy goals. And in this case the evaluations fit perfectly together - which is not at all the case with other clients.



Andrej was a client who experienced great benefits from the music related techniques. While yearning for order and structure throughout the first therapy sessions, extremely while the group was improvising, he continuously accomplished a state more free in thought and emotion. Irritation, in his own words, was substituted by a growing interest in playing and playfulness. In the interview he stated that it was this spirit of playfulness, which he learned from the other group members and the music making. When he was in the 6 months-follow-up he reported that he did no longer struggle with his own insufficiency dissatisfaction. He kept this more playful attitude even after this period of time. He also reported that for the first time he had made a clear decision to finish his school now. According to this, his results for the item of "obsessiveness" in the SCL-90-R decreased significantly.



FIGURE 87.

Intuitive drawings of a client's therapy process 1



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3.3. Intuitive drawings. In the end, I'd like to present a very intuitive and free-style method of evaluation, which I invented for the reflection of the patients outcome. At the end of each group treatment the therapists and researchers conducted a final nonverbal evaluation meeting: Equipped with oil colours and paper we took exactly 5 minutes time to focus on each

patients` therapy process and to produce intuitively a colour painting that visualises the outcome. With colour and form we illustrated intuitively a symbolic overview on the process in time and space as well as on significant change moments during the individual therapy process.

The idea was not to concentrate on what we consciously knew about the clients, but rather to produce Gestalt-like, more unconsciously driven drawings of what we conceived to be most significant in therapy process of the clients. Of course this is not to be considered as traditional scientific investigation, yet, all of us were quite astonished about the density and "morphogenetic field"-like results we got from this experiment.



FIGURE 88.

Intuitive drawings of a client's therapy process 2



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What you can see on these transparencies is the result of this experiment for two different clients, which reveals an impressive coherence in the symbolic language that was spontaneously used by 5 different researchers.



4. Conclusion. First of all, the quantitative evaluation of our groups was successful, if we consider the RCI and the non-controlled comparison of statistical means on different questionnaires.

The SCL-90-R fitted well into our project and it was accepted by the clients.

As we see it now, we made several unlucky decisions concerning the selection of research instruments. This was due to insufficient counselling of our research team at the beginning. What we learned from this: don't make any compromises in terms of what you can achieve even in a pilot project. For example there wasn't a good reason why a control group should not have been established. This would have enforced the impact of our investigation. At least we then could have published our results in mainstream medical journals.

The qualitative evaluation was much nearer to our own way of approaching the clients. The goal-attainment was a perfect measure in the sense that we could use it during the therapy process.

Concerning our research policy I would like to put it like this: We discussed three times as much as was necessary, unfolded five times as many questions as could be answered and collected ten times as much data as was required. In a follow up study we could certainly do this work much more focussed and effective.

Concerning myself I am once again confirmed that I am a full blood therapist much more than a researcher. The often inspiring and creative, more often difficult process of research in a team fascinates me, but I am not



keen of the product. As a psychotherapist my work is radically process oriented, not goal or result oriented. In my view research in music therapy has to serve the clients and is not a goal in itself.

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6. Short Biographies. Sabine Rittner

is a licensed Music Psychotherapist working at the University Hospital of Heidelberg, Department of Medical Psychology. She teaches medical students, nurses and doctors and is working with outdoor psychotherapy clients, mostly psychosomatic and cancer patients. Since

1980 she teaches as a lecturer and gives supervision at many different Universities and other educational institutions in Germany and other countries. She is specialised in the use of altered states of consciousness in psychotherapy and integrates Voice Therapy, Bodywork, Gestalt and Hypnotherapy (Milton Erickson) into her therapeutic work. Since the early days of the Seventies she is one of the pioneers of the integration of voice and the bodywork into music therapy practice and theory. Last but not least she organized the research project "Voice and music in psychotherapy".

Henrik Jungaberle

*(*1967) is Doctor of Human sciences (Dr. sc. hum.) and Diploma Music Therapist working at the Department of Medical Psychology at Heidelberg University Hospital. He teaches Health psychology and is engaged in music psychological research. Among other things he is interested in theory development for the creative therapies and the role of the arts in preventive approaches.*



7. Contact

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*Patterns of preverbal communication - Microanalysis of
interaction in Orff-Music Therapy*

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I am going to present you the story of a clinical study focussing on the development of preverbal communication processes in Orff music therapy. The clinical study at the music therapy department in the center for social pediatrics in Munich was part of my doctoral dissertation in developmental psychology and has been scientifically counseled by Dr. Mechthild Papoušek from the department of Social Paediatrics and by Prof. Rolf Oerter from the department of Developmental Psychology at the University of Munich.