Chapter 18

Microanalysis of Processes of Interactions in Clinical Improvisation with IAP-Autonomy

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Introduction

The Improvisation Assessment Profiles (IAP) by Bruscia (1987) are an assessment tool for research and clinical practice that has been used and discussed frequently in music therapy teaching, research and practice over the last 20 years (see, for example, Gardstrom 2004; Pavlicevic 1997; Stige and Østergaard 1994; Wigram 1999, 2004; Wosch 2002). In this book other contributors discuss its application for microanalysis (see Abrams in Chapter 7, Scholtz, Voigt and Wosch in Chapter 5 and Wigram in Chapter 16). The IAP contains six profiles and is a highly differentiated instrument of measurement for diagnosis and examination of clinical improvisations, especially within a framework of musical analysis. The method is highly suitable for examining microprocesses, which are the subject of this book, and the modification presented here originated in emotion research in music therapy (Wosch 2002). Within the context presented in the following theoretical section, the IAP described here focuses on the use of just one of the profiles in the IAPs – autonomy. Microprocesses can change frequently from one interaction quality to another within an improvisation. This modified IAP shows these microprocesses in musical interaction between client and therapist in a single clinical improvisation. In addition, the modified form can indicate how musical interactions within a clinical improvisation begin. It mirrors both therapist's and client's use of varying musical parameters in musical interaction and reaction. In the emotion research work described in this book (see Wosch in Chapter 17; Wosch 2002, p.234) different musical interactions associated with particular emotions can be calculated.

Theoretical basis

The history of the IAP begins with its creator, Kenneth Bruscia (1987) (see also Table 18.1). He developed this assessment instrument for clinical improvisation out of his own clinical

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practice. The analysis primarily emphasises musical criteria, which are observed and evaluated within six profiles described below. An example can be found in the profile Integration relating to clinical improvisation, which refers to the relationship of one musical element to another, for example relationships between rhythmic figure and ground (Bruscia 1987, p.465). The integration is divided into five categories, which are defined by Bruscia. In the profile Integration, for example, the category 'over-differentiated' refers to too much integration. All categories are defined for each of the six profiles using a series of musical levels and scales, and are examined and evaluated accordingly. The scales used are rhythm, tempo, metre, tonality, harmony, melody, volume and timbre.¹ A highly differentiated picture of the client's clinical improvisation emerges, a musically based assessment of the client based on a current clinical improvisation.

Wigram (1999, 2004) points out that the range of profiles and scales is too extensive to be used in its entirety in clinical practice. In the everyday life of a clinic, there is neither space nor time for lengthy and differentiated analysis of clinical improvisation. For this reason, Wigram developed a shortened, modified version (1999, 2004) for use particularly in diagnostic assessment work with children and adolescents with autism, Asperger Syndrome and developmental and behavioural problems. First, he chose two profiles out of the six that were particularly relevant for analysing relationships and style of play: variability and autonomy. Second, he limited the possible goals of IAP to a single aspect, different from those mentioned by Bruscia. Wigram also proposed that for longer term clinical interventions sections of individual clinical improvisations be taken from a course of therapy extending over a period of weeks and compared with each other (see Chapter 16 in this book). Analysis of a process, as opposed to pure assessment, enables transitions during the course of music therapy to be visualised and controlled. Additional alternative applications of the method, exemplified in my Chapter 17, involve the use of only one profile for a specific type of analysis – autonomy. Here, a clinical improvisation or individual sections of the improvisation are not analysed as a complete entity. The course of events, or process, of the entire clinical improvisation is evaluated. Second-by-second client and therapist use of rhythmic scales, volume scales etc. is continually evaluated as to whether previous categories of autonomy are retained or diverged from. During this process, the original IAP assessment tool becomes a micro-process analysis using IAP (an Improvisation Microprocess Profile, IMPP). In addition, the IAP used as a quantitative measurement instrument provides a complete picture of processes that occur in the clinical improvisation. In comparison to other 'objective methods of data collection' (Bruscia 1987, p.411), the IAP becomes more objective. Results can immediately be understood by the reader, as the score of the clinical improvisation, the description and tabular portrayal of the IAP-Autonomy microanalysis (see the Method section below) are used together.

In the version presented here, client and therapist are examined with respect to their autonomy categories. This is using Bruscia's suggestions for examination of interpersonal

¹ According to the question posed in the assessment, a physical scale can also be evaluated.

relationships. The question is 'how the intermusical relationships relate to roles and role relationship between the improvisers' (Bruscia 1987, p.410).² Of the six profiles, the IAP-Autonomy is the most applicable as it 'helps one look closely at the inter-personal events that are going on' (Wigram 2004, p.219).

A further use of the IAP can be found in Gardstrom (2004). Gardstrom applies the IAP in its original form, as developed by Bruscia. However, she utilises the IAP less as an assessment, and more as a source for understanding the meaning of clinical improvisations. The centre of attention is not the client alone, as both client and therapist are examined equally. To some extent, musical differentiations are made between varying sections within a clinical improvisation, allowing processes within the improvisation to become visible. Analysis is not performed second by second, as in the process by Wosch, but over the course of two to three transitions within an improvisation. Table 18.1 summarises these developmental steps of IAP.

Method

The procedure used in microanalysis of interpersonal transitions using the IAP-Autonomy modification follows. It must be noted that the microanalysis presented here is related to a music therapeutic dyad. Wigram's modification above also analysed <u>dyads</u>. It would be possible, however, to examine group improvisations with microanalysis using the form described here.

The process of analysis consists of the following five steps, which will be described in detail:

- 1. Audio or video recording of the clinical improvisation.
- 2. Transfer of the audio recording onto computer using SoundEdit (or another program).
- 3. Production of a score of the clinical improvisation.
- 4. Microanalysis of the clinical improvisation using IAP-Autonomy in tabular form and written description.
- 5. Production of a diagram that displays all the important interpersonal transitions during the improvisation.
- 2 This reduction was the result of an analysis of emotional processes in clinical improvisations carried out using the above modification. According to emotion definitions by Ulich and Mayring (1992), on which the study is based, <u>emotion consists of four inseparable elements</u>: the body-soul-state, being touched, passive experience in the sense of 'something happening to me' and reactions to inter-personal relationships. The version of the IAP presented here is particularly suited for examining the last element.

Table 18.1: Basis and modifications of IAPs

Author	Profiles	Goals
Bruscia 1987	 Integration Variability Tension Congruence Salience Autonomy 	 Model of client assessment Provide global perspective on client's problems and assets through objective methods of data collection Guiding the therapeutic process
Wigram 1999, 2004	VariabilityAutonomy	 Assessment procedure for analysing change or lack of change in client with comparing different clinical improvisations More use of IAP in clinical practice
Wosch 2002	• Autonomy	 Analysing all interpersonal micro-processes between client and therapist within one clinical improvisation Understanding emotional transitions
Gardstrom 2004	 Integration Variability Tension Congruence Salience Autonomy 	 Analysing main states of processes of client and therapist in one clinical improvisation Understanding meaning of clinical improvisations

Step 1: Audio or video recording of the clinical improvisation

Step 1 restates the necessity that an audio or video recording of the clinical improvisation be available. When video recordings are used, interpersonal activity can be observed as well as heard. The audio recording provides the raw material for the study, and the recording should thus be made under optimum circumstances. Microphones should be positioned so as not to emphasise only one instrument. As volume is evaluated by the IAP, false microphone placement can cause grave distortions of results. While distortions cannot be eliminated completely, they can be minimised. If excellent recording conditions exist, wireless minimicrophones could be installed in each instrument available for the improvisation. The result

would be a many-channelled recording in which each instrument could be identified individually. Step 3 could then be computerised, which would save time in producing the score.³ The case presented here used audio tape recordings, which of course also served the purpose.

Step 2: Transfer of the audio recording onto computer using SoundEdit (or another program)

In Step 2 the recording, regardless of original form, is scanned onto the computer as an **audio file**. This is of especial importance for the next two steps. The example provided in this chapter was scanned using the software **SoundEdit**. However, other similar software can also be used. It is important for score-writing and for evaluation in microanalysis with the IAP-Autonomy profile that the recording of the improvisation can be slowed down. Using sound software, individual sections can then be identified and small details perceived. When the listener is able to choose the speed at which he listens to the improvisation he can better differentiate between and objectively perceive individual musical details and their relationship to one another. This is the most important benefit of working with software. Length and beginnings of specific musical occurrences are exactly timed, and rewinding and fast-forwarding digitally is quicker, easier and much more precise than with other audio equipment. SoundEdit produces a curve or visual representation of the music, which provides an objective reading and shows both changes in overall volume and differences in volume between instruments. All sounds and rests are timed precisely and shown by the curve.

Step 3: Production of a score of the clinical improvisation

Step 3, the production of a score of the improvisation, now follows. In the microanalysis presented here, conventional musical notation was used. Contemporary music and music therapy provide us with many forms of music notation, for example graphic notation (Karkoschka 1966; Langenberg, Frommer and Tress 1992). Advantages of traditional notation are, however:

- exactitude
- portrayal of many dimensions of musical elements
- the way the clinician or the researcher listen becomes comprehensible.

Conventional notation provides the most differentiated and suitable basis for evaluating musical scales in the IAP-Autonomy. However, the researcher or clinician should also attempt to understand and transmit the clinical improvisation ethnologically and ethnographically (for ethnography, see also Aigen 1995). He should not, for example, focus too quickly on a certain known style, such as a waltz, but listen to the improvisation carefully and critically, in order to determine whether this rhythmic–metric form can really be found

³ These conditions would be perfect for research with this method.

in the improvisation. In some of the previously examined improvisations, no time signature could be determined. This was left open in the score. At the same time it remained important that the exact length and position of each tone be notated.

In this step dynamics and rhythmic characteristics from each player are evaluated and differentiated. These are important moments, some of which occur within the space of milliseconds. For this reason, a timetable is included in the notation (see notation example, A18.1 on the web-based resources). In this example, intervals of five seconds were used, and each new five-second interval was notated in the piano score (0:05, 0:10, 0:15, etc.). Changes in metre, or whether 2½ or 3 measures are included in a single time interval, can be precisely determined by means of entries in the time scale. In evaluating rhythm and timbre in microanalysis using the IAP-Autonomy, further ethnologically based symbols are used in addition to conventional notation. Their usage depends on the individual musical expression found in the clinical improvisation. It becomes increasingly clear that a clinical improvisation is not traditional, middle-class concert music, for which standard notation can be used, but consists of elementary musical forms. Figure 18.1 lists the symbols and meanings used in the example here.

>	Accent, briefly louder
	Stronger accent, briefly much louder
$\wedge \wedge$	Leaves metre continually, no joint metre shared by both instruments
•	Drumbeat on the middle of the skin
\bigotimes	Drumbeat on the edge of the skin
	Accelaration towards and ending on a specific tone

Figure 18.1: Additional score signs

In the example (A18.1 on the web-based resources), drum accents were of great importance for microanalysis evaluations, and the analysis thus differentiates between stronger and weaker accents. Lower-sounding drumbeats in the middle of the drum skin were differentiated from higher drumbeats nearer to the rim. In addition, there were metrical occurrences of special interest. These included fluctuations in metre (see measure 3, A18.1), and minimal accelerations towards a point of emphasis or certain tone within a particular motif (see from the second half of measure 8 to interval 1, measure 9, A18.1). This example shows how conventional notation is supplemented by other symbols, in order that individual characteristics of the musical system behind the elementary musical form of the clinical improvisation can

On a theoretical level, it must be taken into account that the score, despite all ethnological considerations, is naturally influenced by the score-writer's own subjectivity. The importance of this factor is dependent on the paradigm used, whether positivist or constructivist. Using a positivist approach to the microanalysis method, an attempt is made to reduce the problem in that another specialist (ideally another music therapist or music ethnologist) listens to the recording with the newly written score as a control. He notes differences in the score and discusses these with the writer, which leads to production of a final version. In clinical practice this part of the microanalysis process would not be realistic, but some validation or second listening could be undertaken in supervision or intervision.

Step 4: Microanalysis of the clinical improvisation using IAP-Autonomy in tabular form and written description

Step 4 is the microanalysis of the score with IAP-Autonomy. Categories within the profile autonomy, its musical scales and a description of the microanalysis IAP-Autonomy procedure are listed below. The clinical improvisation is evaluated according to definitions of and differentiations within the profile autonomy according to Bruscia:

Autonomy...deals with the kind of role relationships formed between the improvisers. Scales within the profile describe the extent to which each musical element and component is used to lead or follow the other. The five gradients are:

- Dependent
- Follower
- Partner
- Leader
- Resister. (Bruscia 1987, p.405)

In 'following', the gradient 'follower' is seen as freer steps, 'dependent' as more restrictive or compulsive steps. In 'leading', the same applies to the 'leader'. An excessive desire to lead is associated with the role of 'resister', who strives to avoid communication and interaction. At the gradient 'partner', the central point, an ideal or healthy situation is reached, where leading and following are balanced. Musical impulses are given and developed in the same measure as they are taken up by the partner. In contrast to Bruscia, who defines the five roles in the autonomy profile using nine musical scales and a standardised form of observation (1987, p.409), Wigram selects those musical scales that are relevant to the improvisation, and which stand out on a first, open listening. In a published example the three chosen musical scales were rhythmic ground, melody and timbre (Wigram 1999, p.17). These are the scales used in the method here. An example of Bruscia's five autonomy categories, rhythmic ground, is defined on the web-based resources, A18.2.

In the modification presented here, Wosch (2002) added the elementary musical element volume to the third scale, timbre. Fifteen definitions (five categories within three musical scales) can be used to analyse microanalytical transitions in interpersonal activity within a clinical improvisation. This is evaluated measure by measure, or second by second. Results are noted in a table as shown by Figure 18.2 (based on Wigram 1999, p.17). Two aspects are new. The first is that *every* transition in interpersonal activity in the clinical improvisation is registered by microprocess analysis, not only an exemplary section of the clinical improvisation. The beginning of each transition is noted in the first row of each new table, as these transitions can occur at different times within the improvisation. Each table is thus valid for *one* clinical improvisation. Wigram's table (1999) was intended for a maximum of three.

Time									
Dependence									
Rhythmical basis									
Melody									
Timbre									
Following									
Rhythmical basis									
Melody									
Timbre									
Partner									
Rhythmical basis									
Melody									
Timbre									
Leading									
Rhythmical basis									
Melody									
Timbre									
Resister									
Rhythmical basis									
Melody									
Timbre									

Figure 18.2: Micoranalysis IAP-Autonomy table

The second new aspect is that both client and therapist are analysed. In the table, C is entered for client and T for therapist in the respective autonomy category or categories in each new column.

A18.3 on the web-based resources gives an example of filling out the table, and for the microanalysis using IAP-Autonomy based on the score. The example uses material from the first 17 seconds of a clinical improvisation, and is shown together with the score in A18.1 on the web-based resources. The client plays a drum (upper system), and the therapist plays the piano (lower two systems). The client is considered to be leading, as she plays alone. This gradient is shown in the musical elements in the scales 'rhythmic ground' and 'timbre'. As the drum is a rhythm instrument, the melody scale is omitted for the entire clinical improvisation. A scale can only be of importance in an interpersonal sense (i.e. when evaluating with the autonomy profile) when *both* players have access to it, and are able to relate to it and to each other.

The piano (therapist) starts at second 9. The preceding 6/8 time signature implied by a stronger emphasis on beat 1 and weaker emphasis on beat 4 on the drum (client) is made insecure by the piano (therapist) entering on a different rhythmical level. The client attempts to follow the therapist's new metre and time signature by changing the drum emphasis. The therapist retains the shift in time-signature. In the scale 'rhythmic ground', the therapist is now leader and the client follower (see A18.3). In the scale 'timbre', both are resisters, as shown in articulation used by both instruments. The client plays rather choppily and staccato, and intensifies this articulation form after second 9. In contrast, with the exception of the first note, the therapist plays long, held legato tones.

The next micro transition in musical interpersonal activity is at 15 seconds. The client returns to 6/8 time, and indicates this more distinctly than in measures 1 to 3 by accenting only beat 1. The piano (therapist) stays with his time signature shift and both thus take up the role of resister. On the level of timbre, however, they approach each other, each playing one portato tone. This moment is evaluated as belonging to the gradient 'partner'. This articulation form is new to both client and therapist. Looked at 'under a magnifying glass', it is not begun as an impulse by one player, but simultaneously. This 18-second-long section also shows that within interpersonal activity different autonomy categories can be used within different scales. Brief transitions can be an indicator for interpersonal transitions within the microprocess of an entire clinical improvisation. For example, the resister category in the second micro section of the timbre scale in the example described above is a premonition of the resister role taken up by both client and therapist on the rhythmic ground level in the second micro section. This section shows that both a differentiated picture and a high level of objectivity can be obtained using this form of microanalysis. Verbal descriptions of the musical process, which make the process more comprehensible (see A18.4 on the web-based resources), further the process of differentiation.

In contrast to Bruscia's and Wigram's analyses, the microanalysis using IAP-Autonomy does not analyse every musical scale in the entire clinical improvisation or in a representative section of the improvisation. Instead, all three chosen scales are observed over short time-periods in order to determine the extent to which the scales change according to inter-

personal content. If a change occurs in one of the scales, a new micro section and starting time are noted. This allows change in the autonomy category and interpersonal content to be observed within individual scales. Tables can show, for example, 19 sections or interpersonal transitions within a two-minute improvisation (as in the clinical improvisation shown in previous examples).

Step 5: Production of a diagram that displays all the important interpersonal transitions during the improvisation

In the fifth and final step, all sections are summarised and portrayed graphically. In the clinical improvisation described above, this was done in relationship to a further study using the microanalysis method as described in Chapter 17. The study determined emotional time sections using statistical cluster analysis.⁴ Interpersonal activity during emotion sections of a clinical improvisation was calculated and added together, as in Wigram's version (1999). In contrast, however, results are not used to compare improvisations with one another, but to compare sections within a single clinical improvisation. This allows interpersonal characteristics of each section to be exhibited. In the clinical example described above, the graphs for client and therapist (Figure 18.3) emerged through the addition of the categories, 'dependent', 'follower', 'partner', 'leader' and 'resister', found in all musical scales contained within the three emotion sections calculated in the other study. This clinical improvisation was 120 seconds long. In the first emotion section, from 0 to 50 seconds, anxiety dominated; the second emotion section, from 50 to 85 seconds, and the third section, from 85 to 120 seconds, were both marked primarily by joy. The vertical axis shows the absolute value of an autonomy-category within each of the three sections. The graph was created using Excel or PowerPoint graph function, filling out a table with each category in each line and, in each column, each time section of the clinical improvisation.

The graphs clearly show that the first section is characterised by the client in the role of 'leader' and the therapist in the role of 'resister'. In section two, both of these characteristics recede; at the same time the client can no longer be seen as a 'follower'. The most distinct transition occurs in the last section, in which the therapist clearly takes the lead and the client follows. Microanalysis IAP-Autonomy alone or together with other studies⁵ makes it possible to investigate important interpersonal transitions in clinical improvisations in a form standardised on the basis of musical scales.

- 4 Only working with microanalysis IAP-Autonomy can create interaction-sections of a clinical improvisation with search for clusters of each of the five categories in the course of the clinical improvisation.
- 5 Although the emotional content varies, the three interpersonal profiles of each emotion section were able to be labelled. In other words, varying emotion contents could be correlated to differing interpersonal contents. This can also occur when an emotion appears twice.



Interaction Profile, Client (Drum)





Figure 18.3: Musical interaction profile

Conclusion

Microanalysis using IAP-Autonomy can be used to summarise and portray all interpersonal transitions within a clinical improvisation, or a series of micro sections within a clinical improvisation. In the example above, an additional microprocess can be identified for the entire clinical improvisation of session 12. In the first section, from 0 to 34 seconds, the client leads and the therapist follows. This is interrupted by two short sections in which client and therapist both take up the role of 'tesister'. The section between seconds 35 and 79 contains several phases in which the client leads and the therapist resists. The section from 80 to 96 seconds is interpersonally the same as the first section. This can be said to be an interpersonal rondo-form, although the melodic themes, for example, differ from those in section one. The particular importance of musical analysis in music therapy as opposed to musical analysis in music pedagogy and musicology is made clear at this point. Musical observation of interpersonal transitions relevant to music therapy has a different structure from that found by music theory analyses.

The fourth and final section contains a completely new element. From 97 to 126 seconds, the therapist leads and the client follows in all scales. The new quality of musical interaction is characterised by a brief episode in second 125, which contains the only partner-category in which 'rhythmic ground' can be observed. This practical importance of this particularity will be enlarged upon briefly in the following case study in the form of a micro-section portrayal. On the whole, microanalysis using the IAP-Autonomy investigates the process of interpersonal activity and change within a clinical improvisation in a very detailed, visible and demonstrable manner.

Case example

The following section examines a portion of the microanalysis IAP-Autonomy of a clinical improvisation already referred to in the method section, and illustrates immediate advantages for clinical use in supervision and therapy planning.

The case and the clinical improvisation can also be found in the chapter by Ortlieb *et al.* in this book. The patient was a 32-year-old female in-patient diagnosed with atypical bulimia nervosa. Differential diagnostics categorised the illness as bulimia with depressive-hysterical personality components. Both music therapist and clinic used a psychoanalytical approach. However, microanalysis IAP-Autonomy can be used in every approach of music therapy. Clinical treatment consisted in the case example here of music therapy, psychotherapy conducted by medical doctors, medicinal treatment and other accompanying therapy forms. The clinical improvisation examined here was the only improvisation in the first music therapy session.

With regard to interpersonal transitions, both the beginning and the course of the clinical improvisation have already been described in the 'Method' section. Using microanalysis with the IAP-Autonomy, an important observation of interpersonal activity was made within an important micro detail, one second in length. The observation enabled the therapist to become aware of the potential for development within the improvisation. The micro detail is found in the last section of the improvisation. From 1:37 minutes on, a stable role-exchange takes place over the course of several measures/bars. The client is the 'follower' and the therapist is the 'leader' (see A18.5 on the web-based resources: section 1:34–2:06). This is interrupted shortly before the end of the improvisation for one second at 2:05 minutes. At this point, both client and therapist undergo an interpersonal transition from 'follower' and 'leader' respectively, to 'partner'. The score shows strong accents from the client on beat 1 of measures 86 and 87 (upper system, drum). The piano (therapist, lower two systems) continues to play on beats two and three, as in the two preceding measures. At the same time, he reduces in volume, playing 'after beats' in the bass and leaving out descant tones. The therapist leaves the role of leader to a certain extent, and the client increases in timbre. They approach each other in an equal manner and in the scale 'rhythmic ground' even interlock. The client plays on beats one and four, the therapist on two and three. A new rhythmic pattern emerges as a give and take between client and therapist, which could mark the beginning of a longer interpersonal section; qualitatively completely new in comparison

to the interpersonal activity in the clinical improvisation up to this point. For the therapist, however, this marks the end of the improvisation, and he plays a single, final note in the next measure. For the client, the end appears not yet to have come. A strong accent follows on beat 1 of the last measure. On beat 2, he hits the centre of the drum skin in *mezzo-forte*, as if to indicate that the improvisation should continue. She then realises that the therapist has finished, and reduces in volume abruptly from *mezzo-forte* to *pianissimo* on beat 3. The playing stops.

Such microanalyses of interpersonal transitions can make minimal transitions, their interpersonal meaning and potency visible. In clinical practice, it is important for the therapist that he or she is able to perceive such details and react to them quickly with doing something or not doing anything. Microanalysis with IAP-Autonomy provides a systematic and objective instrument of measurement. In this case, microanalysis with IAP-Autonomy overreaches client assessment and, as a standardised analysis instrument, offers the therapist potential for perception, control and understanding of interpersonal transitions within the therapist–client dyad. The method is time consuming but can, however, provide important information for supervision in music therapy, as well as systematic learning of competence in music therapeutic practice.

Summary and perspectives

Microanalysis using the IAP-Autonomy makes interpersonal transitions within clinical improvisations visible and allows them to be viewed objectively. The analysis bases itself on audio recordings from which a detailed score of the clinical improvisation is made. This score is examined second by second using the IAP-Autonomy to determine which of the three musical scales 'rhythmic ground', 'melody' and 'timbre' can be identified. Each interpersonal transition is noted in a table (see Figure 18.2). Various musical interaction profiles can be drawn upon as interaction transitions in the course of a clinical improvisation. This is described in the Method section above.

This method can greatly assist in clinical practice when one is dealing with interpersonal problems not perceived or understood by the therapist. Two steps can be taken to reduce the time necessary for analysis. First, when only certain sections of the improvisation are not able to be understood interpersonally, or when the therapist's feelings towards the client in certain sections are unclear, only these sections are analysed. The second step is cooperation with a university at which microanalysis IAP-Autonomy is taught. Material is analysed by students, who at the same time learn from the process (for information on this service see the contact details in the list of contributors at the end of the book).⁶ For teaching music therapy, the method provides an instrument with which students can increase their sensibility to interpersonal processes in clinical improvisations and learn a system for interpersonal

6 The author is interested in receiving information regarding work with microanalysis IAP-Autonomy in clinical practice or at other universities.

understanding of musical elements. For music therapy research, the analysis offers an approach for a wide-ranging standardised multi-centre study, in which all microanalyses using IAP-Autonomy in clinics and in music therapy teaching can be collected and basic music therapeutic and musical processes examined using meta-analyses. In order to increase the clinical use of microanalysis more quickly, computerised versions should also be developed. These already exist in reference to other musical interaction criteria in work by Erkkilä (see Chapter 10), and in reference to singing by Baker (see Chapter 8).

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