

Psychomotricity: Effects of psychomotor interventions from the perspective of teachers.

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Framing and background of the survey

Psychomotricity, to make this clear at the beginning, is the term used by the European Forum of Psychomotricity and related member countries (see www.psychomot.org) to describe the European understanding of psychomotor interventions. Within this context, the various German-speaking countries apply differing approaches to psychomotor intervention. In Germany and Austria there is a great variety both in the context of working with children, with adults and with elderly, from developmental support to therapy, and in the work and employment conditions (Kuhlenkamp, 2018; Zimmer, 2006). In Switzerland, psychomotor therapy – as it is called there – is an established component in special needs support at schools (Adler et al., 2007; Vetter, 2016). As regards the actual content, psychomotor therapists in the German-speaking parts of Switzerland work mostly with the concepts of German-speaking psychomotor intervention. From a European perspective, all these forms of support can be summarised under the term “psychomotricity“. This encompasses the similarities rather than any differences, namely a holistic view of education, support and therapy using movement (Seewald, 2013).

The data presented here was collected in a major city in the German-speaking part of Switzerland. The concepts employed in the region where the data originated display a special feature, based on the specification made by the cantonal administration that there must be a formal differentiation between “child- or case-specific” and “subject-specific“ intervention (Bildungsdirektion Kanton Zürich, 2007). These specifications were made in the follow-up-discussions around inclusion in the sense of the Salamanca declaration of the UNESCO from 1994, in which 92 states agreed to improve educational justice in their countries. Thus, whenever this

Abstract

This article presents excerpts from the results of an online survey of more than 200 teachers whose pupils have used psychomotor intervention. The teachers surveyed expressed a high level of confidence with support by psychomotor therapists: they believe, to very high percentages, that psychomotricity is successful. In general, they rate the therapy that takes place in the dedicated therapy room of the psychomotor therapist as more successful than the preventive or integrative work he or she supplies in the classroom. This leads to questions from the viewpoint of inclusion.

Keywords: Psychomotricity, Motology, Psychomotor Intervention, Efficacy, Integration and Inclusion, Therapy Setting, Support Setting

article

- mentions “therapy“and this is not otherwise specified, this means child- or case-specific therapy as offered by the therapist in the psychomotor therapy room;
- mentions integrative and/or preventive forms of support, this means either subject-specific work in the classroom or the above-mentioned subject-related counselling and support offers. ¹

Methodology and samples

This article presents only a part of the results of a wide-ranging survey that predominantly focused on the question of how satisfied teachers were with the organisational procedures, from registering for psychomotor intervention to its conclusion (see also Vetter & Sandmeier, 2016). It discusses items of this survey relating to the following question: How do teachers assess the effects of psychomotor intervention and its forms of intervention?

The sample group chosen to participate in this survey was chosen from amongst teachers who had at least one child in their class who was receiving support/therapy by a psychomotrician in the school year 2012/13 or at the time of survey. This ensured that the survey respondents were already familiar with the concept of psychomotricity in some way or other and thus were able to answer the items. A total of 479 teachers were invited to participate in the survey.

The collection of the data, using the LimeSurvey tool, started in the second week of January 2013 and was concluded at the end of that month. Of the 479 teachers invited, 215 participated in the online survey, which corresponds to a response rate of 44,9%.

Of the participating teachers, 151 submitted a complete set of data, and 64 broke off the survey at various stages. Thus, the answers of 42,6% (best case scenario) or 31,5% (worst case scenario) of those teachers initially invited to participate could be included in the evaluation of the survey.

Remarks on the evaluation and presentation

The survey had been designed to yield a descriptive evaluation, to which this article has added procedures from the field of inferential statistics. The incomplete data sets from participants who broke off the survey at one point or another were integrated as best as possible. There is some variation in the number of valid data; this is owed to the fact that the teachers only evaluated those forms of intervention they were familiar with.

¹ In Switzerland, despite the knowledge of actual discourse, in official documents the term integration is still in use, and the term inclusion is basically never used. From an objective point of view, concepts and developments in the school system often comply to best practice examples of inclusion.

The graphics were mostly designed using Microsoft Excel 2013. The purpose of the additional inferential statistics analyses contained in this article is to provide further statistical validation of apparent situations and distributions. To achieve this, the ordinally scaled data was grouped in thematically arranged mean indices. Non-parametrical, distribution-free procedures were employed for the statistical SPSS 22 analysis: first the Friedman test (Bortz, Lienert, & Boehnke, 2000, pp. 267), then the Wilcoxon rank test for matched samples (259-266) including the Bonferroni correction. The significance level after applying the correction was 0,017.

The questions contained in the graphics are an almost word-for-word rendition of the questions in the survey. They represent only that section of the wide-ranging survey which asked about the success of an intervention. For the purpose of clarification, it should be understood that the present is not an evaluation of a previously conducted intervention but rather the acquisition of data in the sense of a cross-sectional data collection, aiming at recording experiences made with psychomotricity in general.

Sociometric data of the sample examined

Over 95% of the participating teachers taught either at a regular pre-school (41,1%), a regular school (48,3%) or at a “Grundstufe“, a school form peculiar to Switzerland that combines pre-school and the first two years of elementary school (6%). Less than 5% of the participants indicated they were working in a small-group kindergarten (4%) or in a small class for students with special needs (0,7%). More than two thirds of the participating teachers had been teaching for more than seven years, fewer than 1% were in their first year of teaching.

The teachers were also asked about which children they had so far registered for psychomotricity. The evaluation of this question showed that most of the children were registered because they had problems with their motor skills.

Results

What are the experiences of teachers with psychomotor intervention – successes and failures?

When asked about their experiences with successes and failures of psychomotricity in general, the teachers' answers resulted in the following **figure 1**:

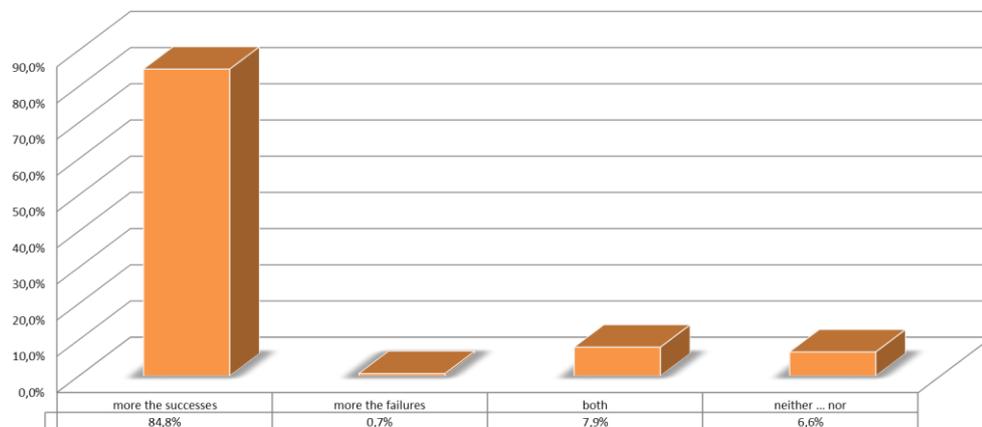


Figure 1: Intervention: how participating teachers perceived successes or failures of psychomotor intervention. Question: Looking back at the contact you've had with psychomotricity: what comes to mind: More the successes or more the failures?" (n=151)

84,8% mentioned the successes achieved through the therapy, whereas 0,7% remembered the failures. 7,9% remembered both equally, and 6,6% had no specific memories of success or failure. Subsequent to this question, the participants had the option to describe success, failure, or both. As a result, they almost exclusively mentioned positive aspects, mainly in the areas of motor skills and personal development of the children.

Which forms of intervention do teachers consider more successful than others?

This question set out to establish what teachers thought of the above-mentioned intervention forms: psychomotor therapy (in the psychomotor therapy room), integrative support, and preventive support (as a rule, these two forms of support are given in the classroom). When asked which of these forms the teachers judged to be successful, their answers yielded the following picture (**figure 2**):

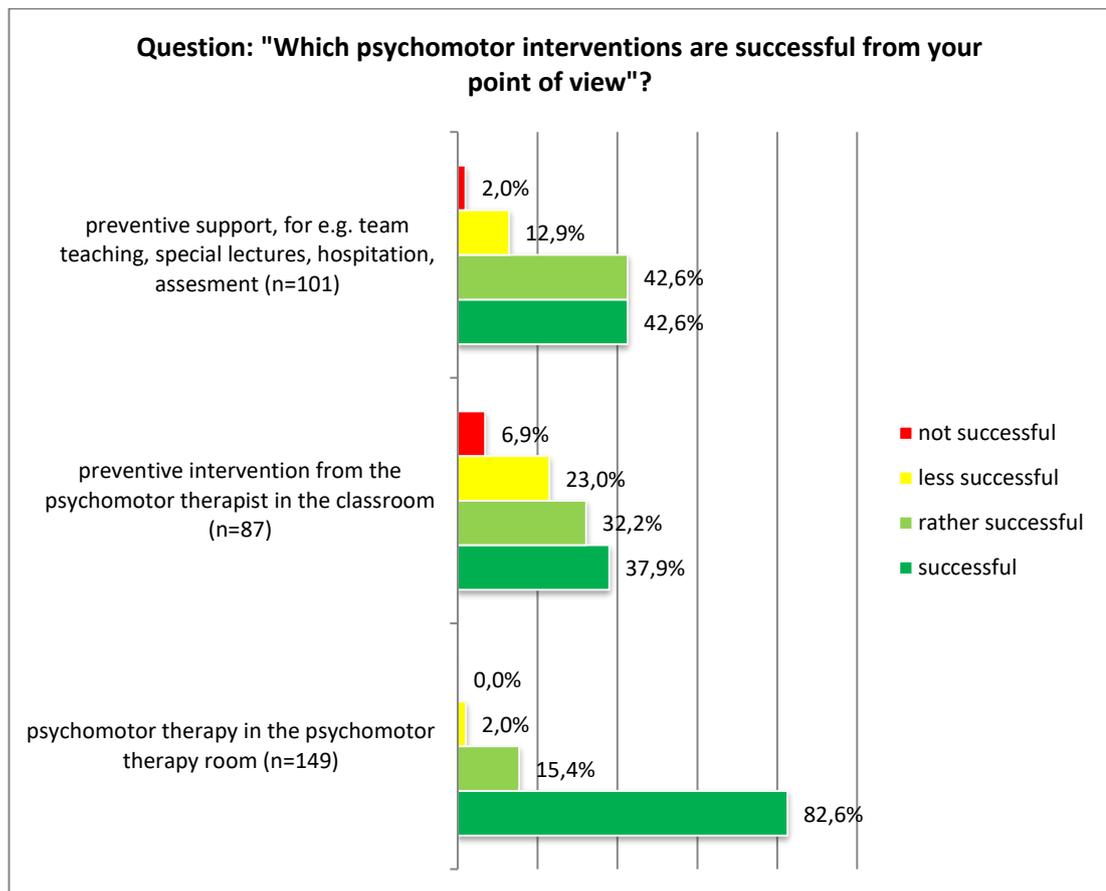


Figure 2: Comparing therapy, integrative support and preventive support: how participating teachers perceived successes and failures (n= number of valid values)

- 82,6% of the participating teachers considered psychomotor therapy in the psychomotricity room as successful, while 15,4% qualified this as “rather successful“
- 42,6% thought preventive support was a successful or rather successful approach. 12,9% considered this form to be less successful and 2% as not successful at all. One third of the participants (of n=151) were not familiar with this form.
- Of those participants familiar with integrative support offered by a therapist in the classroom, 37,9% said this was a successful approach,
- 32,2% considered it rather successful, and 23% less so. 42% of the participants were not familiar with this form of support.

Applying the non-parametrical Friedman test for matched samples to those participants that were able to compare all forms of support (n=79) yielded a highly significant result ($\chi^2=45.89$, $df=2$, $p=.000$). The subsequent paired Wilcoxon test for

matched samples showed that therapies conducted in the psychomotricity room are considered more successful to a very highly significant degree. Preventive support forms and integrative support in the classroom were not held to differ significantly from each other in described success rates.

Thus the currently most commonly offered form of psychomotor intervention in the therapy room is known to all participants and achieved the best evaluation. However, both integrative and preventive support forms were also held to be successful.

Which form was a successful approach for which situation?

The participating teachers were asked, in two separate questions that did not relate to each other, to assess the success rate of the measures undertaken for a diverse range of problematic situations. The questions contained six categories which had to be assessed along a four-tier scale: successful / rather successful / less successful / not successful.

For both questions (relating to support and to therapy, respectively) the categories were identical: children in need of support or therapy for social-emotional issues/ gross motor skills / fine motor skills / graphomotor skills / building self-concept / attention deficits or challenging behaviour. The language chosen was that commonly used in the Zurich area for these problem areas. The results for both items are shown together in the following graphic (**figure 3**).

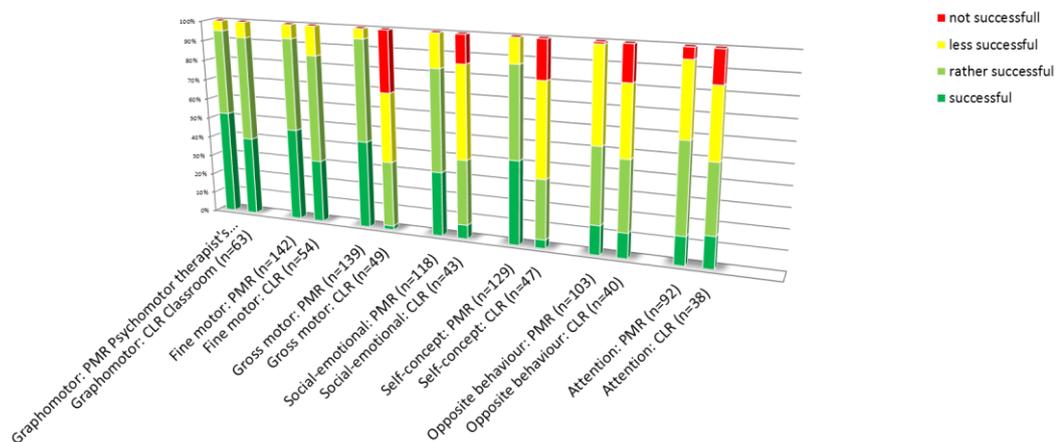


Figure 3: How teachers assessed success of psychomotor intervention (generally in the therapy room) and integrative and preventive psychomotor support (generally in the classroom), comparing diverse problematic situations (n= number of valid values. The graphic should be read as follows: the answers relating to the respective category, once for the setting “therapy in the therapy room” and once for the setting “therapy in the classroom”, are arranged vertically. Thus, reading from the bottom up, bars 1, 3, 5, 7, 9, 11 and 13 represent results for psychomotor therapy offered in the psychomotor therapy room, and bars 2, 4, 6, 8, 10, 12 and 14 represent the preventive and integrative forms offered in the classroom.

As regards the support offered (as a rule) in the psychomotricity room, the following can be established:

- In the three core areas fine motor skills, gross motor skills and graphomotor skills respectively, well over 80% of the participating teachers considered the measures offered by psychomotor therapy as successful or rather successful. With a total of 95% across the categories, support in the area of graphomotor skills achieved the highest success rating.
- Measures of psychomotor therapy for children in need of social-emotional support were considered successful by 32,2% of the participants, and rather successful by 50,8%. Where support had been offered to children who needed to build their self-concept, the evaluation was likewise very positive: 41,9% and 45,7% of participants considered this successful and rather successful, respectively.
- The evaluation of support offered to children with challenging behaviour or attention deficits was held to be successful or not successful in roughly equal measure.

For the purpose of calculating inferential statistics, three additive indices were formed from the items displayed: the index “intervention oriented towards motor skills (IOM)” comprises the dimensions “graphomotor skills”, “gross motor skills” and “fine motor skills”; and the index “intervention oriented towards emotional development (IOE)” comprises the dimensions “social-emotional” and “self-concept”. The third index, entitled “behaviour indicating problems (BIP)” comprises “attention deficits” and “challenging behaviour”. An analysis of the evaluations by those participants who provided a valid value for all indices ($n=92$) shows a highly significant difference in the Friedman test ($\chi^2= 81.31$, $df=2$, $p=.000$). The subsequent paired comparison (Wilcoxon test) shows that motor intervention is regarded as more successful than intervention oriented towards emotions, followed by measures applied in behaviour indicative of problems. Overall, all of the indices show highly significant differences to each other.

With regard to the integrative and preventive forms of support that are usually offered in the classroom (displayed in the same graphic) the following can be established: Of a total of 151 respondents, between 38 and 63 were familiar with the respective form of support. This shows upfront that the forms of integrative or preventive support offered within the class as a group are known to fewer than half, sometimes to as few as one quarter of the teachers forming this sample.

An assessment of the evaluation of the success of psychomotor intervention in the classroom by individual category results in the following picture:

- In two of the seven categories, over 80% of the participants agree that this is successful, in two further categories agreement is over 65%, and in one further category agreement is at just about 60%.

- The areas that achieved the best ratings by far were graphomotor skills and fine motor skills. Taken together, over 90% of the interventions were considered successful or predominantly successful. Likewise, these are the areas the highest number of teachers were familiar with.
- Beyond this, the evaluation of all other forms of support tends towards the positive. As regards children with attention deficit, the support was assessed as successful or not successful in roughly equal measure, which was the least positive result for all the support forms that were the subject of the survey.
- Summarising the preventive forms of support offered in three umbrella indices for the areas “IOM“, “IOE“ and “BIP“ (analogous to the process described above), and then comparing the evaluation by the 37 participants who assessed all of the support forms yields a highly significant result in the Friedman test ($\chi^2= 20.37$, $df=2$, $p=.000$). The paired comparison (Wilcoxon test) shows that here, too, motor skill intervention was evaluated more favourably to a highly significant degree than intervention in the other two areas. There were no significant differences in the evaluation of the preventive forms in the IOE and BIP scales.

It can be said that the positive evaluation (successful and rather successful) of integrative and preventive support offered in the classroom is weaker in almost all areas than that for therapy offered in the psychomotricity room. This result is further substantiated by inferential statistics ($\chi^2=11.919$, $df=1$, $p=.001$) when one creates a single, higher-level index for support offered in the classroom and support offered in the psychomotricity room (provided that a minimum of four forms of support were evaluated) and then compares this by means of the Friedman test ($n=45$). It should be noted, though, that due to the lower degree of knowledge about what was offered in the classroom, the composition of the sample and the resulting answers was different (see also the respective n of participating teachers and the discussion further below). It should furthermore be noted that as a consequence of the regulated allocation of children to therapy forms in the city where this survey took place, the target groups for these forms of interventions cannot be identical.

When looking at the individual comparisons, what stands out is how teachers perceive successes in the three categories social-emotional, gross motor skills and self-concept. Nobody (0%) thought that the work in the psychomotricity room was not successful, and only 16,9%, 5% and 12,4% (with respect to the three above-mentioned categories) said they considered it successful only to a degree. However, the results for the forms of integrative and preventive support as applied in the same categories paint a different picture: altogether, over 60% of participants considered working with children with special social-emotional needs in the classroom as not successful (14%) or less successful (46,5%). With regard to support for gross motor skills, the number of participants who considered this work in the classroom as not or less successful rose

to 65% and 34,7% respectively, compared to 0% and 5% respectively when looking at the identical categories of work carried out in the psychomotricity room.

The results are similar for support for children who require support in building self-concept. Only one third (overall) of participants thinks that intervention measures carried out in the classroom were successful (4,3%) or rather successful (28,8%). When asked about the work in the psychomotricity room, with identical themes and goals, only one eighth shares this view: no one saw this work as not successful (0%) and 12,4% considered it less successful. Furthermore, 41.9% of participants thought that the therapy in the psychomotricity room had been successful and 45,7% considered it rather successful.

Likewise, the differences tended to be less pronounced in the area of supporting children with attention deficits. However, as already mentioned, this category – together with the category “children displaying challenging behaviour“ – received less positive evaluation than the others.

Summary of the results

The results presented above show that therapeutical work in the psychomotricity room is considered to have a higher success rate than preventive or integrative support forms. Overall, the participating teachers expressed absolute certainty that the therapy and support were generally successful.

With regards to the effects of psychomotor therapy (as a rule, carried out in the therapy room), over 90% of the participants held this to be successful or predominantly successful in the areas of fine motor skills, gross motor skills and graphomotor skills. Likewise, psychomotor therapy for children requiring social-emotional support or support in building their self-concept is very decidedly considered a successful approach.

The evaluation of therapeutical measures undertaken with children with challenging behaviour and with attention deficits yields a more or less balanced assessment as successful and not successful, respectively.

The evaluation of preventive or integrative psychomotor support (as a rule, in the classroom) is striking inasmuch as that in none of the surveyed intervention areas, negative assessments prevailed. Within this section, the areas of support for graphomotor skills and fine motor skills received the best evaluations (90% and over 80%, respectively). Among children with attention deficit problems, the evaluations were equally balanced between successful and not successful.

Discussion

In general, it must be noted that in surveys like this one, any group of participants interviewed about a certain situation – in this case, psychomotor intervention as a paedagogic-therapeutic measure – will always have their own interests in mind when answering, whether this happens consciously or unconsciously. Therefore one needs to exercise caution when interpreting questions about, for example, success or failure

of a therapy, or about the effects of pedagogical support offered by teachers. So if, as was the case here, the overwhelming majority of teachers states that they consider psychomotor intervention a successful approach, it might be that they also do so in order to prevent cuts to the support system of their school.

In other words, the process criticised by the German sociologist Oevermann (1996) as a delegation of those classroom challenges which in the view of the teacher impede the teaching and learning process to therapeutic experts is, as a tendency, further promoted by the existing situation of therapy taking place in a therapy room and thus, outside the teacher's classroom.

Furthermore, a comparison of therapy in the psychomotricity room to preventive, inclusive or integrative support in the classroom via a survey surely cannot be a complete and ultimate explanation of which form of support is more successful, as the target group of the support forms on offer and the response group when it comes to evaluating these offers cannot be identical. Firstly, inclusive, integrative or preventive support is not necessarily offered to the same pupils who receive therapeutical support. Thus it can be assumed that teachers have different ideas about the success of a therapy on the one hand and that of a preventive or integrative measure on the other. Secondly, when asked to compare success or failure of therapy compared to other measures, only those teachers who have some experience with all forms of support are able to give answers – and the distribution of answers to the relevant questions shows that this sometimes is the case for less than half of the participating teachers.

The situation is similar for questions about efficiency, effects, or success and failure of therapy. It can be assumed that teachers evaluate effects mainly with regard to changes in the teaching and learning situations, and less so with regard to the indicators for the therapy as such. This means that when assessing success, they may focus on other effects than the therapist or the parents of the children in question. It should also be noted that, on the part of the teachers, the reasons why a child is registered for therapy are – at least on the surface – predominantly functional (fine motor skills, gross motor skills, graphomotor skills); correspondingly, at least on the surface, in the assessment of success, functional categories achieve the highest approval ratings.

However, from the perspective of the psychomotor therapist, this does not necessarily mean that the functional reason for registering a child for therapy is also the focus of the therapy. She will often interpret functional challenges (e.g. problems in the areas of graphomotor skills, fine or gross motor skills) as behavioural issues showing up problems in coping with developmental tasks, which in turn find their origin in other areas, e.g. the social and/or emotional environment (Fischer, 2009, pp. 109-125).

Compared to similar surveys, the response rate of 42,6% can be seen as satisfactory. Nonetheless one has to ask why, in surveys like (or similar to) this one, a large percentage of the teachers who are contacted do not participate in the survey.

This is a general challenge for any survey, as it throws into relief the question of how representative they actually are.

Another fact should be interpreted from the same perspective: There are some teachers in the field under survey who have never registered a child for psychomotor intervention. Without having any data at all, any postulation of why these teachers do not avail themselves of these (and/or other forms of special needs support) is speculative.

Nonetheless, the present data and their interpretation have created the basis for an in-depth discussion of the perspectives and assessments of the teachers towards psychomotricity. The data show remarkably high approval rates – in particular whenever the questions left room to answer freely – and the high degree of goodwill and even enthusiasm for psychomotor intervention. It must be pointed out, however, that the purpose of this survey was never to operationalise the effectiveness as such. That would require further, far more wide-ranging work. But the results can probably serve as a basis for discussing future studies focused on the effectiveness of psychomotor therapy.

Conclusion and outlook

Overall, the results presented herein paint a very positive picture of the successes achieved with psychomotor intervention, as evaluated by teachers. Given that it currently is not possible to respond to the repeated calls for proof of the effectiveness of psychomotor intervention (Vetter, 2014), this is an encouraging result.

What has become apparent is that the offer of support in the psychomotricity room is held to be the more effective form of support. Given the efforts within the educational system to achieve more inclusion, this should be researched more thoroughly and with a great degree of differentiation; the solution cannot be simply to optimise the support offered by psychomotricity. At this moment in time, given the existing data, it is not possible to say what personal, motivational, or content-related reasons or interests have led to these results.

The less positive evaluation of success in both therapy and support for children displaying attention deficits and challenging behaviour are probably not results that simply pose questions of methodology for the subject as such. It is acknowledged in science and literature that the etiology of the above-mentioned phenomena is of a biopsychosocial and complex nature and that therefore any therapy can only be one element of several within a support network. The discussion might benefit from a comparison to the success rates of other forms of therapy and treatment and/or combinations of those (Jans, Kreiker, & Warnke, 2008; Amft, Gerspach, & Mattner, 2004).

Running parallel to the survey, qualitative guideline interviews were conducted with psychomotricity therapists; this improved the understanding of the data as part of a planned triangulation. These qualitative data provided results of their own that have

already been published (Vetter, 2015, 2018). Among other things, it was shown that certain constellations – such as when the structures and processes within the school system are deemed to be narrow and largely standardised – result in making therapists unsure which approaches to use in their therapy and support work. Often, intervention work in the classroom corresponded to these instances of tight regulation, and this could be one reason why, from the teachers' perspective, the success rate seemed lower.

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