

# Indications and contraindications in dance movement therapy: learning from practitioners' experience

## Abstract

Dance movement therapy is increasingly established as an evidence-based treatment modality in health care. However, systematic knowledge on indications and contraindications of dance movement therapy (DMT) are widely lacking. In this study, we developed a questionnaire to learn from practitioners' experience with DMT intervention methods for specific patient populations. Fifty-four practitioners from ten different countries worldwide indicated the "dos and don'ts" for their main populations. These inductively and experientially gained indications and contraindications for DMT, and their justifications, fell into 22 clinical categories such as psychiatry, psychosomatics, neurology, trauma, eating disorder, pain, oncology, and treatment of specific groups such as children, adolescents, families, pregnant women or prisoners. Extensive materials resulted for each disorder. Results suggest that for clinical populations the Chace method, body image work, and movement rituals, such as circle dances, are indicated without contraindications; relaxation and inner focus are differentially indicated (e.g. inner focus is contraindicated for eating disorder and schizophrenia), whereas Authentic Movement and free improvisation are often only indicated with high functioning participants, and contraindicated with low functioning participants (level of functioning moderated the results). Possibilities and limitations of this inductive participatory approach to investigating indications are discussed. The study contributes to defining differential disorder-specific DMT interventions, therapeutic factors of DMT, as well as new methods. Future studies should increasingly investigate indications and contraindications of DMT with diverse methods and populations.

**Keywords:** dance movement therapy, indications, contraindications, clinical experience, inductive method, therapeutic factors, clinical disorders, dance movement therapy intervention methods

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## Introduction

### The necessity to explicate indications

Dance movement therapy (DMT) has its roots in the modern expressive dance of the 1920s in Europe and the USA. It was taken abroad by artists that emigrated from Second World War Europe in the 1930s, and developed and blossomed in the US in the course of the Humanist Movement in the 1960s, from where it returned to Europe and started to spread worldwide in the 1980s [1], [2]. DMT's focus is the therapeutic use of movement in the sense of a process that promotes the physical, psychological, individual and social integration of the individual [3], [4]. Today dance movement therapy is increasingly anchored in medical and health science evidence-based models (partly due to the high pressure of legitimization). In these contexts, DMT must prove which disorders it is suitable for and which of its specific intervention methods or techniques are indicated or contrain-

indicated in specific contexts, following the criteria of evidence-based medicine (EBM) [5]. Meta-analyses of the efficiency of DMT show that there are medium effect sizes for many populations for the clinical outcome variables of anxiety reduction, depression reduction and increase in quality of life and well-being [6], [7], but relatively little is known about specific therapeutic factors or mechanisms of change [8], [9], [10]. Despite many studies on the effectiveness of DMT for specific populations (e.g., [11], [12], [13]), little knowledge exists regarding specific active factors and differential indications. Moreover, evidence-based studies often fail to sufficiently consider the specific effectiveness of the actual intervention components.

## State of knowledge

### Theoretical derivations of indications

In a seminal article of 2003, Trautmann-Voigt pointed out that literature on indications and contraindications in the field of DMT is largely lacking, and emphasized that “systematically posing the indication question would be one of the most important research concerns in Germany for the further establishment of this method” [1]. While there is some theory on the topic (e.g., [14]), there is often a lack of systematization or corresponding empirical and statistical validation.

An early explicit mention of DMT indications and contraindications can be found in Lilian Espenak’s textbook on dance therapy from 1985 [15]. In a paragraph entitled “Contraindications”, Espenak writes:

“The (dance) therapy [...] is contraindicated in exhibitionist and voyeuristic patients who could use the physical side of the therapy to strengthen their neurosis. Such a result would possibly be unavoidable; therefore, other non-verbal therapies would not only be much more effective, but would also achieve much faster results [15].”

With this paragraph, she was the first person DMT to explicitly mention contraindications for specific patient populations. Today we would no longer agree with Espenak’s views as to the unsuitability of dance movement therapy for severely impaired psychotic patients. Nonetheless, she did lay the foundation for the more systematic investigation of contraindications. More recent work on indications and contraindications can be found in Eberhard-Kaechele [16], [17], Hoelter [18], Klein [19], Quinten [10], [20], Roehricht [21], Lausberg [2], and Trautmann-Voigt and Voigt [14].

In his book “Körperorientierte Psychotherapie psychischer Störungen” (body-oriented psychotherapy for mental disorders), Frank Roehricht [21] systematizes successful body therapy interventions for depression, anxiety, personality disorders, and schizophrenia. In the German literature, Gerd Hoelter [18] covers the spectrum of indications from schizophrenia to affective disorders, personality disorders, eating disorders, addiction, and psychiatric diseases of children and adolescents and in old age. Marianne Eberhard-Kaechele [16], [17] describes patient-related factors and contributes differentiated indications and contraindications for oncology (see also [22]) and trauma (see also [23], [24]). Eberhard-Kaechele [25] gives a detailed overview of indications for personality disorders, developing interventions for individual personality disorders from diagnostics with the Kestenberg Movement Profile (KMP); Degener [26] does the same for borderline personality disorder and Bertolaso [27] for narcissistic personality disorder. Quinten [10], [20] defines the field of dance movement therapy for chronic pain as disorder-specific and thus contributes significantly towards the integration of dance movement therapy in health sciences. Trautmann-Voigt & Voigt [14] differentiate the indications in parent-child interactions, anxiety, addiction, and trauma. In addition, Bender [28] contrib-

utes to indications in systemic family therapy, Bräuninger [29] to anxiety and addiction, and Schmitt and Frölich [30] to dementia. Lausberg [31] lists indications for eating disorders and other psychosomatic diseases and places them in the context of the debate as to the differential diagnostic possibilities of dance movement therapy. Arnim and Joraschky [32], for example, have developed their own tests for somatoform disorders and pain patients. Most of this literature, however, is in German and thus hardly reaches beyond national boundaries, why it is important to include it here.

Overall, the state of knowledge on indications and contraindications in DMT remains incomplete and in need of improvement. Due to the low level of differentiation in the literature, it is often assumed that there are hardly any contraindications for dance movement therapy, and that the indication is comprehensive. A lack of knowledge about indications and contraindications in dance movement therapy can lead to the use of contraindicated methods, which risk triggering frustration in the patient, by overstrain or underload, or leading to therapy drop-outs or worsening of symptoms. Specific diagnostic knowledge can expand or focus in on the range of possibilities for indicated methods. Thus, it is of eminent theoretical and practical importance for DMT to differentiate between, and specify knowledge about, indications.

### Empirical derivation of indications

Within the framework of care guidelines (e.g., [33], [34]), quantitative empirical evidence for arts therapies is increasingly requested in the context of political decisions in the health sector. Care guidelines form the evidence basis for the recommendation of therapeutic interventions and are thus decisive in the health care system. In German medical care guidelines, dance movement therapy was – together with the other creative arts therapies (mainly art therapy and music therapy) – included as a recommended treatment in the S3 guideline for breast cancer patients ([12], [35], [36], [37]); in the guideline for trauma treatment ([38], [39], [40]); the guideline for schizophrenia and severe psychiatric disorders ([41], [42], [43], [44]); and in the guideline for Parkinson patients ([45], [46], [47]) among others.

A meta-analysis by Koch, Kunz, Lykou, and Cruz [17] compiled all evidence-based control group studies in the field of dance movement therapy between 1996 and 2012. Empirical evidence for dance movement therapy existed in the areas of schizophrenia [41], [44], depression [48], [49], [50], anxiety [6], [51], stress [11], eating disorders [52], autism [53], [54], children and adolescents [55], [56], somatoform disorders [57], neurological disorders [58], cystic fibrosis [59], pain [60], Parkinson’s disease [14], [61], [62], [63], and dementia (e.g., [64], [65], [66]).

The problem, however, is that the intervention methods used in these studies were usually not sufficiently well documented, impairing replicability of the studies [7]. In seven out of 23 cases, the interventions were somewhat

specified and in only two cases was there a specified treatment manual [44], [54]. The interventions were generally very heterogeneous and only a few were oriented towards classical dance movement therapy methods. However, Bräuninger found homogeneous effects of dance therapy in eleven different DMT groups in preventive contexts, all of which used different methods. This may speak for an additional general therapeutic factor of DMT [67].

Although the systematic testing of specific DMT factors is only just beginning, the data on the efficiency of dance movement therapy provides important clues as to areas of action and enables hypotheses to be made about general active factors [50], [68], [69], [70]. It is indeed conspicuous that in the evidence-based research work of the 12 years that entered into the meta-analysis [7], dance movement therapy interventions were only specified in seven out of 23 studies and assumptions about specific therapeutic factors were only made in three out of 23 studies [7].

For the aforementioned reasons, the idea of this study was to execute an inductive survey among international practitioners as to methods and techniques which are, on the one hand, effective and recommendable in the respective populations and, on the other, ineffective and could even cause harm. The aim was to obtain a differentiated overview of indications and contraindications in dance movement therapy from a participatory angle. To this end, the participating practitioners were asked to state their professional experience and to describe the Do's and Don't's for their specific population in detail (see Attachment 1).

## Methods

### Sample

The sample consisted of 54 dance therapists. The mean age was 44.5 years, SD=11.72 (range=29–71 years). Three of the participants were men. The nationalities of the therapists were as follows (data on nationalities obtained for 40 participants): Australia (1), UK (2), Belgium (2), Greece (2), Netherlands (2), USA (3), Switzerland (4), Latvia (5), Austria (6), and Germany (13).

The data collection was carried out inductively based on a questionnaire specifically developed for this purpose. It was available in two versions; as an online questionnaire and an identical paper-and-pencil version (see Attachment 1). The experiences with dance therapy methods that have proven effective in certain disorders or populations (dos) or as potentially harmful (don'ts) were based upon the experiences of national and international practitioners of dance movement therapy.

### Procedure

Completing the questionnaire "Indications and contraindications in dance movement therapy" took about 30

minutes. Thirty-eight questionnaires were completed online and 16 were completed in paper and pencil versions. The paper and pencil versions had been distributed to national and international participants in Spring 2010 at a three-day international conference (organized by S. Bender in Freising near Munich), "Moving from Within II", and at the international "Summer School of Arts Therapies" in Dundaga, Latvia in Summer 2010. Some participants completed questionnaires on site, others took them home and sent meticulously-completed questionnaires back to the researcher. At the Freising conference, with about 200 participants, about 150 of which were dance movement therapists, seven questionnaires were returned; in Dundaga, with about 120 creative arts therapists taking part in the summer school, of which about 30 were dance movement therapists, five participants handed in the completed questionnaire. Voluntary participation was guaranteed, no reward was given. The participants were informed about the purpose of the study when the questionnaires were distributed; in addition, the purpose of the study was also explained on the first page of the questionnaire. A total of 38 completed online questionnaires reached the researcher. The link to the online version was sent mainly by email to the German listserv of the Professional Association of Dance Therapists in Germany (BTD), the listserv of the European Network for Dance Movement Therapy (in the meantime the European Association for Dance Movement Therapy EADMT emerged from this), the Australian listserv and the forum of American Dance Therapy Association's (ADTA) homepage. All mailing lists, except the Australian, had an original call and a later reminder.

## Evaluation

The disorders and patient populations mentioned by the therapists were clustered by two master's students of psychology within their research internship (see Attachment 2; original data in German see Attachment 3). They listed the mentioned indicated and contraindicated dance movement therapy methods for the disorders in order to provide an overview (see Table 1, Table 2, and Table 3). In this listing, multiple responses for the single disorders were possible.

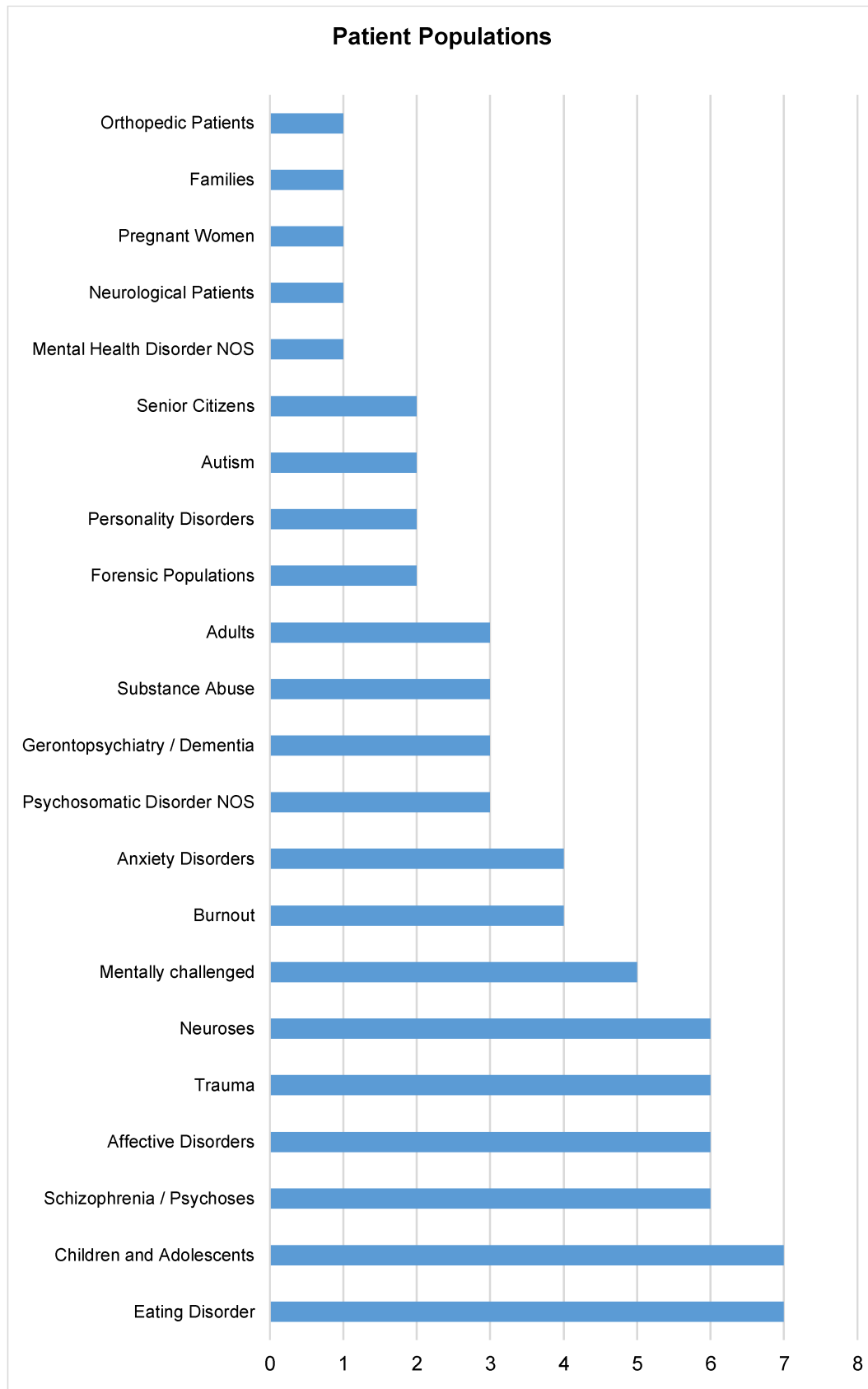
## Results

### Overview

The therapists named a total of 23 different patient groups and areas of application. With seven mentions each, "eating disorders" and "children and adolescents" were the most common. Then came the groups "trauma", "schizophrenia and psychosis", "neurosis", "affective disorders" with six mentions each, "mentally and physically disabled persons" with five mentions each and "burnout" as well as "anxiety disorders" with four mentions each. The groups "unspecified general psychoso-

Table 2: CONTRAINDICATIONS – Overview sorted by population, institution and age

Disorder	No.	Contraindication
Affective disorders	5x	Authentic Movement
	2x	(Direct) expressing feelings in movement, placing them in the center, working with self-created images, use of image material, free dancing, free movement without instruction, caution with competitive games and directive action
Anxiety disorders	3x	Authentic Movement
	2x	Work with self-created images, use of image material
	1x	Competitive games, voice use, free dancing
Trauma	4x	Authentic Movement, longer Authentic Movement (1)
	2x	Working lying down, touching, closed eyes trauma too early to address (before relationship is established)
	1x	Working longer in indirect space drive (loss of control), loose structured movements image material
Schizophrenia/ psychoses	6x	Authentic Movement
	3x	Improvisation, long free movement without direct task
	2x	Working lying down, touch, closed eyes
	1x	Indirect room drive, longer relaxation
Eating disorders	4x	Authentic Movement, closed eyes (1)
	2x	Long relaxation, all too direct confrontation with feelings
	1x	Work without music, make the goal too explicit (leads to follow instead of feel)
Addiction	2x	Authentic Movement, too long pauses
	1x	Too much insisting
Neuroses	2x	Closeness to the body and sensitive touches, changes in appointments, changes in the therapeutic framework, Authentic Movement
	1x	Free dancing in space without goal or theme, too much intellectualization
Burnout	4x	Authentic Movement
	2x	Too direct confrontation with feelings
Personality disorders	1x	Loose structured movement or pictures, directive procedure for guidance or imitation, Baum-circle
Autism	1x	Baum-circle, body image work
Mental and physical Disability	3x	Authentic Movement
	2x	Longer conversations, too much weight on verbal processing
	1x	Longer relaxation or meditation, Life-Art-Process
Not further specified psychosomatics	1x	Authentic Movement, immediately begin with the focus on the body, too many perception exercises
Geriatric psychiatry and dementia	1x	Authentic Movement, relaxation, Sherborne, hyper stimulation
Forensics	1x	Authentic Movement, Kundalini yoga
Neurology	1x	TT contraindicated for: sexually uninhibited patients, acute phase of neurological injury
Pregnant woman	1x	Contact improvisation, work with weights
Children and adolescents	3x	Too much structure (over-structuring)
	1x	Too little structure (under-structuring), Authentic Movement
Seniors	1x	Authentic Movement, use of too much force and speed, too often break up circular formation



Number of therapists who worked with a specific patient population (sorted by frequency descending)

**Figure 1: Absolute frequencies of the treated populations**

Multiple responses were possible; x-axis: number of therapists reporting on the according population



matics", "geriatric psychiatry", "dementia", "addiction" and "adults" were named three times. The groups "forensics", "personality disorders", "autism" and "seniors" were each mentioned twice and the groups "neurology", "pregnant women", "orthopedics", "family" and "unspecified psychiatric diseases" were each mentioned once. The bar chart shows the absolute frequencies of the mentions of the treated disorders (see Figure 1).

## Professional experience of the therapists

In order to better assess the quality of the individual therapist's statements, the therapist's professional experience in dance movement therapy as well as the treatment setting were requested. This revealed problems of understanding: some participants understood "treatment setting" to mean the institution in which they work (e.g., clinic or private practice) while others indicated type of therapy sessions (individual or group), frequency of sessions or size of the therapy group.

In terms of work experience (data for 48 participants), the participants differed as follows: six were beginners, 24 had worked one to ten years and 18 had worked in the field for eleven years or more (see Figure 2).

## Indications

Across disorders, there were only small differences in the recommended dance therapy methods. Often the Chace method (24), dance techniques (circle dances 3; others), mirroring (7), body image work (14), Laban (14), Kestenberg (7) and Sherborne (1) (the latter three also diagnostic methods) and relaxation methods (25) were mentioned as indications. Techniques of improvisation (10) and creation (5) were often only given with precise structural specifications.

The most widely used method for diagnosis is motion analysis according to Laban (14) and Kestenberg (7). As independent theories, these offer not only methodological access as movement diagnosis instruments, but also enable the derivation of a wide range of clinical hypotheses that can be used directly for intervention planning. In order to promote the development of body awareness of a realistic body image, the therapists suggest body image work, perception of body boundaries and exercises on closeness and distance and perception of one's own needs. In body image work, the body image is, for example, drawn, shaped in clay, or outlined in contour. In severely impaired patients, body image can be distant from reality and fragmented (e.g., in schizophrenic or anorectic patients). The aim of body image work is therefore the integration, autonomy and support of identity formation starting on the body level.

The processing of emotional content is most frequently realized through imitation and reflection and additionally through verbal processing and reflection. Relaxation exercises, yoga, and exercises from modern dance (contract-release exercises) are used to reduce tension. Active creation (such as in improvisation), in which patients have

more control over and distance to the inner experience, is also mentioned as a method of emotional expression. The dance techniques are fixed forms of movement. They provide structure, cultural references, possibilities for ritualized use, offer references to metaphor and body memory and emphasize individual movement qualities and forms. In this context, circle dances are most frequently mentioned across all disorders (3). These provide security and structure, lead to the experience of solidarity with other people, bring fun, promote exuberance and activity, and establish relationships between mood and movement as well as movement and meaning. Improvisation and Authentic Movement are used to promote authentic expression and to integrate the unconscious, although this is usually only recommended for higher functioning patients with precise structural requirements or in advanced therapy. Table 1 provides an overview of the indications mentioned.

## Contraindications

Free improvisation (2) and Authentic Movement (AM) were often mentioned as contraindications (36 times, especially in psychoses, dementia, and autism, i.e. the most severe mental health disorders). On the other hand, Authentic Movement was listed five times as an indication: for neuroses, personality disorders, trauma, autism and pregnant women. The contradictory data for autism can be resolved by separating the lower functioning persons on the autism spectrum (formerly early childhood autism where AM is contraindicated) from the higher functioning persons on the autism spectrum (Asperger autism). More structured forms of free improvisation, such as the Baum-circle, have proven particularly effective for high functioning persons on the autism spectrum [71]. In Authentic Movement, the patient moves with closed eyes and without music following only his/her inner impulses and images and is observed and supported by a witness. Since it can be difficult and frightening for patients, and since they can feel overwhelmed and insecure by the sudden freedom in acting and moving, improvisation and Authentic Movement are often listed as contraindications. However, introduced stepwise and in structured forms, AM can be helpful even for lower functioning patients. By switching off self-control and intellect, access to emotions, unconscious material, and one's own processes can occur, which is helpful for many patients.

General contraindications are achievement-oriented overstrain (emotional and physical) and pressure to perform, for example through competitive games and situations. Dance movement therapy distances itself from these aspects, which are overemphasized in Western as well as Asian societies, and provides an opposite pole of physical sensation, kinesthetic answers, individual and social competence experience, joy, enjoyment, hedonism and play. Under-structuring (e.g., leaving the patient without sufficient guidance) is regarded as a contraindication, as is strongly directive behavior and over-structuring. Here it seems important to find an appropriate bal-



**Figure 2: Participating therapists within the different work experience clusters (n=48)**  
y-axis: number of participating therapists

ance. In general, the participating therapists recommend a respectful and empathetic attitude, providing security and structure, while remaining flexible and responsive. An overview of all contraindications mentioned is provided in Table 2.

## Disorder-specific interventions

In the following section, methodological peculiarities of the different populations are summarized. The participants state that it is important not to work directly on the unconscious in a number of disorders; they mention psychotic, dementia, and trauma patients, but also forensic patients, and patients with neurological injuries. The integration of the unconscious requires a clear and stable ego-structure. Table 4 provides an overview of major DMT interventions commonly and internationally used.

Methodical specificities for individual disorders are:

1. The emphasis in the treatment of *depression and burnout* is on promoting body awareness, relaxation, activation and expansion of the movement repertoire.
2. For patients with *anxiety disorders*, the focus should be on emotional expression and relaxation. In this context, creation and well-structured improvisation to express one's own feelings are often recommended.
3. For *trauma* patients, techniques that provide security and structure (e.g., circle dances or other dance techniques in the group) as well as body awareness exercises are indicated as the method of choice. Confrontation should be avoided (e.g., Authentic Movement, as well as other exercises with closed eyes, touching each other) as there is a risk of re-traumatization.
4. In patients with *psychosis*, exercises can be used to strengthen the ego structure, such as body perception exercises or closeness and distance exercises. Direct work on the subconscious should be avoided.
5. With *eating disorder* patients, the focus is on body awareness and the emotional experience of the physical. No exercises should be performed that increase the pressure to perform, instead emphasis should be placed on sensing and finding an emotional connection with the body. Relaxation exercises are recommended with specific reservations (no prolonged closing of the eyes).
6. For *addiction*, it is recommended to avoid procedures that may be associated with loss of concentration.
7. In *intellectually disabled* patients, verbal reflection of movement is usually quite limited. For this work, it is advisable to remain on the non-verbal level and to use different media.
8. Patients with *dementia* and patients in *geriatric psychiatry* benefit from exercises that provide structure and security (e.g., circle dances). The focus is on long-term memory and the updating of positive body memory contents. This can be achieved, for example, by using familiar music. It is also important to offer rituals.
9. For the patient group of *children and adolescents*, the focus is on promoting body awareness, emotional expression, relationships and communication. Circle dances and group movements are recommended. Often, creation and well-structured improvisation are used to express one's own feelings. It is necessary to provide clear structure, but strongly directive behavior should be avoided. Instead, it is important to awaken the interest of children and adolescents and to avoid boredom.
10. For the *elderly* patient group, increased work with aids and materials is important. Physical overload should be avoided and (adapted) circle dances are a well-tested method.

Only a few of the other disorders are mentioned in Table 2 but they do not allow reliable statements to be made about indications.

## Scope and limitations of individual therapy methods

If one focuses on the particularities of individual therapy methods and deductively analyses their indications and contraindications, the following picture emerges (due to the large number of mentions, only methods with multiple mentions were considered in Table 3):

According to the participants, *Laban movement analysis* application (in the sense of the use of Laban's system of movement analysis for intervention planning and therapy; [75]) is indicated for patients with eating disorders (2), schizophrenia and psychoses (2), neuroses (2), addiction (1), and anxiety disorders (1). Laban's movement analysis application is also beneficial for children and adolescents (1), people with mental and physical disabilities (1), general psychosomatics (1), geriatric psychiatry and patients with dementia (1), and orthopedics (1). Laban's movement work focuses on the expansion of the movement repertoire and the functional use of movement qualities, both individually and inter-bodily. Laban is not mentioned as a contraindication for any disorder.

The *Chace method* is indicated for patients with eating disorders (3), schizophrenia and psychoses (2), neuroses (2), traumata (1), affective disorders (1), burnout (1), anxiety disorders (1), and addiction (1), as well as for psychiatric disorders (1) that are not specified in more detail. The Chace method ([72]) works with mirroring, minimizing and maximizing movement and process-oriented work on group topics. The process of empathic reflection is at the center of therapeutic action in the initial phase. The Chace method is also mentioned as an application in general psychosomatics (2), in geriatric psychiatry and in patients with dementia (1), in forensics (1), and in work with pregnant women (1), children and adolescents (2), seniors (1), and patients with autism (1). The Chace method is not mentioned as contraindicated by any of the sources of this study. It is a generic method that works with any patient population.

Interventions according to Kestenberg [73], [74] are mentioned in relation to patients with eating disorders (1), autism (1), as well as in work in general psychosomatics (2). Movement work expands the movement repertoire and works on missed or inappropriately established developmental steps by providing the patient with a space to practice or relearn them. According to the participants, Kestenberg Movement Analysis has no contraindications. Work with the *body image* or *body perception* exercises [75] are mentioned as indications in patients with anxiety disorders (6), eating disorders (5; reference is also made here to work with individual body parts (1)), burnout (5), schizophrenia and psychoses (4), trauma (3), neuroses (3), affective disorders, in particular depression (4), addictions (1), and personality disorders (1). Body image work is also suitable in general psychosomatic medicine



(2), neurology (1), orthopedics (1), geriatric psychiatry and in work with patients with dementia (1), people with mental and physical disabilities (1), children and adolescents (1), and pregnant women (1). In neuroses, physical proximity and sensitive touch (1) are listed as contraindications. In general psychosomatics it is important not to start with the focus on the body (1). Body image work seems to be generally contraindicated in patients with autism (1).

*Authentic Movement* [76], [77] is recommended for pregnant women (1), neuroses (1) and autism (1) as well as for patients with personality disorders (1). Authentic Movement in persons with psychoses and schizophrenia (6), affective disorders (5), trauma (5), eating disorders (4), burnout (4), anxiety disorders (3), addiction (2), and neuroses (2) are mentioned as contraindications. Authentic Movement is also considered contraindicated in persons with mental or physical disabilities (3), in general psychosomatics (1), forensics (1), geriatric psychiatry and work with dementia patients (1), as well as in seniors (1) and children/adolescents (1).

*Mirroring* [72] is regarded as indicated in patients with affective disorders (3), anxiety disorders (1), trauma (1), burnout (1), and personality disorders (1). It is also recommended in work with patients with mental or physical disability (1), in geriatric psychiatry or in patients with dementia (1). Mirroring is not mentioned as contraindicated in any disorder.

The *Baum-circle* [78] seems to be suitable for patients with trauma (1), neuroses (1), affective disorders (1), and autism (1); in the case of autism, however, it is also mentioned by one person as a contraindication. With the Baum-circle, the patients bring their own music, meaningful for them, into the session and improvise in an authentic way to that piece of music. The task of the group is to mirror the person in their improvisation in order to feel with them. After three to six persons have initiated the movement, a verbal part follows in which group members give each other feedback on how it was for them to move with the initiating persons. Initially, it is surprising how effective this simple technique can be. The Baum-circle is resource-, support- and solution-oriented.

*Tension and relaxation techniques* are mentioned as indicated for affective disorders (4), addiction (3), burnout (3), eating disorders (2), trauma (2), schizophrenia and psychoses (2), anxiety disorders (2), and personality disorders (2). In the case of mental and physical disabilities (2), orthopedics (1) and work with children and adolescents (2), adults (1) and seniors (1), tension and relaxation work is also recommended. In the case of eating disorders (2), psychoses and schizophrenia (1), and mental or physical disability (1), prolonged relaxation should be avoided. Relaxation is contraindicated in geriatric psychiatry and in work with dementia patients (1).

## Discussion

The present work represents a step towards a more detailed recording and differentiation of indications and contraindications in dance movement therapy and enriches the knowledge of disorder-specific interventions in the field.

The main results of the study speak for a broad spectrum of indications for dance techniques, mirroring, body image work, movement analysis applications, and relaxation methods (as general indications across disorders). Improvisation techniques are usually only recommended in connection with a higher degree of structure of the interventions. Free improvisation and Authentic Movement are most often mentioned as contraindications. As a rule, Authentic Movement and free improvisation are almost exclusively recommended for high functional patients, unless strongly structured variations such as the Baum-circle are used [78]. According to the results of our study, the disorder specificity of individual DMT methods is rather low, conversely the generalizability is high [67]. This is partly due to a concentration on general therapeutic factors of DMT. Specific therapeutic factors such as, for example, the vertical movement of jumping, causing a decline of depression [50], the role of the experienced unity with the music or the partner when dancing [69], the experienced freedom of choice or empowerment [79], or the non-goal-orientation of dance movement [70] have only recently become the subject of DMT research [8].

One of the limitations of the present work is that it was not always possible to clearly assign the stated disorder to the clusters (cluster formation; see also Attachment 2; original data in German see Attachment 3). In addition, some therapists did not provide information on certain questions (missing data). Further, direct comparisons and frequency data of indications and contraindications were difficult to interpret due to the therapists' different contents- and language-related interpretations and conventions, and finally the small sample size in single clusters. Therefore, this overview cannot be regarded as an exhaustive description and should therefore be read critically and interpreted with caution. Furthermore, the collection of indications and contraindications concentrates exclusively on therapeutic techniques or methods and does not explicitly consider patient-related aspects. For intervention planning, this material can be an orientation, but patient- and case-specific aspects need to be considered in addition. Furthermore, it is likely that we have missed literature on indications in our search, since often indications are not explicitly named as such.

The inductive method of data acquisition, on which we based this paper, proved to be generally fruitful. Due to the small number of cases and the small number of multiple answers in many cases, however, it only yields first descriptions, still relatively subjectively bound to the participating therapists, as can be seen from reading the overview in Table 1, Table 2, and Attachment 2 (original data in German see Attachment 3). An increase in the number of cases would be necessary in order to achieve

a valid systematic gain of knowledge with this method. Due to the limited sample size of the study, there is a continuing need for research in this area. Despite all limitations, the present study makes a fertile contribution to the initial systematization of indications and contraindications, as well as to the development of disorder-specific knowledge and treatment approaches in DMT. The study can be both an orientation for intervention planning in practice, and a stimulus for future investigations of disorder-specific indications and therapeutic factors in dance movement therapy.

## Notes

The questionnaire data of this article was first reported in Koch SC, Kolter A, Kunz T. Indikationen und Kontraindikationen in der Tanz- und Bewegungstherapie Eine induktive Bestandsaufnahme. Musik-, Tanz- und Kunsttherapie. 2012;23(2):87-105. Because the information has been requested to be put forth in English from colleagues worldwide, the present article provides access to the updated results in English and provides extensive formerly unpublished materials (<75%) in German and English suited to guide practitioners in DMT intervention planning with regard to indications and contraindications for their specific populations.

## Competing interests

The author declares that there are no competing interests.

## Attachments

Available from

<https://www.egms.de/en/journals/jat/2020-2/jat000006.shtml>

1. Attachment\_1.pdf (88 KB)  
Questionnaire of the survey
2. Attachment\_2.pdf (593 KB)  
Original data, English
3. Attachment\_3.pdf (538 KB)  
Original data, German

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