

## Cognitive Behavior Therapists Refer to Concepts of Cognitive Behavior Therapy When Asked What They Have Done in Single Sessions

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### Abstract

**Background and objective:** An important question is how psychotherapists describe their own treatment under routine care conditions. To what degree do they follow theoretical concepts as defined in psychotherapy schools? The specification of psychotherapy is of interest in regard to training, quality assurance, reimbursement and policy making.

**Methods:** Using the pivotal topics method, cognitive behavior therapists from a department of behavioral medicine were asked to report what they did in this particular session of individual psychotherapy. Subsequently, pivotal topics were grouped and analyzed by content analysis.

**Results:** The study involved 23 cognitive behavior therapists who treated 289 inpatients and reported 2,298 pivotal topics. Predominant pivotal topics included behavioral analysis, goal setting, and modification of dysfunctional cognitions, problem solving, emotional self-control, homework assignments and summary of treatment, respectively. The interventions follow a sequential script over the course of treatment.

**Conclusion:** Therapists describe their treatment with regard to theoretical concepts and techniques as described in CBT manuals and textbooks. In a general sense this suggests that psychotherapy can be applied and conceptualized in reference to specific therapeutic guidelines and is more than an unspecific therapeutic interaction. This is not only the case in scientific studies but also in treatment under routine care conditions.

**Keywords:** Cognitive behavior therapy; Pivotal topic method; Routine care; Treatment fidelity; Therapeutic schools; Psychotherapy research

### Introduction

Psychotherapy is a professional interaction and must be delimited from talking in general. Psychotherapists shall be able to communicate to colleagues, patients, health insurance and even lawyers what they do or have done. They should follow theory-based rules of interaction and apply evidence-based therapeutic techniques. These are elaborated in psychotherapy schools, like cognitive behavior therapy, psychodynamic psychotherapy or humanistic psychotherapy, which are descriptions of theoretical frameworks and therapeutic interventions. These frameworks are often rather vague, however, and this even more the case with a growing discussion on a school integrative or universal psychotherapy [1, 2]. The problem is even more complex when psychotherapists have to explain what they did in a particular treatment session. They then cannot refer to psychotherapeutic schools in general but have to name specific interventions [3].

There is a lack of data on the degree to which psychotherapists under routine care conditions follow rules and concepts of their respective psychotherapy schools in reference to controlled trials or to what extent they use individual or intuitive strategies [3-9]. There are many approaches to study therapist behavior and compliance with defined professional rules. These comprise supervision and peer reviews of individual cases, standardized self- and observer-rating scales or therapist's reactions to case vignettes [10-15].

Another approach is the pivotal topic method [16,17,13]. Pivotal topics are summaries of single sessions in the view of the therapist. Memory psychology has demonstrated that information is best remembered if it is important or well-learned and can be conveyed in words [18].

When persons are asked after an encounter what they talked about with the other person, they will give a summarizing statement, even of a long discussion, which reflects what they understood and think it is the essential of the encounter. The phrasing depends on their linguistic competence, which in turn also influences what is reported and remembered. Pivotal topics reflect what therapists consider essential about a therapeutic session and how they describe and conceptualize their treatment. Pivotal topics refer to what the therapists see as the primary objective or content of a session. They capture their way of thinking [19]. This allows studying changes of individual treatment concepts overtime.

The objective of this study was to investigate how therapists who have been trained in cognitive behavior therapy to describe and conceptualize their interventions and the course of their treatment under conditions of routine treatment. This provides information not only on the importance of theoretical concepts in the provision of treatment, but also allows, to a certain degree, to describe what encompasses CBT, which are the most often used interventions, and how the therapeutic process is structured over time. Such knowledge is of use for the understanding of psychotherapy in general and CBT in particular.

### Material and Methods

#### Participants

The study was conducted over a period of about twelve months in a behavioral medicine department. It involved 289 inpatients (67.9% female, mean age = 47.4 years, SD = 8.66, range = 19-67). 40% had a high school education, 72% were employed. 66% of ICD-10 diagnoses were from chapter F4 (anxiety and somatoform disorders), 27% from chapter F3 (depressive disorders).

On average patients stayed for 6.4 weeks in hospital (SD = 1.19, range 4-10). They had individual and group psychotherapy based on CBT principles. Additionally they had physical-exercise therapy, occupational therapy, social support or medical treatment. Due to the varying length of stay they took part in varying numbers of therapy sessions (mean value per patient = 11.9; SD = 4, 3; range 1-56).

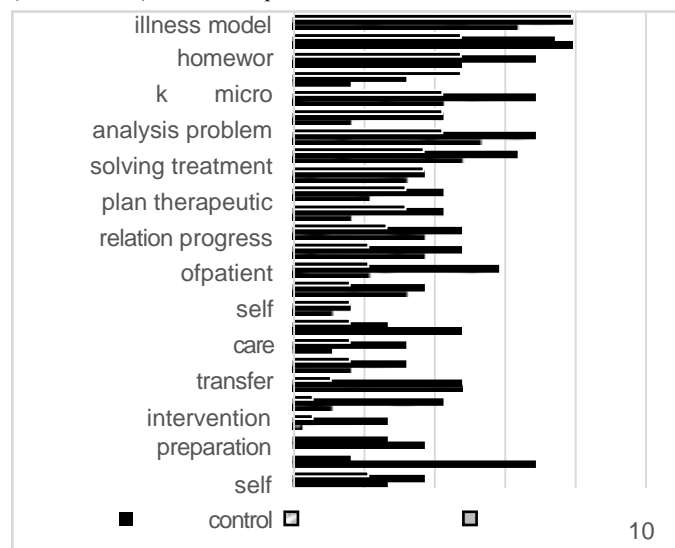
### Therapists

Therapists included 13 specialists in psychiatry/psychosomatic medicine and 6 clinical psychologists, 13 female and 6 male. They were trained in CBT according to state regulations, which request the person to be a physician or psychologist with a university diploma, to participate in an accredited curriculum in a state licensed CBT training institute over a time period of at least three years, involving more than 200 sessions of theory courses, a similar number of treatment sessions under close supervision, and finally a state examination. Therapists of this study worked full time in routine care, providing CBTs to approximately ten to fourteen inpatients simultaneously, and were supervised on a weekly basis; this included the discussion of tape recordings.

### Pivotal Topic Measure

Therapists were asked to write down in free wording immediately after the patient had left the room what they thought had been the pivotal topic of this particular individual session: "In my view the most important topic of the session was...". This pivotal topics method [16,13], elicits cognitive representations on what is remembered as "important" of the treatment session. The answers do not reflect the "truth", but individual memories, attributions, goals or judgements, reflecting their way of thinking [19]. It allows a greater individuality of answers in comparison to standardized instruments with predefined items. Pivotal topics mostly consist of one or two sentences. The 19 therapists wrote down 1,637 pivotal topics for 1,161 sessions and 289 patients. In 60.2% of the sessions only one statement was written down, in 27.1% two statements were noted and in 3.9% 0.4% four statements were listed.

The pivotal topics were classified by content analysis [20, 21]. The analysis scheme was developed on the basis of a test sample. An inductive bottom-up approach was used; at first pivotal topics were written down and then grouped according to content similarity. These statement clusters were then given headlines which served as codes. Finally 25 different categories (Figure.1) were specified, such as macro-analysis (analyzing the conditions of the illness development), micro-analysis (contingency analysis here and now), activity planning, goal setting, homework assignment, etc. Psychologists were then trained to assign pivotal topics to these codes. Inter rater reliability (Cohen, 1960) of two independent raters was  $\kappa = .81$ .



**Figure 1:** Pivotal topics in the course of treatment (% of therapists per treatment phase).

### Statistics

Descriptive data are reported on pivotal topics from the first two weeks (early stage; 19.5% of all therapy sessions), the last two weeks (late stage; 29.3%) and the therapy sessions in between (middle stage; 51.2% of all therapy sessions). If a patient stayed in the unit only for four or five weeks, the early stage included only the therapy sessions of the first week and the late stage only the therapy sessions of the last week.

### Results

Figure 1 indicates the percentage of therapists who mentioned a certain pivotal topic at least once in one of the three treatment phases. The topics are listed according to their frequency in the initial phase.

At the beginning of the treatment therapists focus on establishing an understanding for the problem and providing an "illness model" to the patient. Micro- and macro-behavioral analysis, goal setting and treatment planning are also relatively frequent. They target dysfunctional cognitions, problem solving, emotional control and homework assignments which can also be part of the diagnostic process, but also indicate the early beginning of the initiation of change-oriented interventions.

In the second phase, work on promoting an understanding of the illness is continued, which includes ongoing micro-behavioral analyses and explanations of the diagnosis. Therapists also motivate and prepare the patient for planned therapeutic interventions. Further topics are dysfunctional cognitions, problem solving, and emotional control, increase of activity and self-control, and self-care. Therapists also explain other treatments like medication and somatic interventions.

In the final phase, therapists summarize the current state of treatment, review the development of treatment, make predictions, discuss the transfer of therapeutic developments into daily life and discuss possibilities of aftercare and summarize the conclusion of the therapy.

There are some interventions which occur at high frequencies across all three phases of therapy. These are the work on the illness model and micro-behavioral analysis, on dysfunctional cognitions, problem solving and emotional control.

Throughout the treatment process there is also a base rate of unspecific interventions which suggests that therapists exercise at a certain degree of freedom in regards to what they do.

### Discussion

From the perspective of cognitive psychology, pivotal topics reflect the "subjective truth". The pivotal topic method indicates what therapists remember and consider important, what guided their treatment and what they intended to do or thought they have done. This allows assessing the treatment concepts and understanding of therapists, in this case, what cognitive behavior therapists regard as CBT under routine treatment conditions of [22]. The pivotal topic method allows much freedom in describing the ongoing treatment since it does not influence the answers by preset categories. The answers refer to individual patients and treatment sessions and are therefore more valid than just asking what therapists regard as CBT from a purely theoretical perspective [14].

The major finding of this study is, that cognitive behavior therapist refer to theory-based language and concepts as described in respective textbooks and training manuals of this school of psychotherapy when asked what they have done in a particular session with an individual patient [23-28]. The topics reflect treatment techniques which are core elements of CBT, like behavioral analysis, modification of cognitions, problem solving, emotional control, homework assignments. CBT therapists are also aware of the need for motivating the patient, of a good working alliance and therapeutic relationship. The overall frequencies demonstrate that the different topics have been reported at least once by the majority of therapists. This allows the conclusion that these interventions are CBT-specific and can define CBT in general, as well as under routine care conditions. The pivotal topics reflect a bottom up definition of CBT. Psychotherapists who intend to do micro- and macro-behavioral analysis, modification of cognitions, problem solving, emotional and self-control, homework assignment, etc., can be called CBT therapists [29]. These core therapeutic interventions can define what therapists must learn in order to be able to apply CBT. This is also very different from what is considered to be psychodynamic or humanistic psychotherapy.



The frequencies differ between topics. There are interventions which can be found across the whole treatment process, like modification of cognitions, problem solving, behavioral analysis and teaching an understanding of the present problem. Other topics are only seen in certain phases of treatment or selected patients like the increase of activities, activation of resources, self-care and self-control.

The data also show that there is a dynamic development over the course of CBT. The early stage of treatment is characterized by the clarification of treatment goals, behavioral analysis, psycho-education and also at a very early stage by coping and cognitive modification. At the intermediate stage of treatment the processes of change, self-control or regulation of emotions become predominant topics; the orientation to the future after the end of therapy is also included. Helping the patient to understand the illness and inform him or her about the diagnosis is also part of the intermediate phase, after the therapist and also the patient had some time to better understand the current problem. Similarly, the therapeutic alliance becomes a prominent topic. In summary, the initial phase is characterized by inducing hope and positive expectations. In the intermediate phase predominant topics are, for example, homework assignment, micro-analysis, and increase of activities or emotional control. At the end the therapist focuses on planning the future, relapse prevention and summarizing what has been learned. This stepwise structure of the therapeutic process over time demonstrates that CBT is applied as a stepwise coherent developmental process. This study involves more than talking about day to day problems.

To our knowledge this is the only study to investigate individual sessions in this particular way.

Limitations of the study are that no tape recording was available to observe what therapists did in the sessions. The data originate from therapists who have undergone comprehensive education for several years with state examinations and licensing and who work full time as professionals in an inpatient setting with close supervision. Results may be different for other therapists and settings. This is not an epidemiological study of care and cannot prove what is done across the world under the label of CBT.

### Conclusion

(a) The data suggest that CBT is not an empty word but stands for a specific spectrum of therapeutic perspectives, interventions and processes. (b) Psychotherapists conceptualize, describe and apply treatment in reference to theoretical concepts as laid down in psychotherapy research, manuals, textbooks, and psychotherapy schools. (c) This is not only the case in well-controlled scientific studies or specialized institutions but also under routine care conditions [30,31]. (d) The data contradict the concept that psychotherapy is in essence rather a general type of patient-centered interaction and not the application of specific techniques [1,2,22,24] In summary, our results show the importance of psychotherapy theory and professional language.

**Disclosure Statement:** The author declares that he has no conflict of interest.

**Ethical Approval:** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the Helsinki Declaration 1964 and its later amendments or comparable ethical standards. The study was approved by the internal review commission of the Federal German Pension Insurance.

**Informed Consent:** Informed consent was obtained from all individual participants included in the study.

### References

1. Stricker G, Gold JR (2013) Comprehensive handbook of psychotherapy integration. 2nd edition. New York: Springer Science & Business Media.
2. Krippendorff K (2012) Content analysis: An introduction to its methodology. Seven Oaks, Sage.

3.

- Mander J, Schlarb A, Teufel M, Keller F, Hautzinger M, et al. (2015) The individual therapy process questionnaire: development and validation of a revised measure to evaluate general change mechanisms in psychotherapy. *Clin Psychol Psychother* 22(4): 328-345.
4. Crawford EA, Frank HE, Palitz SA, Davis JP, Kendall PC (2018) Process Factors Associated with Improved Outcomes in CBT for Anxious Youth: Therapeutic Content, Alliance, and Therapist Actions. *Cognit Ther Res* 42(2): 172-183.
5. Gibbons CR, Stirman SW, DeRubeis RJ, Newman CF, Beck AT (2013) Research setting versus clinic setting: Which produces better outcomes in cognitive therapy for depression? *Cognit Ther Res* 37(3): 605-612.
6. Sudak DM (2016b) Measures of competence in cognitive behavioral therapy. In: D Sudak, RT Codd, JW Ludgate, L Sokol, MG Fox, et al. (eds) *Teaching and Supervising Cognitive Behavioral Therapy*. Wiley, Newyork, USA 67-84.
7. Tschuschke V, Cramer A, Koehler M, Berglar J, Muth K, et al. (2016) The role of therapists' treatment adherence, professional experience, therapeutic alliance, and clients' severity of psychological problems: Prediction of treatment outcome in eight different psychotherapy approaches. Preliminary results of a naturalistic study. *Psychother Res* 25: 420-434.
8. Farmer CC, Mitchell KS, Parker-Guilbert K, Galovski TE (2016) Fidelity to the Cognitive Processing Therapy Protocol: Further Evaluation of Critical Elements. *Behavior Ther* 48: 195-206.
9. Hoyer J, Colic J, Pittig A, Stangier U (2017) Manualized cognitive therapy versus cognitive-behavioral treatment-as-usual for social anxiety disorder in routine practice: A cluster-randomized controlled trial. *Behav Res Ther* 95: 87-98.
10. Jacinto SB, Lewis CC, Braga JN, Scott K (2018) A conceptual model for generating and validating in-session clinical judgments. *Psychother Res* 28: 91-105.
11. Gonsalvez CJ, Brockman R, Hill HR (2016) Video feedback in CBT supervision: review and illustration of two specific techniques. *The Cognitive Behaviour Therapist* 9: 1-15.
12. Kealy D, Goodman G, Ogrodniczuk JS (2017) Psychotherapists' ideals in the treatment of panic disorder: An exploratory study. *Counselling and Psychotherapy Research* 17: 201-208.
13. Linden M, Langhoff C, Rotter M (2007) Definition, operationalization, and quality assurance of psychotherapy. An investigation with the behaviour therapy-competence-checklist (BTCC). *Psychiatria Danubina*, 19: 308-316.
14. Linden M, Staats M, Bär T, Zubrägel D (2005) The assessment of treatment strategy in cognitive-behavior therapy: Using the pivotal topic measure. *Psychother Res* 15: 382-391.
15. Muse K, McManus F (2016) Expert insights into the assessment of competence in cognitive-behavioral therapy: A qualitative exploration of experts' experiences, opinions and recommendations. *Clin Psychol Psychother* 23: 246-259.
16. Sudak DM (2016a) Core competences in cognitive behavioral therapy training. In: D Sudak, RT Codd, JW Ludgate, L Sokol, MG Fox, PR Reiser, DL Milne (Eds) *Teaching and Supervising Cognitive Behavioral Therapy*, New York: Wiley, 25-36.
17. Linden M, Christof T, Rentzsch C (2008) Contents of General Practitioner-Patient Consultations in the Treatment of Depression. *J Gen Intern Med* 23: 1567-1570.
18. Linden M, Langhoff C, Milew D (2007) Das Mehrebenenmodell psychotherapeutischer Kompetenz. *Verhaltenstherapie* 17: 52-59.
19. Groome D, Eysenck M (2016) An introduction to applied cognitive psychology. 2nd edition, Psychology Press, Taylor and Francis Group, London, New York.
20. Waltman S, Hall BC, McFarr LM, Beck AT, Creed TA (2017) In-Session Stuck Points and Pitfalls of Community Clinicians Learning CBT: Qualitative Investigation. *Cognit Behav Pract* 24(2): 256-267.
21. Mayring P (2003) *Qualitative Inhaltsanalyse. Grundlagen und Techniken*. 7th edition. Weinheim: Deutscher Studien Verlag.
22. Spiegler MD (2015) *Contemporary behavior therapy*. (6th edition) Boston: Cengage Learning.



23. Creed TA, Wolk CB, Feinberg B, Evans AC, Beck AT (2016) Beyond the Label: Relationship Between Community Therapists' Self-Report of a Cognitive Behavioral Therapy Orientation and Observed Skills. *Administration and Policy in Mental Health* 43(1): 36-43.
24. Kamholz BW, Lawrence AE, Liverant GI, Black SK, Hill JM (2017) Results from the Field: Development and Evaluation of a Psychiatry Residency Training Rotation in Cognitive-Behavioral Therapies. *Academic Psychiatry* 42(2): 1-5.
25. Lambert MJ (2003) Bergin and Garfield's handbook of psychotherapy and behavior change. 5th edition. New York: John Wiley & Sons, New Jersey.
26. Roth AD, Stephen P (2008) Using an evidence-based methodology to identify the competences required to deliver effective cognitive and behavioural therapy for depression and anxiety disorders. *Behav Cognit Psychother* 36:129-147.
27. Rozek DC, Serrano JL, Marriott BR, Scott KS, Hickman LB, et al. (2018) Cognitive Behavioural Therapy Competency: Pilot Data from a Comparison of Multiple Perspectives. *Behav Cognit Psychother* 46: 244-250.
28. Staats M, Bär T, Linden M (2003) Messinstrumente der Therapeutencompliance in der Verhaltenstherapie. *Verhaltenstherapie* 13: 62-67.
29. Hofmann SG, Asnaani A, Vonk IJ, Sawyer AT, Fang A (2012) The efficacy of cognitive behavior therapy: A review of meta-analyses. *Cognit Ther Res* 36: 427-440.
30. Becker S, Witthöft M, Klan T (2018) Überzeugungen von Therapeuten in Bezug auf Exposition: Entwicklung einer deutschen Version der Therapist Beliefs about Exposure Scale. *Verhaltenstherapie* 28: 147-156.
31. Cohen J (1960) A coefficient of agreement for nominal scales. *Edu Psychol Meas* 37-46.