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Work-Related Cognitive-Behavioral Treatment with a Focus on Return to Work: Two Case Descriptions

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Keywords

Cognitive-behavioral therapy · Return-to-work · Case report

Summary

Background: Mental disorders among the working population lead to high absenteeism and thus cause corresponding costs for companies and the health care system. The working life is an important source of life satisfaction. It seems therefore important to include the reintegration into the workplace as a treatment goal of a cognitive-behavioral therapy and to support the reintegration therapeutically. Case Reports: Based on 2 casuistics, the approach of work-focused cognitive-behavioral therapy according to Lagerveld et al. [2012] is described. Conclusion: Conditions and limitations of the approach are discussed.

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Schlüsselwörter

Kognitive Verhaltenstherapie · Berufliche Wiedereingliederung · Fallbeschreibung

Zusammenfassung

Hintergrund: Psychische Störungen bei Erwerbstätigen führen zu hohen Fehlzeiten und verursachen damit entsprechende Kosten für die Betriebe und das Gesundheitssystem. Das Arbeitsleben ist eine wichtige Quelle der Lebenszufriedenheit. Daher scheint es wichtig, die Wiedereingliederung an den Arbeitsplatz im Rahmen einer kognitiven Verhaltenstherapie als Therapieziel aufzunehmen und den Wiedereinstieg therapeutisch zu begleiten. Falldarstellungen: Anhand von 2 Kasuistiken wird die Vorgehensweise der arbeitsplatzbezogenen kognitiven Verhaltenstherapie nach Lagerveld et al. [2012] beschrieben. Schlussfolgerung: Voraussetzungen und Grenzen des Ansatzes werden diskutiert.

Introduction

Although the number of days of incapacity to work (DIW) has decreased in the (German) population at large, the number of DIW due to mental disorders rose steadily between 2000 and 2012, stabilizing at a high level [Bundespsychotherapeutenkammer, 2015]. Currently, mental disorders are responsible for about 10% of all DIW [Meyer et al., 2014]. Absenteeism takes a high economic and social toll, for example because of loss of productivity or, in longer illnesses, from sick pay benefits or in-patient treatment. Thus in

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2013, production losses amounted to around EUR 8 billion and gross value added losses were about EUR 14 billion [BAuA, 2015].

Suffering from a mental disorder also affects the employee's quality of life. A number of studies have shown that loss of employment diminishes the patient's overall life satisfaction [Fergusson et al., 2014; Herbig et al., 2013; Zenger et al., 2013]. If employees drop out of the labor force due to illness, they may additionally lose social support, experiences of success, and thus lose positive reinforcement [Seymour and Grove, 2005]. Long-term inability to work also creates financial difficulties for many patients, since sick pay amounts to only about 70% of one's income.

Incapacity to work can not only be triggered by depressive symptoms, but it can also maintain and reinforce already existing depressive symptoms [Price et al., 2002]. Furthermore, it is known

that some anxiety disorders exclusively occur at the workplace and can cause workplace-specific problems [Muschalla and Linden, 2013]. If employees suffer from job-related anxiety and depressive symptoms, the aim of treatment should be not only to improve the symptomatology as a whole, but also to focus on coping ability at the workplace, to prevent complete avoidance of the workplace, and to reactivate the affected person's social engagement.

Work-Related Cognitive-Behavioral Treatment

Anxiety and mood disorders cause more DIW than any other mental disorders [Bundespsychotherapeutenkammer, 2012]. Evidence-based interventions with *cognitive-behavioral treatment* (CBT) have proven to be effective and efficient treatment methods for these disorders [Wunsch et al., 2013] and are recommended for employees with a high rate of absenteeism [NICE, 2009]. One of the goals of CBT for the employed should be, in addition to the reduction of their distress, the prevention of long-term sick leave and the restoration of the capacity to work. The workplace should be considered as a possible factor in the development and perpetuation of the symptoms, but also as a potential resource.

General Prerequisites for Treatment

According to Lagerveld and Blonk [2008], workplace-oriented CBT is appropriate for patients who have a clinically relevant psychological disorder and are incapacitated for work. In our view, this intervention can be expanded to other areas, provided at least one of the following conditions is met: 1) The patient is unable to work because of the disorder and wants to return to the workplace; 2) the disorder still affects the capacity to work in that job; 3) the development of the disorder was significantly influenced by the situation at the workplace; or 4) in addition to a mental disorder, other work-related problems are reported (e.g., difficulties relaxing in the evening after work, not being permitted to take regular breaks, or conflicts at the workplace).

Overview of the Treatment

The procedure generally follows the unpublished Dutch manual by Lagerveld and Blonk [2008]. However, the authors' approach differs in 2 aspects from the Dutch method. In Lagerveld and Blonk [2008], return to work is intended after 3-6 weeks, whereas in the present study the time for rehabilitation is determined individually during the course of treatment. The advantages and disadvantages of this approach are presented in the Discussion. Lagerveld and Blonk [2008] also recommend gradual return to work. In Germany, the so-called Hamburg Model (§ 74 of the Social Security Code (Sozialgesetzbuch, SGB) V, § 28 SGB IX) spells out the general conditions under social law for return to work after a lengthy illness (for more information: www.einfach-teilhaben.de). It specifies that currently disabled employees should be offered the option of a gradual return to work, provided the employer agrees. The attending physician or occupational physician recommends a phased plan for reintegration, including the intensity and frequency with which the workload should be increased until full capacity to work is restored. During the psychotherapy, common CBT interventions are used to prepare the way for and support rehabilitation, with due consideration of the nature of the job. For example, when the anamnesis is performed, the patient is asked about the effects of the symptoms on the job, and a therapy rationale is developed that takes the workplace into account as either a maintaining factor or a resource. Prior to the return to work, the relevant skills should first be reviewed and, if necessary, learned. Furthermore, the reintegration process can help with anxiety management, if there are work-related anxieties and avoidance behaviors [Lageryeld et al., 2012].

In regular CBT for the particular clinical disorder(s), job-related problems and reintegration are addressed in 3 stages [Lagerveld and Blonk, 2008]:

Stage 1: Gaining an Overview of the Symptoms and the Workplace In the first stage, in addition to taking an anamnesis of the mental symptoms, a workplace-related anamnesis is performed in order to assess the patient's working conditions. The following should be ascertained: 1) basic parameters (e.g., a fixed-term or unlimited contract); 2) nature and duration of the activity (e.g., working hours, duration of breaks, shift work); 3) workplace design (e.g., whether there is daylight); 4) possibilities for self-determination and control (e.g., whether one can independently arrange the nature and timing of one's activities); 5) conflicts with employees, colleagues, or supervisors; 6) problems in the compatibility of work and private life; and 7) opportunities for personal development (e.g., advanced training or potential for advancement). The job-related anamnesis is conducted as a structured interview, based on models of work psychology (including the Stress-Strain Concept of Rohmert and Rutenfranz [1975] and the Job Demand-Control Model of Karasek [1979]), and at the same time it systematically identifies verifiable details about the job. In preparation for the following stage, the patient is given informational worksheets about how mental disorders and the capacity to work can be related. In developing the model for the development and maintenance of a particular disorder, the workplace is incorporated into the model as a maintaining factor and/or a resource. The results of the workrelated anamnesis and the patient's reports are used for this purpose.

Stage 2: Preparing for the Reintegration

In the second stage, the gradual return to work is planned according to the Hamburg Model. The necessary steps are discussed with the patient, for example, making contact with relevant persons at the company (e.g., the occupational physician, the Works Council). This should be the responsibility of the patient, and difficulties and obstacles should be overcome by systematic problemsolving (e.g., evaluation by occupational health caregivers of a possible exemption from shift work or from specific types of work, transfer to another workplace, communication by the employer of supplementary information about mental disorders or reintegration measures). If the patient and therapist consider it necessary,

the therapist can also play a supportive role in these discussions. Where appropriate, a written recommendation should be sent to the general practitioner or occupational physician about how the gradual reintegration should proceed and what workload the patient should assume at what point in time.

Stage 3: Supporting the Reintegration

If the schedule of the gradual reintegration is fixed, the therapist will develop a plan along with the patient for which tasks he or she will have to deal with during the reintegration and how quickly the stress level can be increased. That also allows problems and obstacles to be anticipated and resolved. If possible, in weekly sessions (at least 1 session during each stage of the process), the current phase of the reintegration process should be evaluated. This puts a special focus on the patient's success, in order to increase his or her self-efficacy expectation. If certain aspects of the plan cannot be implemented (e.g., there is a lighter or heavier workload than anticipated), the conditions should be modified, if necessary in cooperation with occupational physicians or supervisors. It may be that symptoms occurring on the job (e.g., anxieties, feelings of overload) should be addressed and integrated into the treatment model. That way the reintegration can also serve as a means of confrontation, in the sense of confrontational, cognitive-behavioral methods (e.g., by exposure in vivo, in the case of work-related anxieties) or testing of new ideas in daily life (e.g., with the ABC Schema).

Effectiveness

A Dutch study [Lagerveld et al., 2012] with employees on sick leave (N = 168) who mainly suffered from adjustment disorders, compared workplace-focused CBT to regular CBT, and found that full return to work was possible in about 65 days, and the capacity to work continued over a long period. The mental complaints, including depression and anxiety, were reduced equally by both forms of therapy (Cohen's d = 0.65-1.77 at the 12-month follow-up) [Cohen, 1988].

In another controlled study [Kröger et al., 2014a], work-related CBT (W-CBT) was compared with regular CBT for unipolar depression (N = 26). In addition to the number of DIW as the primary outcome measure, the mental stress was also assessed. The findings showed that absenteeism was significantly reduced in both conditions after treatment, with a greater decrease in DIW in the W-CBT condition. After 1 year, more employees in the W-CBT condition were able to work than in the CBT condition. There was an equally significant reduction of symptoms in both conditions (d = 0.50-2.19), as Lagerveld et al. [2012] also found. This suggests that W-CBT is an effective intervention, which can speed up the return to work without losing symptom-related effectiveness.

In the latest Cochrane Review [Nieuwenhuijsen et al., 2014; 23 studies, N = 5,996], the treatment of patients with depressive disorder or depressive symptoms was studied with a focus on the return to work. The review showed that the inclusion of workplace-related interventions in the customary pharmacological treatment and/ or psychological interventions can reduce patients' absenteeism

more than clinical interventions without this workplace focus (standardized mean difference (SMD) -0.40; 95% confidence interval (CI) -0.66 to -0.14; 3 studies).

Case Descriptions

Patients in this project received CBT in an interdisciplinary care project. Contracts were concluded among a university outpatient psychotherapy clinic, a local company, and the company health insurance fund. If a mental disorder is suspected, company employees or insured participants in the company's health insurance fund can participate in so-called diagnostic counseling, which assesses whether there is a mental disorder and, if appropriate, authorizes the prompt beginning of psychotherapy. The return to work is integrated as an important therapy goal and is therapeutically supported throughout the treatment process. Networking among the therapist, employer, and health insurance also allows for an ongoing exchange of information. While considering the workplace, this also facilitates a quick reintegration if the person is unable to work. A detailed description of the process (e.g., the diagnostic counseling, case management, and networking), as well as contractual and organizational parameters, can be found, e.g., in Kröger et al. [2014b].

Diagnostics and Evaluation

The diagnostic procedures include both common clinical diagnostic instruments (Beck Depression Inventory (BDI) [Hautzinger et al., 1995], Life Satisfaction Questionnaire (Fragebogen zur Lebenszufriedenheit; FLZ) [Fahrenberg et al., 2000], Symptom Check List-90-R (SCL-90-R) [Franke, 2002]), and a questionnaire on work-related self-efficacy (Expectations for Return to Work (Erwartungen zur Rückkehr an den Arbeitsplatz; ERA) [Lagerveld et al., 2010; German translation: Brackmann and Kröger, 2013]). The results are reported for pre, post, and follow-up, and the observed and critical differences are shown. The Reliable Change Index (RCI) [Jacobson and Truax, 1991] is used to evaluate whether a clinically significant change has occurred, as this test statistic identifies the observed difference in proportion to the standard deviation of this difference. With an RCI ≥ 1.96 ($\alpha = 0.05$), it can be assumed that there was a clinically relevant change.

Specific releases from confidentiality, provided by the patients, allowed a review of health insurance data, such as the DIW of the patients before, during, and after therapy. On the basis of the DIW, the costs incurred through absenteeism before and after the therapy were calculated for both cases. The data of the Bundesanstalt für Arbeitsschutz und Arbeitsmedizin [BAuA, 2015] was used as a basis for calculating the cost of 1 DIW with respect to the loss of production and loss of gross value added.

Case 1

A 50-year-old clerk (30 h/week) was enrolled in the outpatient psychotherapy clinic after a preliminary interview with the occupational physician. A few months earlier, she had taken on a new organizational assignment. Since then she had been anxious about

making mistakes. She no longer dared to ask colleagues or supervisors questions, from fear of being considered incompetent. Finally the anxieties became so bad that the patient experienced severe nausea and vomiting when thinking about the work and was put on sick leave by her family doctor. She also suffered from bad moods, reduced appetite, exhaustion, and feelings of worthlessness. At the time of the first probationary session, the patient had been unable to work for about 3 weeks.

A life history anamnesis, work anamnesis, and Structured Clinical Interview for DSM-IV (SCID-I) [Wittchen et al., 1997] were conducted with the patient at the probationary sessions. In SCID-I, the patient met the criteria for a social phobia as well as a mild depressive episode; her social anxieties related exclusively to situations in the workplace. Her life history revealed relevant events that had fostered a social phobia (e.g., being mocked by her teacher in front of the class). The patient identified as her therapy goals that she wanted to overcome her social anxieties, to be able to return to work. Treatment planning was based on a cognitive-behavioral therapeutic approach according to the manual by Stangier et al. [2006]. The workplace-related therapy followed the manual by Lagerveld and Blonk [2008].

At the beginning of the *first stage* of treatment (1st through 3rd sessions), a hypothetical model of the development and maintenance of the social phobia was elaborated, following Clark and Wells [1995]. Behavioral analysis made clear to the patient how the onset of social anxieties at the workplace has been triggered: A few months before, her supervisor had responded with 'annoyance' to a question, and she no longer dared to ask questions. As the patient assumed her new task, negative beliefs were perpetuated ('If I make a mistake, I will be considered incompetent'), which led to feelings of overload and feeling of inferiority. The role of avoidance and safety behavior was illustrated with the aid of job-related examples: the patient reported, for example, that at meetings she always held a large folder in order to hide her trembling hands.

The second stage consisted of 11 sessions (4th through 15th sessions) over a 3-month period. At the beginning of this stage, the patient learned that her previous job would only be available for 3 months because of company restructuring and that a new job within the company would have to be found for her, which initially intensified her feelings of insecurity and tension. The first sessions of the second stage (4th through 8th sessions) were used to describe an 'ideal job', to identify which aspects of a job were associated with her mental health. The patient stated that time pressure and changing tasks particularly increased her anxieties and that an 'ideal job' should have clearly defined tasks and little time pressure. Although the patient and therapist considered these criteria as perhaps unrealistic, they were used in the later phases to present the patient's problem in greater detail to the occupational health physician and to identify, with the patient, specific 'risk situations' for a relapse. Also by using the ABC Schema [see, for example, Stavemann, 2008], automatic thoughts in anxiety-provoking situations were detected. It turned out that the patient especially feared not being able to explain work-related processes well and not being able to answer questions about her tasks, and therefore being judged as incompetent. These assumptions were questioned in a Socratic dialog and were cognitively restructured. Then, following Stangier et al. [2006], a behavioral experiment with video feedback was conducted. The patient was supposed to explain to a co-therapist whom she did not know what her main tasks were at the job, and to face and answer questions of the co-therapist. Additionally, she was supposed to avoid safety behavior (e.g., intertwining her fingers to hide the trembling of her hands). The conversation was evaluated by patient and therapist on the basis of the video recording. The patient noted that she seemed less nervous than she had previously thought, and that the co-therapist considered her 'slightly nervous' and at the same time 'competent'. The findings from the video experiment supported the patient in the development of new, more helpful thoughts through self-verbalization [see Hinsch and Pfingsten, 2007], e.g., 'Even when I'm nervous, I still seem to be competent.' Subsequently the patient felt motivated to make the necessary contacts at the company, and agreed to arrange appointments to discuss reintegration in a new position. Between the 9th and 12th sessions, she had interviews with the occupational physician and the works council. To prepare for these interviews, during the therapy sessions the patient practiced role-playing in potentially difficult situations. The patient experienced no social anxieties during the interviews with the occupational physician and the works council; on the contrary, she felt invigorated by the idea of 'being able to take control of her affairs'. In sessions 13 to 15, following the usual approach of CBT, the patient's further negative assumptions were questioned in a Socratic dialog, and new, helpful self-verbalizations were developed (e.g., 'It is ok to ask questions, because there's no way I could know everything at a new job'). In parallel, she maintained telephone contact with the occupational physician and the Works Council until a new job became available after the 15th session.

In the third stage (16th to 19th sessions), the patient's reintegration took place in parallel with therapy [Lagerveld and Blonk, 2008]. The first session of this level took place 2 weeks before the reintegration started. Sessions 17-19 occurred every 2 weeks, providing support for the patient's return to work. In the first 2 weeks, she worked 2 h per day, and every 2 weeks her workday was increased by 2 h, until finally, in week 5, she worked a full 6-h day. A new workplace anamnesis was taken in these supporting sessions, and potentially difficult situations at the new workplace were explored. The individual stages of the gradual reintegration were evaluated following Lagerveld and Blonk [2008]. The patient still reported difficulties in situations in which she had to ask questions. She no longer avoided these situations, however, but could handle them well without resorting to safety behavior. The self-verbalizations she had previously developed were particularly helpful for her. At the time of full reintegration, she no longer experienced any social anxieties. Therefore, after the 19th session, the sessions became less frequent. Two more sessions during a 2-month period were used for final diagnostics and to develop strategies to prevent relapse. The main results of the therapy were summarized and early warning signs of relapse were identified, and the patient put together an 'emergency plan' in case her anxieties should reemerge.

Table 1. Means and standard deviations in comparison populations and scale values of patient 1 on the various questionnaires at 3 measurement points

Questionnaire	Compari	Comparison population ^a				Patient 1				
	M	SD	α	D _{crit.} b	Pre	Post	Follow-up ^c	D _{observ.} d	RCIe	
BDI	23.2	10.8	0.87	10.79	18.00	1.00	0.00	18.00	3.27*	
FLZ Total	256.63	35.93	0.95	22.27	252.00	284.00	286.00	34.00	2.99*	
FLZ Work Profession	35.15	9.59	0.93	7.03	31.00	40.00	42.00	11.00	3.07*	
SCL-90 GSI	0.43	0.38	0.97	0.18	1.44	0.03	0.06	1.38	14.83*	
ERA	4.24	1.14	0.92	0.89	2.82	5.64	6.00	3.18	5.95*	

aMeans (M), standard deviation (SD), and Cronbach's α from the following publications: BDI = Beck Depression Inventory [Hautzinger et al., 1995], comparison group depression; FLZ = Fragebogen zur Lebenszufriedenheit (Life Satisfaction Questionnaire) [Fahrenberg et al., 2000], scale 'Overall Life Satisfaction' and 'Work & Profession', comparison group: German women aged 46–55; SCL-90-R = Symptom Checklist 90-R [Franke, 2002], scale 'Global Severity Index' (GSI), comparison group: German women aged 51–59; ERA = Erwartungen zur Rückkehr an den Arbeitsplatz (expectations for return to work) [Lagerveld et al., 2010; German translation: Brackmann and Kröger, 2013], comparison group: Dutch employees with at least 13 weeks of incapacity for work.

bD_{crit.} = 1,96 × SD × $\sqrt{2}(1 - \alpha)$ with 2-sided testing.

Table 2. DIW and costs of DIW before, during, and after therapy

	Patient 1			Patient 2			
	12 Months before Th.	During Th. (8 months)	12 Months after Th.	12 Months before Th.	During Th. (12 months)	12 Months after Th.	
DIW	20	243	0	250	114	134	
DIW per 100 days	5	99	0	68	30	43	
Costs absolute ^a	EUR 5,700	EUR 69,255	EUR 0	EUR 71,250	EUR 32,490	EUR 38,190	
Costs per 100 days	EUR 1,481	EUR 28,152	EUR 0	EUR 19,257	EUR 8,417	EUR 12,124	

^aCosts per DIW: EUR 285, of which EUR 103 from loss of production and EUR 182 from loss of gross value added [BAuA, 2015]. Th. = Therapy; DIW = days of incapacity to work.

A booster session was held after 6 months, at which it turned out that the patient was dissatisfied with the conditions at her workplace, as she often was used as a 'floater', but she no longer had social anxieties.

The diagnostic findings at the beginning and at the end of the treatment as well as after 1 year are shown in table 1. The treatment improved the patient's overall life satisfaction (FLZ Total) as well as her specific satisfaction with the category 'Work and Profession' (FLZ Work Profession). Depressive symptoms (BDI) and general psychological distress (SCL-90 GSI) decreased, while job-related self-efficacy (ERA) increased, as expected. The differences observed between the start of treatment and follow-up clearly exceed the calculated critical differences; the RCI [Jacobson and Truax, 1991] was in the significant range (RCI ≥ 1.96) for all scales, although we must assume that her answers may have been subject to social desirability bias. Table 2 presents the DIW as well as the associated costs for the periods before, during, and after the therapy. In the 12 months prior to the therapy, the patient's absenteeism was 20 DIW; during the 8 months of therapy, 243 DIW; and in the year after therapy, 0 DIW. The costs of absenteeism (loss of production and loss of gross value added according to BAuA [2015]) amounted to about EUR 5,700 in the year before therapy; about EUR 69,300 during the 8 months of therapy; and none in the year after therapy.

Case 2

A 52-year old salaried employee (30 h/week) reported that for 6 months she had suffered from listlessness, a depressed mood, difficulty falling asleep and sleeping through the night, severe restlessness, difficulty concentrating, and exhaustion ('I sometimes feel like a block of wood'). She said she had pulled back more and more from leisure activities and social engagement. Since she began to take citalopram (20 mg), the sleep disorders had gone into remission. The patient also reported that she had repeatedly suffered sudden hearing losses in the last 10 years, accompanied by severe dizziness, nausea, and a whistling sound in the right ear. The last sudden hearing loss had occurred 3 months earlier. For 10 years she had also suffered from osteoporosis and associated pain in the thoracic vertebrae area. Furthermore, 8 years ago she had a malignant thyroid tumor removed and underwent radioiodine treatment. The patient began work-related outpatient psychotherapy 3 months after the initial contact. In the meantime, she had applied for an in-patient psychosomatic rehabilitation program, and wanted to wait to find out the decision on that before beginning outpatient therapy. However, the program was rejected, citing the option of outpatient psychotherapy. During the period before treatment began, the patient had returned to work but stopped again, so that when outpatient therapy began, she was unable to work.

At the probationary sessions, a detailed anamnesis of her life

^cFollow-up measurement after 12 months.

^dD_{observ.} = Magnitude of observed difference between pre and follow-up after 1 year.

[°]RCI = Magnitude of Reliable Change Index (RCI) [Jacobson and Truax, 1991]; significant changes (RCI ≥ 1.96) marked with *.

history and workplace history [Lagerveld and Blonk, 2008] as well as a structured interview (SCID-I) [Wittchen et al., 1997] were conducted, and a moderate depressive episode was diagnosed. The following objectives were agreed to in a goal attainment scale: She would like to feel calmer, to learn strategies for coping with stress, to go back to work, and to manage periods of increased workload. Therapy planning included a behavioral therapeutic approach with cognitive elements, based on the manual by Hautzinger [2013].

At the beginning of the first stage (1st to 3rd sessions), an explanatory model was elaborated for the development and maintenance of depressive symptoms, following Hautzinger [2013], and also including the workplace, as per Lagerveld and Blonk [2008]. Triggers of the depressive disorder were identified, which were critical life events (the death of her sister from cancer, illnesses in the family), a heavy workload due to absenteeism of colleagues, and her own health constraints (pain, dizziness). Excessive demands on herself ('I have to do everything right') and the conviction that she had to cope with everything on her own, sapped her energy by the end of the day, leaving none for positive activities. In psycho-education, the patient learned about the negative mood spiral and the depression triangle. A weekly schedule was introduced to clarify the relationship between activity and depressed mood: the lack of daily structure due to the long sick leave and lack of positive activities had resulted in a worse mood and sleep disorders. So the number of positive activities was increased (especially social contacts), to improve her mood and to make the day more meaningful.

In the second stage (4th to 6th sessions), preparations were made for occupational rehabilitation [Lagerveld and Blonk, 2008]: a work analysis was performed in which the patient listed and described her activities and checked their feasibility together with the therapist. Risk factors were analyzed and possible coping options devised. Patient and therapist discussed in advance the interviews with the occupational physician, the works council, and the human resources department and evaluated them afterwards at the therapy sessions. Regarding the upcoming reintegration, the patient was particularly anxious about renewed attacks of dizziness. She experienced these as unpredictable and severe. Several somatic examinations could not definitely confirm the suspected diagnosis of Menière's disease, but also could not rule it out. The model of somatosensory amplification [according to Barsky, 2007] was discussed with the patient. She was able to identify stress and hectic activity as risk factors for her dizziness, so further work was done on recognizing her own limits and standing up for herself so as not to exceed them. Negative cognitions ('I am helpless when these attacks come on') were questioned and restructured ('I have this disease, but I know what I can do if the symptoms occur again'). This enabled the patient to strengthen her self-efficacy.

Then came the *third stage* (7th to 22nd sessions), the reintegration phase. The gradual reintegration followed the Hamburg Model and the various stages were planned and evaluated as per Lagerveld and Blonk [2008]. Agreement was reached with the occupational physician and the human resources department that the patient should first work 3 h per day for 3 weeks, then 4.5 h for

3 weeks, and subsequently the 'full' 6 h. It was planned with the patient that she would return to her old job, but at first with a reduced workload. Specific strategies were developed for how the patient could protect herself at the workplace from renewed overload (such as taking regular breaks, checking her e-mail only at certain times, structuring her tasks). A 'stress traffic light' was developed for this purpose [based on Kaluza, 2011], for risk situations (e.g., unexpected phone calls, absence of colleagues), physical warning signs (e.g., headache, anxiety), or behavioral warning signs (e.g., no break), and possible coping strategies (e.g., self-verbalizations such as 'One thing at a time, stay calm'). The therapist coached her on 'saying no' (cognitive restructuring); she practiced it (including role-playing, self-verbalization), and the implementation was evaluated. They analyzed her conflicts with a new colleague and devised solutions. The patient also practiced these skills in role-playing and performed them at the workplace. The therapist took care that the patient was planning and performing positive activities in her spare time. She said that previously she had almost exclusively tended to her home and garden, and had not found a counterbalance to that. Bit by bit the patient resumed sports (walking, swimming, sports lessons) and was able to continue these until the therapy ended. To strengthen her self-efficacy, the patient and therapist analyzed her resources in the therapeutic conversation [following Flückiger and Wüsten, 2008]. That way, she identified her positive characteristics and strengths in relation to the workplace and/or the resumption of work.

The therapy sessions occurred at 14-day intervals after her full reintegration (session 13). Since the symptomatology was in remittance and this improvement remained stable over a fairly long period of time, the therapy was wound down after the 22nd session. The content that she had learned was reviewed and consolidated in the further sessions. No attacks of dizziness occurred during the entire therapeutic process. At the final session, the patient reported that her husband had cancer and it was not certain how long he had left to live. For this reason, 2 additional booster sessions were agreed upon, at an interval of 3 or 6 months. Despite this distress, the patient managed to successfully carry out the strategies she had learned and suffered no further depressive illness.

The diagnostic findings at the beginning and end of the treatment, and after 6 months, are presented in table 3. The treatment reduced the patient's depressive symptoms (BDI). Her overall life satisfaction (FLZ Total) as well as the specific satisfaction in the 'Work and Profession' category (FLZ Work Profession) were already in the normal range at the beginning of the treatment and had improved only slightly by the time of the follow-up measurement. General psychological distress (SCL-90 GSI) declined. Selfefficacy (ERA) increased significantly. The observed differences in the measuring instruments (with the exception of the FLZ) between the start of treatment and follow-up exceeded the calculated critical differences; the RCI was also in the significant range (RCI ≥ 1.96). Despite the strong psychosocial stress factors at the end of the treatment, the patient was able to maintain her progress and improvements. In the 12 months prior to therapy, she had 250 DIW (table 2). During therapy (12 months), successful reinte-

Table 3. Means and standard deviations in comparison populations and scale values of patient 2 on the various questionnaires at 3 measurement points

Questionnaire	Comparison population ^a				Patient 2	Patient 2				
	M	SD	α	D _{crit.} b	Pre	Post	Follow-up ^c	D _{observ.} d	RCI ^e	
BDI	23.2	10.8	0.87	10.79	15.00	0.00	2.00	13.00	2.36*	
FLZ Total	256.63	35.93	0.95	22.27	257.00	269.00	270.00	13.00	1.14	
FLZ Work Profession	35.15	9.59	0.93	7.03	40.80	37.00	41.00	0.20	0.06	
SCL-90-R	0.43	0.38	0.97	0.18	0.62	0.16	0.19	0.43	4.62*	
ERA	4.24	1.14	0.92	0.89	3.09	4.91	4.73	1.64	3.60*	

^aSee the notes and explanations to table 1.

SCL-90-R = Symptom Checklist 90-R; ERA = Erwartungen zur Rückkehr an den Arbeitsplatz (expectations for return to work).

gration was achieved so that the DIW decreased to 114. In the 12 months after therapy, the number of DIW was 134. As a result of the illness and the time the patient had to spend caring for her spouse, she had a longer period of sick leave. The costs due to absenteeism amounted to about EUR 71,300 in the year prior to therapy, about EUR 32,500 in the 12 months of therapy, and about EUR 38,200 in the year after therapy.

Discussion

Two case examples were presented to show how work-related measures can be integrated into therapy. In both patients, a flexible schedule of occupational rehabilitation was important to the course of treatment, which resulted in significant symptom reduction.

According to Lagerveld and Blonk [2008], reintegration should occur within 3 weeks after the start of therapy, regardless of the symptom severity. The present project showed that, depending on the case, different numbers of sessions were needed to prepare the way for reintegration. While in the study by Lagerveld et al. [2012], two-thirds of patients had an adjustment disorder, the 2 cases presented here had depressive disorders or an anxiety disorder. Given the severity of the patients' symptoms, return to work was only possible after first reducing the symptom severity and building up certain skills needed in the workplace (including social competence and problem solving). Reintegration also depended on whether the patients were able to return to their former workplace or a new workplace had to be found before the reintegration: in case 1, the reintegration took place later on in the therapeutic process, because at first no alternative workplace was found; in case 2, reintegration without therapeutic help failed at first, but with therapy, the second attempt was successful.

Another difference with Lagerveld et al. [2012] involves the diverging legal frameworks in Germany and the Netherlands: while patients in Germany qualify for disability benefits after 6 weeks, in the Netherlands the company is obliged to pay those unable to work for up to 2 years, usually their full salary [Mittag et al., 2015].

In the Netherlands, the responsibilities for organization and monitoring of reintegration are more clearly formulated and are limited to a few persons. The procedure for reintegration is established by law; a case manager is responsible for each patient, and sick leave authorization is issued only by occupational physicians. Although employers in Germany are also legally obliged, if a disability lasts at least 6 weeks, to provide the person with so-called Workplace Integration Management (Betriebliches Eingliederungsmanagement; BEM) (§ 84, par. 2 SGB IX), the various participants in the process and their responsibilities are not legally defined, and patients may decline to participate.

A special feature of our project is the cooperation among practitioners, the employer, and the occupational physician. A regulated BEM at the workplace was also possible in both of the cases we described. These support options promote successful occupational rehabilitation, especially when there is an option of cooperating with the employer to change or adapt the workplace if necessary. In companies without occupational medicine or BEM, or in cases in which the patient does not wish to cooperate with the employer or occupational physician, the process of reintegration must be adapted accordingly. The duration of occupational rehabilitation should depend upon the severity of the patients' symptoms and functioning as well as their motivation. Provided there is simultaneous and frequent therapy, direct reintegration can be planned even if there are still complaints or functional limitations. This approach is essential if the employer rejects gradual integration or gradual integration is not possible at the particular workplace. It needs to be checked whether the workplace should be adapted to accommodate the patient's level of distress and whether this is even possible in the particular work context.

We used only 1 workplace-related questionnaire (ERA) in our outpatient treatment, for economic reasons and to encourage patient acceptance. Additional questionnaires for self-assessment (e.g., Effort-Reward Imbalance questionnaire (ERI) [Siegrist et al., 2009]) or third-party assessment (e.g., Osnabrück Profile of Working Abilities (Osnabrücker Arbeitsfähigkeitenprofil; O-AFP) [Wiedl and Uhlhorn, 2006]) could provide more information. The focus on self-efficacy and increasing the resources available to the

 $^{^{}b}D_{crit.} = 1.96 \times SD \times \sqrt{2(1 - \alpha)}$ with 2-sided testing.

cFollow-up measurement after 6 months.

^dD_{observ.} = Magnitude of observed difference between pre and follow-up after 0.5 years.

 $^{{}^{}e}RCI = Magnitude \ of \ Reliable \ Change \ Index \ (RCI) \ [Jacobson \ and \ Truax, 1991]; \ significant \ changes \ (RCI \geq 1.96) \ marked \ with \ {}^{\star}.$

BDI = Beck Depression Inventory; FLZ = Fragebogen zur Lebenszufriedenheit (Life Satisfaction Questionnaire);

patient was important in both courses of therapy. The further use of questionnaires would also be possible here to identify resources (e.g., the Essen Resources Inventory (Essener Resourcen-Inventar; ERI) [Tagay et al., 2014]), as would interviews [e.g., according to Willutzki et al., 2005].

Both patients reported increased worries and fears while planning their reintegration. It was possible to process these undesired effects, however, using common CBT techniques (such as role playing, cognitive restructuring, problem-solving). Generally speaking, a differential diagnostic evaluation of workplace-related anxieties (including workplace phobia, feeling of inferiority) should be performed before treatment is planned. Therapists should make sure that patients who tend to be overwhelmed at the workplace and who are therefore advised to pull back and create a reasonable balance between assuming a greater workload and taking it easy, do not develop protective and resting behavior, which could jeopardize their successful reintegration [Linden and Strauß, 2012].

The limitation should be noted that in calculating the costs of absenteeism for the 2 patients, we had access only to the DIW data that was submitted to the health insurance company. Since at the company concerned, notification of illness is not required until the 4th day of absence, no sick leave of 3 days or fewer could be considered. It is not possible to tell from the insurance company data whether these patients, in addition to the reports of illness that we counted, also had briefer periods of DIW, which could lead to an underestimation of the costs for both the pre and the post periods.

Moreover, the data of the BAuA [2015] were used to estimate those costs. The specified costs (loss of production and loss of gross value added) represent an average for Germany, for all sectors of the economy and income groups. A specific estimate of the costs incurred for the income of the 2 patients described could not be made because this would have required direct contact with the human resources department and would have been a violation of confidentiality. To ensure the comparability of the costs in the pre and post periods, we therefore considered only the costs due to loss of production and loss of gross value added, but not the costs to the

health insurance company in the form of sick pay after 6 weeks of incapacity to work. Finally, only the costs caused by absenteeism are incorporated in the calculation, while the costs from potential presenteeism could not be considered. If employees keep working despite impairment by a mental disorder, considerable losses in productivity can also occur. The associated costs are estimated as up to 10 times higher than the costs incurred through absenteeism [Schmidt and Schröder, 2009]. In the cases reported here, however, these costs are likely to be low, because the diagnostic results overall suggest stable remission.

Conclusions

The therapeutic concept described here is conceived as cross-disorder, because the usual disorder-specific CBT techniques are used, and then adapted or extended with regard to the workplace. These cases show that it is possible to integrate workplace-related interventions in a guideline-compliant approach with 25 therapy sessions, and that the workplace-focus caused neither delay nor detriment to long-term symptom reduction: also after the conclusion of therapy (follow-up measurement after 6 or 12 months), the symptoms of both patients remained in remission. By returning to work, the patients were able to increase their self-efficacy, expand the domains in which they practiced the ideas and behavior patterns they had learned in therapy, and ultimately reduce their sickness-related absenteeism. Thus, work-related psychotherapy, in addition to reducing patients' mental problems, also helps to reduce costs for businesses and social insurance by reducing downtime.

Disclosure Statement

There are no significant conflicts of interest.

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