The View of Psychologists on the Treatment of Insomnia in Patients with Mood Disorders

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University of Twente

Department of Psychology

Victoria Hesker

Supervisor: Luisa Reiter

2nd Examiner: Erik Taal

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Abstract

Insomnia is a sleep disorder that is highly prevalent among individuals with psychological disorders, especially those suffering from mood disorders such as major depression and bipolar disorder. The most common treatment options include pharmacological treatment or cognitive behavioural therapy for insomnia (CBT-I). This qualitative study aimed to evaluate the extent to which psychologists report to carry out insomnia treatment in patients with mood disorders. The purpose was to explore their views and methods, as well as potential ideas on how the treatment for these patients could be improved in the future.

Throughout 10 semi-structured interviews with open-ended questions, clinical psychologists and psychotherapists were asked to share their attitudes, methods, and ideas on this topic. The thematic analysis showed that there were differences regarding the participants' openness towards pharmacological treatment options and that all participants reported making use of CBT-I methods during the treatment. Furthermore, the majority of participants expressed feeling unsatisfied with the expert training and education in this field. They shared ideas on how the treatment of those patients could be improved, such as by offering education about sleep problems for the general population, group therapy for patients with insomnia, or a CBT-I expert in every clinic. However, it needs to be taken into account that all participants were located in either Germany or the Netherlands and that they had differing educational backgrounds and job specializations, which may have influenced the results of this study. Still, the outcomes contribute to a deeper understanding of the current practices that are applied in healthcare and the factors that influence the decision-making of psychologists.

Keywords: Sleep Disorders, Insomnia, Mood Disorders, Clinical Psychologists, CBT-I

Introduction

Insomnia and Mental Illness

Insomnia is a sleep disorder characterized by difficulties initiating and maintaining sleep, as well as disruptions of sleep or awakening early in the morning. The diagnostic criteria for chronic insomnia require individuals to experience symptoms for more than two nights a week over at least three months. Additionally, the symptoms must cause the person significant distress, leading to impairments in social or occupational functioning (Substance Abuse and Mental Health Services Administration, 2016). According to Morin and Jarrin (2022), approximately 10% of the population suffers from chronic insomnia, while roughly 20% of people report experiencing occasional or mild insomnia. In women and elderly people, even higher prevalence rates and vulnerability to the development of insomnia have been found (Morin & Jarrin, 2022). This makes it the most common sleep-wake disorder in the general population.

Chronic insomnia can lead to an inability to manage everyday life appropriately. The long-term effects of chronic insomnia include difficulties concentrating, impaired memory, and a decreased quality of life and overall well-being (Thase, 2005). In 30-90% of psychological disorders, insomnia is listed as a primary symptom, suggesting that the majority of mental disorders are directly related to sleep dysfunctions (Becker, 2006). Even though insomnia has been classified as a symptom of psychological disorders, recent studies show that it also serves as a risk factor for multiple disorders, including major depression and anxiety disorders (Krystal et al., 2019). Consequently, it has been suggested to assess and recognize insomnia separately, even when it occurs as a result of another disorder (Krystal et al., 2019). This makes the relationship between insomnia and other mental illnesses rather bidirectional and more complex than it was originally assumed.

Insomnia in Mood Disorders

Mood disorders often involve problems initiating and maintaining sleep due to psychological distress and restlessness at night. They are characterized by inconsistencies in the emotional state and energy levels of a person. It can be distinguished between depression (intense sadness) and mania (intense euphoria), that either occur individually or alternately (Coryell, 2018). Mood disorders can be diagnosed when the unstable mood impairs the daily life of a person and is accompanied by other physical and psychological symptoms (Coryell, 2018). Major depression is a mood disorder that manifests as low mood, decreased energy levels, and feelings of hopelessness, which can lead to acts of self-harm or even suicide attempts (Sekhon & Gupta, 2020). Bipolar disorder consists of switches between depressive

and manic episodes. The depressive episodes are characterized by symptoms of depression, while mania involves increased energy levels, racing thoughts, and reckless behaviour (Sekhon & Gupta, 2020). Mood disorders also include depressive episodes resulting from other health conditions or substance use disorders (Sekhon & Gupta, 2020). If someone experiences manic episodes without them alternating with depressive episodes, it is called unipolar mania, which is significantly less common than bipolar disorder (Coryell, 2018). Therefore, this research will mainly focus on major depression and bipolar disorder as they are two of the most prevalent mood disorders.

The most significant correlation was found between insomnia and major depression. A study by Geoffroy et al. (2018) showed that out of 3573 participants with major depression, 92% reported sleep complaints, of which 85.2% had symptoms of insomnia. Patients with major depression are likely to develop insomnia as a result of stress, negative thoughts, and ruminating at night time. Along with that, they may use their phone excessively or consume caffeinated drinks in the evening, making them more restless and alert (Villiness, 2022). On the other side, people suffering from insomnia are also at high risk of developing symptoms of major depression over time due to the negative long-term effects of insomnia (Krystal et al., 2019). Sleep restriction also influences the neurotransmitter serotonin, which can contribute to the development of depressive symptoms (Newsom, 2020). Due to the bidirectional relationship between those conditions, patients suffering from them often feel trapped in a continuous cycle of sleep problems and depression (Newsom, 2020).

Insomnia is not only a symptom and a risk factor of major depression, but it also occurs in bipolar disorder. According to Seow et al. (2018), bipolar patients experience an increase in insomnia symptoms during the depressive phases and a decreased need for sleep before or during the manic phases. Some experimental studies even show that induced sleep deprivation can cause the onset of a manic episode (Harvey et al., 2009). Depending on the current state of the patients, their needs and complaints about sleep can change. Another study revealed that patients reported fewer issues around sleep while being manic, while more than 40% of the patients experienced insomnia during their depressive episodes (Steardo et al., 2019). This suggests that patients with bipolar disorder report more sleep disturbances while experiencing depressive symptoms. Based on this information, it can be said that mood disorders are one of the most common psychological disorders with a significant relation to insomnia.

Treatments for Insomnia

Considering that insomnia significantly impacts mental well-being and is highly comorbid with mood disorders, it is of great importance to look at available treatment options. Research has been done on the effects of pharmacological as well as cognitive behavioural therapy on the sleep quality of patients suffering from comorbid insomnia. In addition, the benefits and risks of both treatment options were investigated.

The most common pharmacological treatments for insomnia include the use of benzodiazepines, nBBRAs, and sedating antidepressants. According to Madari et al. (2021), benzodiazepines (e.g. Diazepam, Lorazepam, Flurazepam) have been widely used to treat insomnia before the dangers and side effects were fully established. Benzodiazepine binds to GABA-A receptors in the brain, causing sedating effects and a calmer nervous system, which helps to ease symptoms of insomnia (Peters, 2023). However, the side effects of this medication include dizziness, impaired thinking, as well as dependence, and withdrawal (Peters, 2023). Given the side effects and the risk of dependence, daily long-term use of this medication can be considered dangerous.

For this reason, they were widely replaced by non-benzodiazepine benzodiazepine receptor agonists (nBBRA), which affect the same receptors in the brain. Even though nBBRAs (e.g. Eszopiclone, Zolpidem, Zaleplon) are effective and linked with less severe side effects, they can still cause symptoms like headache, nausea, and dizziness (Madari et al., 2021). Due to the common side effects like drowsiness, dizziness, and dependence, both options are mostly used for short-term treatment.

Lastly, sedating antidepressants, such as Doxepin and Trazodone are also commonly prescribed in low doses to treat insomnia. Even though it was found that Doxepin does not help initiate sleep, it improves sleep quality and duration, which can be helpful for patients who struggle to maintain sleep (Madari et al., 2021). Trazodone works by affecting the release and reuptake of the neurotransmitter serotonin, which causes patients to feel relaxed and tired (Ghoshal, 2019). It is mostly used to treat patients with comorbid insomnia, and the side effects can include symptoms like suicidal thoughts or serotonin syndrome (Ghoshal, 2019). Moreover, Doxepin and Trazedone are both associated with headaches and somnolence (Madari et al., 2021). Since the side effects do not include dependence or withdrawal, Doxepin and Trazadone are the safer options for long-term use.

The best-known non-pharmacological treatment for insomnia is cognitive behavioural therapy for insomnia (CBT-I). This form of therapy works by assessing and correcting poor sleep habits, as well as beliefs and attitudes about sleep (Newsom, 2020). Cognitive restructuring and psychoeducation about sleep hygiene are used to correct inaccurate beliefs

about sleep (Newsom, 2020). Furthermore, CBT-I aims to reduce the hyperarousal of patients as insomnia is closely linked to physiologic, cognitive, and emotional arousal that manifests as hypervigilance during the day (Lie et al., 2015). For this reason, relaxation techniques and mind-body practices are applied during the treatment (Pietrangelo, 2021). CBT-I works by teaching adaptive coping skills and habits to reduce sleep problems as it combines cognitive, behavioural, and psychoeducational interventions (Newsom, 2020). According to Rossman (2019), even though CBT-I has been found to be a highly effective non-medicational treatment for patients with insomnia, there is still a shortage of professionals who are trained in CBT-I. Additionally, unlike pharmacological forms of treatment, CBT-I is rather timeconsuming for both parties involved, and thus, remains to be underutilized (Bouchard et al., 2003). Due to the lack of trained professionals in CBT-I, digital interventions, such as mobile apps have emerged to offer this form of treatment to a wider population. These applications aim to either provide additional support while working with a therapist or to offer fullyautomated help for patients (Newsom, 2020). According to Liang et al. (2022), digital CBT-I can be used to effectively treat insomnia and comorbid insomnia for patients with anxiety disorders or depression in the long term. Still, it can be assumed that the effectiveness of these interventions depends on the severity of insomnia symptoms and the engagement of patients.

Comparing pharmacological and non-pharmacological treatment options shows that they differ in effectiveness, benefits, and disadvantages. Sleep-inducing medication affects neurophysiological structures in the brain, resulting in relaxation and improved sleep maintenance among patients. Furthermore, they are less time-consuming than nonpharmacological alternatives as they do not require the patients to actively engage in therapy. Still, the effects of sleep medication are less durable as the chance of relapse is significantly higher than with non-pharmacological treatments (Rossman, 2019). Even though they are effective in treating the symptoms, the habits and beliefs that contribute to the onset and persistence of insomnia are disregarded. In addition, patients can experience mild to severe side effects, which is why most of them are used for short-term treatments. In contrast, CBT-I aims to correct the underlying causes of insomnia by challenging wrong beliefs and habits around sleep, which makes it a more suitable option for long-term treatment and durable effects. Still, many patients are referred to sleep medication as a treatment for insomnia as they are more available and promise rapid improvements in symptoms (Rossman, 2019). It is assumed that many psychologists and practitioners lack knowledge and skills concerning insomnia treatment, which may impact their perception of available options for treatment (Ogeil et al., 2020). For this reason, digital interventions have been developed that have

shown the same long-term effectiveness as conventional CBT-I (Liang et al., 2022). Digital CBT-I (dCBT-I) can be considered a cost-effective and accessible alternative for patients with insomnia since they do not necessarily require the work of a trained expert.

Aim of the Study

It can be concluded that there is a bidirectional relationship between insomnia and various psychological disorders. The common treatment options for insomnia involve sleep medication and CBT-I, while the risk of side effects and relapse is significantly lower with CBT-I. Due to high comorbidity of insomnia with mood disorders, the extent to which insomnia in mood disorders is addressed in psychological healthcare needs to be assessed. A qualitative study by Davy et al. (2013), revealed that health practitioners were more focused on treating the comorbid disorders and psychological causes of insomnia than addressing insomnia itself. Furthermore, they prescribed sleep medication or briefly educated the patients about sleep hygiene rather than suggesting CBT-I due to lacking skills and awareness about this method (Davy et al., 2013). Considering that the study involved health professionals in general, it is necessary to investigate how insomnia treatment for these patients is carried out by clinical psychologists who merely work with non-pharmacological treatments. Conducting research about the preferred methods of clinical psychologists is essential to explore their knowledge and awareness about available treatment options and to identify areas in psychological healthcare that can be improved.

This research aims to gather information about the current ways in which insomnia is treated by conducting semi-structured interviews with clinical psychologists and psychotherapists. Not only is it important to take their educational backgrounds and training into account, but also their attitude towards the disorders and the available treatment options. Especially their perception of the relationship between mood disorders and insomnia and their experiences regarding different treatment options are of great interest. To evaluate how insomnia is currently treated according to psychologists, the main question of this research has been formulated as follows:

"To what extent and how do psychologists report to carry out treatment of insomnia in patients with mood disorders?".

Moreover, the fact that insomnia is frequently disregarded in healthcare due to a lack of trained providers for CBT-I indicates flaws in education and expert training. The interviews aim to provide insights into the satisfaction of clinical psychologists with their education to detect potential flaws. Furthermore, additional reasons for the lack of available CBT-I professionals can be investigated. Depending on the experiences of psychologists, one

could gather suggestions on how insomnia treatment could be made more available for patients by improving education and other relevant factors. Therefore, a second research question has been formulated:

"What are possible options for improving the treatment for insomnia in patients with mood disorders according to psychologists?"

Methods

Study Design

An interview study was conducted to gather insights into the view of clinical psychologists and psychotherapists on the treatment of insomnia in patients with mood disorders. The interviews aimed to focus on the individual experiences and opinions of the participants to explore their current methods and ideas for improvements. Therefore, the participants were invited to take part in semi-structured interviews that took approximately 45 minutes and involved open-ended questions.

Participants

A combination of purposive sampling and snowball sampling was used to gather potential participants. Google and Linkedin, as well as the social network of the researchers, were used to look for psychologists based in the Netherlands and Germany. Moreover, the participants were asked to contact colleagues within the same target group who would be willing to participate.

To take part in the study, the participants were required to work in the field of clinical psychology and to be involved with the treatment of patients will mental illness. An adequate level of English or German listening, reading, and speaking skills was required for the interviews. This was ensured by contacting the participants in either English or German and stating that the interviews would be held in that language as well. Conducting the interviews partly in German has been decided on because two members of the research team are fluent in German, which resulted in an uncomplicated translation process.

In total, 10 participants agreed to take part in the interviews, of which seven participants were female and three were male. The age of the participants ranged from 23 to 53 with a mean age of 32.5 (SD=9.30). In addition, 50% of the participants reported their nationality to be German (n=5), and 20% reported to be Dutch (n=2), while 30% had other nationalities, including Italian (n=1), British (n=1), and Turkish (n=1). Half of the participants reported their job to be located in the Netherlands (n=5), while the other half were based in Germany (n=5). All participants confirmed being actively involved in patient treatment or counselling in the field of clinical psychology.

Prior to the start of the interviews, all participants agreed to and signed the informed consent form (see Appendix A). Before contacting participants, the background of this study, along with the conditions and risks for the participants was reviewed and approved by the BMS Ethics Committee. Since the participants did not receive any rewards for taking part in the study, it has been established that there will neither be a risk of harm, nor a direct benefit for them.

Materials

Informed Consent

An informed consent form was provided to the participants via email or WhatsApp in the form of a docs file (see Appendix A). It entailed a description of the aim and background of the study, along with the contact information of the ethics committee, the research team, and the supervisor. Furthermore, it informed the participants about their rights to refuse questions and to withdraw from the study at any time. Within the docs file, the participants were asked to tick 'Yes' and 'No' for each statement and to insert a digital signature at the bottom.

Interview Scheme

In addition, a semi-structured interview scheme with open-ended questions has been developed. It included an introduction to the study followed by general questions about the demographics, education, and occupation of the participants. The main interview consisted of 22 main questions and 40 follow-up questions that were divided into three sections (see Appendix B). The section that aimed to answer the research questions consisted of eight questions and eight potential follow-up questions. The remaining sections concerned other topics that have been analysed by two other researchers who explored the treatment of insomnia in patients with substance use disorders and anxiety disorders. To answer the research questions of this study, open-ended questions about the view of psychologists on the treatment of insomnia in mood disorders were asked, such as "How do you think insomnia and mood disorders are related?", or "To what extent are you satisfied with the treatment options and expert training in this field?" (see Appendix B). Thus, the interview consisted of questions regarding the participant's attitude toward the current treatment, as well as suggestions for improvements. The semi-structured scheme provided a general guideline for the interview while leaving room for the researcher to ask follow-up questions or modify questions depending on the responses. In addition, probes were used by the researchers to gather more detailed insights and to encourage the participants to share their views and

experiences openly. Examples of these probes are "Can you elaborate further on this?" or "Why do you think this is important?".

Setting

Lastly, since the interviews were held online, a working laptop and a quiet place were required for a comfortable atmosphere. Depending on the participants' preferences, either Zoom or Microsoft Teams was used for the online meetings. During the interviews, both the participant and the researcher needed a stable internet connection to avoid disruptions and to ensure a smooth interaction. Moreover, for the video recordings and the transcripts of the interviews, the 'record and transcribe' function on Microsoft Teams was used. For the interviews on Zoom, the recording function was used, which does not provide a transcript afterwards.

Procedure

To collect an appropriate number of participants, 115 psychologists were contacted via email, LinkedIn, and WhatsApp. 10 psychologists agreed to schedule an interview with one of the researchers, of which seven were conducted in English and three in German. As soon as a date and time for an interview were set, the researchers stayed in contact with the participants to provide them with an invitation to the online meeting and the informed consent form. The participants were asked to fill out and sign the consent form shortly before the interviews took place (see Appendix A).

The interviews were conducted by three researchers, of which each researcher conducted either three or four interviews. In the interviews, the researcher first introduced the aim of the study to ensure that all information and conditions have been understood by the participant. After welcoming the participant, they were informed about their rights to withdraw and that all personal data would be handled confidentially and anonymously. Once the participant was informed about the conditions and agreed to start the interview, the record button was pressed to record the interview. The researcher then introduced themselves and started asking demographic and general questions before moving to the interview questions.

After all interview questions were addressed by the participant, the recording was stopped by the researcher and they thanked the interviewee for participating. Then, the researcher asked if they were willing to refer them to other potential participants who would be suitable for the study. The researcher ensured that the participant still agreed to the data being used and that there were no questions left before ending the meeting.

Data Analysis

Since Zoom does not provide the option to transcribe the interviews, the recordings from Zoom were uploaded to otter.ai for transcription. Microsoft Word was then used to edit the transcripts by comparing them to the recordings and correcting mistakes. After transcribing the interviews verbatim, the finished transcripts were saved and anonymized before sharing them with the other researchers in Google Drive. For the thematic analysis, Atlas.ti was used as it enables a diligent and organized approach. Within this program, all transcripts were imported and numbered before coding them. The analysis was mainly focused on the responses from the first section of the interview scheme concerning mood disorders. However, all transcripts were read entirely to highlight important aspects and filter all relevant parts of the interviews. This way, all responses related to the participants' methods and views towards the treatment of insomnia in patients with mood disorders could be detected.

A combination of an inductive and a deductive approach was used for the thematic analysis. The majority of the codes emerged after categorizing the responses of the participants into recurring topics, while some codes were developed based on scientific research, namely 'Considering insomnia a symptom of mood disorders', 'Supporting the idea of a bidirectional relationship', 'Considering manic episodes in bipolar patients', and 'Openness towards pharmacological treatment'. Due to the relevance for this study, they refer to the view of psychologists on the relationship between insomnia and mood disorders and available treatment options. The deductive approach was used for these codes because the participants were explicitly asked for their opinion after conducting a literature search on these topics. By using the mixed approach, the interviews resulted in new topics and variables that might not have been considered in existing scientific literature, while still taking valuable information from the literature into account.

After initial codebooks were developed and no new themes were found, they were exchanged within the research team to improve the reliability and validity of the codes. Each member used the codes of another researcher on two transcripts to evaluate the extent to which the codes were clear and understandable. Their usability was assessed by comparing how the codes were applied by another researcher to the same transcripts. Afterwards, the researchers provided constructive feedback and, if necessary, the understanding and definition of the codes were discussed. In case specific codes were unclear or overlapping, they were adapted and reformulated to create mutually exclusive codes within a well-defined codebook (see Appendix C). After implementing the feedback, all interview transcripts were coded, and after eight interviews, no new codes emerged.

Results

The thematic analysis resulted in a codebook consisting of three themes and 13 codes that are related to the view of clinical psychologists on the treatment of insomnia in patients with mood disorders. The codes have been divided into three themes to ensure a clear structure. The first and second theme are called 'Current views and methods of treatment' and 'External factors affecting the treatment' and they include 10 codes that refer to the main research question: "To what extent and how do psychologists report to carry out treatment of insomnia in patients with mood disorders?". The third theme 'Flaws in education and ideas for improvements' includes the remaining three codes that address the second research question: "What are possible options for improving the treatment for insomnia in patients with mood disorders according to psychologists?". The final codebook including example quotations from the interviews can be seen in Table 1. Furthermore, the results of the interviews will be elaborated on below.

Table 1 *Overview of Codebook*

Theme	Code	Interview Quotation	Interviews (N=10)
Current views and methods of treatment	Considering insomnia a symptom of mood disorders	"I think it's just a normal symptom of the mental disorder."	6
	Supporting the idea of a bidirectional relationship	"The mood disorders affect the sleep, the sleep affects the disorders. So yes, relationship in both ways there."	6
	Emotional discomfort leading to symptoms of insomnia	"I guess people do report at night time. There may be more issues around, I think, especially around the isolation. So thoughts about, like, self harm and things like that do tend to come up."	7

Theme	Code	Interview Quotation	Interviews (N=10)
	Sleep as a central element in mental well-being	"Sleep is actually a very important factor, because in my opinion it has such a great influence on our overall wellbeing."	7
	Exploring underlying causes of insomnia	"So we'd be exploring the issues behind why they're not sleeping more than dealing with the sleep itself."	3
	CBT-I methods to provide knowledge and helpful tools	"And we also teach them to stimulus control their bed, so they don't associate their bed with not being asleep we have to teach them to associate their bed with sleep again, right?"	10
	Openness towards pharmacological treatment	"So again, if I had a client who was really in crisis, I would be getting them to speak to a medical professional."	10
External factors affecting the treatment	Considering manic episodes in bipolar patients	"It depends in which phase the bipolar person is at that moment."	7
	Patients' willingness to engage in CBT-I	"Some patients tend to deflect everything very quickly and say that they know everything."	6

Theme	Code	Interview Quotation	Interviews (N=10)
	Learned skills and knowledge about insomnia treatment	"I learned about relaxation techniques, like progressive muscle relaxation or autogenic training."	10
Flaws in education and ideas for improvements	Changed attitude and knowledge due to work experience	"I really underestimated how persistent unfavourable behaviour patterns can become."	5
	Level of satisfaction with expert training and education	Yes: "I'm satisfied like it works so like, I don't work only or mainly on that."	3
	(Yes/No)	No: "I'm not really satisfied I think It should definitely be more of a topic in the studies."	6
	Ideas for improvements in the treatment	"I think it would be more helpful if people specialized in that. So, you know, more effective treatment would be possible."	8

Current Views and Methods of Treatment

The first theme 'Current views and methods of treatment' refers to statements that involve the participants' attitudes towards sleep, insomnia, and mood disorders. It does not address their past education or satisfaction with treatment options but mainly focuses on their present techniques and opinions. Furthermore, the codes assigned to this theme aim to establish how the psychologists feel about the patients and which treatment options they prefer to use.

Considering Insomnia a Symptom of Mood Disorders

The code 'Considering insomnia a symptom of mood disorders' addresses the view of participants that insomnia should be treated as a symptom of mood disorders. After being asked about their perception of the relationship, six participants reported viewing insomnia as part of depression, such as: "Difficulties with sleep, both too much and too little, are basically a symptom of depression.". Some participants believed that focusing on treating the mood disorder leads to an improvement in insomnia: "I experienced that over the time of the therapy, when the depression or the depressive symptoms get reduced, they also can sleep better." Therefore, this code refers to the opinion of psychologists that insomnia should be recognized as a symptom that naturally occurs in depression rather than a separate disorder. Furthermore, the participants conveyed the expectation of the insomnia symptoms disappearing if they focus on treating the mood disorder.

Supporting the Idea of a Bidirectional Relationship

The second code 'Supporting the idea of a bidirectional relationship' relates to the opinion that insomnia can cause and worsen symptoms of mood disorders, meaning that they affect each other. In six interviews, participants expressed supporting claims for this perspective. For instance, a participant working in a rehabilitation clinic stated: "Patients with mood disorders often describe that they have fatigue, no energy, and can't get out of bed; and it can be a part of the mood disorder, but that can also be a direct effect of the sleep problems, the insomnia." Others claimed that insomnia can worsen the mood disorder or inhibit an improvement of the symptoms, for instance: "They affect each other, and the insomnia can make the fatigue even worse." and "Yeah, it's very hard to to get out of your depression when you are still sleeping very bad."

Still, there is an overlap between the first and the second code, even though they aim to address two opposite views. Two of the participants who reported considering insomnia a symptom of mood disorders still emphasized the negative effects of poor sleep on the mental health of patients. For instance, one participant described insomnia as a symptom of mood disorders and later pointed out that the effect goes in both directions: "For people who are not sleeping, that can increase the way they feel in terms of feeling fatigued and that lack of motivation." Therefore, two participants suggested that the link between insomnia and mood disorders could be mutual despite viewing insomnia as a symptom of mood disorders.

Emotional Discomfort Leading to Symptoms of Insomnia

The next code addresses the belief that patients with mood disorders often suffer from insomnia due to emotional discomfort they are experiencing, such as ruminating and negative or suicidal thoughts. The code 'Emotional discomfort leading to symptoms of insomnia' was

used in seven interviews, suggesting that the majority of the participants talked about emotional discomfort being a risk factor for insomnia. One participant highlighted anxiety, rigidity, and inflexibility as relevant factors: "Sometimes it simply anxiety or some other emotional discomfort. If the person's experiencing an extreme rigidity for instance, or inflexibility, that provokes most of the time insomnia.". Next to that, it was frequently mentioned that uncontrollable worrying at night can inhibit the patients' ability to fall asleep, for instance: "When they go into bed, and they start to ruminate and ruminate, worried, worried, and that might be the problem of falling asleep.".

Sleep as a Central Element in Mental Well-being

In line with the code about emotional discomfort, the next code 'Sleep as a central element in mental well-being' emerged from the participants' views on the importance of sleep in mental health. Seven participants suggested that sleep was a crucial element in maintaining or improving the mental well-being of patients. One of them emphasized the importance of sleep by establishing a link between insomnia and emotional discomfort: "It's very important because it has a huge impact on symptoms, all of it, like general discomfort.". It was common among the participants to report that disruptions in sleep patterns lead to negative consequences for the mental health of patients. One participant even considered this a reason for focusing on sleep problems early in the treatment: "The patients simply suffer so much that their mental health is also massively threatened if their sleep is poor. This means that the topic of sleep is one of the most central elements at the beginning of treatment.".

Furthermore, some participants shared the belief that sleep problems affect the overall quality of life, such as: "It is extremely important because the quality of life gets severely impacted.".

Exploring Underlying Causes of Insomnia

The code 'Exploring underlying causes of insomnia" refers to methods of participants that involve discovering deep-rooted issues that contribute to the onset or persistence of insomnia. Three participants highlighted the importance of establishing the underlying causes of insomnia before or instead of treating the symptoms. Two of them expressed concerns about potential neurological or biological roots of insomnia, such as: "I also refrain from advising apps because if someone is not sleeping for days and days, there can be a neurological disorder, right?". The third participant who completed her training in a British institute reported looking for deep psychological issues rather than focusing on current symptoms and behaviour. She gave the example of exploring psychological trauma or other causes from the past, specifically: "I like the more long-term deep work where we look at the issues that are causing these problems rather than specifically focusing on just addressing the

symptoms of what's happening in there in the here and now". Rather than focusing on sleep habits and hygiene, these participants delve into more profound issues first, which highlights the differing priorities and approaches among psychologists.

CBT-I Methods to Provide Knowledge and Helpful Tools

Since the main research question aims to assess how insomnia treatment is carried out by psychologists, this code focuses on cognitive behavioural techniques that are used and for what purpose. All participants reported applying CBT-I methods, such as psychoeducation, stimulus control, or relaxation techniques, even though only one participant received training in CBT-I and was fully aware of applying all the methods. Even the participants who were not specialized or educated in the treatment of insomnia applied at least one method, with psychoeducation being the most commonly used. The majority of participants mentioned using this method to correct bad habits and wrong beliefs about sleep, for instance: "Don't drink coffee before you go to bed, don't watch TV or don't watch very nasty series or those kinds of things. We teach them that."

Next to that, one participant specifically reported applying techniques to ease emotional discomfort at night: "When there are a lot of thoughts going around, where you say okay, try to do a kind of problem consultation beforehand, write down your thoughts, see if you can do any distraction techniques, mindfulness, meditation, something like that.". Other methods that were mentioned involve stimulus control, sleep restriction, and relaxation techniques, such as progressive muscle relaxation or breathing exercises. Still, psychoeducation was mentioned even by participants who reported having no skills regarding insomnia treatment at all. This indicates that the majority of participants were not aware of psychoeducation being a part of CBT-I and that they considered it the most accessible tool for treating insomnia in mood disorders. Furthermore, they did not view psychoeducation as a method that necessarily requires specialized training.

Openness Towards Pharmacological Treatment

The code 'Openness towards pharmacological treatment' was developed from interview statements about the participants' willingness to explore sleep medication as a treatment option with their patients. Some participants reported being more open to pharmacological options than others, for instance: "There are also hard cases where you notice that it is difficult to sleep for weeks and months and then you have to try medication.". One participant explicitly shared their concerns about the potential dangers of sleep medication, such as dependence or tolerance: "I mean, the medication for sleep is also, people, they're going to like it so much that they need to keep on using it until it doesn't work

anymore." The analysis has shown that the majority of the participants only considered pharmacological treatments in extreme cases, for example: "I don't do this often, only if the patient is very desperate and has no way out.", while some rejected it entirely. For instance, a 53-year-old psychotherapist claimed it to be "just a temporary relief for the problem, but it's not treatment." Therefore, this code highlights the differences among participants regarding their openness towards this form of treatment. It refers to the psychologists' approaches to finding the best course of action for the patients' needs while being mindful of the potential dangers of sleep medication.

External Factors Affecting the Treatment

The second theme 'External factors affecting the treatment' focuses on factors that are mainly out of the psychologists' control but still influence their decision-making and the success of treatment methods. This theme addresses the main research question by tackling different patient factors and past education about insomnia treatment. The analysis resulted in three codes, namely 'Considering manic episodes in bipolar patients', 'Patients' willingness to engage in CBT-I', and 'Current skills and knowledge about insomnia treatment'.

Considering Manic Episodes in Bipolar Patients

The code 'Considering manic episodes in bipolar patients' represents one of the patient factors that have an influence on the psychologists' decision-making in the treatment. Since bipolar patients can have different sleep cycles and needs depending on their current state, the participants were asked about their approach for bipolar patients compared to patients with major depression. The responses from the interviews have shown that the psychologists based their approach to treatment on the current episode of their patients.

First, the participants shared the common belief that manic episodes are characterized by a reduced need for sleep, specifically: "People who have bipolar disorders and are in a manic stage, they cannot sleep, but they are also not tired." Regarding their approach to treatment, some participants mentioned that they put more focus on treating insomnia in depressive phases, for instance: "If the person is manic, I don't usually focus on that." In contrast, one participant highlighted the importance of treating insomnia during the manic phase: "When people are, in quite a high phase, it's really important to have that rest because obviously that increases the symptoms if not." The participants had different reasons for taking manic episodes into account. Some claimed that the patients experience symptoms of insomnia throughout both phases, caused by ruminating during depression and excessive energy during mania. Two participants, however, claimed that insomnia is present during the manic phases, but not during depression: "When people are in a low, then they're sleeping

increases.". Thus, this code highlights differences in the psychologists' beliefs and methods for insomnia in bipolar patients.

Patients' Willingness to Engage in CBT-I

Another factor that was mentioned by participants is the openness and effort of the patients to actively engage in CBT-I. It was frequently reported that the effectiveness of the treatment can be determined by the patients' openness and willingness to eliminate biases and modify current behaviours. One participant explicitly mentioned paying attention to the patients' effort during the treatment: "Then you also notice an effort really quickly, whether patients are willing to really change something or not.". Others simply expressed the importance of the patients' consistency and discipline while changing their habits, for example: "But I mean, if they're willing to follow a regime and they're happy to try that, then they do report that things improve.". According to the psychologists, treatment success is not solely dependent on their methods, but also on the patient's engagement and openness. This code addresses the opinion that both parties contribute to the effectiveness of the treatment.

Learned Skills and Knowledge about Insomnia Treatment

The next code of the theme about external influential factors is called 'Learned skills and knowledge about insomnia treatment'. It focuses on the education and techniques the psychologists have obtained during their studies or occupational training. The majority of participants explained that they learned about sleep habits and cognitive bias around sleep, for instance: "A little bit in general, like how sleep works with all the sleep hygiene and how it can be disrupted. What are the substances having an impact on sleep ...". Only four participants shared concrete methods they have learned to treat sleep problems, such as: "I learned about for example, relaxation techniques like progressive muscle relaxation or autogenic training and stuff that this is really helpful in getting to sleep" or "Regulated rhythm, so actually quite a lot of simple structure and regulated sleeping times.". It also appeared that some participants did not receive specific education and training about sleep at all. More specifically, one participant shared their lack of education in this topic: "During my studies, I have not, yeah, I was not so confronted with insomnia. I was aware that this is a symptom.". This shows that the participants shared their diverse educational backgrounds, which implies that they had varying levels of skills after completing their training. Furthermore, it becomes clear that the knowledge they acquired through education influences their decision-making and the treatment options available to them.

Flaws in Education and Ideas for Improvements

The third theme addresses the second research question, which deals with potential future improvements in the treatment of insomnia in patients with mood disorders. Therefore, the following codes do not relate to the participants' current methods but rather aim to detect factors that could be improved in healthcare and education. The three codes of this theme are 'Changed attitude and knowledge due to work experience', 'Level of satisfaction with expert training and education', and 'Ideas for improvements in the treatment'.

Changed Attitude and Knowledge due to Work Experience

Based on the skills and knowledge the psychologists obtained through education, the next code refers to changes in their beliefs and expertise since they started working in practice. The code 'Changed attitude and knowledge due to work experience' was used across five interviews, which makes it a recurring topic among the participants. For instance, one participant explained how their openness towards causes of insomnia has changed: "I also have a more open view to different kinds of explanations why a person cannot sleep.". The participants often reported a greater awareness and understanding of sleep-related issues, as well as a more empathetic approach to patients with insomnia. One participant even admitted approaching this topic from her personal experiences in the past: "I have to say that I really underestimated it for a long time, not with the patient in particular, but in general. I myself just need very little sleep and actually rarely have any real problems with sleeping.". This code shows that half of the participants were prompted to acknowledge their own cognitive bias or to recognize the significance of sleep in mental health through job experience.

Level of Satisfaction with Expert Training and Education (Yes/No)

The next code addresses the extent to which psychologists feel satisfied with the education they had on the topic of sleep. The code 'Level of satisfaction with expert training and education' identifies potential weaknesses within current education and training. The participants were asked what practices they have learned for the treatment of insomnia, and whether or not they feel satisfied. Three participants claimed to be satisfied with their level of education in this field, stating that they possess sufficient knowledge to treat their patients effectively, for instance: "I'm satisfied because it works, like, I don't work only or mainly on that.". Six participants conveyed dissatisfaction with their education, expressing a lack of information and strategies for the treatment, such as: "I think I would like to have some more education about how to treat sleep problems in patients with mood disorders exactly." or "I think there is still a great need for expansion and information.". This code has been applied to nine interviews as the remaining participant received her training in a British bereavement center. She did not expect to learn much about insomnia in mental illness in the first place,

and thus, refrained from sharing her level of satisfaction or specific problems she experienced. Still, the results show that the majority of participants considered their level of knowledge and skills about sleep insufficient, with most of them referring to a lack of information about insomnia in their studies or occupational training.

Ideas for Improvements in the Treatment

The previous code addressed the participants' satisfaction with their education by identifying flaws in their studies or expert training. Consequently, the final code 'Ideas for improvements in the treatment' includes ideas for improvements within healthcare and academic institutions to improve the treatment of patients with insomnia and mood disorders. The most common wish among the participants revolved around the amount of course material and general education on the topic of sleep problems. One participant shared the idea of integrating more study lectures solely focused on this subject: "It would be nice to have lectures focusing only on sleep problems.", while another suggested spreading information to the broad population: "Maybe that one also starts rather preventively. I don't know, in primary schools, secondary schools, it's enough to explain something about sleep". Other participants, however, discussed ideas for offering more accessible and effective treatment for the patients, specifically: "I think group therapy is very important. Support groups, even if it's about sleep like I think it will still add a lot. Maybe having a sleep specialist in every practice. Um, because like I said, it's very overstretching.". In total, eight participants shared explicit wishes for improvements, which indicates that even participants who reported feeling satisfied with their level of education identified a necessity for enhancing the treatment for this group of patients.

Discussion

The purpose of this qualitative study was to explore and evaluate the views and experiences of psychologists regarding the treatment of insomnia in patients with mood disorders. This study aimed to discover flaws in the education and expert training of this target group and to gather ideas for improvements in the treatment of those patients.

After 10 interviews were conducted and transcribed by the research team, three themes and 13 codes were constructed in a thematic analysis with a combination of an inductive and a deductive approach.

The participants expressed different views regarding the relationship between insomnia and mood disorders. While some psychologists considered insomnia to be a symptom of mood disorders, the majority claimed the relationship to be bidirectional. Furthermore, underlying causes and risk factors for insomnia were discussed, including

emotional discomfort or neurological disorders. Regarding the treatment for insomnia, all participants reported applying CBT-I methods, such as psychoeducation or relaxation techniques, even though only one participant received specialized training in this field. Their willingness to consider pharmacological treatment differed from being rather open to being very critical about the effectiveness and side effects of sleep medication. In addition, the participants stated that their decision-making and treatment success was influenced by the current state of bipolar patients, their past education, and the patients' willingness to engage in therapy.

Depending on the training and education the participants received, the majority reported being unsatisfied with the knowledge and skills they obtained in the past. In some cases, the participants stated that their attitude and knowledge about sleep problems have changed and developed after being involved with the treatment of patients. They made suggestions on how the treatment for these patients can be improved in the future. For instance, they suggested that the topic of sleep problems should be more present in the education of psychologists, as well as in the general population. One participant expressed the need for sleep experts and group therapy for insomnia in every psychological institution.

To What Extent and How Do Psychologists Report to Carry Out Treatment of Insomnia in Patients with Mood Disorders?

The first key finding revolves around the relationship between insomnia and mood disorders. It has been established by research that there is a mutual link between those conditions rather than a one-sided relationship (Krystal et al., 2019). Both views were mentioned by participants while the majority claimed the relationship to be bidirectional. However, some participants emphasized the negative effects of poor sleep on mental health despite classifying insomnia as a symptom, indicating that the views overlap and are not mutually exclusive. According to Lee (2022), if the relationship is bidirectional, both conditions are seen as separate disorders serving as risk factors for one another. However, the participants who supported both views only emphasized that insomnia can worsen the mood disorder or inhibit an improvement of the symptoms. They did not acknowledge that insomnia can cause the onset of a mood disorder, which reveals that they only partly supported the idea of a bidirectional relationship. This lack of insight might directly correlate to the amount of information the psychologists received during their studies.

Some participants obtained detailed information about insomnia, while others reported insufficient amounts of course material on this topic during their studies. Some participants mentioned that they only learned about insomnia in relation to other psychological disorders,

which was reflected in their approach of prioritizing the treatment of mood disorders rather than addressing insomnia separately. This view is likely to result from a lack of insight and knowledge about insomnia and its potential to develop into a chronic disorder (Koffel et al., 2018). Furthermore, the participants justified this approach by saying that they were not specialized in sleep problems, and thus, did not feel the need to expand their treatment. This suggests that their methods were not only based on lacking education but also on their sense of responsibility for offering insomnia treatment. On the other side, the majority of participants expressed dissatisfaction with the training they received in this field as they considered their options for treatment to be limited. This clearly relates to the finding that many psychologists and practitioners do not receive enough training to diagnose and treat insomnia effectively (Ogeil et al., 2020). Those who criticised the lack of education mentioned that working with patients made them aware of the importance of sleep in mental health, leading them to self-educate or explore other treatment options.

Sleep-inducing medication and cognitive behavioural therapy for insomnia (CBT-I) are both useful treatment options. However, according to Rossman (2019), sleep medication is more available for patients due to a shortage of healthcare professionals who are trained in CBT-I. Only one of the participants received training in CBT-I and was able to apply all techniques, which is in line with this assertation. Additional research suggests that the public demand for CBT-I is significantly higher than the capacity of healthcare institutions allows to deliver (Koffel et al., 2018). The fact that all participants reported being regularly confronted with insomnia to the point where some took measures to expand their skills supports this claim.

Psychoeducation about sleep hygiene was by far the most commonly applied method by the participants, particularly by those who did not receive specialized training in CBT-I. Surprisingly, some participants who reported making use of this method were not aware of it being a CBT-I technique, which further highlights the lack of education. Still, the effectiveness of CBT-I is achieved by the combination of the main components, including cognitive, behavioural, and psychoeducational interventions (Newsom, 2020). Considering that psychoeducation is only a part of CBT-I, it can be said that this method alone does not replace the whole treatment. Even though psychoeducation about sleep hygiene is widely used as a monotherapy by health practitioners (Koffel et al., 2018), applying all components of CBT-I is significantly more effective than this method alone (Chung et al., 2017). Therefore, it can be assumed that the treatment success of the psychologists who only applied psychoeducation is lower than that of those who also applied other CBT-I methods.

Along with their cognitive behavioural methods, the participants' attitudes and openness toward pharmacological treatment options have been assessed. The majority of the psychologists reported their decision-making to depend on their patients' conditions. Some participants were more aware of the negative side effects of sleep medication than others, which also links to their past education and work experience. Especially those who highlighted the potential dangers of pharmacological treatment were less likely to refer their patients to medical professionals. Generally, the participants expressed the opinion that sleep medication should not be the first treatment option, but can be used additionally in difficult cases. These results contradict the expectation that patients are more likely to receive sleep medication rather than non-pharmacological treatment. Still, it needs to be taken into account that the original claim by Rossman (2019) revolved around general healthcare, including other professionals such as general practitioners and psychiatrists. However, this study exclusively involved clinical psychologists and psychotherapists. Unlike psychiatrists and doctors, their profession focuses on applying cognitive behavioural methods, which does not allow them to prescribe medication (Stewart, 2015). Considering that the participants are not able to directly apply pharmacological treatment, their knowledge in this area might be limited. Furthermore, considering their profession it makes sense that the participants preferred non-pharmacological treatments for patients with insomnia and mood disorders.

Lastly, the participants mentioned other factors that influence their decision-making. According to Seow et al. (2018), patients with bipolar disorder can experience different sleep problems and needs depending on being depressive or manic. The majority of psychologists indeed reported considering differences in sleep patterns for manic and depressive phases, although they shared different opinions. While some defended the view that bipolar patients show more symptoms of insomnia during their depressive episodes, others emphasized increased symptoms during mania. This can be explained by individual differences among bipolar patients as most patients either sleep too much (Hypersomnia) or too little (Insomnia) during depressive episodes (Harvey et al., 2009). Therefore, the psychologists' opinions toward bipolar patients were likely shaped by their treatment experiences.

Another factor that was frequently brought up involves the patients' effort and willingness to work with CBT-I. According to the psychologists who claimed this, the success rate of their treatment is significantly lower for patients who are not open to changes. Even though this factor has not been considered or expected before conducting this study, research indeed shows that patient motivation is a key factor for the success of CBT (Ryan et al.,

2021). Thus, the link between patients' efforts and the effectiveness of CBT has not only been confirmed by research but also by the experiences of psychologists.

What are Possible Options for Improving the Treatment for Insomnia in Patients with Mood Disorders According to Psychologists?

Based on the psychologists' dissatisfaction with education and treatment options, a variety of ideas emerged on how the treatment for this group of patients can be improved. Most ideas involved improvements in the educational system and institutional training programmes. The participants suggested more course materials on sleep problems or CBT-I training to give this topic more presence. A study by Koffel et al. (2018) also suggested implementing educational interventions for practitioners to enhance their insight and familiarity with CBT-I. Therefore, the ideas that were shared by the participants are in line with other research in this field.

Next to improvements in the academic context, participants came up with ideas about different forms of treatment. They suggested having a sleep expert in every clinic or offering group sessions where the patients can share their sleep problems and give advice to each other. Group therapy for CBT-I has been found to be effective in improving symptoms of depression and the sleep quality of patients (Shareh et al., 2022). However, it should be noted that it is advised to use this form of therapy in addition to traditional treatment (Shareh et al., 2022). Still, finding a way to implement group therapy and sleep experts in every psychological institution would contribute to making CBT-I more available to patients.

One participant expressed the idea of providing information and education about healthy sleep habits and CBT-I to the broad population, which would contribute to greater awareness and the prevention of sleep problems. On one hand, studies have shown that one of the reasons patients are more likely to engage with sleep medication is their belief that it is the only available treatment option for insomnia (Shareh et al., 2022). On the other hand, even though some websites implement psychoeducation about healthy sleep habits, its effectiveness in preventing insomnia has not been established by research yet.

Implications of the Findings

The interviews contributed to a clearer understanding of how the treatment for patients with insomnia and mood disorders is applied according to clinical psychologists working in Germany and the Netherlands. The results validated the assumed flaws in education and expert training, which highlights that sleep problems and CBT-I are not present enough in current psychological education. This lack of education leads to a shortage of professionals who are trained in CBT-I and are aware of the treatment options in this field. However, the

assumption that psychologists are more likely to refer patients to pharmacological treatments has been disapproved by the participants. The reason for this outcome is their critical attitude towards sleep medication due to their educational background and profession.

Furthermore, the results only partly validate the claim that symptoms of insomnia are disregarded by psychologists since all participants reported applying at least one method of CBT-I. Psychoeducation about sleep hygiene has been applied by nearly all participants, even if they did not receive CBT-I training in the past. Even though psychoeducation is significantly less effective than the combination of all CBT-I methods, all participants addressed symptoms of insomnia to some extent. Especially those who reported a lack of education about sleep during their studies expanded their skills and educated themselves, which indicates a high level of engagement and motivation among the participants. It can be said that despite the differences among participants, there is a high chance of insomnia being disregarded due to missing education and a lack of training rather than a lack of motivation and willingness of psychologists.

Another important contribution of this study is the variety of ideas for future improvements that were shared by the participants. Not only did the participants express the need for more education about sleep problems and treatment options in universities, but they also shared ideas for preventing sleep problems by offering education about healthy sleep habits to the broad population. Another idea involved treating the patients in different settings, such as group therapy, or hiring an expert for sleep and CBT-I in every clinic. These outcomes should be taken into account when brainstorming about areas in the treatment for those patients that need to be enhanced.

By conducting this study, the theories and assumptions could be either confirmed or refuted, which highlights the importance of considering the individual experiences and opinions of experts who are working in this field. The interviews revealed fundamental flaws in healthcare and suggestions on how more treatment options and better treatment success can be achieved.

Limitations of the Study

Even though this study provides valuable insights and new factors, some limitations need to be discussed that leave room for more accurate and reliable outcomes.

One limitation that needs to be taken into account is the fact that the participants were located in Germany or the Netherlands. This should be considered when generalizing the results since education and healthcare have different standards and limitations depending on the country. The insights might not apply to the healthcare systems of other countries due to

differences in education and insurance policies. Another disadvantage of this limitation could be that some differences among participants can have resulted from the treatment standards of the country they were located in.

Another aspect of the study that might have an impact on the results is the fact that the interviews were conducted by three different researchers. Even though the research team shared one interview guide consisting of the same questions, each researcher likely used different follow-up questions and probes, which might have influenced the participants' responses. Even though all interview questions were discussed with the research team, there still might have been a lack of understanding when participants asked for more detailed explanations of the questions. The natural expectations of the researchers might have influenced the way they asked certain questions, which could have impacted the results as well. Thus, it is possible that the interviews went in different directions depending on the researcher's intentions and expectations.

Still, the analysis of the interviews has shown recurring factors that were stated in response to the same questions. Therefore, the individual expectations and interview skills of the researchers did not necessarily impact the results that were found. The outcomes revealed common views and valuable insights even though they should only be generalized to the German and Dutch healthcare systems. For further research into this topic, it should be taken into account that the results can only be applied to the countries the participants are located in. If one is interested in evaluating the methods of this treatment in general healthcare, samples would be needed from more countries with different treatment standards and guidelines. Additionally, it should be considered to let one researcher conduct all interviews to offer more similar conditions to the participants.

Practical Implementations and Suggestions for Future Research

The outcomes of the study involve ideas concerning potential improvements in the treatment of patients with insomnia and mood disorders. The most feasible implementation based on the recommendations involves educational interventions for psychologists concerning sleep problems and CBT-I. By putting more emphasis on this topic, it could be ensured that in every psychological institution, at least one expert is available when it comes to the treatment of insomnia. This would give patients the option to receive information and specialized treatment from an expert in case they are experiencing symptoms of insomnia.

An important factor that was not covered in the results of this study is the implementation of dCBT-I interventions. As it has been stated earlier, digital applications have been developed to make CBT-I more accessible and cost-effective for the broad

population (Liang et al., 2022). This option was not mentioned by the participants, even though evidence shows that dCBT-I is an effective alternative for the treatment of insomnia (Dautovich et al., 2010).

In future research, the experiences of psychologists regarding digital applications of CBT-I could be investigated. Due to the potential risks of dCBT-I, including a lack of user adherence or privacy concerns (Uyumaz et al., 2021), one could gather participants who applied this method already to explore their views on its effectiveness. The aim of future studies could be to assess the participants' attitudes towards dCBT-I and whether they would recommend this method or not. However, due to the challenge of finding participants who are experienced in the application of dCBT-I, the most feasible research would involve investigating psychologists' openness toward implementing this method. One goal of this study could be to spread more awareness of this treatment option and to investigate whether psychologists would be willing to explore this option in the future.

Conclusion

It can be said that this research has contributed to a better understanding of current psychological healthcare for insomnia in patients with mood disorders and the aspects that need further progress. The results indicated a direct link between the psychologists' methods and their past education. It was also found that the participants' motivation and willingness to expand their knowledge and skills was greater than assumed, despite limited options for treatment. All participants reported addressing symptoms of insomnia to some extent, but mostly by applying psychoeducation about sleep hygiene, which does not show the same effectiveness as CBT-I. Therefore, the shortage of trained professionals remains a problem. This research also led to concrete suggestions for improvements in the treatment of patients with insomnia and mood disorders through educational interventions and changes in psychological institutions. Still, due to the limitations of this study, the results are not necessarily applicable to countries outside of Germany and the Netherlands. Additionally, the results of this study could be complemented by investigating the experiences and openness of psychologists towards digital applications of CBT-I in the future. All in all, the study showed that cognitive behavioural treatment options for insomnia in patients with mood disorders are still limited due to a lack of training and familiarity with sleep problems among clinical psychologists.

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Appendices

Appendix A

Informed Consent Forms

Consent Form English

(The view of Psychologists on the Role of Sleep in Mental Illness)

The purpose of this study is to interview psychologists and psychotherapists about their view on the assessment/treatment of insomnia in patients with mental illnesses. The participants will be asked questions about their opinion and their current behaviour in healthcare in regards to patients who suffer from insomnia and mood disorders/anxiety/substance use disorders. The interviews will be conducted by either one of three researchers of the team that works on this bachelor thesis.

The data that will be used for this research are the video/audio recordings in order to discover common themes. All names and personal data will be handled confidentially and anonymously, and it will only be stored until September 1st of 2023. This research project has been reviewed and approved by the BMS Ethics Committee on 10th of March, 2023.

How will it work?

You will take part in a study in which we will gather information by:

- Audio record - Transcript

This information will only be used by the University of Twente, the Netherlands.

Please tick the appropriate boxes	Yes	No
Taking part in the study		
I have read and understood the study information or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.		
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.		
I understand and agree that taking part in the study involves answering questions in an audio- recorded interview that will be transcribed into text. After transcribing the text, the recording will be destroyed.		

I understand that the information I provide psychologists on the role of sleep in men		A docut the view of	
I understand that personal information con name or where I live, will not be shared by		identify me, such as my	
I understand that the information I provide	le will be used for a stude	ent report (bachelor thesis).	
I agree that the information I provide can	be quoted in research ou	tputs.	
I understand that all data is stored until S destroyed.	eptember 1 st of 2023, afte	er which the data will be	
Signatures			
Name of participant (printed):	Signature:	Date:	
I have accurately read out the information my ability, ensured that the participant un	• •	•	
Name of researcher (printed):	Signature:	Date:	

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethics.organical.com and Social Sciences at the University of Twente by ethics.organical.com and Social Sciences at the

Consent Form German

Einwilligung nach erfolgter Aufklärung

(Die Ansichten von Psychologen auf die Rolle von Schlaf in psychischen Erkrankungen)

Ziel dieser Studie ist es, Psychologen und Psychotherapeuten zu ihrer Sicht auf die Diagnose und die Behandlung von Schlaflosigkeit bei Patienten mit psychischen Erkrankungen zu befragen. Den Teilnehmer/innen werden Fragen zu ihrer Meinung und ihren aktuellen Methoden im Gesundheitswesen in Bezug auf Patienten gestellt, die an Schlaflosigkeit und Depressionen/Angststörungen/Drogenmissbrauch leiden. Die Interviews werden von einer der drei Studentinnen des Teams geführt, die an dieser Studie arbeiten.

Die Daten, die für diese Forschung verwendet werden, sind die Video-/Audioaufnahmen, um wiederkehrende Themen festzustellen. Alle Namen und persönliche Daten werden vertraulich und anonym behandelt und nur bis zum 1. September 2023 gespeichert. Dieses Forschungsprojekt wurde von der BMS-Ethikkommission am 10. März 2023 überprüft und genehmigt.

Wie funktioniert es?

Sie werden an den Interviews teilnehmen, in denen wir Informationen sammeln durch:

- Audioaufnahme - Transkript

Diese Informationen werden nur von der University of Twente, Niederlande, verwendet.

Bitte kreuzen Sie die entsprechenden Kästchen an	Ja	Neir
Teilnahme an der Studie		
Ich habe die Studieninformation gelesen und verstanden bzw. sie wurde mir vorgelesen. Ich		
konnte Fragen zur Studie stellen und meine Fragen wurden zu meiner Zufriedenheit		
beantwortet.		
Ich stimme freiwillig zu, an dieser Studie teilzunehmen und verstehe, dass Ich die		
Beantwortung von Fragen verweigern und jederzeit ohne Angabe von Gründen von der Studie		
zurücktreten kann		

	e Teilnahme an der Studie die Beantwo		
Transkription des Interviews wird d	riew beinhaltet, dass in Text umgewand ie Aufnahme vernichtet.	en wird. Nach der	
	ereitgestellten Informationen für Forsch r Rolle des Schlafs bei psychischen Erk	_	
	obene personenbezogene Daten, die mie nein Wohnort, nicht jenseits des Studie		
Mir ist bekannt, dass meine Angabe werden.	en für eine Studienarbeit (Bachelorarbei	t) verwendet	
I stimme zu, dass die von mir bereit werden können.	gestellten Informationen in Forschungs	ergebnissen zitiert	
Mir ist bekannt, dass alle Daten bis werden die Daten vernichtet.	zum 1. September 2023 gespeichert we	rden, danach	
Ich bin damit einverstanden, währer	nd des Interviews aufgezeichnet zu wer	den.	
Unterschiften			
Name Teilnehmer/in:	Unterschrift Teilnehmer/in:	Datum:	
-	ner/in das Informationsblatt genau vorg rgestellt, dass der Teilnehmer/in verstel		
Name Forscher/in:	Unterschrift Forscher/in:	Datum:	

Kontaktinformationen für Fragen zu ihren Rechten als Forschungsteilnehmer/in

Wenn Sie Fragen zu ihrern Rechten als Forschungsteilnehmer/in haben oder Informationen erhalten, Fragen stellen, oder Bedenken zu dieser Studie mit jemand anderem als dem/der Forscher/in besprechen möchten, wenden Sie sich bitte an das Sekreteriat der Ethikkommision/Bereich Geisteswissenschaften und Sozialwissenschaften der Fakultät für Verhaltens-, Management- und Sozialwissenschaften der University of Twente unter: ethicscommittee-hss@utwente.nl

Appendix B

Interview Schemes

Interview Scheme English

Introduction¹

Dear participant,

Welcome to this interview about the general topic of assessment and treatment of insomnia in mental illness. First of all, thank you for being here and taking some time. We are a group of three students (Nika, Victoria, Lorena) and are conducting research in the form of interviews in order to gain information about the perception of psychologists on this topic. This includes current behaviours, practices and attitudes regarding the assessment and treatment of insomnia.

The interview is organised into three parts, which are investigating the topic of treatment of insomnia in patients with mood disorders, the treatment of insomnia in patients with substance use disorders, and the assessment and treatment of insomnia in people with anxiety disorders. When we accumulated enough data, each of us will write distinct reports, which will be assessed by our supervisor.

Before we start with the interview procedure, I would like to tell you some general instructions about the procedure and how your data will be handled. Firstly, before we start the interview, you will receive a consent form. Regarding the actual interview, we are interested in your personal opinion, there are no right or wrong answers. Therefore, do not hesitate in expressing your line of thinking and arguing openly. Moreover, I would like to record the interview. This makes it possible to deeply analyse the whole conversation. As we are all working on a different research question but using the information of each interview, our conversation of today will also be read by the others, as well as our supervisor. However, I can assure you that your data will be anonymised. For instance, your name, age, as well as personal background information, date, and place will be removed. The interview will also not be utilised for any other purpose than this research. If you do not feel comfortable being in this conversation anymore, you have the right to withdraw from the interview and, therefore, from the research at any time.

 $^{^{\}rm l}$ Adapted from "Improving Group Collaboration in Higher Education through Self-Reflection" by L. Hengstermann, 2022

Now, you are provided with the following consent form, and if you agree with the mentioned aspects, it would be kind if you would sign the form and send it as an email back to me.

If you agree, I would now start the recording.

General questions

- → Welcome to this interview, I would first like to ask you some demographic questions and questions that allow you to introduce yourself, such as your age, gender, and nationality.
 - 1. Where is your job located?
 - 2. What are you doing at your job?
 - 3. How many years have you been doing this?
 - 4. What kind of education do you have?

Section 1- Treatment of insomnia in patients with mood disorders

- 1. Have you treated patients with mood disorders, who also report struggling with symptoms of insomnia recently? sleep problems in patients with mood disorders recently?
 - If not, ask if they had any patients with mood disorders and insomnia in general
- 2. How do you feel about treating patients with mood disorders who report suffering from insomnia?
 - How do you think insomnia and mood disorders are related?
- 3. In what way do you think it is important to consider/ focus on symptoms of insomnia in patients with mood disorders?
 - Are there certain patient factors that guide your decision on whether or not focusing on symptoms of insomnia?
- 4. How would you approach the treatment of insomnia in patients with major depression in comparison to patients with bipolar disorder?
- 5. Did your view/knowledge/experiences about treatment options of insomnia change or develop over the last few years?
 - Did your methods change?

- Do you approach sleep problems differently now compared to then?
- 6. What practices have you learned about the treatment of sleep problems in general?
 - Ask if they have even learned any practices at all (if yes, continue with the subquestions
 - pharmacological or behavioral? (CBT-I)
 - What options do you think are available for treating symptoms of insomnia?
- 7. To what extent are you satisfied with treatment options and expert training in this field?
 - Do you think there should be more/less education/training on the treatment of sleep problems in patients with mood disorders?
- 8. What would your wishes/ideas be for improvements in healthcare regarding the treatment of insomnia in patients with mood disorders?

Section 2 - Treatment of insomnia in patients with Substance use disorders

- 1. When do you decide insomnia should be treated in patients with SUDs?
 - How serious do insomnia symptoms need to be to start treating them?
- 2. What do you think should be taken into consideration when treating insomnia in individuals with SUDs?
 - Which factors could affect treatment success if not taken into account?
 - Why are these factors important?
- 3. How do you usually treat insomnia in individuals suffering from SUDs?
 - Do you focus on treating it or consider it a comorbidity?
 - Why do you use this(ese) type(s) of treatment(s)?
- 4. Are there any psychological or behavioural treatment options that you are using to treat insomnia in SUD patients?
 - Why do you use these treatments?
 - What are the other pharmacological and non-pharmacological treatments?
 - How satisfied are you with the treatments you use?
 - Would you like to have/ learn about other options?

- 5. What do you think of the use of non-pharmacological treatments (such as psychological or behavioural treatments) instead of pharmacological treatments to treat insomnia among patients with SUDs?
 - What are the benefits and drawbacks of these types of treatment?
 - When comparing non-pharmacological and pharmacological treatments, do you think one type of treatment is more effective than the other?
- 6. What is the long-term success rate of the insomnia treatment that you use among patients with SUDs?
 - Which type of treatment usually works better for these individuals in the long term?
 - Why is that the case?

Section 3 - Assessment and treatment of insomnia in patients with anxiety disorders Assessment:

- 1. What procedure do you typically use in assessing insomnia in general?
 - 1. Why do you do it in this order?
 - 2. Can you give me a specific example?
- 2. What kind of tests do you typically use for the assessment of insomnia?
 - 1. Do your organisation provides you with any kind of test?
 - 2. Can you give me a specific example of this?
 - 3. What do you think about this kind of assessment?
- 3. When do you consider doing an <u>assessment</u> for insomnia in patients who have primary diagnosed anxiety disorder?
 - 1. What leads you then to consider assessing it as beneficial?
 - 2. Why do you consider it to be important at this point?
- 4. Can you describe some of the key indicators that you look for when deciding to assess insomnia, and how you use these indicators to develop a treatment plan?
 - 1. Are these factors related to the patient (their behaviour, age, gender?)
 - 2. What kind of patients are these?
- 5. How do you feel about assessment procedures? Do you think it is beneficial to assess insomnia in patients with anxiety disorders?
 - 1. Why do you think it is beneficial?
 - 2. Can you give me a specific example of this?
 - 3. Can you elaborate further on this?

Treatment:

- 6. In which cases do you find addressing sleep complaints as beneficial in general?
 - 1. Why do you think that it is beneficial for a specific case, can you give me a description of a situation?
- 7. Which specific factors do you consider in whether <u>treating</u> insomnia in patients with anxiety disorder or not?
 - 1. How often do they report these problems on their own to you?
 - 2. Are these factors related to the behavior of the patient?
 - 3. What other factors may contribute to your decision to treat insomnia or not?
 - 4. Can you think of any others possible factors? To what are they related?
- 8. What factors do you consider when choosing between pharmacological and nonpharmacological treatments for insomnia in patients with anxiety disorders?
 - 1. Can you give me a specific example/description of these factors?
 - 2. Why do you consider these factors as relevant for your decision?

Probes in general:

Can you give me a specific example of this?

Why do you think this is important?

What do you mean when you say...?

Can you elaborate further on this?

What does this look like?

Are these factors related to the behavior of the patient? What kind of patients are these?

• Ask about who they can refer us to \rightarrow snowball sampling

Interview Scheme German

Einleitung

Sehr geehrter Teilnehmer,

herzlich willkommen zu diesem Gespräch über das allgemeine Thema der Beurteilung und Behandlung von Schlaflosigkeit bei psychischen Erkrankungen. Zunächst einmal vielen Dank, dass Sie hier sind und sich etwas Zeit nehmen. Wir sind eine Gruppe von drei Studenten (Nika, Victoria, Lorena) und führen eine Untersuchung in Form von Interviews durch, um Informationen über die Wahrnehmung von Psychologen zu diesem Thema zu erhalten. Dazu gehören aktuelle Verhaltensweisen, Praktiken und Einstellungen in Bezug auf die Bewertung und Behandlung von Schlaflosigkeit.

Die Befragung ist in drei Teile gegliedert, die sich mit dem Thema der Behandlung von Schlaflosigkeit bei Patienten mit Stimmungsstörungen, der Behandlung von Schlaflosigkeit bei Patienten mit Substanzkonsumstörungen und der Bewertung und Behandlung von Schlaflosigkeit bei Menschen mit Angststörungen befassen. Wenn wir genügend Daten gesammelt haben, wird jeder von uns einen eigenen Bericht schreiben, der von unserem Betreuer bewertet wird.

Bevor wir mit der Befragung beginnen, möchte ich Ihnen einige allgemeine Hinweise zum Ablauf und zum Umgang mit Ihren Daten geben. Bevor wir mit dem Interview beginnen, erhalten Sie zunächst eine Einverständniserklärung. Was das eigentliche Interview betrifft, so sind wir an Ihrer persönlichen Meinung interessiert, es gibt keine richtigen oder falschen Antworten. Zögern Sie daher nicht, Ihre Meinung zu äußern und offen zu argumentieren. Außerdem möchte ich das Gespräch aufzeichnen. Dies ermöglicht eine gründliche Analyse des gesamten Gesprächs. Da wir alle an einer anderen Forschungsfrage arbeiten, aber die Informationen eines jeden Gesprächs verwenden, wird unser heutiges Gespräch auch von den anderen Teilnehmern und unserem Betreuer gelesen werden. Ich kann Ihnen jedoch versichern, dass Ihre Daten anonymisiert werden. So werden beispielsweise Ihr Name, Ihr Alter sowie persönliche Hintergrundinformationen, Datum und Ort entfernt. Das Interview wird auch nicht für andere Zwecke als für diese Untersuchung verwendet. Wenn Sie sich in diesem Gespräch nicht mehr wohlfühlen, haben Sie das Recht, jederzeit aus dem Interview und damit aus der Untersuchung auszusteigen.

Sie erhalten nun die folgende Einverständniserklärung, und wenn Sie mit den genannten Punkten einverstanden sind, wäre es nett, wenn Sie das Formular unterschreiben und als E-Mail an mich zurückschicken würden.

Wenn Sie damit einverstanden sind, würde ich jetzt mit der Aufzeichnung beginnen.

Allgemeine Fragen

→ Zunächst möchte ich Ihnen einige demografische Fragen stellen z. B. Ihr Alter, Ihr Geschlecht und Ihre Nationalität. Die Fragen sollen auch dazu dienen, dass sie sich kurz vorstellen können.

Wo befindet sich Ihr Arbeitsplatz?
Was machen Sie an Ihrem Arbeitsplatz?

was machen sie an intem Arbeitsplatz.

Wie viele Jahre üben Sie diese Tätigkeit schon aus?

Abschnitt 1- Behandlung von Schlaflosigkeit bei Patienten mit affektiven Störungen

- 1. Haben Sie in letzter Zeit Patienten mit affektiven Störungen behandelt, die ebenfalls mit Symptomen von Schlaflosigkeit zu kämpfen haben?
 - Wenn nicht, fragen, ob sie Patienten mit Stimmungsstörungen und Schlaflosigkeit im Allgemeinen behandelt haben.
- 2. Was denken Sie über die Behandlung von Patienten mit affektiven Störungen, die angeben, unter Schlaflosigkeit zu leiden?
 - Wie hängen Ihrer Meinung nach Schlaflosigkeit und affektive Störungen zusammen?
- 3. Inwiefern ist es Ihrer Meinung nach wichtig, die Symptome der Schlaflosigkeit bei Patienten mit affektiven Störungen zu berücksichtigen bzw. sich darauf zu konzentrieren?
 - Gibt es bestimmte Patientenfaktoren, nach denen Sie entscheiden, ob Sie sich auf die Symptome der Schlaflosigkeit konzentrieren oder nicht?
- 4. Wie würden Sie die Behandlung von Schlaflosigkeit bei Patienten mit Depressionen im Vergleich zu Patienten mit bipolarer Störung angehen?
- 5. Haben sich Ihre Ansichten/Wissen/Erfahrungen über die Behandlungsmöglichkeiten von Schlaflosigkeit in den letzten Jahren verändert oder weiterentwickelt?
 - Haben sich Ihre Methoden geändert? Gehen Sie heute anders an Schlafprobleme heran als früher?
- 6. Welche Praktiken haben Sie über die Behandlung von Schlafproblemen im Allgemeinen gelernt? (z.B während der Ausbildung?)
 - Fragen Sie, ob sie überhaupt irgendwelche Praktiken erlernt haben (wenn ja, fahren Sie mit den Unterfragen fort
 - pharmakologisch oder verhaltenstherapeutisch? (CBT-I)
 - Welche Möglichkeiten gibt es Ihrer Meinung nach, um die Symptome der Schlaflosigkeit zu behandeln?
- 7. Inwieweit sind Sie mit den Behandlungsmöglichkeiten und der Ausbildung auf diesem Gebiet zufrieden?

- Sind Sie der Meinung, dass es mehr/weniger Schulungen zur Behandlung von Schlafproblemen bei Patienten mit Stimmungsstörungen geben sollte?
- 8. Was wären Ihre Wünsche/Ideen für Verbesserungen im Gesundheitswesen in Bezug auf die Behandlung von Schlaflosigkeit bei Patienten mit Stimmungsstörungen?

Abschnitt 2 - Behandlung von Schlaflosigkeit bei Patienten mit Suchterkrankungen

- 1. Wann sollte Schlaflosigkeit bei Patienten mit Suchterkrankungen behandelt werden?
 - Wie schwerwiegend müssen die Symptome der Schlafstörung sein, damit sie behandelt werden?
- 2. Was sollte Ihrer Meinung nach bei der Behandlung von Schlaflosigkeit bei Personen mit Suchterkrankungen beachtet werden?
 - Welche Faktoren könnten den Behandlungserfolg beeinträchtigen, wenn sie nicht beachtet werden?
 - Warum sind diese Faktoren wichtig?
- 3. Wie behandeln Sie normalerweise Schlaflosigkeit bei Menschen, die an einer Suchterkrankung leiden?
 - Konzentrieren Sie sich auf die Behandlung der Schlaflosigkeit oder betrachten Sie sie als Komorbidität?
 - Warum verwenden Sie diese Art(en) von Behandlung(en)?
- 4. Gibt es psychologische oder verhaltenstherapeutische Behandlungsmöglichkeiten, die Sie zur Behandlung von Schlaflosigkeit bei Patienten mit Suchterkrankung einsetzen?
 - Warum setzen Sie diese Behandlungen ein?
 - Welche anderen pharmakologischen und nicht-pharmakologischen Behandlungen gibt es?
 - Wie zufrieden sind Sie mit den Behandlungen, die Sie anwenden?
 - Würden Sie gerne andere Möglichkeiten kennen lernen?
- 5. Was halten Sie vom Einsatz nicht-pharmakologischer Behandlungen (wie psychologische oder verhaltenstherapeutische Behandlungen) anstelle pharmakologischer Behandlungen zur Behandlung von Schlaflosigkeit bei Patienten mit Suchterkrankungen?
 - Was sind die Vor- und Nachteile dieser Behandlungsarten?

- Wenn Sie nicht-pharmakologische und pharmakologische Behandlungen vergleichen, glauben Sie, dass die eine Behandlungsart wirksamer ist als die andere?
- 6. Wie hoch ist die Langzeiterfolgsrate der Behandlung der Schlafstörungen, die Sie bei Patienten mit Suchterkrankungen anwenden?
 - Welche Art der Behandlung wirkt bei diesen Menschen langfristig besser?
 - Warum ist das der Fall?

Abschnitt 3 - Bewertung und Behandlung von Schlaflosigkeit bei Patienten mit Angststörungen

Beurteilung:

- 1. Welches Vorgehen wenden Sie normalerweise bei der Beurteilung/Anamnese von Schlafstörungen im Allgemeinen an?
 - Warum gehen Sie dabei in dieser Reihenfolge vor?
 - Können Sie mir ein konkretes Beispiel nennen?
- 2. Welche Art von Tests verwenden Sie typischerweise für die Beurteilung/Anamnese von Schlafstörungen?
 - Stellt Ihre Organisation Ihnen irgendwelche Tests zur Verfügung?
 - Können Sie mir ein konkretes Beispiel dafür nennen?
 - Was halten Sie von dieser Art der Beurteilung?
- 3. Wann ziehen Sie eine Diagnostik der Schlafstörungen bei Patienten in Betracht, die eine primär diagnostizierte Angststörung haben?
 - Was veranlasst Sie dazu, eine solche Untersuchung als sinnvoll zu erachten?
 - Warum halten Sie sie zu diesem Zeitpunkt für wichtig?
- 4. Können Sie einige der wichtigsten Indikatoren beschreiben, auf die Sie bei der Anamnese von Schlafstörungen achten, und wie Sie diese Indikatoren zur Entwicklung eines Behandlungsplans nutzen?
 - Stehen diese Faktoren im Zusammenhang mit dem Patienten (Verhalten, Alter, Geschlecht)?
 - Um welche Art von Patienten handelt es sich?
- 5. Was denken Sie über die vorhandenen Beurteilungsverfahren bezüglich der Erkennung von Schlafstörungen? Glauben Sie, dass es sinnvoll ist, Schlafstörungen bei Patienten mit Angststörungen zu berücksichtigen?

- Warum glauben Sie, dass dies sinnvoll ist?
- Können Sie mir ein konkretes Beispiel dafür nennen?
- Können Sie dies näher erläutern?

Behandlung:

- 6. In welchen Fällen halten Sie die Behandlung von Schlafstörungen im Allgemeinen für sinnvoll?
 - Warum glauben Sie, dass es in einem bestimmten Fall von Vorteil ist, können Sie mir eine Situation beschreiben?
- 7. Welche spezifischen Faktoren berücksichtigen Sie bei der Entscheidung, ob sie die Schlafstörung bei Patienten mit Angststörungen behandeln oder nicht?
 - Wie oft berichten die Patient:innen Ihnen von sich aus von diesen Problemen?
 - Stehen diese Faktoren im Zusammenhang mit dem Verhalten des Patienten?
 - Welche anderen Faktoren könnten zu Ihrer Entscheidung beitragen, Schlaflosigkeit zu behandeln oder nicht?
 - Fallen Ihnen weitere mögliche Faktoren ein? Womit hängen sie zusammen?
- 8. Welche Faktoren berücksichtigen Sie bei der Wahl zwischen pharmakologischen und nicht-pharmakologischen Behandlungen von Schlafstörungen bei Patienten mit Angststörungen?
 - Können Sie mir ein konkretes Beispiel/Beschreibung dieser Faktoren geben?
 - Warum erachten Sie diese Faktoren als relevant für Ihre Entscheidung?

Proben im Allgemeinen:

Können Sie mir ein konkretes Beispiel dafür nennen?

Warum glauben Sie, dass dies wichtig ist?

Was meinen Sie, wenn Sie sagen...?

Können Sie dies näher erläutern?

Wie sieht das aus?

Hängen diese Faktoren mit dem Verhalten des Patienten zusammen? Um welche Art von Patienten handelt es sich?

Fragen Sie, an wen sie uns verweisen können → Schneeballsystem

Appendix C

Overview of Codebook

Treatment of Insomnia in Mood Disorders

The codebook consists of three themes, the first two tackling the first RQ: "To what extent and how do psychologists report to carry out treatment of insomnia in patients with mood disorders?". The third categorie addresses the second RQ: "What are possible options for improving the treatment for insomnia in patients with mood disorders according to psychologists?".

Theme 1: Current views and methods of treatment

- 1. Considering insomnia a symptom of mood disorders
- → This code refers to the opinion of psychologists that insomnia can be seen as a symptom of mood disorders, and therefore, should not be treated as a seperate disorder. According to these responses, insomnia is not a risk factor for the development of mood disorders.
- 2. Supporting the idea of a bidirectional relationship
- → In contrast to the first code, this one addressess the view that the relationship between insomnia and mood disorders is bidirectional, meaning that they can affect and cause each other or be seen as seperate disorders.
- 3. Emotional discomfort leading to symptoms of insomnia
- → This code has been developed due to the common belief of the participants, that patients with mood disorders struggle with insomnia due to emotional discomfort they are experiencing, such as ruminating and negative or suicidal thoughts.
- 4. Sleep as a central element in mental health
- → The fourth code refers to statements of psychologist expressing the view that sleep plays a crucial role in mental health and the treatment of patients with mental disorders. According to them, sleep affects the overall quality of life and the mental well-being of patients.
- 5. Exploring underlying causes of insomnia
- → Some participants reported focusing on more deep-rooted issues of biological or psychological nature rather than on the symptoms. Therefore, this code relates to participants who take biological and neurological disorders into account, as well as deep psychological issues or trauma.
- 6. <u>CBT-I methods to provide knowledge and helpful tools</u>

- → Since the RQ deals with the methods that psychologists use in their treatment, this code refers to all the methods and CBT-I techniques (non-pharmacological) that the participants use in the treatment of those patients. This code is not about what they have learned in their education, but what they actually apply to correct wrong behaviour and attitudes of the patients.
- 7. Openness towards pharmacological treatment
- → In contrast to CBT-I, this code is about the participants' openness/likelihood to consider pharmacological treatment for their patients. Furthermore, it refers to their view and attitude towards sleep medication and how useful it is.

Theme 2: External factors affecting the treatment

- 8. Considering manic episodes in bipolar patients
- → The first code of the second theme represents one of the patient factors that have an influence on the participants' decision-making in their treatment. Since the participants were asked in how far their treatment differs for patients with bipolar disorder compared to major depression, their responses have shown that the participants base their approach on whether the patients find themselves in a depressive (low) or manic (high) phase.
- 9. Patients' willingness to engage in CBT
- → When asked about their experiences with their current methods, some participants reported that the effectiveness of the treatment depends on the patient willingness to eliminate biases and modify current behaviours. Thus, this code refers to the opinion that the patients' effort plays a crucial role in the treatment.
- 10. Learned skills and knowledge about insomnia treatment
- → The last code from this category focuses on the skills and knowledge the participants have learned in their education/training. Therefore, this code refers to their past education in university or during their training (Methods and skills they have learned as well).

Theme 3: Flaws in education and ideas for improvements

- 11. Changed attitude and knowledge due to work experience
- → Since the last code aimed to assess the participants' level of education (from university and training), this code addressess the extent to which their knowledge has changed since they started working in practice. Therefore, it's about changed views and attitudes (about sleep and insomnia) due to their experiences with patients.

12. Level of satisfaction with expert training and education (Yes/No)

→ During the coding process, this code was divided into 2 seperate codes (one for yes, one for no), in order to assess how many participants are satisfied with their education, and how many are not. If participants stated that they were satisfied with what they learned about insomnia in the past, it was coded with ,Yes', and if they weren't it was coded with ,NO'.

13. Ideas for improvements in the training

→ Based on the last code, this one has been formulated for possible improvements in case the participants reported not feeling satisfied with their education in this field. Therefore, this one refers to concrete ideas and statements about how the treatment options for these patients could be improved.