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Bridging Psychotherapy and Technology:

Foundational Business Plan for Lynk

Market Analysis & Opportunity

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Abstract

This work presents a foundational business plan for Lynk, a digital psychotherapy platform designed to bridge the gaps between in-session and between-session care. Grounded in Cognitive Behavioural Therapy (CBT), Lynk integrates secure communication tools, progress tracking, and personalized task management. Drawing on insights from psychotherapists, patients, and empirical research, it addresses critical inefficiencies in accessibility, engagement, and administrative tasks. Lynk's evidence-based design improves patient outcomes while adhering to Germany's strict healthcare regulations. Positioned at the intersection of mental health and technology, it offers a scalable, privacy-compliant solution to meet the growing demand for digital therapeutic innovations.

Keywords: Digital Mental Health; Mental Health Innovation; Digital Innovation; Digital Health Application; Psychotherapy Tools; Digital Transformation; Health Innovation

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List of Abbreviations

Abbreviation	Definition
AFIs	Acceptance-facilitating Interventions
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte (eng. Federal Institute for Drugs and Medical Devices)
BMWK	Bundesministerium für Wirtschaft und Klimaschutz (eng. Federal Ministry for Economic Affairs and Climate Action)
BPtK	Bundespsychotherapeutenkammer (eng. *Federal Chamber of Psychotherapists)*
CAC	Customer Acquisition Cost
CAGR	Compounded Annaul Growth Rate
CAPEX	Capital Expenditure
CBT	Cognitive Behavioural Psychotherapy
CEU	Continuing Education Units
CPC	Cost-per-Click
CPM	Cost-per-Mille
DGPT	Deutsche Gesellschaft für Psychotherapie (eng. German Association for Psychotherapy*)*
DGPPN	Deutsche Gesellschaft für Psychiatrie, Psychotherapie, Psychosomatik und Nervenheilkunde (eng. German Society for Psychiatry, Psychotherapy, Psychosomatics, and Neurology)
DGV	Digitale Gesundheitsanwendungen Verordnung (eng. Digital Health Applications Ordinance)
DMHI	Digital Mental Health Interventions
DTx	Digital Psychotherapy
DiGA	Digitale Gesundheitsanwendung (eng. Digital Health Application)
DVG	Digitale-Versorgung-Gesetz (eng. Digital Healthcare Act)
eCPM	Effective Cost-per-Mille
ePA	Electronic Patient Record
GDNG	Gesundheitsdatennutzungsgesetz (eng. Health Data Use Act)
GDPR	General Data Protection Regulation
GTM	Go-to-markets
mHealth	Mobile Health
M&A	Mergers & Acquisitions
MVP	Minimum Viable Product
OCD	Obsessive-compulsive Disorder
PDSG	Patientendaten-Schutz-Gesetz (eng. Patient Data Protection Act*)*
PPP	Public Private Partnerships
PTSD	Post-traumatic Stress Disorder
RKI	Robert-Koch-Institut (eng. Robert-Koch-Institute)
SaaS	Software-as-a-Service
SAM	Serviceable Available Market
SOM	Serviceable Obtainable Market
TAM	Total Addressable Market
TI	Telematic Infrastructure
VC	Venture Capital
WHO	World Health Organisation

1 Project Background and Purpose

The public perception of mental health has undergone a profound transformation over the past decade. Once heavily stigmatized, mental health issues are now widely recognized as central to public health discussions, particularly in developed nations like Germany. This shift is underpinned by an increasing understanding of the critical importance of mental well-being and the extensive effects that mental health conditions have on individual quality of life, workplace productivity, and the overall health of society (Schomerus and Speerforck 2023; Schreiter 2024).

The number of people affected by mental health issues like anxiety, depression, and stress continues to rise at an alarming pace. Despite increased awareness, these conditions have become one of the biggest global public health challenges today. Mental health disorders account for 13% of the total global disease burden, with depression recognized as the leading cause of disability worldwide (Hock et al. 2012). In Germany, research reports an increase in symptoms of depression and anxiety, particularly among younger populations, adding further strain to an already overburdened mental health system (Mauz et al. 2023).

The origins of the increase in mental health disorders are complex and shaped by various social, economic, and psychological factors. One of the primary drivers is the increasing pressure of modern life. Globalization, technological advancements, and the fast pace of contemporary work environments have contributed to chronic stress and burnout. Long working hours, constant connectivity through digital devices, and blurred lines between personal and professional life have exacerbated mental health problems, particularly among working adults and young professionals. Additionally, social isolation, often driven by urbanization and the decline of traditional support networks, has intensified feelings of loneliness and mental distress in many communities (Marazziti et al. 2020).

Another significant factor fueling mental health disorders is economic insecurity. Financial instability, job insecurity, and the widening gap between income levels have contributed to increased stress and anxiety. Economic downturns, such as the global financial crisis of 2008, have left lasting effects on mental health, particularly in regions where social safety nets and mental health services are limited. The mental health impacts of financial hardship are particularly pronounced among vulnerable groups, including the unemployed, low-income workers, and marginalized communities (Forbes and Krueger 2019; Mucci et al. 2016).

Impact of Covid-19 on Mental Health

While these social, economic, and environmental factors have long contributed to the mental health challenges, the *COVID-19* pandemic acted as a key accelerant, escalating these challenges into a severe crisis, exposing and exacerbating pre-existing vulnerabilities. The global pandemic caused profound disruptions in daily life, leading to widespread mental health challenges across diverse populations. Lockdowns, social distancing measures, and fears about the virus created a climate of uncertainty, isolation, and anxiety. According to a WHO report, the pandemic resulted in a 25% increase in the prevalence of mental diseases worldwide during the first year alone (2022). This surge highlighted how fragile mental health systems were, with many healthcare providers overwhelmed and unable to meet the rising demand for mental health services.

One of the most significant contributors to this crisis was social isolation. With physical contact restricted and social support networks severed, many individuals experienced loneliness, which is closely linked to depression and anxiety. Remote working, the closure of schools, and limits on public gatherings further intensified feelings of isolation. A study revealed that during the pandemic, nearly 41% of adults in the U.S. experienced symptoms of anxiety or depression, a significant jump from just 11% in the years before the pandemic (Panchal et al. 2023).

Digitalization of Mental Health Care

The pandemic, however, catalysed change in the healthcare industry, accelerating the need for accessible and efficient health support. This urgency drove the rapid digitization of healthcare, resulting in the rise of telemedicine, digital mental health tools, and mobile applications. These digital tools have become essential for individuals who cannot access traditional in-person services, improving healthcare delivery, patient outcomes, and operational efficiency (Stumpos, Kitos, and Talias 2023).

The shift towards digitalisation has also fundamentally transformed how mental health services are delivered. Digital tools now play a central role in managing mental health care by providing remote access to psychotherapy, counseling, and self-care tools. Furthermore, digital mental health tools have significantly reduced the barriers associated with in-person care, allowing individuals to seek help more quickly. Research has demonstrated that digital mental health tools can expand the capacity of mental health services, enabling providers to reach underserved populations who previously faced barriers to accessing care (Chew et al. 2020; Strudwick et al. 2021). Digital mental health tools have also consistently demonstrated their effectiveness in addressing a variety of mental health disorders. Numerous studies validate their outcomes as comparable to traditional in-person therapies (Kim et al. 2023; Prescott et al. 2022). Cognitive Behavioural Psychotherapy (CBT), especially in its digital form, has been a cornerstone of digital mental health interventions. Digital CBT has shown robust efficacy in treating a range of mental health conditions, including anxiety, depression, and chronic pain. It combines the structured approach of CBT with the accessibility and scalability of digital tools, enabling guided or unguided psychotherapy sessions tailored to individual needs (Lattie, Stiles-Shields, and Graham 2022; Kumar et al. 2017).

Cost efficiency further strengthens the demand for digital mental health tools. These interventions reduce costs by minimizing logistical challenges, optimizing psychotherapist involvement, and offering scalable delivery models. Evidence suggests that modalities like

telepsychotherapy and app-based interventions provide significant savings compared to traditional in-person psychotherapy while maintaining clinical efficacy (Buntrock 2024; Prescott et al. 2022). Furthermore, the flexibility of digital tools offers tailored approaches to mental healthcare, which can be less stigmatizing and more accessible than conventional methods (Hollis et al. 2018).

However, the rapid adoption of digital mental health tools has also revealed challenges, particularly around digital exclusion. Individuals from marginalized communities may lack the necessary technology or digital literacy to benefit from these tools (Greer et al. 2019; Petrou et al. 2023). This digital divide highlights the need for initiatives to improve access to technology and digital literacy, ensuring that the benefits of digital mental health interventions are equitably distributed (Kozelka et al. 2021). By addressing these disparities, the mental health sector can better leverage digital tools to provide more inclusive, efficient, and accessible care for all.

2 Scope, Objectives & Impact

With the continued rise of mental health disorders and the growing relevance and acceptance of digital tools, there is not only the need for innovative, inclusive, and scalable approaches but also a significant opportunity. This work project will explore the potential of new digital mental health tools besides existing ones to meet the growing needs of individuals in Germany, examining how the digitalization of mental healthcare can provide effective tools. The primary focus is to thoroughly identify the genuine challenges and needs faced by psychotherapists through close collaboration while exploring potential tools to address these obstacles and enhance psychotherapeutic outcomes effectively. The work project serves as the foundation for potentially translating the theoretical concept into a practical digital mental health solution, presented in the form of a comprehensive business plan that highlights serval key areas, including market analysis, product development, go-to-market, and revenue model.

3 Literature Review

3.1 Introduction

This literature review examines psychotherapeutic approaches, focusing on CBT for its empirical support and effectiveness in treating mental health disorders. It provides an overview of various methods before detailing CBT's structured approach and success in addressing conditions like anxiety, depression, and OCD. The role of homework in CBT is analysed alongside the growing impact of digital tools in enhancing accessibility and adherence. CBT's modular design is considered particularly suitable for digital applications.

3.2 Overview of Psychotherapy Methods

Psychotherapy encompasses various methods, each employing unique strategies to improve mental health. Psychoanalysis, for instance, uncovers unconscious meanings behind problematic behaviours through a close therapist-patient relationship and exploration of past experiences. Behaviour psychotherapy targets unhealthy behaviours via conditioning techniques like exposure psychotherapy and reinforcement (Kazdin 2000). Cognitive psychotherapy addresses distorted thought patterns, helping patients challenge irrational thinking and develop healthier behaviours (Beck et al. 1979). Humanistic psychotherapy focuses on personal growth, self-actualisation, and providing a supportive environment for emotional exploration. Integrative psychotherapy combines elements from various methods, tailoring treatment to individual needs.

Among these, CBT stands out as a cornerstone of modern psychotherapy, backed by substantial empirical evidence for treating conditions such as anxiety disorders (e.g., GAD, social anxiety, PTSD), depression, OCD, and somatoform disorders like hypochondriasis and body dysmorphic disorder. It integrates behavioural techniques, such as exposure and response prevention (ERP) and skills training, with cognitive restructuring to address distorted thinking and maladaptive behaviours. CBT's structured, goal-oriented format promotes significant

symptom reduction, prevents relapse, and equips patients with sustainable coping strategies, making it one of the most versatile and preferred treatment options in psychology (Kazdin 2000; Hofmann 2012).

3.3 Deep-Dive CBT

3.3.1 Importance of Homework

Homework is critical component to CBT, bridging psychotherapy sessions and daily life. It reinforces skills and strategies introduced during psychotherapy, aiding the cognitive and behavioural changes necessary for lasting improvement. Research shows a strong correlation between homework adherence and positive treatment outcomes, with consistent completion linked to significantly better progress (Kazantzis, Deane, and Ronan 2000).

The main goal of CBT homework is to encourage patients to apply learned techniques actively. Assignments often include mood tracking, thought records to challenge negative thinking, and task-related activities to confront anxiety-provoking situations. These exercises are fundamental in helping patients internalise psychotherapeutic skills, fostering self-efficacy, and driving behavioural change. By engaging with homework, patients actively participate in their treatment, reinforcing progress made during sessions (Kazantzis, Deane, and Ronan 2000).

Despite its benefits, patient engagement with homework can be challenging. Common barriers include procrastination, perceived irrelevance of tasks, or external stressors. Such difficulties in adherence may reduce psychotherapy effectiveness, limiting behavioural change and leading to suboptimal outcomes. Addressing these challenges is vital for improving CBT's overall efficacy (Kazantzis, Whittington, and Dattilio 2010).

Empirical evidence highlights the role of homework in promoting long-term behavioural change. By practising techniques between sessions, patients reinforce their learning and become empowered participants in their treatment. This makes CBT a practical, action-oriented

approach emphasising long-term improvement and self-sufficiency (Kazantzis, Deane, and Ronan 2000).

3.3.2 Digitalisation

The digitalisation of CBT has created significant opportunities for mental health treatment, particularly during the COVID-19 pandemic, by addressing constraints on traditional face-to-face psychotherapy. Digital CBT increases accessibility, enabling self-directed, flexible psychotherapy tailored to individual needs. Research highlights its benefits, including scalability, personalisation, and continuous patient monitoring through features such as reminders, feedback, and progress tracking, which enhance engagement and adherence. These tools can function as standalone treatments or adjuncts to in-person psychotherapy, offering versatile mental health care options (Thew, Rozental, and Hadjistavropoulos 2022; Mohr et al. 2013).

CBT's structured, evidence-based nature is ideal for digital implementation. Its modular approach breaks complex interventions into manageable units, such as cognitive restructuring and behavioural activation, allowing patients to progress at their own pace while coordinating with psychotherapists. Features like feedback loops and reminders further enhance engagement. The emphasis on homework, essential for reinforcing psychotherapeutic outcomes and promoting self-efficacy, aligns seamlessly with digital tools that guide users through tasks between sessions (Kazantzis, Deane, and Ronan 2000; Andersson et al. 2014). CBT's strong empirical support across conditions like anxiety, depression, and insomnia ensures that digital adaptations offer proven, evidence-based interventions, expanding their reach and impact (Hofmann 2012).

However, digitalisation poses challenges, particularly in maintaining patient engagement, as drop-out rates remain high without psychotherapist involvement (Thew, Rozental, and Hadjistavropoulos 2022). Hybrid models that combine digital tools with therapeutic guidance

are essential to balance scalability with patient-centred care. Additionally, digital CBT must address data privacy and digital exclusion, as individuals with lower digital literacy or limited access to technology may struggle to benefit. Despite these hurdles, technological advances and increasing global demand underscore the promising future of digital CBT (Kumar et al. 2013). In summary, digital CBT leverages its structured, evidence-based nature of CBT to enhance reach and accessibility. By improving communication, monitoring progress, and reinforcing techniques, digital tools complement traditional psychotherapy. While challenges such as patient engagement and inclusivity remain, integrating digital tools into CBT represents a promising evolution in mental health care.

4 Empirical Study

4.1 Introduction

This section presents the methodology and procedures for the empirical study conducted to explore the challenges within the psychotherapeutic process. The study seeks to explore the experiences and perspectives of both psychotherapists and patients, with a focus on uncovering existing shortcomings within psychotherapy and examining how digital tools can effectively support and enhance the psychotherapeutic process. Therefore, a qualitative, inductive approach was adopted, using expert interviews to capture the complex, firsthand insights of participants. This method allows for an exploration of the needs, barriers, and potential tools within the psychotherapeutic landscape. The data collected was assessed through qualitative content analysis, enabling the identification of key challenges and actionable insights.

4.2 Methodology

4.2.1 Research Design

The study adopts a qualitative research design to gain a nuanced understanding of psychotherapy's challenges and inefficiencies and explore how digital mental health tools could address these issues. The qualitative approach aligns with the exploratory and inductive nature

of the study, focusing on gathering in-depth data rather than testing predefined hypotheses. This approach is particularly suitable as the research aims to develop an understanding of the challenges from the ground up, making it essential to capture the subjective experiences and complex perspectives of those directly involved. Unlike quantitative methods, which require predefined variables and are focused on testing specific hypotheses, this qualitative research is flexible and open-ended, allowing theoretical insights to emerge organically from the data.

Expert interviews represent the primary method of data collection to support the inductive process and enhance the credibility of the findings. Given the authors' limited prior knowledge of the topic, relying on the expertise of psychotherapists and patients directly involved in the field provides a strong foundation for credible insights. Direct interaction with these experts allows a deeper, more authentic understanding of the realities of psychotherapy, lending trustworthiness to the study’s conclusions. Engaging with psychotherapists and patients offers access to firsthand experiences and deep professional knowledge without imposing preconceived notions or frameworks. Psychotherapists contribute valuable insights into their systemic and practical challenges they face, while patients share personal aspects of their experiences and unmet needs within the current psychotherapeutic landscape. This dual perspective is essential for identifying patterns, challenges, and opportunities hidden from a purely theoretical or external viewpoint, thereby reducing the risk of superficial analysis or misinterpretation.

Moreover, the qualitative, inductive approach of expert interviews provides the flexibility needed to explore the topic without constraints. It adapts to new insights as they arise and allows the experts to dive deeper into a particular topic according to its perceived relevance. By not committing to specific guidelines in advance, this study remains open to unexpected findings, enabling the identification of core problems and potential solutions post-interviews.

4.2.2 Procedure

To build on the semi-structured interview design mentioned above, an interview guide was developed as a foundational tool, structured around key themes relevant to the research objectives and areas of exploration. The guide contained open-ended questions, allowing participants to elaborate on their experiences and thoughts without constraints. This approach was designed to capture rich, qualitative data that could reveal both expected and unexpected insights. The interview guide was developed based on the literature review and initial discussions with professionals in the field. It was also pilot-tested with one psychotherapist and one patient to ensure clarity and relevance, and minor adjustments were made based on their feedback. This iterative process ensured that the guide would facilitate meaningful discussions aligned with the study's objectives.

Two groups of experts, psychotherapists and patients, were interviewed. In the context of this study, experts refer to individuals with substantial knowledge, experience, and involvement in psychotherapy, either as practising psychotherapists or as patients who have engaged in psychotherapeutic processes. Psychotherapists were chosen as experts due to their professional training, clinical experience, and firsthand understanding of the structural and practical challenges within mental health services. On the other hand, patients offer unique insights into the lived experiences and potential gaps in traditional psychotherapy from a client's perspective, making them equally valuable contributors to this study. Together, these two groups provide a comprehensive view of the field, bringing both professional and personal perspectives on psychotherapy and the potential role of digital tools.

The interviews were conducted individually via video conferencing, accommodating the geographical distance between the authors based in Portugal and the interviewees in Germany. Each interview lasted between 45 and 60 minutes, giving participants enough time to share their insights without feeling hurried. Before each interview, participants were briefed on the

interview's goals, the confidentiality of their responses, and their right to withdraw at any point. Informed consent was obtained verbally, ensuring participants fully understood the study's purpose and rights. Participants were assured that all data would be anonymized to protect their privacy unless explicit permission was granted to use identifying information, as in the case of psychotherapists who consented to display their full names. Conversely, patient names were fully anonymized to maintain confidentiality. All interviews were audio-recorded with the participants' permission to ensure accurate transcription and analysis. Following each interview, the audio recordings were carefully transcribed and translated to capture the full range of participants' responses, providing a reliable foundation for the subsequent analysis (Appendix 34-41).

4.2.3 Introduction to the Interview Partner

Interviews with five psychotherapists were conducted, each bringing unique perspectives based on their training, clinical experiences, and professional roles. These interview partners were selected for their diverse backgrounds, hands-on experience in cognitive behavioural psychotherapy, and their exposure to outpatient settings. As *Lynk* primarily focuses on the German market, German interview partners were chosen to ensure relevance and effectiveness.

Anna Schmitt (age 28) is a psychologist at the University Hospital in Homburg and a research associate at Saarland University. Currently training as a psychotherapist at the Institute for Psychotherapy in Saarbrücken, *Schmitt* specializes in clinical psychology and behavioural psychotherapy. Her dual role in both clinical and academic environments allows her to contribute valuable insights into integrating digital tools in psychotherapy from both a research and clinical perspective.

Luca Tarantini (age 30) works as a psychologist on the inpatient psychiatric ward at the University Hospital in Homburg. He is also in training as a behavioural psychotherapist at a psychotherapy institute, dividing his time equally between clinical and outpatient settings. This

balance of experience allows him to offer a unique view of the practical challenges and needs in structured clinical environments and flexible outpatient care.

Julia Weber (age 31) is currently in the middle of her psychotherapist training, with 1.5 years remaining. Having completed her master's degree three years ago, *Weber* has been in training for two years and has worked in outpatient care for one year. Specializing in behavioural psychotherapy, she provides a fresh perspective on the early career challenges faced by psychotherapists and the potential of digital tools to streamline processes and improve patient outcomes in outpatient psychotherapy.

Anna Jansen (age 27) is a psychologist currently training to become a licensed psychotherapist. For the past three months, she has worked in acute psychiatry, specifically in an addiction ward. Approximately 50 percent includes patients without addiction issues, often those experiencing severe depression or psychosis following a crisis. Her role on this ward provides her with direct exposure to complex cases, offering valuable insights into both addiction treatment and acute psychiatric care.

Cosima Höflacher (age 32) has been working in the clinical field for approximately a year and a half and is currently obtaining her psychotherapist license. Before her career in psychotherapy, she spent five years in the private sector as a product manager for an online recruiting platform. Her decision to pursue psychotherapy led her to focus intensively on direct patient care, bringing a unique perspective that combines her corporate experience with her clinical practice training.

Their combined insights offer a nuanced understanding of the systemic and practical challenges in psychotherapy and informed perspectives on how digital mental health tools could effectively address these issues.

In addition, the perspectives of three patients who have undergone CBT were incorporated. Each patient brings unique personal experiences regarding the psychotherapeutic process,

providing a critical view of it from the patient's side. To ensure confidentiality and respect for their privacy, all patient data has been anonymized.

Patient 1 (Age: 44) is a male who has been in psychotherapy for two years, primarily focused on managing depression. His depressive symptoms are closely linked to a midlife crisis, which has contributed to a pervasive sense of demotivation and difficulty in staying engaged in various aspects of life. His long-term psychotherapy experience provides valuable insights into the challenges of maintaining engagement over time and how digital tools might help address motivational barriers.

Patient 2 (Age: 21) is a female who has been in psychotherapy for six months, with a primary focus on treating anxiety. As a young adult navigating life transitions, her experience highlights the needs of younger patients facing anxiety and the potential benefits of digital tools that cater to this demographic's lifestyle and expectations in psychotherapy.

Patient 3 (Age: 34) is a female who recently completed psychotherapy (12 sessions) focused on managing general anxiety about the future. Her completed course of psychotherapy provides insights into how behavioural psychotherapeutic interventions are perceived by patients and how ongoing self-management after psychotherapy works.

These patient interviews provide diverse perspectives on the psychotherapeutic experience, touching on various aspects such as long-term engagement, age-specific needs, and the impact of psychotherapy completion. Their experiences allow for a thorough examination of patient-specific challenges and unmet needs within the current psychotherapeutic framework, and they offer important perspectives on how digital tools might enhance or complement traditional psychotherapy.

4.2.4 Introduction of the Interview Guide

The first section of the interview guide focuses on understanding the psychotherapists' workflow in CBT. It seeks to clarify typical psychotherapeutic processes, techniques for

keeping patients engaged between sessions, and current tools used to monitor patient progress and adherence to psychotherapeutic tasks.

Following this, the guide addresses common challenges psychotherapists face in psychotherapy. This exploration was intended to pinpoint areas where digital support could provide tangible benefits.

To capture the psychotherapists' needs and requirements, the third section invites psychotherapists to reflect on the type of support they believe could enhance their practice. Topics include desired functionalities in a digital solution, potential gaps in patient monitoring, and openness to paid tools. This section also investigates the feasibility of insurance reimbursement for digital tools to better understand the economic considerations involved.

The fourth section asks psychotherapists to evaluate specific app functionalities, such as symptom tracking, secure communication, and motivational features. This allows for feedback on the practical and ethical implications of using digital support in psychotherapy, including data security and patient autonomy. The questions in this section aim to clarify which features psychotherapists find most valuable and feasible in supporting ongoing psychotherapy.

Finally, the guide includes a section for open feedback, allowing psychotherapists to share any additional thoughts or considerations that could support the development of a patient-centred, psychotherapist-friendly digital tool. This open-ended approach ensures that any overlooked needs or innovative ideas can be captured, thus enriching the design process with diverse insights (Appendix 33).

4.3 Evaluation

4.3.1 Evaluation Procedure

The data analysis for this study followed a thematic approach, aiming to identify and summarize key topics that emerged from the interviews with psychotherapists and patients. Given the semi-structured nature of the interviews, each one was initially analysed individually. This allowed

flexibility in handling the unique responses of each participant, as not every interview included the exact same questions or provided insights on each topic. After thoroughly reviewing each interview, relevant topics were clustered into thematic areas, enabling a systematic comparison of insights across participants. This method highlighted shared experiences and contrasting perspectives, with responses from patients and psychotherapists summarized under each theme to provide a comprehensive understanding of the issues explored. In this evaluation process, not every question was examined in isolation. Some questions were less insightful, others were addressed together, and certain topics held varying importance depending on the interview partner. This selective approach facilitated a more cohesive and accurate representation of each participant's overall impressions and viewpoints.

4.3.2 Evaluation Results

The interview responses provide an in-depth look at the psychotherapeutic process, with a focus on CBT. Through these discussions, psychotherapists and patients highlight session structures, psychotherapeutic tasks, and specific CBT techniques for managing depression and anxiety. While individual approaches vary, common themes reflect CBT's structured, goal-oriented nature and its emphasis on self-monitoring and behavioural activation.

Understanding Psychotherapy

Tarantini outlines a typical CBT session, beginning with a check-in on urgent concerns or organizational needs and followed by a review of homework. For patients with anxiety, *Tarantini* uses exposure exercises – a fundamental CBT technique – to help them gradually face their fears. These tasks are carefully planned in advance, with details like timing, location, and potential safety signals customized to each patient’s needs.

Jansen shares a similar approach, starting sessions with diagnostic assessments and symptom tracking, particularly for new patients. In treating depression, she emphasizes positive behavioural changes through activities and mindfulness exercises to boost engagement with

life's positive aspects, which is central to CBT. Weber further describes how the structure of CBT sessions often becomes more flexible as psychotherapy progresses, allowing patients to bring in recent experiences. Early sessions focus on psychoeducation and goal-setting, while later sessions become more adaptive, reflecting CBT's integration into daily life.

Homework assignments are essential in CBT, providing patients with skills and coping mechanisms to apply beyond the psychotherapy room. *Höflacher* emphasizes that tasks like self-monitoring and exposure exercises are most effective when they come from the patient's personal goals, fostering commitment rather than compliance. *Tarantini* and *Höflacher* both rely on exposure exercises for anxiety, guiding patients through initial exposures and then encouraging independent practice. *Tarantini* notes that behavior-focused tasks, such as specific exposures, are more consistently completed than theoretical tasks, like creating lists of positive activities, which patients may find less engaging.

For depression, *Weber* uses behavioural activation early in psychotherapy to help patients re-engage with pleasurable or meaningful activities, a fundamental CBT strategy to combat inactivity. She explains that simple, structured tasks can help establish routines before addressing deeper cognitive issues. As psychotherapy progresses, homework may shift to identifying and challenging negative thoughts, a central focus of CBT for depression and anxiety.

Self-monitoring is another key CBT tool, aiding psychotherapists and patients in tracking thought, emotion, and behaviour patterns. *Tarantini* finds that mood tracking is especially effective in depression treatment, allowing patients to observe mood patterns and triggers over time. He notes that reminders may be needed for anxiety tracking, as patients sometimes avoid it due to anxiety about symptoms.

In summary, these accounts illustrate a consistent application of CBT principles, including structured sessions, targeted behavioural tasks, and self-monitoring. The shared approaches

reflect a strong commitment to CBT's evidence-based, goal-oriented techniques that actively involve patients both in and outside of sessions.

Challenges in the current psychotherapeutic process

The interviews' analysis uncovers significant challenges in psychotherapist-patient communication, primarily regarding data privacy, accessibility, and clarity around professional boundaries. A recurrent issue among psychotherapists is the lack of a secure, formalized communication channel that meets data protection standards specific to psychotherapeutic settings. Without a dedicated system, psychotherapists often resort to informal communication tools such as SMS or *WhatsApp*, which, while convenient, do not fully comply with privacy regulations and can blur the boundaries of the professional relationship.

Several psychotherapists acknowledge using *WhatsApp* for administrative matters like scheduling. However, they emphasize the limitations of this approach, noting that psychotherapeutic content is strictly avoided due to privacy concerns. Although *WhatsApp* is end-to-end encrypted, its use remains legally ambiguous and ethically problematic in psychotherapeutic contexts. *Tarantini* and *Weber* point out that the widespread use of such informal tools highlights a gap in safe, easily accessible communication tools explicitly developed for psychotherapy. *Weber*, for instance, opts for SMS and email, which, although safer in terms of privacy, lack the immediacy and flexibility that patients often seek in their interactions with psychotherapists. This lack of a formal, regulated communication tool is further echoed by *Schmitt*, who advocates for a central, data-secure platform to facilitate interactions with patients. *Schmitt* envisions a digital platform that offers secure messaging and supports the distribution of psychotherapeutic materials, such as assignments and psychoeducational documents. From *Schmitts* and *Höflacher's* perspective, the reliance on informal tools can lead to frequent misunderstandings regarding appropriate usage. Such misunderstandings often necessitate corrective actions, placing an additional administrative

burden on psychotherapists, who must remind patients about the limitations of these communication channels. *Höflacher* and *Tarantini* manage this distinction by using a secondary phone specifically for patient contacts, an arrangement they found cumbersome. This secondary device represents only a partial solution, as it does not address the underlying demand for a secure, integrated communication tool. Furthermore, *Höflacher* reports logistical difficulties in contacting patients who only possess a landline, noting that privacy constraints prevent her from leaving detailed messages if someone else answers the call. This situation underscores the need for a more flexible, psychotherapist-specific communication system that respects both patient privacy and the operational needs of psychotherapists.

Patients' perspectives align with the psychotherapists' concerns, highlighting similar challenges from the receiving end. *Patient 1* describes email as overly formal and rarely uses it for reaching out between sessions, which they feel hinders supportive exchanges. Conversely, *Patient 2* appreciates the convenience of *WhatsApp* but remains unsure about appropriate communication boundaries, fearing frequent contact could overstep professional limits. These experiences underscore the need for a communication tool that is not only secure but also intuitively designed to fit the informal, supportive interactions patients often desire outside formal sessions. Furthermore, the analysis reveals that maintaining motivation and engagement between psychotherapy sessions poses a substantial challenge for many patients, particularly in completing psychotherapeutic exercises and implementing learned techniques independently. Across multiple interviews, both psychotherapists and patients acknowledge that patients often struggle to stay motivated and consistently apply psychotherapeutic practices outside the structured environment of psychotherapy sessions. This difficulty highlights a crucial gap in sustaining the psychotherapeutic process, as psychotherapy's success depends much on the patient's ability to integrate and practice strategies in their daily lives.

Patient interviews reveal a typical pattern of motivation declining between sessions. For instance, *Patient 1* describes feeling motivated and focused during sessions, only for this momentum to diminish shortly afterwards, leaving him feeling disconnected from the psychotherapeutic goals. *Patient 2* echoes this sentiment, noting that while the strategies discussed in sessions make sense in theory, they often become challenging to apply during moments of heightened anxiety outside of psychotherapy. *Patient 3* initially found it challenging to focus on her exercises throughout the week but reported that establishing a straightforward routine and receiving consistent reminders helped her remain engage. These accounts illustrate a shared need among patients for additional support mechanisms to reinforce engagement outside of sessions.

Psychotherapists, including *Schmitt* and *Tarantini*, similarly identify the issue of declining motivation and engagement as a key obstacle in psychotherapeutic progress. *Schmitt* emphasises that psychotherapy primarily happens "between the sessions" as patients work on assignments or behavioural practices designed to help them overcome specific challenges, such as anxiety-related avoidance behaviors. However, many patients face difficulty completing these tasks independently, often due to motivational lapses or avoidance. Both *Schmitt* and *Tarantini* suggest that gentle reminders or structured check-ins could mitigate these issues by keeping psychotherapeutic goals in patients' daily routines, reducing the likelihood of avoidance or neglect.

In addition to reminders, psychotherapists highlight the importance of explaining the purpose and relevance of each assignment to increase patient engagement. *Schmitt*, for example, takes time at the end of each session to discuss the rationale behind the assigned tasks, aiming to strengthen the patient's intrinsic motivation by clarifying how these exercises contribute to their overall psychotherapeutic progress. *Weber* supports this approach, noting that understanding the purpose behind tasks can prevent patients from feeling overwhelmed by psychotherapeutic

exercises. Instead of seeing them as burdensome chores, patients are more likely to approach assignments as valuable components of their mental health journey when their relevance is explicitly communicated.

The analysis also highlights substantial organizational and administrative challenges in psychotherapeutic practice, mainly due to insufficient digital infrastructure and the reliance on paper-based documentation systems. Both psychotherapists and patients identify these issues as obstacles to the efficiency and accessibility of psychotherapy. Psychotherapists, in particular, express frustration over the administrative burdens caused by outdated or fragmented documentation processes, which consume valuable time and compromise patient care's consistency and comprehensiveness. *Schmitt* provides a detailed account of the difficulties associated with a largely paper-based documentation system. She explains that psychotherapy-related documents are often dispersed across multiple formats. Some notes are stored digitally, others remain in physical files, and still others are kept by the patients themselves. This fragmentation complicates efforts to maintain a cohesive record of the psychotherapeutic process, as psychotherapists may lose track of which documents have been shared, completed, or stored in which location. *Schmitt* argues that a centralized, digital system for organizing all psychotherapy-related documentation would significantly reduce these inefficiencies, allowing psychotherapists and patients to access all relevant materials in one place. *Weber* shares a similar perspective, describing how her psychotherapeutic practice recently adopted a digital documentation tool, alleviating some of the burdens associated with paper-based record keeping. She notes that this system not only simplifies storing and organizing session notes but also includes functionality for processing diagnostic questionnaires, which can be directly completed and submitted by patients through a secure link. Despite these improvements, *Weber* emphasizes that not all psychotherapeutic practices have access to such resources, which creates discrepancies in the quality and efficiency of care depending on institutional support for digital

tools. Another organizational challenge frequently mentioned by psychotherapists is the inefficiency of scheduling methods. *Höflacher* and *Tarantini* highlight the time-consuming nature of patient outreach and appointment management. This limitation emphasizes the need for a secure and efficient scheduling tool that enables asynchronous communication without compromising patient confidentiality.

In addition to reducing organizational burdens for psychotherapists, digital systems for psychotherapy organisations could greatly benefit patients by providing them with accessible records of their psychotherapy sessions and assignments. Psychotherapists and patients suggest that integrating a calendar and task management function into a digital platform would offer patients a clear overview of upcoming appointments and psychotherapeutic tasks, reinforcing engagement and accountability. Such tools would serve as a central reference point, allowing patients to track their progress and revisit materials as needed, thus reducing dependency on memory or disparate notes and materials.

Potential and Attitudes Toward Digital Tools in Psychotherapy

The interview analysis reveals a broad interest in digital tools as a means to enhance psychotherapeutic engagement and support and streamline administrative tasks. Both patients and psychotherapists identify specific functionalities and benefits that digital tools could bring to the psychotherapeutic process, though they also highlight essential considerations regarding data privacy, personalization, and accessibility.

Psychotherapists generally report limited use of digital tools, with existing applications often serving only basic supplementary functions. Some psychotherapists, such as *Weber*, have experimented with specific mental health apps, like *Body to Brain*, which provides exercises to address emotional states such as sadness or anxiety. *Weber* occasionally suggests these apps as an adjunct to psychotherapy, particularly in cases where she would otherwise provide physical resources, like books or printed exercises. *Weber*'s practice also uses a documentation tool,

streamlining some administrative processes. However, most digital tools currently lack integration with core psychotherapeutic activities, and their adoption remains inconsistent due to limitations in functionality and concerns over data privacy. Additionally, many psychotherapists rely on traditional methods like paper worksheets or, at best, email to share assignments, given the absence of a comprehensive, secure digital platform.

Despite these barriers, there is apparent enthusiasm among both psychotherapists and patients for the potential of digital tools to support psychotherapy. Patients view digital tools improving accountability and sustaining motivation between sessions. *Patient 1*, for instance, sees value in an app that could provide gentle reminders for completing homework tasks without exerting pressure. Similarly, *Patient 2* appreciates the idea of a tool that could help her track anxiety levels and provide reminders for specific psychotherapeutic exercises based on her current emotional state. *Patient 3*, who has completed psychotherapy, suggests that a digital tool could serve as valuable post-psychotherapy support, offering prompts for exercises and check-ins during moments of heightened anxiety. These perspectives indicate a shared preference for digital tools that offer subtle support without intruding on patient autonomy.

Psychotherapists also recognize the potential benefits of digital tools for enhancing patient engagement, mainly through features that support self-monitoring and visual tracking of progress. *Tarantini* suggests that mood tracking and anxiety logs could enable patients to document their experiences in real-time, improving accuracy and reducing avoidance behaviours often associated with retrospective reporting. He further highlights the value of visual aids, such as progress graphs or charts, which could help patients identify patterns in their emotional states and better understand their progress over time. By making psychotherapeutic progress more tangible, these features could foster greater engagement and a stronger psychotherapeutic alliance.

Digital tools are also seen as a solution for reducing administrative burdens and improving the structure of psychotherapy. *Schmitt* envisions a centralized platform that consolidates patient records, session notes, and assignments in one place, enhancing psychotherapist efficiency and patient continuity of care. *Weber* shares this sentiment, suggesting that digital worksheets and exercises could increase patient adherence by simplifying access and reducing the need for physical materials. These administrative benefits underscore the organizational potential of digital tools, which could enable psychotherapists to allocate more time to patient interaction and less to paperwork.

5 Discussion of Literature Review and Expert Interviews

5.1 Key Findings of the Study

First, interviews highlight that CBT is particularly well-suited for integration into a digital platform. Its structured and modular design – focusing on clearly defined goals, behavioural exercises, and measurable outcomes – adapts seamlessly to digital formats. Psychotherapists emphasized how CBT's framework, which includes techniques like cognitive restructuring, behavioural activation, and exposure exercises, naturally lends itself to a step-by-step, interactive approach that a digital tool could reinforce. Using structured exercises and homework assignments within CBT also makes it ideal for digital support. A digital tool could assist patients in tracking their progress, completing thought records, and receiving gentle reminders to stay engaged between sessions, allowing them to maintain momentum and practice skills independently. Additionally, such a tool could serve as a centralized repository for psychotherapy materials, such as mood tracking and thought records, benefiting both psychotherapists and patients by providing clear insights into progress over time.

Beyond CBT's suitability for digital adaptation, the interviews reveal an openness among patients and psychotherapists toward using digital tools to enhance the psychotherapeutic process. A shared theme among participants was the potential for digital tools to boost patient

engagement and accountability between sessions. Patients generally expressed willingness to use apps that support their psychotherapy by offering reminders, mood tracking, and check-ins as long as notifications remain subtle and non-intrusive. This approach would help sustain psychotherapeutic momentum, addressing the common disconnect that patients experience between in-person sessions. However, privacy emerged as a central concern for both groups. Patients consistently preferred tools that allow them to control what information is shared with their psychotherapist, emphasizing the importance of autonomy over personal data. Psychotherapists echoed this, highlighting the sensitive nature of mental health information and the current lack of secure, privacy-compliant options that meet these standards. This shared focus on data security underscores the need for customizable privacy features, ensuring patients and psychotherapists feel confident in the technology's reliability and ethical information handling.

Psychotherapists also expressed a strong demand for digital tools that are flexible and customizable to meet the specific needs of individual patients and psychotherapeutic contexts. They frequently voiced frustration with the lack of adaptability in existing digital health applications, which they described as overly standardized and unsuited to the nuanced requirements of psychotherapy. An integrated platform that combines self-monitoring, documentation, and administrative functions was highly desirable, as it would streamline psychotherapists' workload and improve continuity in the psychotherapeutic process. This need for adaptable, versatile digital tools reflects a broader demand for tools that align with personalized psychotherapy goals and the unique administrative challenges psychotherapists face.

5.2 Positioning within the Literature Research Context

The findings from the study align closely with existing literature on the effectiveness and structure of CBT, underscoring why it is particularly suitable for integration into digital tools.

As described in foundational studies, CBT's structured, modular nature allows for a focused approach where cognitive and behavioural interventions are broken down into discrete, manageable steps. This format supports clarity and consistency and lends itself well to a digital context where progress can be tracked and feedback provided in real-time. The interview participants affirmed this by highlighting how CBT's goal-setting framework, behavioural activation, and cognitive restructuring could seamlessly translate into an interactive digital tool. However, while the literature establishes CBT as inherently structured, the interviews add a nuanced understanding of the practical need for customization. Unlike the more standardized applications discussed in prior research, the psychotherapists interviewed emphasized the need for a flexible digital tool that could adapt to individual patient requirements. Interviewees often criticised existing digital applications for being too rigid and lacking the adaptability to tailor psychotherapy to specific patient needs. This insight builds on findings from studies which emphasize homework and self-monitoring as critical to CBT success but without exploring the challenges of customizing these tasks digitally (Kazantzis, Whittington and Dattilio 2010).

Furthermore, adherence to psychotherapy between sessions is a well-documented challenge in CBT literature, with studies emphasizing that consistent practice of CBT techniques is essential for effective outcomes. Interviewees supported this view, noting that patients often struggle with task adherence and accountability outside sessions. They proposed that a digital solution could help address these issues by incorporating gentle, non-intrusive reminders for tasks such as thought records and mood tracking. This reflects an existing gap in the literature, as while extensive evidence supports the importance of between-session activities, there is less discussion on how digital tools can enhance adherence. The psychotherapists' input here highlights a clear opportunity for digital tools to bridge the gap by making between-session practice more consistent and accessible.

A final critical insight from the interviews concerns data privacy, an area that the literature only partially addresses in the context of mental health. Although literature reviews generally acknowledge privacy as a factor, they often lack specific recommendations on incorporating privacy into psychotherapeutic tools. However, the interviewed psychotherapists and patients expressed explicit concerns about maintaining control over what information is shared, emphasizing that privacy features must be robust and customizable.

In summary, the interview findings affirm existing literature on the effectiveness and structure of CBT for digital adaptation but add valuable, practical insights.

5.3 Interpretation and Implications

The findings from the study and literature collectively point to a significant opportunity for innovation in the mental health sector. There is a compelling business case for developing a digital solution that addresses the existing gaps by combining the evidence-based structure of CBT with the adaptability and scalability of digital tools. Such a solution would enhance psychotherapy adherence and engagement and streamline administrative tasks, allowing psychotherapists to allocate more time to patient-centred care. By embedding CBT's structured modules into a digital format, this platform could offer patients ongoing support, feedback, and reminders aligned with their psychotherapeutic goals.

The demand for an accessible, customizable, and privacy-compliant digital platform that meets the nuanced needs of both psychotherapists and patients has become increasingly apparent. This solution would aim to bridge the gaps identified in the psychotherapeutic process, supporting patients in sustaining progress between sessions and empowering psychotherapists with tools that enhance their ability to deliver effective, efficient care. By addressing these challenges, such a platform could reshape the psychotherapeutic experience, fostering long-term behavioural change and supporting mental health on a broader scale.

5.4 Practical Applications

The rising prevalence of mental health disorders and the increasing strain on traditional psychotherapeutic systems demand innovative, impactful tools. In response to these challenges, *Lynk* was created, emerging as a digital platform uniquely positioned at the intersection of healthcare and technology. *Lynk* aims to revolutionize the psychotherapeutic experience for both psychotherapists and patients in Germany by bridging critical gaps in psychotherapy and streamlining the psychotherapeutic process.

Designed to accompany and enhance psychotherapy rather than replace it, *Lynk* addresses inefficiencies in communication and administration, two major pain points identified through in-depth research and collaboration with psychotherapists.

> *"The mission of Lynk is to bridge the gap between therapy sessions by strengthening the connection between therapists and patients, fostering consistent engagement, and ultimately improving therapeutic outcomes."*

The platform integrates key features such as secure messaging, session scheduling, and psychotherapy-related task management into a single, user-friendly system. By doing so, *Lynk* empowers psychotherapists to focus more on patient care while patients experience a more accessible and seamless psychotherapy journey.

Lynk strives to reduce administrative burdens and improve psychotherapeutic outcomes by ensuring that every aspect of its platform supports the human connection at the core of psychotherapy. Its comprehensive yet straightforward tools enable psychotherapists and patients to shift their focus from logistical challenges to meaningful engagement and progress.

> *"The vision of Lynk is to create a world where psychotherapy is accessible, seamless, and focused on human connections to foster a psychotherapeutic environment where technology enhances, not replaces, the human touch in mental health."*

By streamlining processes and fostering more effective communication, Lynk cultivates an environment where digital innovation supports and strengthens the interpersonal aspects of therapy. This holistic approach ensures psychotherapy is more accessible, effective, and personalized, addressing the evolving needs of modern mental health care.

6 Market Analysis and Opportunity – Individual Part Elena Brandt (58442)

6.1 Introduction

Lynk is strategically positioned within the digital mental health sector, as it leverages technology to enhance and extend mental healthcare. Unlike the broader digital health market, which primarily focuses on general well-being, *Lynk* explicitly targets mental health, catering to this field's unique challenges and needs. Furthermore, in contrast to conventional mental health services that predominantly rely on in-person interactions, *Lynk* introduces a digital dimension that supports the psychotherapeutic process beyond the boundaries of traditional psychotherapy.

Therefore, this section of the work project provides a comprehensive market analysis of the digital mental health industry, examining key trends, drivers, and challenges. By assessing the capabilities and limitations of existing tools, the analysis identifies critical market gaps and unmet needs, highlighting opportunities for *Lynk* to differentiate itself. Furthermore, the market sizing offers a quantifiable perspective on *Lynk*'s business potential within the digital mental health industry.

6.2 Overview of the Digital Mental Health Industry

Digital mental health refers to integrating digital technologies into mental healthcare to enhance accessibility, efficiency, and psychotherapeutic outcomes. This rapidly evolving field encompasses a broad spectrum, from digital psychotherapy tools that overcome geographic limitations to standalone self-help apps that encourage users to manage their mental health

independently (Bond 2023). This typically includes mobile applications, teletherapy tools, AI-powered tools, wearable devices, and asynchronous self-help services designed to deliver mental health support, promote well-being, and facilitate early diagnosis and intervention (Bond 2023; Faria et al. 2023). Digital mental health tools provide significant benefits for users and practitioners, offering flexibility through remote support, enabling real-time monitoring of mental health indicators, and allowing scalable interventions. These strategies are called *Digital Mental Health Interventions* (DMHIs). They are typically categorised under *Mobile Health* (mHealth), a broader domain encompassing a range of technology-enabled healthcare services to improve the quality and accessibility of care. Importantly, digital mental health technologies are not intended to replace traditional psychotherapeutic treatment but are developed to augment and enhance them (Faria et al. 2023; Lattie, Stiles-Shields and Graham 2022). The primary goal of these digital tools is not only to address mental health conditions but also to mitigate the significant barriers that hinder access to care, such as stigma, high costs, and geographical limitations (Bond 2023).

6.3 Geographic Focus

This market analysis focuses on the German market, as Germany was selected as *Lynk*'s entry market based on several strategic factors, outlined below.

First, Germany has significantly committed to advancing digital health through robust governmental support. In the coalition agreement of December 2021, the federal government emphasized the importance of digitally transforming the healthcare system and pledged to develop a comprehensive national digital health strategy (McKinsey & Company 2022). This commitment fosters a favourable climate for the growth and adoption of innovative healthcare tools (Federal Ministry of Health 2020).

Additionally, Germany is undergoing significant digital transformation, increasing digitalisation efforts across various industries. The growing familiarity and willingness of

healthcare providers and the public to embrace digital tools position Germany as an ideal market for *Lynk* (McKinsey & Company 2018).

Germany also benefits from a well-established and robust healthcare system, one of the strongest in Europe. Its extensive infrastructure and comprehensive health insurance coverage ensure that digital mental health tools can achieve excellent market penetration. The strong healthcare system also allows integrating digital tools into existing care pathways (Müller 2020; Statista 2023).

Within the context of this work project, the founders' profound cultural insights and experience in the German market offer a key advantage in addressing German users' specific needs and preferences of German users. Through collaboration with local mental health experts, the product is tailored to the unique requirements of Germany's healthcare landscape. Given the significant differences in psychological training and practice across countries, this localized approach ensures alignment with the expectations of both providers and patients in the German market.

6.4 Market Drivers

6.4.1 Prevalence of Mental Health Disorders

The increasing prevalence of mental health disorders has become a substantial driver for the digital mental health market in Germany. Recent studies indicate that around 27.8% of all adults in Germany are affected by mental health disorders each year, which corresponds to an absolute figure of 17.8 million people affected (DGPPN 2024). Furthermore, according to the *German Federal Chamber of Psychotherapists* (BPtK), the need for psychotherapy has almost doubled in the last 20 years (2021). Notably, these figures have risen since the onset of the COVID-19 pandemic, further intensifying mental health challenges, particularly for young adults, women, and those with pre-existing conditions (Statista 2024a). The continued rise in mental health cases is putting significant pressure on the German healthcare system to innovate and adopt

digital tools to manage this influx effectively. This urgency is compounded by the limited availability of psychological care services, which are unable to meet the rising demand (Amand-Eeckhout 2023). As a result, 38% of psychotherapists report feeling burnt out and 43% feel "completely" overwhelmed by administrative tasks (Bühring 2024).

The rising prevalence of mental health disorders has placed significant strain on healthcare systems, overwhelming traditional mental health services but also underscoring the critical role of innovation in this sector.

6.4.2 Changes in Consumer Behavior

Over the past decade, there has been a significant shift in how society perceives and handles mental health. Historically, mental health conditions were stigmatized, with individuals often reluctant to seek help due to fear of judgment or discrimination (Clement 2015). However, in recent years, mental health has become a topic of open discussion, resulting in widespread destigmatization (Schomerus and Speerforck 2023; Schreiter 2024). Public awareness campaigns, greater media coverage, and high-profile advocacy efforts have contributed to normalizing conversations around mental health, encouraging individuals to address their mental well-being like they would their physical health (Green 2022). This destigmatization has led to an open handling of mental health topics, where people increasingly feel empowered to speak about their experiences, seek help, and engage with supportive communities (Green 2022, Schomerus and Speerforck 2023). Those affected are now more proactive, engaging in preventative measures or seeking professional help. This is reflected in the growing popularity of mental health apps that offer tools for relaxation, emotional regulation, and stress reduction (Auxler, Bucaille and Westcott 2021; Torous et al. 2020).

6.4.3 Public Sector Initiatives

Government support plays a critical role in driving the growth of the digital mental health industry. Many governments, particularly in developed markets like Germany, have

implemented policies to foster innovation in digital health. For example, the *Digital Healthcare Act* (DVG) in Germany allows for the prescription of *Digital Health Applications* (DiGA) by healthcare professionals, which can be reimbursed by statutory health insurance. Currently, almost half of the existing DiGAs (27 out of 56) were developed to treat mental health disorders (Bundesministerium für Gesundheit 2020). This policy lowers the financial barriers for consumers seeking digital mental health services, providing a significant incentive for adoption (Dittrich et al. 2021).

Furthermore, the *German Innovation Fund* is a pivotal mechanism driving progress in the healthcare sector relevant to the digital mental health market. Allocating €200 million annually until the end of 2024, the fund supports projects that aim to enhance patient care and improve services within the statutory health insurance framework. By focusing on interdisciplinary collaboration and fostering innovative care models, the fund provides an essential platform for testing and integrating new tools into the healthcare system (Bundesministerium für Gesundheit 2020).

The Telematics Infrastructure (TI), launched in 2015, is central to Germany's digital healthcare transformation. It ensures secure data exchange through tools like the electronic patient record (ePA) and mandates integration across pharmacies and hospitals to foster a unified digital ecosystem. For mental health, the TI supports the integration of digital tools into care pathways, improving coordination, patient outcomes, and scalability. Streamlining data sharing and ensuring interoperability sustains the growth and embedding of digital mental health solutions within the broader healthcare system (Bundesministerium für Gesundheit 2020).

Such initiatives reflect broader governmental efforts to encourage the integration of digital tools into healthcare systems, ultimately driving digital mental health development and setting the foundation for further interest and investment in the industry.

6.4.4 Technological Advancements

The growth of the digital mental health sector is driven by several key technological advancements that enable innovative, scalable, and personalized tools. Breakthroughs in artificial intelligence (AI), natural language processing (NLP), and machine learning (ML) have transformed mental health tools, making them capable of diagnosing, monitoring, and treating conditions with greater accuracy and efficiency. AI-powered chatbots, for instance, provide immediate and tailored psychotherapeutic interactions, increasing scalability while reducing reliance on human intervention (Fitzpatrick, Darcy and Vierhile 2017). Similarly, machine learning enhances preventive care by identifying early signs of mental health issues through behavioural and linguistic data analysis, ultimately lowering long-term treatment costs (Buntrock 2024; Iyortsuun et al. 2023). Wearable devices enhance mental health care by providing real-time data on physiological metrics such as heart rate and sleep quality. This enables individuals to adopt a more proactive and evidence-based approach to managing their mental well-being (Hickey et al. 2021).

Complementing these technological advancements is a growing willingness among patients to adopt digital tools. The rapid digitalization of daily life has provided individuals with a better knowledge of how to use digital tools, making it easier to integrate mental health technologies into their routines (Eurostat 2023). As digital literacy improves, consumers are increasingly comfortable using and prescribing mental health apps, teletherapy, and AI-driven tools (Health Innovation Network 2024). In addition, with over 85% of Germany's population having internet access and more than 68 million smartphone users, the country exhibits a strong readiness and accessibility for adopting digital mental health tools (Statista 2024b; Statista 2024c). This trend is already evident, as nearly one-third (31.6%) of Germans reported using a health app in 2023 (Deutsches Ärtzeblatt 2024).

6.5 Risks & Challenges

6.5.1 Regulatory Compliance and Legal Risks

Operating within the digital mental health sector requires strict adherence to regulatory standards, which presents a significant challenge, particularly in Germany's highly regulated healthcare market. Digital mental health tools must comply with stringent regulations like the *General Data Protection Regulation* (GDPR). These regulations mandate the secure handling and processing of sensitive health data, requiring that digital tools implement rigorous data protection mechanisms to avoid breaches, unauthorized access, or misuse of personal health information (Federal Office for Information Security 2024). Additionally, regulatory frameworks such as the *Patient Data Protection Act* (PDSG) and the *Health Data Use Act* (GDNG) play a critical role in defining the legal landscape for digital health applications. The *PDSG* aims to enhance data privacy and patient rights, mandating that sensitive health data be securely stored and shared (Bundesministerium für Gesundheit 2020). Similarly, the *GDNG* emphasizes the responsible and transparent use of healthcare data, maintaining high privacy and security standards (Bundesministerium für Gesundheit 2024).

Furthermore, achieving *DiGA* certification adds another layer of complexity to regulatory compliance. The *Federal Institute for Drugs and Medical Devices* (Bundesinstitut für Arzneimittel und Medizinprodukte; BfArM) requires rigorous evidence demonstrating a digital health application’s medical benefits or positive effects on patient care. This process involves conducting clinical studies, ensuring interoperability with existing healthcare infrastructure, and meeting strict standards for data security. The certification process is resource-intensive and time-consuming, often spanning several months to over a year, requiring substantial investments in documentation, testing, and compliance measures (BfArM 2023).

Maintaining compliance with evolving regulatory frameworks demands continuous monitoring and adaptation. Not meeting these standards may lead to legal consequences, harm to

reputation, or limitations on entering specific markets. These regulatory challenges represent a significant barrier for digital mental health startups aiming to scale their operations in Germany.

6.5.2 Acceptance and Adoption Among Mental Health Professionals

Another significant challenge faced by digital mental health tools is achieving acceptance and adoption among mental health professionals. Despite growing awareness and substantial evidence supporting their effectiveness, recent research indicates that acceptance of these tools remains low to moderate (Baumeister et al. 2020; Braun et al. 2022; Hennemann, Beutel and Zwerenz 2017). This reluctance is underpinned by several interconnected factors, ranging from concerns about the quality of digital interactions to uncertainties regarding their implementation in practice.

A significant barrier to adoption lies in the perceived impersonality of digital tools, with some professionals fearing that these tools could undermine the psychotherapeutic alliance. Furthermore, legal uncertainties surrounding data security and professional liability, coupled with concerns about the inability to intervene effectively in situations where patients may face critical mental health crises, further contribute to the hesitancy (Braun 2022). Acceptance levels also vary significantly based on the type of digital intervention and its intended application. For instance, videoconferencing tools, which closely replicate in-person psychotherapy, tend to be more favourably received. In contrast, unguided self-help tools, which lack direct professional involvement, often face scepticism regarding their effectiveness (Braun 2022). Demographic and experiential factors also play a role in shaping attitudes towards digital mental health tools. Research indicates that younger professionals are more receptive to digital mental health tools (Himmler, Schreyögg and Phillips 2022). Additionally, male professionals and those with prior experience using digital tools consistently show higher acceptance levels (Hennemann, Beutel and Zwerenz 2017). This highlights the importance of exposure and familiarity in overcoming resistance and building trust in digital tools.

Acceptance-facilitating Interventions (AFIs) to encourage the adoption of digital mental health tools among professionals have shown mixed results, highlighting the limitations of a one-size-fits-all approach (Baumeister et al. 2020; Braun et al. 2022; Simbula, Paganin and Apolinário-Hagen 2024). Mental health professionals stress the need for reliable, evidence-based information and robust clinical validation to build trust and credibility (Braun et al. 2022; Nogueira-Leite, Diniz and Cruz-Correia 2023). Providing these resources is essential to address professional concerns and enhance the perceived value of digital tools, paving the way for their seamless and sustainable integration into routine care.

6.6 Investment Landscape and Financial Trends

In recent years, the digital mental health industry has attracted significant interest from venture capital (VC) and private investors, driving rapid expansion. A notable peak was observed in 2021, when global investment in health technology reached a record $5.5 billion, reflecting a substantial increase compared to previous years (Krasniansky, Somaiya and Kaganoff 2024). However, this growth must be viewed in the context of the *COVID-19 pandemic*, which acted as a significant catalyst for digital health tools. As such, the exceptional funding levels of 2020 and 2021 are better understood as outliers rather than reflective of consistent, long-term growth. Rising interest rates and geopolitical instability in recent years have tempered investor enthusiasm for digital health, leading to a decline in funding. By 2023, digital health funding fell to its lowest level since 2016. Despite this overall slowdown, core areas such as mental health have continued to attract substantial funding, reflecting a targeted focus on transformative technologies within the sector (Carlsquare and Earlybird 2024). This selective investment focus suggests that investors remain committed to areas with high potential impact, even as broader market challenges persist. In the first half of 2024, digital health investments in the US and Europe showed signs of stabilization, with a modest increase over the same period in 2023. If this trajectory holds, annualized figures could indicate a recovery, potentially

marking a turning point for digital (mental) health funding after recent declines (Carlsquare and Earlybird 2024; Krasniansky, Somaiya and Kaganoff 2024).

In addition to venture capital, there has been significant activity mergers and acquisitions (M&A) activity. Established healthcare and technology companies are acquiring smaller digital mental health startups to diversify their service offerings and stay competitive in an evolving market. This consolidation helps smaller firms access the resources they need to scale, while larger companies integrate cutting-edge technology and new capabilities (Carlsquare and Earlybird 2024; Webber et al. 2023). This M&A activity signals the maturation of the market and its attractiveness to more prominent players who see the potential for substantial returns on investment in the digital mental health industry (KPMG 2024).

Moreover, public-private partnerships (PPP) are emerging as a new funding trend, with governments and private firms collaborating to develop and implement digital health tools. These partnerships provide critical financial support while ensuring that new technologies align with public health objectives. They also help facilitate the deployment of digital mental health services on a large scale, particularly in regions where governmental budgets are focused on improving healthcare access and affordability through digital tools (Ebulue, Ebulue and Ekesiob 2024; PwC 2017; Storeng and Puyvallée 2021).

6.7 Competitive Landscape

6.7.1 Market Mapping

The competitive analysis provides a comprehensive view of the digital mental health market by categorizing market players based on their core functionalities relative to *Lynk*'s specific focus areas (Figure 1). This approach provides a structured overview of the digital mental health tools available, highlighting strengths and limitations. These categorized groups are further organized into direct and indirect competitors. While direct competitors offer solutions that closely resemble *Lynk*'s approach and target similar user needs, indirect competitors provide

broader mental health support that overlaps with some aspects of *Lynk*'s offering but does not fully align with its core functionalities. This framework facilitates focused comparisons and identifies key gaps and unmet needs within the market, which are crucial for *Lynk's* strategic positioning. Notably, traditional psychotherapy approaches are not included as competitors in this analysis. Instead, they are considered essential stakeholders, as *Lynk*'s goal is to complement and enhance face-to-face psychotherapy rather than replace it. *Lynk* aims to work alongside established mental health services to improve patient outcomes and alleviate pressure on healthcare systems.

Indirect Competition

Self-help and asynchronous mental health tools, including apps like *Headspace*, *MindDoc*, and *7mind*, are widely accessible tools for independent mental health management. These tools provide users with resources such as meditation exercises, mood tracking, journaling, and educational content, empowering individuals to monitor and manage their well-being at their own pace. While these tools are adequate for general well-being and stress relief, they lack real-time feedback and professional oversight, limiting their ability to address more complex mental health needs. Consequently, these apps are suited to broad, preventative care but fall short in providing the structured support required for psychotherapeutic interventions, highlighting an unmet need for guided, continuous psychotherapeutic journeys.

Teletherapy and digital psychotherapy (DTx, including *Selfapy* and *HelloBetter*, provide virtual psychotherapy sessions as substitutes for in-person care. These tools offer a practical alternative to traditional psychotherapy, particularly for individuals with limited access to face-to-face services. By enabling live psychotherapy sessions online, teletherapy tools address geographic and logistical barriers, making mental health support more accessible. However, their primary limitation lies in the lack of between-session engagement, as interactions are typically confined

to scheduled sessions. This restricts the level of continuous support that many patients need, especially when managing symptoms or challenges between appointments.

AI-powered mental health tools like *Clare & Me* and *Neurolonic*, use artificial intelligence to provide immediate, scalable mental health support through chatbots, predictive analytics, and automated diagnostics. These tools offer round-the-clock accessibility, helping users manage mild symptoms by delivering personalized insights based on user interactions. Despite their accessibility, AI tools lack the human interaction needed for more complex issues, falling short of empathy and nuanced understanding. Their reliance on algorithms can also lead to misinterpretations, making them suitable primarily for supplementary care rather than comprehensive psychotherapeutic support.

Workplace mental health and *corporate wellness tools* like *nilo.health* and *Olaf*, focus on enhancing mental well-being in corporate environments. These tools offer resources for stress management, resilience training, and counselling tailored to employee needs, supporting organizations by improving productivity and satisfaction. However, corporate wellness tools are typically designed for general mental health support within group settings rather than offering personalized psychotherapy for individual needs. Additionally, these programs often lack continuity in patient engagement, emphasizing periodic check-ins rather than sustained psychotherapeutic progress. This leaves a gap for individuals who seek a more individualized, continuous approach to mental health within a psychotherapeutic framework. *Administrative tools*, such as *TheraNest* and *SimplePractice*, assist psychotherapists with practice management by offering scheduling, billing, and record-keeping tools. These tools focus on supporting the administrative aspects of psychotherapy, streamlining operations for psychotherapists and enhancing efficiency. However, while they help reduce the workload associated with managing a practice, they generally lack features aimed at directly enhancing the psychotherapeutic

process or patient engagement. This leaves a gap in tools that address the needs of the psychotherapists and patients.

Figure 1: Overview of the German Digital Mental Health Industry

Direct Competition

Blended psychotherapy tools, combining digital support with traditional face-to-face psychotherapy, represent *Lynk*'s primary competition area (Nunes-Zlotkowski et al. 2024). These tools enhance the psychotherapeutic process by offering resources that patients can use between sessions, improving engagement and continuity of care. By supporting patients and psychotherapists, blended psychotherapy tools aim to fill critical gaps in mental health care (Nunes-Zlotkowski et al. 2024). In this space, *Elona Health* stands out as *Lynk*'s main competitor. The following sections delve into a detailed examination of its approach.

Elona Health, founded in 2021, supports outpatient psychotherapy, particularly for anxiety and depression. The *Elona therapy* app acts as a digital companion, enhancing continuity between sessions and reducing psychotherapist's administrative tasks. Key features include digital exercises, journaling tools, mood tracking, and adjustable treatment plans. Certified under Germany's *DiGA* program, it is eligible for health insurance reimbursement, increasing accessibility within the healthcare system (Elona Health 2024).

Despite its strengths, *Elona Health* faces notable limitations. Its narrow focus on anxiety and depression excludes patients with other common mental health conditions, limiting broader

applicability. The platform's reliance on psychotherapist adoption poses scalability challenges, as its success depends on psychotherapists integrating it into their practice. Additionally, the lack of robust communication features leaves gaps in support for patients requiring ongoing care. While it reduces administrative burdens, it does not address complex tasks like billing or detailed progress tracking, preventing complete workflow optimization. Moreover, its personalization capabilities are limited, as the tools do not dynamically adapt to individual progress or preferences, reducing effectiveness. Addressing these gaps greatly enhances its impact on therapists and patients.

6.7.2 Market Gaps & Opportunity

Based on the competitor analysis, several critical gaps have been identified within the German digital mental health market. Assessing these unmet needs within existing tools reveals specific opportunities where innovative approaches, such as *Lynk,* can address underserved areas.

One significant gap in the digital mental health landscape is the limited support for patients between psychotherapy sessions. Research highlights that consistent engagement with therapeutic practices outside scheduled appointments is crucial for long-term success, as it reinforces the skills and techniques learned during psychotherapy (Aguilera et al. 2017; Cronin et al. 2015). However, most digital tools offer either self-guided resources or scheduled psychotherapy sessions without continuous engagement, which can result in reduced adherence and increased dropout rates (Torous et al. 2020). A platform that bridges this gap by providing exercises, in addition to traditional psychotherapy, would help patients stay actively engaged. For psychotherapists, these features could alleviate the difficulty of maintaining patient motivation and involvement between face-to-face sessions (Appendix 34; Appendix 36).

Another critical gap in the digital mental health space is fragmented communication. Currently, communication often remains asynchronous, with reliance on scheduled sessions or external, insecure methods for exchanging information (Appendix 35; Appendix 36). This lack of

integrated, real-time communication tools make it cumbersome and potentially insecure to share critical updates, track progress, or clarify important details. As a result, the flow of information between therapists and patients is disrupted, hindering the therapeutic process and delaying timely interventions. Addressing this gap is essential for fostering stronger psychotherapeutic relationships, improving patient outcomes, and ensuring a more efficient and secure exchange of information.

A third gap is the need for more support for psychotherapists in managing administrative tasks. While digital mental health tools often prioritize patient-facing features, they rarely address the significant administrative load that psychotherapists must manage. The time-consuming nature of scheduling, documentation, and session tracking reduces the time psychotherapists can spend on direct patient care, underscoring the need for tools that streamline these processes (Deschamps et al. 2023). Existing solutions are fragmented and need more integration, failing to meet the specific needs of psychotherapists.

Lynk uniquely bridges these gaps by offering a seamless, integrated platform that supports psychotherapists and patients. Unlike other solutions that focus on standalone self-help tools or session-based psychotherapy, *Lynk* provides a holistic approach. It ensures continuous patient support between sessions through mood tracking, journaling, and personalized reminders, fostering deeper engagement and sustained progress in psychotherapy. For psychotherapists, *Lynk* alleviates administrative burdens such as scheduling, documentation, and secure communication, allowing them to focus more on patient care. By streamlining patient engagement and therapist workflows, *Lynk* sets itself apart from existing digital mental health solutions, addressing key gaps in the market.

6.8 Market Sizing

The following market sizing analysis aims to estimate *Lynk*'s potential reach and growth within Germany's digital mental health market from 2025 to 2030. By leveraging data on mental health

prevalence, psychotherapy needs, and the penetration of digital tools, this analysis provides a structured forecast for *Lynk*'s Total Addressable Market (TAM), Serviceable Available Market (SAM), and Serviceable Obtainable Market (SOM). These projections shed light on *Lynk*'s business opportunity and scalability potential, considering both the demand for innovative tools and *Lynk*'s anticipated market penetration.

Starting with the TAM, the analysis examines the total demand for behavioural psychotherapy in Germany, encompassing all individuals affected by mental health disorders. Approximately 17.8 million Germans, or 28% of the population aged 18-79, experience a mental health disorder each year. With around 16% of this group receiving outpatient care and 50% of those in care opting for CBT, the TAM for digital mental health support in behavioural psychotherapy is projected to reach 1.4 million individuals in 2025, growing at a Compound Annual Growth Rate (CAGR) of 6.75% through 2030. This growth rate reflects the increasing prevalence of mental health conditions and the expanding demand for outpatient care.

The SAM further narrows this group to individuals with anxiety and depression, which are *Lynk*'s initial target conditions. These two conditions are particularly relevant due to their high prevalence among mental health disorders, with anxiety affecting 15.4% and depression 8.6% of the adult population. However, this focus is part of an incremental approach. *Lynk* intends to expand its offerings to cover additional mental health disorders over time, broadening its serviceable market as it develops. Further limiting the analysis to individuals with the technical proficiency to use digital tools, the SAM will reach approximately 1.1 million people in 2025, reflecting high smartphone penetration and readiness for digital health tools among the population. This SAM is projected to grow steadily, driven by increasing familiarity with digital tools and will expand further as *Lynk* includes additional disorders in its scope.

The SOM calculation is based on *Lynk*'s expected market share, beginning conservatively at 0.1% in 2025, with projected growth to 3.5% by 2030, reflecting a CAGR of 105%. This growth

trajectory factors in *Lynk*'s expanding brand recognition, increased acceptance among healthcare providers, and enhanced functionality over time. Therefore, in the initial phase (Year 0), Lynk's SOM is projected to include 1,080 patients, achieved through onboarding 18 psychotherapists. This projection assumes that each psychotherapist will manage approximately 15 patients simultaneously. Considering the typical psychotherapy duration and patient turnover, each psychotherapist can complete about four full patient cycles annually. By 2030, *Lynk*'s SOM is expected to surpass 51,000 patients, driven by the onboarding of 850 psychotherapists and reflecting steady growth fueled by increased adoption and scalability.

This market sizing demonstrates that *Lynk* is entering a sector with significant growth potential. It also underscores *Lynk*'s strategic potential for long-term growth within a targeted, high-demand segment, driven by favourable market trends and a strong, steadily increasing user base (Appendix 1).

7 Conclusion

7.1 Summary of Key Findings

Lynk represents an innovative solution by addressing gaps in traditional psychotherapy, combining the structured principles of CBT with the advantages of digital technology. As a modular and evidence-based therapeutic approach, CBT provides an ideal foundation for digital tools that enhance patient engagement and therapeutic outcomes. Features like communication, self-monitoring, and task or patient management align seamlessly with CBT's framework, allowing *Lynk* to bridge the gap between traditional psychotherapy and modern digital interventions. This integration is supported by empirical research, highlighting the potential of digital platforms to improve psychotherapy adherence and continuity.

Germany serves as the ideal entry market for *Lynk*, driven by strong governmental support for healthcare digitalization through initiatives like the Digital Healthcare Act and the Innovation

Fund, alongside a robust infrastructure and a progressive healthcare system. With 27.8% of German adults affected by mental health disorders annually and rising demand since COVID-19, *Lynk* addresses a critical and growing need. Market sizing underscores this potential. The TAM is estimated at 1.4 million individuals in need of CBT by 2025, with a CAGR of +6.75% until 2030. *Lynk*'s SAM focuses on anxiety and depression, projected to reach 1.1 million by 2025, while the SOM begins at 1,080 patients in 2025, scaling to 51,000 individuals by 2030.

The development of *Lynk*'s product capitalizes on the unique benefits of mobile applications, including real-time engagement, accessibility, and flexibility. Through an iterative, user-centered design process, the app's core features, the *Communication Portal* and *Calendar*, were developed to address critical gaps in therapeutic workflows. The *Communication Portal* ensures GDPR-compliant, secure messaging with options for real-time interaction, voice and text communication, and customizable availability settings to maintain professional boundaries. Complementing this, the *Calendar* facilitates therapy adherence by simplifying appointment scheduling, offering reminders, and providing tools for self-management. Additional psychotherapeutic tools, such as *Mood Tracking*, *Journaling*, and *Worksheets*, were designed to foster self-reflection and accountability, supported by an interface focused on reducing cognitive load and enhancing usability. User testing played a pivotal role in refining *Lynk*'s MVP. By focusing on the *Communication Portal* and *Calendar* as high-priority features, the iterative testing process incorporated feedback from psychotherapists and patients to drive significant improvements. Enhanced navigation paths, recurring appointment options, and task visualization emerged as key refinements, ensuring alignment with user needs while laying a scalable foundation for future features such as personalized task assignments and mood tracking. The dual-interface system was integral to this process, enabling therapists to efficiently manage patient interactions and progress while empowering patients with tools for self-management and therapy engagement. These iterative adjustments underscore *Lynk's*

commitment to delivering a user-centric, adaptable solution that addresses the unique needs of psychotherapists and patients.

Lynk's go-to-market strategy builds on the platform's strong foundation to successfully enter and scale within Germany's outpatient mental health market. The strategy focuses on engaging psychotherapists, particularly younger professionals specializing in CBT, who are more open to adopting digital solutions. This group, often operating in independent or group practices, is targeted for its decision-making flexibility, making it an ideal starting point for early adoption. A phased market entry approach ensures scalability by segmenting practitioners not only by practice size but also by affiliation as private or statutory health insurance based. Private practitioners are prioritized initially due to their autonomy and accessibility, enabling *Lynk* to build a solid user base and refine its offering. Expansion to statutory health insurance-based therapists will follow upon achieving *DiGA* certification. To effectively engage this target market, *Lynk* positions itself as a digital companion that bridges gaps between therapy sessions, enhancing therapeutic relationships and easing administrative burdens, key challenges that strongly resonate with psychotherapists and their patients. *Lynk*'s branding strategy reinforces its market positioning by fostering a trusted and empathetic identity. Through the thoughtful integration of visual elements such as color, typography, and logo design, *Lynk* communicates reliability and modernity. The brand voice, balancing compassion with professionalism, resonates deeply with both psychotherapists and patients, fostering trust and credibility in a sector that relies heavily on these qualities. Supporting these efforts, *Lynk*'s marketing strategy employs a multi-channel approach to build awareness and engagement. Digital advertising, content marketing, email campaigns, and social media initiatives are designed to consistently deliver value-driven messaging. This approach not only raises awareness but also positions *Lynk* as a thought leader in the digital mental health industry. Building on the marketing efforts, *Lynk*'s sales strategy emphasizes direct engagement with psychotherapists through tailored

outreach and strategic partnerships with mental health organizations, further strengthening its market presence.

These efforts are complemented by a flexible revenue model, combining a *Freemium* model with a *Tiered Pricing* structure. This lowers initial adoption barriers while simultaneously offering scalability in line with varying user needs. Plans for *DiGA* certification further support integration into the German healthcare reimbursement system, ensuring long-term financial sustainability. Additional revenue streams, such as partnerships with health institutions and the provision of advanced data reports, provide further resilience and capacity for innovation.

By uniting evidence-based therapeutic principles, user-centric design, a strategic go-to-market approach, and financial scalability, *Lynk* presents an integrated response to the critical gaps in mental health care. Its focus on accessibility, engagement, and efficiency positions it as a transformative solution within Germany's evolving digital mental health industry, paving the way for better therapeutic outcomes and a more connected patient-therapist dynamic. *Lynk*'s holistic approach not only meets the current needs of the market but also lays the groundwork for continuous growth and impact in the future.

7.2 Challenges and Limitations

Lynk faces a range of interconnected challenges that must be addressed to establish itself as a leading digital mental health solution. One critical challenge lies in maintaining patient engagement and adherence. While the app is designed to support users between therapy sessions, limited access to digital technology and low digital literacy among specific demographics could hinder adoption. Sustaining patient motivation requires robust engagement strategies, such as reminders and task prompts, to encourage consistent interaction without overwhelming users. Additionally, the app must balance simplicity and functionality to meet diverse user needs while avoiding feature overload. Adoption barriers not only for patients but also among psychotherapists add another layer of complexity. Many may resist integrating

digital tools into established workflows due to concerns about disrupting routines, time investments in learning new systems, and skepticism regarding digital interventions. Convincing psychotherapists of *Lynk*'s value will require clear demonstrations of its ability to reduce administrative burdens and improve patient outcomes. Furthermore, cost sensitivity among independent practitioners, particularly those without immediate proof of return on investment, underscores the need for a compelling and accessible pricing structure and ultimately the importance of achieving *DiGA* certification for statutory reimbursement. Data privacy and security represent another significant hurdle, as the sensitive nature of mental health information necessitates rigorous *GDPR* compliance and robust data protection measures. Ensuring this while maintaining a user-friendly interface is a complex task, and any misstep in data handling could erode both legal compliance and trust, which are vital for the app's success. The dynamic regulatory landscape also poses risks of unforeseen compliance challenges, which could impact *Lynk*'s ability to adapt efficiently. Meeting stringent *DiGA* certification requirements demands continuous updates to features, clinical validation, and alignment with evolving digital health regulations in Germany and the EU. These resource-intensive processes introduce potential delays to market entry and expansion. Furthermore, the rapidly expanding digital mental health sector presents a highly competitive landscape, requiring *Lynk* to clearly differentiate itself. With numerous established platforms competing for market share, *Lynk* must emphasize its unique features, such as its dual-interface design tailored to psychotherapists, patients and its usability focus. Without clear differentiation, *Lynk* risks being overshadowed by competitors with established brand equity or more comprehensive functionalities. At the same time, challenges within product development highlight the need for continued refinement. While the *Communication Portal* and *Calendar* address foundational needs, other features, such as journaling and mood tracking, remain untested. This limits the ability to evaluate *Lynk's* full potential as an integrated solution. Moreover, the iterative testing

process has been restricted to a small and focused user group, which may not fully represent the broader demographics or therapeutic use cases *Lynk* seeks to serve. Expanding testing to include more diverse user profiles will be critical to ensuring inclusivity and adaptability. Transitioning from a Figma prototype to a fully operational live app will require significant development effort to ensure scalability, seamless integration of features, and continued compliance with privacy regulations. As *Lynk* evolves, the introduction of additional features, such as those planned in the P2 and P3 phases, will increase complexity, demanding careful design to maintain a seamless user experience across functionalities. The go-to-market strategy also faces constraints. By focusing initially on independent and group practices, *Lynk* limits its immediate reach, excluding larger outpatient facilities and delaying broader market penetration. The dependency on achieving *DiGA* certification for expansion into statutory health insurance-covered practices introduces regulatory delays. This limited immediate reach may pose challenges in establishing a foothold and achieving early traction. In addition to that, as a new entrant, *Lynk*'s limited brand recognition presents a challenge, necessitating trust-building efforts to gain traction among psychotherapists and patients. Clear, targeted messaging and consistent trust-building efforts will be essential to overcome this barrier. Moreover, the strategy must account for the highly competitive and price-sensitive nature of the market, which requires *Lynk* to maintain a strong focus on value delivery and user satisfaction.

Addressing these limitations will demand a multifaceted approach, focusing on user-centric design, iterative testing, regulatory alignment, and a strategic focus on differentiation within a crowded digital mental health industry.

7.3 Outlook and Next Steps

Lynk's future development strategy is structured around short-term, mid-term, and long-term goals, ensuring a clear progression from initial implementation to sustained market impact.

In the short term, spanning the next two years, the primary focus will be on completing the development and testing of all P1 features, ensuring they are fully functional and refined based on comprehensive usability testing with therapists and patients. This includes features such as secure communication, task management, progress tracking, and foundational onboarding processes, all of which will be rigorously validated to ensure a seamless user experience across the dual-interface design. Concurrently, the first prototypes of P2 features, such as *Journaling*, *Mood Tracking*, and therapist-assigned tasks, will be developed to maintain momentum in feature expansion. Alongside these efforts, regulatory compliance will remain a critical priority, with preparations for *DiGA* certification, including clinical validation studies, ensuring eligibility for integration into Germany's healthcare reimbursement system. *Lynk* will also execute a targeted market launch, focusing on private psychotherapists working independently or in a group practice, by engaging 30 early adopters to gather actionable feedback. These efforts will be supported by a multi-channel marketing campaign, aiming to build brand awareness and trust through professional endorsements, user testimonials, and a clear value proposition, with the goal of achieving a 60% increase in both aided and unaided brand recall within the first year after launch. On the sales front, the focus will be on forging partnerships with at least three leading mental health organizations, such as the German Association for Psychotherapy. Additionally, collaborations with established digital health leaders, such as Headspace, will be pursued to co-create content, amplify credibility, and solidify *Lynk*'s position in the mental health ecosystem. From a revenue perspective, *Lynk* will focus on transitioning users from free to paid tiers and prepare for *DiGA* certification.

In the mid-term, spanning years two to five, *Lynk* will focus on scaling and feature expansion. By this phase, all P2 features will be fully developed, validated, and integrated, offering tools that deepen patient engagement and enhance therapeutic customization. Additionally, the development and initial launch of P3 features, such as advanced reporting tools and external

therapeutic resource integration, will begin to extend *Lynk*'s functionality and value proposition further. Expansion efforts will broaden the target market to include larger institutions and statutory health insurance-affiliated psychotherapists, leveraging *DiGA* certification to penetrate these segments. To ensure inclusivity and adaptability, testing will be expanded to include diverse patient profiles and therapy workflows, refining features to meet a broader range of user needs. Marketing will evolve to include accredited workshops, industry congress participation, and broader outreach campaigns to establish thought leadership and strengthen market positioning.

In the long term, beyond five years, *Lynk* will shift its focus toward European expansion, targeting markets with advanced digital health policies, such as the Nordics, France, Benelux, and Austria. By this stage, *Lynk* will aim to be known for its clinical efficacy, trusted brand, and user-centric design. All P3 features will be fully integrated, providing advanced functionalities such as real-time analytics, adaptive AI recommendations, and comprehensive patient outcome tracking. On a strategic level, *Lynk* aims to establish itself as a thought leader in digital mental health. This will involve active collaboration with government regulators and industry bodies to shape policies that support digital mental health solutions. Additionally, partnerships with academic institutions across Europe will enable *Lynk* to contribute to scientific research and publish studies that highlight the platform's long-term impact on mental health outcomes.

Such efforts will reinforce *Lynk*'s credibility and strengthen its position as a trusted innovator in the industry.

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Appendix 1 Market Sizing Calculations 2025-30

1. Total Maket for Behavioral Therapy in Germany

Variable/Year	2025 (Year 0)	2026	2027	2028	2029	2030
1. People affected by mental disorders in germany (12-month prevalence)	17.800.000	17.800.000	17.800.000	17.800.000	17.800.000	17.800.000
2. Share of outpatient care	16%	17%	18%	19%	21%	22%
3. People that are in CBT	50%	50%	50%	50%	50%	50%

2. Limitation on Anxiety and Depression

Variable/Year	2025 (Year 0)	2026	2027	2028	2029	2030
Anxiety	56%	56%	56%	56%	56%	56%
Depression	30%	30%	30%	30%	30%	30%

3. Technical Profeciency/ Aadoption of Digital Solutions

Variable/Year	2025 (Year 0)	2026	2027	2028	2029	2030
Share of smartphone users	89%	89%	89%	89%	89%	89%

4. Expected Market Share Lynk

Variable/Year	2025 (Year 0)	2026	2027	2028	2029	2030
Market share	0,10%	0,20%	0,41%	0,84%	1,72%	3,53%
# simultaneous patients per therapist	15					
# patient bases per year	4					

Market Size 2025-30

Variable/Year	2025	2026	2027	2028	2029	2030
TAM	1.409.760	1.501.394	1.598.985	1.702.919	1.813.609	1.931.493
SAM	1.065.339	1.134.586	1.208.334	1.286.876	1.370.522	1.459.606
SOM	18	2.269	4.954	10.816	23.614	51.556
Market Share	0,10%	0,20%	0,41%	0,84%	1,72%	3,53%

Appendix 33 Interview Guide for Psychotherapists

Introduction:

Please introduce yourself: Name, Employment type (private practice, etc.), public or private sector, Position, Age, Specialization.

Section 1: Understanding Current CBT Workflow

Therapeutic Process:

"Can you walk us through a typical CBT session for patients with depression or anxiety? What does the patient’s journey look like between sessions?"

How do you ensure that patients stay engaged between sessions?

What methods do you use to track progress or compliance with homework?

Therapist Tools:

"Do you currently use any digital tools or apps to support your CBT practice?"

If yes: "What tools do you use and how do they fit into your workflow?"

If no: "Is there a specific reason why you haven’t adopted any digital tools yet?"

Section 2: Identifying Pain Points

Challenges in Therapy:

What are the most common challenges you face in delivering CBT?

Examples: monitoring patient progress, managing homework, patient engagement?

Do you experience any issues with paperwork or tracking progress across multiple patients?

How do you deal with patients who struggle to complete tasks outside of therapy?

Patient Communication:

"How do you handle communication with patients between sessions?"

Do you find that more regular communication would be beneficial, or would it potentially overwhelm your patients?

How do you assess when more interaction is necessary without crossing professional boundaries?
Tracking Progress:
"How do you track a patient's progress over time (e.g., symptom changes, mood improvements, activity completion)?"
What difficulties do you encounter in collecting or interpreting data about your patients?
Would a tool that automatically tracks these variables be helpful for your practice?

Section 3: Exploring Therapist Needs
Support Needs:
"What kind of support would help you in managing your patients?"
Is there a budget available for such a solution?
Are there reimbursement options through insurance or other avenues?
Are there any current gaps in how you monitor patients, and how could an app help fill those?

Section 4: The Patient Perspective
What challenges do patients face in CBT?

Section 5:
How willing are therapists to pay for digital tools?
What are the ethical implications of promoting paid digital tools to patients?

(**Additionally) Section 5: Evaluating Specific App Concepts**
Symptom Tracking:
"How helpful would it be for patients to log their mood, thoughts, or behaviors in an app that you could access before sessions?"
What kind of data would you want to see? Would real-time data be useful?
Communication Tools:
"Would you find value in secure messaging or other communication features between you and your patients?"
How often do you think communication should happen, and under what circumstances?
Motivational Nudges:
"Our app could send motivational nudges, like reminders to complete tasks or positive affirmations. Do you think this would help patients stay engaged with their therapy?"
Would nudges help or potentially overwhelm certain patients?

Section 6: Ethical and Practical Considerations
Data Privacy:
"How do you feel about apps that collect and share patient data with you? What are your main concerns about patient privacy and data security?"
Patient Autonomy:
"How much control should patients have over the data they share or the features they use? Should they be able to customize their app experience?"

Section 7: Open Feedback and Closing
Additional Thoughts:
"Is there anything we haven't covered that you think is important in developing a tool to support therapy?"

Appendix 34 Interview Transcript – Anna Schmitt
Date: *12.10.2024*
Duration: *50min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Sophia Schmitt*
Participant: *Anna Schmitt*

Sophia Schmitt (Interviewer)
Then you have to do a little introduction first. I've already written down your name and age. What exactly is your type of employment and your position? Because you have several things, so you have to say that very briefly.

Anna Schmitt (Therapist)
Yes, I'm a psychologist at the University Hospital in Homburg, then I'm a research assistant at Saarland University and then I'm also a psychotherapist in training at the Psychotherapy Training Institute in Saarbrücken. I also have a specialisation in clinical psychology and behavioural therapy.

Sophia Schmitt (Interviewer)
Perhaps you could give us a little insight into the therapeutic process from a psychologist's perspective. Today we're limiting ourselves to behavioural therapy and it would be interesting to find out what a typical therapy session in behavioural therapy looks like for patients with depression or anxiety disorders. Is there any kind of standardised approach? Sure, of course it's probably also very individual for the patient, but there are already certain standardisations in behavioural therapy. Can you tell us something about what this typically looks like? Yes

Anna Schmitt (Therapist)
As a rule, these are 50-minute sessions and then you start with a brief insight into the patient's life for 10 minutes, i.e. an update on certain topics, and then you usually determine the topic and then you work on the topic for the remaining 30 to 35 minutes and then you finish off for another 5 minutes or so and possibly discuss homework or something.

Sophia Schmitt (Interviewer)
Can you go into more detail about the homework?

Anna Schmitt (Therapist)
The homework depends very much on the patient's disorder, so for example in the case of anxiety disorders you prepare an exposure therapy or perhaps do an exposure in the session, so that you confront yourself with the object or thing that makes you anxious.
With depression, you practise behavioural activation, make weekly plans, question certain basic assumptions, although we generally do this across the board for many different disorders. So it's very, very individual and it depends very much on the issues of the individual patient.
And it's usually the case that you first have the probationary sessions with a patient and then you get to know the patient, then you do diagnostics, you formulate hypotheses, you work with the disorder model and then you use this to plan the therapy and set therapy goals.

Sophia Schmitt (Interviewer)
How many hours are there that you had beforehand, so to speak, in this diagnostic process? And when do you switch to this one, where you have drawn up a plan and then what happens next?

How is that structured?

Anna Schmitt (Therapist)
As a rule, you have six psychotherapeutic consultations at the beginning, each lasting half an hour or 25 minutes, and then you have the probationary sessions and, as I said, the probationary sessions are primarily about the final diagnosis, creating disorder models with situation analyses and so on, and then clarifying therapy goals and at the end of these probationary sessions you actually have your rough roadmap, the goals you want to achieve and you already have an idea of which intervention you want to use to achieve these goals with the patient.
Then you apply for therapy and then you first have CCT 1 of 12 sessions, CCT 2 of 12 sessions and then you have the option of going into long-term therapy again. This might make sense if there are very persistent imprints, if there is also a disorder or accentuation behind it or if it is a relatively complex disorder, for example, with a chronicity or something like that, so then you have the option of getting an additional 36 sessions and then you always have the option of applying for a continuation of the long-term therapy for 20 sessions, exactly, that's the standard now.

Sophia Schmitt (Interviewer)
So once you've had this first session and then you make this transition, so to speak, where you define these goals and so on. And then you build the therapy on this, these KZ 1 and 2, you probably build on these overriding goals that you have found out from the diagnostics, so to speak.

Anna Schmitt (Therapist)
Exactly, you need a disorder model and you need the goals, and you derive the interventions based on that. And these are the ones that you then work on together with the patient in short-term therapy and long-term therapy, always adapted to the current situation, of course.

Sophia Schmitt (Interviewer)
Would you also always say standard, i.e. standard, standardised procedures in inverted commas, i.e. that you can now really find out, okay, it's an anxiety disorder and then you can assign this and the goal, or would you say it's super, super individual, always per patient?

Anna Schmitt (Therapist)
Well, basically the most important thing is an individualised disorder model because patients are really much more complex than just their normal disorder. But of course there are also very, very standardised tools that you use for a functional diagnosis, that you use for an anxiety disorder, that you use for compulsions.
There are also many manuals that are explicitly geared towards the treatment of individual disorders. And that is already relatively standardised. What you end up doing with the patient is... It depends on the individual's focus.

Sophia Schmitt (Interviewer)
Would you say that an ideal therapy would be a mixture, so you have certain standardised procedures for this particular disorder plus this individual part, which is always determined by you for each patient, so to speak, where something is somehow deeper and needs to be treated.

Anna Schmitt (Therapist)
Exactly, or rather these are also standardised things. So we have procedures. So you just have to choose the right interventions based on the disorder model and goal. And, as I said, this can

be done according to a manual, so if you have someone with classic depression, then you can use a manual for depression treatment as a guide.
But if you realise that maybe there's a racist personality structure behind it or there's also an eating disorder, comorbidity or something like that, then you just have to look again, do I first do an intervention to maybe get the eating disorder under control before I deal with the depression or vice versa or whatever, you know?
Or if you focus on something emotion-focussed, you first build up resources, perhaps try mindfulness. So there are many different interventions that can be used and, accordingly, this therapy planning through an individualised study model and goal setting is very relevant.

Sophia Schmitt (Interviewer)
Okay, but that's actually super exciting for the idea that we have that there's this moment where you do this therapy planning. It's actually a really cool way of saying that you can then, I mean, as I said, you already know our solution, that wouldn't be the case in a normal interview, but that in itself would be a really good way of using our idea, so to speak, so that you can already do the therapy planning in there.

Anna Schmitt (Therapist)
And as a supplement to the therapy goals, the patient has to say more about where they have deficits, where they have problems, what they would like to change. So this is worked out in a very, very structured way with the patient. That's an important part of the case concept right at the beginning.

Sophia Schmitt (Interviewer)
Then it's actually really cool to have it all captured in one place.

Anna Schmitt (Therapist)
Yes, absolutely! There is also a method, for example the GAS, Global Assessment Scale. It's a way of very, very specifically recording and documenting goals. We need this in Trier, for example, but recording goals is crucial in order to reflect later on how far we are in our process, have goals perhaps changed?

Sophia Schmitt (Interviewer)
Yes, it's also exciting that you can always follow it up, especially with something like that. Even when you said this typical behavioural therapy process, you also said at the end that there would be homework and things like that. How do you make sure that your patients do this or do you notice that this often leads to difficulties or that it's something that takes on a life of its own or how is it or how do you experience it with your patients?

Anna Schmitt (Therapist)
Well, it depends a lot on the patient's motivation, I would say. And I'm not really the kind of therapist who is very strict and imposes negative consequences. So it's just to your own advantage if you do certain homework. I usually try to explain the homework at the end of the lesson. I then give the corresponding worksheets or instructions that the patients write down, for example in their therapy book or something. And then I explain the rationale behind it again, so I try to make it very clear why this homework is relevant for us in the therapeutic process, for example, what a learning experience could be behind it and why we might want to work with it in the next lesson. So that the patients simply have the motivation and I always find that this is greater when they know why they are actually doing it. Nonetheless, of course, it's not always the biggest priority when you leave therapy and put the sheet or something to one side.

It really depends on various factors.

Sophia Schmitt (Interviewer)
That would have been my assessment at least, okay, therapy in the lesson is of course full of focus, but as soon as the lesson is over you have 100 million other things on your mind again. And that this is such a problem, or what would you say, where are the problems, why patients don't do this afterwards?

Anna Schmitt (Therapist)
They are motivational problems, I think it depends a bit on that, you know, they also say that therapy takes place between sessions. That's also largely the case in behavioural therapy. Take anxiety disorders, for example. Then you prepare a weekly plan in the session with the respective exposures. So I don't know, on Monday they should somehow go to a shop and somehow ask if they can return something, on Tuesday they should go to a café and then somehow order something there. Make a proper plan with them and then of course it's their homework to carry out the plan. And if you have someone who has very pronounced anxieties, who is perhaps extremely anxious and not well prepared, then they might not do it. Our 50-minute therapy sessions per week are less relevant in this case, as they are used for preparation and debriefing.

Sophia Schmitt (Interviewer)
You write it down in your diary or how do you record it or how do you give it to them?

Anna Schmitt (Therapist)
Very different. For example, if it's about an exposure to anxiety, then we record it on sheets of paper, so then we make a weapon plan, as I said, and then there's also a protocol that you have to fill out before and after, for example, what were the fears, what were the anxieties, how did the anxiety manifest itself in the course, what learning experience was drawn from it But it depends a lot on the homework, so, [00:13:00] I don't know, the last homework assignment with one of my patients, for example, was to write a WhatsApp message to her children, which we had pre-formulated a bit and then she didn't have a worksheet or anything else, for example, but she was supposed to do it if she wanted to.

Sophia Schmitt (Interviewer)
Okay, okay, I'm curious. Okay, and you've already mentioned this gas, for example, what other tools or apps or whatever you use, be it really, it doesn't even have to be digital, it can be both, so what are digital tools on the one hand and what are your other working methods, how do you record everything in behavioural therapy or what supports you, so to speak?
Sophia Schmitt: Something like this Trier Therapy Navigator or your WIPS has this one planning tool, what you meant in general in your work, in your everyday life, what are either certain tools that you already use, for which areas or what are things that are still happening, for example, or does most of it still happen completely on paper, do you just make your own notes and that's it or yes, what does that look like in terms of your everyday work?

Anna Schmitt (Therapist)
Well, we just use our documentation system, where the numbers are billed to the health insurance company in order to get our money. And we also document the course of therapy. And then we currently have a tool that goes with it, where we can have questionnaires filled out digitally. We also use another one to do our room planning. So that's the.

Sophia Schmitt (Interviewer)
And in contact with the patient, everything is in haptic form and nothing is digital yet?

Anna Schmitt (Therapist)
I do what only I do with my patient by printing things out or making notes in my or the patient's book.

Sophia Schmitt (Interviewer)
Okay, all right. Would you say that's good or do you find it exhausting or if you want to look something up somehow, especially in therapy, it's also a lot about how it used to be like it is now, so I personally imagine it's quite exhausting to always have to look something up in a notebook or do you want to say that it works well?

Anna Schmitt (Therapist)
I have this programme to document my meeting. It's our quasi-digital file. We used to have a paper file and we always wrote our notes there and then put them in the paper file. But now we simply have a digital file in this Psychplan.

Sophia Schmitt (Interviewer)
And then something like these worksheets and homework - that's all in paper form, you mean, right?

Anna Schmitt (Therapist)
Exactly, exactly. But it would be nice to have a general page or a general tool, you know, where you can relax maybe on the iPad or something or where you can digitalize it directly. You make your notes on the tablet and you can also, as I said, provide the worksheets to a patient, you can also view the worksheets again digitally You could perhaps also, for example, if you had a digital whiteboard, you could digitise the blackboard pictures that you make with the patient directly and so on. So it would be nice if therapy processes could be digitised and you could have everything at a glance. Because it's super tedious to scan things in so that you can put them in this digital file or create a new Word document for every single therapy session. So it would be cool if everything could be digitised directly, but that's not the case for us at the moment because we're not that far along in the digitisation process yet. I don't know what it's like at other institutes, for example.

Sophia Schmitt (Interviewer)
What are generally the biggest challenges that you face in your day-to-day work during your therapy? Was what you just said the main challenges or what else would you say in addition?

Anna Schmitt (Therapist)
Well, I think the biggest challenges are in contact with the patient, I would say. As far as supporting therapy processes is concerned, I think it would be nice to have a shared communication tool, so that you could provide patients with homework via an app or something like that or forward certain psychological content or something. Or, I don't know, upload statements. So, for example, patients ask me, can you write me a statement for this and that and then I just print it out where I've written it, stamp it and then I give it to the patient when they come in and so on. So I think a platform like this would be really helpful where you can communicate well with the patients. That's what it is anyway, for example, simply having a communication channel that you could use via data protection channels. I don't know how often it has happened that I say at the beginning of the therapy that yes, we can only communicate

via text message because WhatsApp, for example, is not secure in terms of data protection and then the patients don't write on it because it's faster or they can send pictures and so on and then I have to explain it again and delete it and so on and so on and so on. So I would find it helpful if, as I said, you had a communication channel where you can also send larger files, for example, where you can send patients the disorder model that has been set up so that they have an overview, that you can upload questionnaires, that you can upload worksheets. Or they can comment on it. Exactly, and you could make appointments, for example, so that would be cool.

Sophia Schmitt (Interviewer)
We're already talking about the solutions, so to speak Shall we take another step back and talk about the problems? For example, you say that communication is a problem.

Anna Schmitt (Therapist)
I see communication exactly, yes, so it's not a problem if you've discussed it well. You have to decide whether you only want to communicate via email or whether you only want to communicate via text message. What can you communicate via these channels and what not? So I think it would be nice if there was a simpler solution as there is a lot of potential for error at the moment. Everyone can do what they want, I guess. Which is also difficult. It's recommended to have your own therapy mobile phone, for example, but that might not be feasible. So yes, I think simple, clearly data-protected communication would be nice.

Sophia Schmitt (Interviewer)
You just mentioned the problem that you have so many different places and nothing is collected, is that right?

Anna Schmitt (Therapist)
Yes, I find it quite problematic that you have millions of things, but somehow on different media, you know, and some are just uploaded in some system that is backed up, other things are in some compartment because they haven't been scanned yet, others are still in some paper file and so on. Other things are just with the patient and sometimes I don't even have an overview of what worksheets they've been given, what worksheets they haven't been given. Sometimes patients also lose track of the worksheets or have somehow lost track of them because they haven't created a therapy booklet or therapy folder. So it would be nice to have a place where all therapy-related documents could simply be collected. So that you simply have a good overview. Yes. Exactly. And also, I think for our own understanding, we, for example, also create case conceptualisations that contain all of this, i.e. the patient's assignment, the patient's diagnosis, the disorder model, what kind of treatment plan we have and so on. But it would be nice if this could also be prepared in digitalised form.

Sophia Schmitt (Interviewer)
Yes, you actually just make a Word document again and write everything together from your notes that you somehow have everywhere. That would be cool, of course, if you could do it all in one place.

Anna Schmitt (Therapist)
Exactly, and then I just upload this case concept in this programme as a file where I also put my documentation about the meeting or final reports or statements and so on. But it would be nice if it were simply more intuitive, more accessible, and perhaps also simply presented in a nice way.

Sophia Schmitt (Interviewer)
Where would you say the patients' problem is? So why do they have such difficulties with motivation? What would you say are the problems from the patient's point of view?

Anna Schmitt (Therapist)
As I said, it's primarily a motivational problem if you have someone who has no idea, so many people who go to therapy are also more avoidant about their problem and well, in behavioural therapy we usually give homework that is more solution-oriented or more problem-oriented, and you also have to deal with that. But some people are just so involved, they get bogged down. So there are really a lot of factors that can lead to homework not being done, for example. But that brings me back to my thoughts. For example, I'd like it if homework could be set in a specific tab in an app or programme, for example, that you could tick off like a to-do or where you get a reminder on your mobile phone, for example, yes, do your therapeutic homework by Monday or something like that, so that would also be nice if you had a clear overview in your therapy app. Yes, and especially with reminders like that, I think that helps enormously, of course, so that the patient has everything in one place, bundled together, and if they have a to-do today, that they remember exactly where they are, what might still be floating around in the car if they've put it down after therapy after being emotionally upset or something?

Sophia Schmitt (Interviewer)
Yes, totally. And when you think about it here, but if it's bundled in the app and if you then get reminders, maybe also the reminders from the therapist, why that's important, you know, again as a motivational cue, too, I think it would be totally helpful to organise something like that better.

Anna Schmitt (Therapist)
Totally straightforward. Or what I also imagine is that the patient somehow doesn't quite know how to continue. And then he waits until the next therapy session until he can ask you, like this, and then stops straight away. He then simply cancels and so you could either write a comment about the workplace or the patient could ask you questions where you can see and communicate with him, where you know that this is your work app, so to speak. I have also noticed in the past that patients often struggle to work independently because they lack immediate feedback. real-time feedback could strengthen their sense of responsibility and foster a more dynamic therapeutic experience

Sophia Schmitt (Interviewer)
A little bit about this tracking progress. So how do you track patients' progress over time? So there is something like these mood pictures or generally this task mastery or symptom change. How do you do that?

Anna Schmitt (Therapist)
As a rule, this is standardised using questionnaires, so we do an initial diagnosis, then we do a follow-up diagnosis and another final diagnosis, and you can then compare these values objectively with each other and use this as a basis for making a judgement about the progression.

Sophia Schmitt (Interviewer)
But you mean you already have this questionnaire tool, do you use it for exactly this kind of therapy process?

Anna Schmitt (Therapist)
Exactly, exactly, that's what you can do with it. There are now various questionnaires fed into the system and you can make them available to patients online. They fill it in at the beginning in the middle or if you want to do a progression diagnosis and then the therapy ends and then you are also shown such a progression in the middle programme. But as I said, it's not always just the surface that's a bit difficult to use.

Sophia Schmitt (Interviewer)
Would that make sense for your therapy, would you say, if you really reminded the patient ten minutes before the session or an hour beforehand to take a mood picture or after the session or something like that?

Anna Schmitt (Therapist)
Definitely, that would be great. If you could outsource that from therapy, because as I said, of course, or for example the first two minutes or the last two minutes of therapy, I would find it really helpful if that could simply be digitised directly. If perhaps certain therapy variables could simply be clicked on directly in an app or something like that before therapy and after therapy or that you could perhaps also upload logs where the patient can perhaps indicate over the course of weeks or months that they have somehow slept etc. So that logs and diaries are no longer just piled up somewhere in paper form, but are perhaps digitised in the app and can be edited directly or something like that. That's probably also technically difficult, feasible a bit.

Sophia Schmitt (Interviewer)
Yes, but it's probably just another single app that's just a kind of diary. So I don't know, I had that for my headaches, I used to have something like that and I never opened it because for this one single thing, it was completely irrelevant to me somewhere. But what, while we're on the subject, where you just said, okay, these therapy variables could be used for something like that. What are these variables that aren't super hyper-personalised per patient? So something like these mood pictures before or after the session, for example.

Anna Schmitt (Therapist)
So it's difficult to generalise, but of course it would be nice if you could enter something symptom-specific, so if at the beginning, I don't know how often compulsions occur, you know, how many times a day and this and that. If I had a platform like that now, I would also like to send them imagination exercises, for example, because they could perhaps just play audio files from the app or I would like to send them information material or I don't know, maybe just at the end of therapy, for example, you usually also create an emergency kit in the sense of a relapse prophylaxis using strategies you have learnt or do another therapy balance sheet or look again to see what my warning signs are and so on. You could also provide them with something like that. I think it would be really helpful as a patient to look again in the long term and see what I've learnt in therapy. Because I often find that at the end, if the therapy isn't summarised well, patients leave and don't have a good overview of what they've worked on, what they've learnt and then you give them, well I usually give them, well I usually work out a joint worksheet or an emergency kit with the patients, which we then write down, but I also think that's just a piece of paper that you then write down. If things go well, you put it in your therapy folder or therapy booklet and then look at it again. But I think that could also be more accessible for many patients in a digitalised form. Then you realise that somehow I'm not doing so well at the time. Then you open another therapy app or something, and then you look again to see what my warning signs were and how long have they been there? And what have I learnt? What strategy do I need to use when I'm coping? For example, we have increased inner restlessness

and then you could look, oh yes, you think, if you have a therapeutic mindfulness exercise, then maybe you could also look again under mindfulness exercises, what variants were there and then just try them out again and listen to them and so on, because they have already been provided there and so on So I think that would be the case. And that it's also recorded somehow so that you can always look at what you've already achieved, what certain tools or tactics have helped you. Yes, I think that's really, really cool. If we now have, I would say, a relatively clear picture of the idea a bit or of the problems and what would help.

Sophia Schmitt (Interviewer)
Can you somehow say, from the therapist's point of view, I mean, you always have less money than probably your bosses or something, but would you be prepared to pay for a tool like this or, for example, the tools, this survey tool or this documentation tool, which are paid for by your institute, or do you pay for them?

Anna Schmitt (Therapist)
I actually know surprisingly little about that. So you definitely have to ask them in some way, of course. But for me, it goes through the institute. Or rather, I also ask myself to what extent the health insurance companies are involved.

Sophia Schmitt (Interviewer)
You would pay money for a solution that we have just discussed?

Anna Schmitt (Therapist)
Well, if I were a psychotherapist in private practice, I would also pay a fee for it. But it would be preferable if it were settled with the health insurance company. Of course, it would be even more convenient if it was covered by this. However, I would still be prepared to pay around €15-20 a month for a patient because I can really see the benefits and how it would make my work easier. As I'm still in training, I wouldn't pay for it myself yet and would definitely like my institute or the health insurance fund to cover it, but if I had my own practice or was in a private group practice, I would be very willing to pay the money for it. From the patient's point of view, I imagine it to be more like a digital health application, where you get a prescription that you can take to the health insurance company and that you get this app financed by the health insurance company. Hello Better or something like that, a digital health application, and these are also financed by the health insurance company if you have a corresponding prescription. So logically, the patient shouldn't pay for such a tool, but the ideal would be if the health insurance company invested in it, because logically the aim is that less therapy is needed in the long term, because it also has this sustainable aspect, so to speak.

Sophia Schmitt (Interviewer)
Well, our customers are outpatient psychotherapists (B2B), who are self-employed, so actually their own companies, or of course small practices, institutes, clinics - these are actually our customers. In other words, they are the ones who pay when the health insurance company is able to provide support to their patients. What would you actually see as the primary customers of this solution?

Anna Schmitt (Therapist)
Definitely self-employed psychotherapists, but also independent companies. So I think you can also use it in training institutes or in teaching clinics or something like that. I mean, as an independent psychotherapist, you have way more freedom. Like, unlike us in institutional settings, they don’t need to get organizational approvals or anything, so they can just implement

digital tools much faster.

Sophia Schmitt (Interviewer)
Finally, could you say something about the patient perspective, what problems they are struggling with and whether they are at all open to new digital solutions?

Anna Schmitt (Therapist)
Well, I think that would be very helpful. And the majority of my patients are digitally fit enough to find an app. So, that's just what I mean. I think it would simply have to be a user-friendly app. So, and I think that patients... Much more likely, at least, yes of course, it depends on their age, but patients are much more likely to look at a specific app than to make their own therapy booklet or something. Because you feel like you have your mobile phone with you 24-7. And then you somehow know, or maybe you get a reminder on your mobile phone.
And then it's much, much easier for the patient to have everything there in a user-friendly way, rather than having to search for his or her work plate somehow. Above all, for example, if an appointment tool is also integrated into this app. So, if you as a patient can look again, yes, what time was the therapy planned with Mr, Mrs or Mr Eleven, whatever. And then you're already on the app anyway and think to yourself, ah yes, wasn't there a homework assignment or something that I had to do? That's also a good reminder cue.

Sophia Schmitt (Interviewer)
Very exciting! Thank you very much for the insights and your time!

Appendix 35 Interview Transcript – Luca Tarantini
Date: *13.10.2024*
Duration: *50min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Maximilian Schmitz*
Participant: *Luca Tarantini*

Maximilian Schmitz (Interviewer)
Hi Luca, I hope you’re doing good!
I wouldn't introduce the project in the first instance, but rather ask you in general how it works and how the therapy sessions are organised. I think that will help us. And if you have any questions at the end, I'll be happy to answer them.

Luca Tarantini (Therapist)
Yes, of course, we can do it that way. That will certainly be efficient.

Maximilian Schmitz (Interviewer)
Great. I would maybe start straight away. Would it be okay if you could briefly introduce yourself - with your name, age, what you do and how you work?

Luca Tarantini (Therapist)
My name is Luca Tarantini, I'm 30 years old and I work in the Saarland, in Homburg, at Saarland University Hospital. I'm employed there as a ward psychologist in the hospital context, i.e. in psychiatric care. And I'm doing my psychotherapist training in behavioural therapy at an

institute in Saarbrücken. I treat outpatients there as part of this training. I do this in a 50-50 ratio, i.e. clinic and outpatient.

Maximilian Schmitz (Interviewer)
What I can anticipate is that we probably want to focus our idea on depression and anxiety disorders. And I would simply ask you: Could you guide me through a typical behavioural therapy session in relation to depression and anxiety disorders? What does the path look like from your perspective?

Luca Tarantini (Therapist)
It depends on which phase of therapy you are in.

Maximilian Schmitz (Interviewer)
I know this is a very general question, and it probably can't be answered in a nutshell.

Luca Tarantini (Therapist)
So, it's very difficult for me to say what it typically looks like. The basic structure - would you like to know that? In terms of content? The basic structure typically looks like this: Greeting. I always ask whether there are any important organisational or urgent, i.e. crisis-related, aspects that we should discuss first. If not, then we look at the homework, if there was any.

Maximilian Schmitz (Interviewer)
How often is homework given for depression and anxiety disorders?

Luca Tarantini (Therapist)
In general, I would say about 50 per cent of cases.

Maximilian Schmitz (Interviewer)
So why don't you give homework every time?

Luca Tarantini (Therapist)
I don't know if you don't do that. I don't do it. That's because I don't work with worksheets, for example. I don't do that at all. Why is that? Because I find that you're not close to the patient then. I can engage much better with what is happening intrapsychically with someone when the patient looks at me and we are in contact than when they fill in a worksheet. Worksheets are often used for avoidance - especially emotional avoidance. It's a good place to hide behind. It's good for discussing and theorising about issues. But in my opinion, you don't get much of substance out of it.

Maximilian Schmitz (Interviewer)
So you only give homework 50% of the time. When do you do it then?

Luca Tarantini (Therapist)
Yes, good question. If we have talked about something specifically on a behavioural level, then I give up. With depression or anxiety disorders, for example, the behavioural level is perhaps even more catchy. For treating anxiety disorders, we use exposure tasks - a core psychotherapeutic technique - to help patients confront anxiety-inducing stimuli independently over time. And you should do this in every anxiety treatment. In other words, confrontation with the anxiety-inducing event. In the beginning, you do this together, but as the therapy progresses, the patient must continue to do this on their own. And this is very classic, very

typical homework at the behavioural level - confronting fear-inducing stimuli. This may only be possible in the home environment, depending on what it relates to. Do you want it to be more specific or is it specific enough?

Maximilian Schmitz (Interviewer)
I think I understand. Sure, in that case it makes sense to give the homework. But then the homework is more likely to be: "Deal with this exposure or do it."

Luca Tarantini (Therapist)
We may plan this precisely in advance. In other words, when it comes to exposures for anxiety disorders, we plan this relatively precisely because you control the corresponding safety behaviours. Let me give you an example: If the exposure is for the patient to go shopping in the supermarket, then we set the day, the time, whether or not someone will go with them. These could all be safety signals. For example, in the case of social phobia, the patient doesn't go shopping at half past seven in the evening because there's no one else there. Or with agoraphobia, they don't go shopping with their partner because their partner is a safety signal. This may be necessary at the beginning, but it is then gradually changed. In this respect, it requires a certain amount of planning, and we discuss this in advance. This is also what a homework assignment looks like.

Maximilian Schmitz (Interviewer)
I see. What are the chances that the homework will actually be done?

Luca Tarantini (Therapist)
I find that the more behavioural the tasks are, the higher the rate. If they are more theoretical tasks, like in depression treatment, where you make a list of 350 enjoyable activities, then people do it less often. But if they are concrete, planned exposures, then people do it more often.

Maximilian Schmitz (Interviewer)
Do you think that digitising this and making it more accessible to younger generations will increase the rate?

Luca Tarantini (Therapist)
Yes, I could well imagine something like that, especially with self-observation. What I do a lot, especially for depression, are mood logs and anxiety logs for anxiety disorders. In my opinion, mood logs are well kept because they are quite simple: Assess your mood once an hour and briefly note what you've done. Anxiety logs, on the other hand, are less well kept. Digital support would be helpful because you are reminded of this and it helps patients to document concretely and not half-heartedly.

Maximilian Schmitz (Interviewer)
I can imagine that mood logs are easier because you think about them regularly. But with an anxiety disorder, during a panic attack, you might forget to write it down, right?

Luca Tarantini (Therapist)
If you have a panic attack, of course you don't write it down during it, but you can do it an hour later. It has to be quick and easy. Documentation should be as simple as possible, such as multiple-choice questions about symptoms, so that it is not too time-consuming.

Maximilian Schmitz (Interviewer)
Could it be helpful to have a shared calendar in which such exposures are scheduled and the patient receives reminders?

Luca Tarantini (Therapist)
Yes, I think that's very good. Because many patients "forget" such tasks, which in reality is avoidance. A reminder would dispel this argument and it would be easier to understand why it wasn't done.

Maximilian Schmitz (Interviewer)
Do you also look back on the week in your sessions or do you observe the process in a more structured way?

Luca Tarantini (Therapist)
I ask at the beginning if there is anything urgent that needs to be discussed. But if it's just vague reports like "I was with my mum and it wasn't so nice", then I interrupt it. A weekly reflection is often not effective unless it is therapeutically structured.

Maximilian Schmitz (Interviewer)
Is a review done when a patient has kept a mood log, or is it more for the patient themselves?

Luca Tarantini (Therapist)
Both. At the beginning of therapy, when you do a lot of self-observation, this is definitely used. It also helps to build a trusting relationship. The patient often wants you to understand their life, and sometimes it's important to listen at the beginning, even if it's not directly therapeutically valuable. But mood and self-reflection protocols help patients observe patterns in their behavior and thoughts, which is crucial for developing self-awareness.

Maximilian Schmitz (Interviewer)
Do you think an evaluation of the protocol - i.e. a graphical or statistical summary - would be helpful, or is it more about a qualitative reflection?

Luca Tarantini (Therapist)
What I find important is that the patient himself sees a graphical representation. I have the patients enter this in a diagram because it helps them to recognise patterns. Digital support could take over this. A colour-coded distinction between chores and pleasurable activities can also be helpful.

Maximilian Schmitz (Interviewer)
If you digitalise this and the app creates the chart, do you lose the value that the patient gets from the manual entry?

Luca Tarantini (Therapist)
I think the crucial thing is that the patient sees the diagram and visually perceives the changes. It's not about the patient drawing it themselves, but having it in front of their eyes.

Maximilian Schmitz (Interviewer)
That's exciting. So you don't use any digital tools then?

Luca Tarantini (Therapist)

There are, but I don't use any because I'm too lazy to work my way in. I always think I can do it that way, but it would make sense.

Maximilian Schmitz (Interviewer)
Do you know of other therapists who use such tools, or of tools that you would theoretically like to use?

Luca Tarantini (Therapist)
There are digital health applications (DIGAs), but I don't find them individualised enough. I need to know exactly what is useful for my patient, but the applications are often too generalised.

Maximilian Schmitz (Interviewer)
Could you give an example of where individualisation is important?

Luca Tarantini (Therapist)
For example, I often have patients keep mood logs, but some say that their fatigue is independent of their mood. Then I have them document both and see if that's true. There are patients for whom one influences the other. Such individual adjustments are needed, and this is often lacking in standardised applications.

Maximilian Schmitz (Interviewer)
In other words, if you had to map something like this digitally, would it require a high degree of flexibility?

Luca Tarantini (Therapist)
Yes, but the more flexible it is, the more complicated it becomes. And then my motivation to deal with it is rather limited.

Maximilian Schmitz (Interviewer)
Then the question: In your opinion, what are the biggest challenges in communicating with patients?

Luca Tarantini (Therapist)
That's a good question, because everyone does it differently. I use my private mobile phone. I used to have an extra patient mobile phone, but that was too cumbersome for me. I ask the patients how they want to communicate - by email, phone or WhatsApp. Most communication is via WhatsApp, but only for organisational matters. We don't discuss the content of the therapy via WhatsApp.

Maximilian Schmitz (Interviewer)
Do you know whether this is OK in terms of data protection?

Luca Tarantini (Therapist)
It's end-to-end encrypted, but I don't know if it's completely legitimate. As long as the patient agrees, I don't see a problem. I always tell patients that I don't do WhatsApp therapy, but only clarify organisational matters.

Maximilian Schmitz (Interviewer)

Would you find it helpful if you had an app that integrated communication, questionnaires and self-observation?

Luca Tarantini (Therapist)
Yes, that would be helpful. If I had a system that could do everything and the patient could use an app that integrated questionnaires, self-monitoring and a calendar, that would be great.

Maximilian Schmitz (Interviewer)
What would be the most important functions of such an app from your point of view?

Luca Tarantini (Therapist)
Self-observation would be the most important thing for me. Then comes communication with the patient and a calendar in which behavioural experiments and tasks can be defined.

Maximilian Schmitz (Interviewer)
Exciting. One question about financing: Could such an app be financed by health insurance companies?

Luca Tarantini (Therapist)
Yes, this already exists in the form of DIGAs. Therapists can prescribe them and the health insurance companies cover the costs.

Maximilian Schmitz (Interviewer)
Would you say that health insurance companies would also be prepared to pay for a supplementary app that supports the therapy process?

Luca Tarantini (Therapist)
Yes, because it improves the therapy process and is ultimately cheaper than paying for a hospital stay.

Maximilian Schmitz (Interviewer)
Thank you very much for your time and the many valuable insights.

Luca Tarantini (Therapist)
With pleasure. I wish you every success with your project!

Appendix 36 Interview Transcript – Julia Weber
Date: *20.10.2024*
Duration: *70min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Luisa Jansen*
Participant: *Julia Weber*

Luisa Jansen (Interviewer)
Hello. Hello. Yes, perfect. Very good. It's working now. Okay. Perfect. Thank you very much. Right, so Sophia's sister had already spoken to you, I think that's where we left off. Right, had she already picked you up a bit on the subject or not yet?

Julia Weber (Therapist)

I think you want to think about a start-up for something to do with psychotherapy.

Luisa Jansen (Interviewer)
Exactly. That's actually the most basic thing you need to know. I think it's good if we don't give too much away before the interview, but it's more or less about a therapy-accompanying app that connects the patient with the therapist, but it's not an app that basically arranges the places, but really when the therapy is already underway. Exactly, that's actually the most important thing you need to know. I'd also like to briefly introduce myself. I'm Luisa, I'm studying together with Sophia, whose sister you know. We are working on our Master's theses with three others and we're developing a start-up, or rather, we're writing a business plan for it. We decided on the topic of mental health support because it's something that's close to all of our hearts and I also studied business psychology in my bachelor's degree, so I had a slight background in psychology. And yes, that's actually the most important thing. Exactly, perhaps you would like to briefly introduce yourself again, including what kind of position you're currently in or what's important there.

Julia Weber (Therapist)
Okay, I'm Julia. I studied psychology. I almost completed my master's degree three years ago, or two years ago, and then I started training as a psychotherapist pretty much straight away and I've been training for two years now and I've been working as an outpatient for two and a half years and I've been seeing my own patients for about a year now. And before that and now I'm still working part-time, also in the clinic, and I have patients there too.

Luisa Jansen (Interviewer)
And how old are you, if you don't mind me asking? 31. 31, okay. And does working as an outpatient simply mean that you have your own patients, or is that also in the practice or still in the same clinic, so to speak?

Julia Weber (Therapist)
No, it's more or less a practice. Our institute is like a big practice, with lots of therapists.

Luisa Jansen (Interviewer)
Okay, so your position is being in training to become a psychotherapist?

Julia Weber (Therapist)
Exactly.

Luisa Jansen (Interviewer)
Okay, and how long is this training going to last? So you're almost at the end?

Julia Weber (Therapist)
That's a good question. Well, I think with the number of patients I'm seeing right now, it's going to take another one and a half to two years.

Luisa Jansen (Interviewer)
Okay. Is it the case during your training that you already have some kind of specialisation or something, or would you only do something like that afterwards? And also, out of interest, how many patients do you typically see at the same time after you’re fully trained?

Julia Weber (Therapist)
A typical patient base consists of around 15 people. And regarding your first question, there are different schools of therapy that you can train for. The schools of therapy that can be discontinued by the health insurance company are behavioural therapy, depth psychology, systemic therapy.I think there are two different ones, as well as analytical therapy, but I don't know much about that. And I just decided to train in cognitive behavioural therapy. Exactly.

Luisa Jansen (Interviewer)
Okay, but then you're not yet specialised in certain disorders or anything like that, right?

Julia Weber (Therapist)
Exactly, they do everything. It's more the process itself that's different.

Luisa Jansen (Interviewer)
Okay, great, thank you very much. Right, maybe you can take me through a typical behavioural therapy session, especially for patients with depression or anxiety disorders. What does the path from the patient coming to you look like, how does an hour like this work, are there different, yes, let's say, processes that occur again and again or is it totally individual?

Julia Weber (Therapist)
Well, I would say that the first few hours are a bit different from the rest of the therapy, because the first few hours are about getting to know each other, making a diagnosis, getting an idea of the patient and then all the therapy actually starts properly and that's where the hours, so you already have a rough structure that always follows the same um, yes, well, that you always follow, but the topics and how you then divide them up is right, that actually changes from hour to hour or from patient to patient. So, it usually starts with consultation hours, that's three per quarter, which you can only do if there are no problems, I say, and then four probationary sessions. In the trial sessions, you actually get to know the patient. The initial consultation is typically where you simply let the patient tell you why he or she is coming, what their current symptoms are, what brought them into therapy, um, and that you also clarify a little bit what the therapy is supposed to change. But that's usually very, very much at the beginning, so it should just get better, um, exactly. And from the second to about the sixth session, I would say, we do diagnostics with the patients or look at their biographies a bit, so diagnostics remain focused on the voice, we often do a skit, for example, where we simply ask about the individual, um, disorder patterns. And then we do biographical work, where the patient comes from, how they grew up, um, what kind of situations they've already had in their life, what kind of crises they may have already needed to have an idea of why another problem has arisen. And when all that has been finalised, then the therapy really starts.

Luisa Jansen (Interviewer)
And, very briefly about these six sessions, i.e. biographical work, do you really go into childhood and things like that? So is that also part of behavioural therapy or is it more of an analytical, in-depth psychological approach?

Julia Weber (Therapist)
No, you also do that in behavioural therapy. Well, that's what you do, I think, systemically I don't know, but we in behavioural therapy, for example, we also look for basic assumptions, um, and that's often what arises in childhood, but which are still cognitions today, thoughts that accompany us in everyday life and then it's often very helpful, um, to look, where do you get here?

Luisa Jansen (Interviewer)
Yes.

Julia Weber (Therapist)
Exactly, and behavioural therapy, that's actually called cognitive behavioural therapy, so there's also a focus on this.

Luisa Jansen (Interviewer)
Yes, that's, that's super interesting that you say that, because we also found that out in our, um, research, because it's also CBT in English, and then we weren't sure at first whether cognitive behavioural therapy is the same thing as behavioural therapy, but that is the same okay, good to know.

Julia Weber (Therapist)
In German it is called Kognitive Verhaltenstherapie.

Luisa Jansen (Interviewer)
Ah, okay. Okay, that's very good to know. Um, exactly, and then the real therapy starts after that, and after these six sessions you already have a diagnosis, or at least an assumption of a diagnosis, and then the therapy is organised according to that, or how does that work?

Julia Weber (Therapist)
Exactly, so ideally, it always depends a bit on the patient whether these six sessions are enough and also on the disorder, but exactly, at the beginning, of course, you also use it for relationship building and then after the six sessions you have an idea and also work out with the patient what the goals of the therapy really are, so not just that it should get better, but what it would look like if it were better, um, that you can also make it a bit measurable. For us as therapists, so that we can see that something is happening, but also for the patient, so that they have a bit of feedback themselves and exactly, and then you just try to see, depending on the disorder, so you've now said, um, depression and anxiety is the relevant thing, right? Exactly. Well, if it's quite clear that it's depression and anxiety, then there are actually manuals, for example, that give a pretty good indication of what has proven successful, um, in science too, where there is, um, yes, good data, I'd say that's recommendable and in the case of depression, for example, the question would be, how severe is the depression? At the beginning of depression, you often have to deal with the fact that the patients are often, um, withdrawn, no longer have any joy, but also because they perhaps no longer do many things that gave them joy before and did them good, so the basic things you do at the beginning are to build up positive activities, to see what was good before, what could perhaps be incorporated again today, um, as simple and stupid as it sounds, this is often a first step to get the patient's activity and so on back, um, exactly, and only when it gets better, a little better, do you often get to these cognitions.

Luisa Jansen (Interviewer)
And so cognitions are then the really already anchored thought patterns that you then try to transform more positively again, right?

Julia Weber (Therapist)
Exactly, so then there's also the question of what caused the depression, where did it come from? Some of it comes out of the blue, but often there are events that trigger it, like break-ups, right? Yes. We say it's a break-up, and a break-up like that can also reactivate old cognitions,

for example, which we may know from childhood, and so that can be a problem, for example, no, that it's actually not so bad now, you would normally think, yes, I'll find someone again, but then maybe thoughts come up again earlier, I don't want anyone anyway, so always the same, and then to work on them, because they also keep you in the disorder.

Luisa Jansen (Interviewer)
Yes. Okay. And would you say that then, um, depression that comes, let's say, out of the blue, and depression where you have a certain trigger, for example a break-up or whatever that may be, are they dealt with differently in therapy, or, so you have, let's say, that you can somehow imagine that this is the therapy that I use for depression that comes from wherever, and, or can you not differentiate between them at all?

Julia Weber (Therapist)
Um, so I don't think it really matters for the therapy itself. Mhm. Because it's usually always about, well, with depression it's really about, no, first building up the activities again, getting out of this withdrawal, um, filling everyday life with positive things that you enjoy doing, that you like doing, um, that's actually always the core, I say, to get going again, but the patients often have, if they don't know where the depression comes from, they also have a primary desire, why have I become ill now? And then it comes out of the blue for the patients, but if you then look at the past, you often realise that overwork is an issue, for example, that things have somehow changed where they didn't think it would be a problem, but which then pile up with other things, for example, so, um, a colleague has left at work, I have to work more overtime now and at the same time I got a new dog and somehow it's all really stressful at the moment, so things like that, where you actually think, my life goes on for a while, I've fallen into such a hole now, that's why, for some people that can be, well, for some people that's also a concern, to understand that, it's not really relevant for the therapy, necessarily, because the way out is always a bit the same, so to a certain extent, um, but nevertheless, many patients are keen to find out more about it first, and if you now know, okay, that was a separation, then you might get to the point faster, okay, where do these cognitions come from, than if you don't know where it comes from.

Luisa Jansen (Interviewer)
Yes, okay, so you've just mentioned it, this way out of it, so to speak, so, you have these six sessions and then the therapy session, so what does this further course look like, or as I said, even within the session, is it simply a conversation, which is super individual, or do you really have somehow, we do ten minutes of this, we do half an hour of that, and then finish again, right?

Julia Weber (Therapist)
Yes, well, there are always twelve sessions first, which are authorised by the health insurance, and the twelve sessions, which, well, I think that varies a lot from therapist to therapist, but that also varies a lot between patients, the idea would be that usually, that you allow the patient about ten to 15 minutes at the beginning to tell about the week, what was maybe relevant, what happened the week, and then but, so an hour each 50 minutes, I just have to think about it, then we're at 30, then the next 20 minutes are used to determine a topic for the lesson, so what do we want to work on today, on positive activities, for example, then at the beginning you also do a lot of psycho-education, first explain again what depression is, what the symptoms are, how it comes about, and what can be done about it, so why is it useful to do that, what we then give as homework, for example, or do in therapy, why is it useful to explain this a bit, and exactly, and then just in dialogue with the patients, so, no, at the beginning I would say it's very

structured, we really proceed in a gentle way, the last 15 minutes are then like making an appointment, and maybe homework if necessary, and then when the therapy progresses and it starts to work, or even if it's not working, actually, then you have to look again at why it's not working, and then it's often the case that the therapy sessions become a bit more relaxed from this strict plan that you have, that you then somehow say, okay, what was the week, they tell you something, and then you pick out the topics again more individually, because then they already have a certain basic knowledge, and you can build on that a bit. So at the beginning, I would say they are more structured than later on.

Luisa Jansen (Interviewer)
Okay, you just brought up a very good keyword, homework. That's something you read again and again when you're dealing with CBT. What exactly does that mean? So, what can this homework be, for example, in the case of depression, or how would it differ in the case of an anxiety disorder? It's probably different.

Julia Weber (Therapist)
Exactly, that's very individual. It can be questions that come up in a lesson. I'm quite happy to do that if, I don't know, if somehow the question that comes up in the hour is, what, so the feeling of loneliness, okay, that's active right now, a lot, because of a separation, for example, do you know that from before? If the patient says, hm, I don't know, then it would be homework, for example, to go back inside yourself, try to tap into this feeling and see if you can still remember something, if it's not around now, that you could give something like that, for example.
But then it's also the case with depression, for example, that you clearly say, okay, we're going to make a plan for positive activities. What do you enjoy? I used to enjoy sport. Okay. When could you go out for sport each week? What would it be possible to really make a plan with them step by step? What good things could you do for yourself this week? And then the homework is to carry out this plan, for example. Another example would be mood tracking. So I would encourage the patient to write down how their feeling everyday in the morning, lunchtime, evening. To see how that changes. In the case of anxiety, i.e. anxiety therapy, you mainly work with exposure, i.e. confronting yourself with the anxiety. And after you've done a lot of psychoeducation and explained why it makes sense to do exposures, you have to do that so that people do it at all, because it's scary to do it, then you would give homework, for example, to carry out these exposure plans. So, for example, if someone is afraid of lifts, you would say, okay, then take this step that has already been discussed, go into the lift in your building and just stand in front of it to go up until next week. Do it this way and that way. So you'll discuss exactly what you're supposed to do with them in advance. What the homework is.

Luisa Jansen (Interviewer)
Yes, and this homework, you discuss it with the patients at the end of the lesson and then you just ask in the next lesson, okay, how was it now, when you were in the lift or something, or is there somehow a reminder between the sessions? Do you somehow check that the homework is being adhered to or are these perhaps sometimes even written things?

Julia Weber (Therapist)
That depends. I often have problems with that. I know that other patients are detectives and say that they're writing it down. I also say that sometimes, my patients are often lazy. I have one patient who writes everything down in her book, she does a great job, but the others are like, yes, I make a note of it. Exactly, sometimes I write things on the whiteboard and have

them take a photo of it. But yes, it's a bit individual, how the patients deal with it, whether they feel like writing it down.
And then how I deal with it during the week. It's also individual. So, in the beginning, I would say I give up on a task first. If I realise that it's not working. Or if I realise that the patient has something else to do, maybe. Sometimes it's also a bit like being seen to be working. So we made a shower plan when the patient was so depressed that she hardly showered at all. And groomed herself. Then I said, okay, when would it be good to take a shower during the week? When can you imagine doing that? And then she wrote to me after she had showered. So that I just knew that she had done it. And then I could also discuss the next lesson. So she did it once and didn't do it once. And then I could say, okay, she didn't do it a second time. That was the issue. So then you could pick it up directly. Of course, I could have had them tell me about it in the next lesson. But this way I thought I could also tell her at the moment when she had showered that it was great that she had managed it. Give her a bit of feedback again. Exactly. So I think it depends a bit on what the patient needs. Whether it's someone who does it on their own or whether it's someone who needs a bit of positive reinforcement.

Luisa Jansen (Interviewer)
Okay, great, thank you very much. Exactly, you just said that you would also write or have someone write to you between sessions. How do you generally handle the sessions? How do you communicate with your patients? Is it email, WhatsApp?

Julia Weber (Therapist)
Yes, we don't use WhatsApp because it's too insecure for us as it's stored on external servers. On the one hand, I also think of spam mail in the same way, because with email it's always said that it's okay. Exactly, I have an e-mail that I, well, I have it, but I hardly ever use it, to be honest. I usually call the patients for the initial consultation and then they usually communicate with me via text message.

Luisa Jansen (Interviewer)
Okay, exactly. And then is that your private mobile phone number or do you have an extra service?

Julia Weber (Therapist)
No, I still have a business and private mobile phone.

Luisa Jansen (Interviewer)
Okay, is that something where you sometimes thought it was kind of annoying to use text messages or that you would have liked to have something else, a platform or something, or do you know friends who somehow work with others? Yes, other things, or is texting the most common way of working in your therapist environment?

Julia Weber (Therapist)
So I would say text messages and emails are the most common. There are people who only do email. There are people who do SMS and email or just phone and email. I think that's the platform. I know it's changing a bit. Well, there are already a few apps that try to build bridges like this, but I think there are quite a few that do it a bit differently. The biggest problem is always, like now with WhatsApp, that as a therapist you're somehow unsure whether it's all kosher in terms of data protection.

Luisa Jansen (Interviewer)
Okay. Do you use any other digital tools or apps in your therapy, not in terms of communication, but in general, to provide support in any way? Or not yet at all?

Julia Weber (Therapist)
Not much so far. I recently tried an app for the first time, I think it was called Brain to Brain. It has a few exercises in it. I bought a book and this app was also in the book. And I had already taken the book home with me on the patient evening. And when I take a closer look at this app, I can imagine that if the exercises are similar to those in this little booklet, that instead of giving the book home with me, because I'm already afraid I'll get it again, I could say, yes, hey, why don't you have a look at this app?

Luisa Jansen (Interviewer)
Yes. Okay. But is that a kind of app that patients can download so that they can do exercises in everyday life? Or what kind of exercises are included?

Julia Weber (Therapist)
I just have to have a look. I've already deleted them myself.

Luisa Jansen (Interviewer)
Okay. Otherwise I can have a look at it afterwards. Brain to Brain, you said right?

Julia Weber (Therapist)
Exactly, that was the name. Ah, no, it was called Body to Brain. Body to Brain, okay. There's an ugly sheep on it. Exactly, and these are, well, it's really an app that just has lots of little physical exercises in it. With a bit of psycho-education too, but mainly like, hey, you're sad right now, these are exercises to get you out of your sadness a bit. Or you're stressed right now, or you're scared, so you can calm yourself down a bit.

Luisa Jansen (Interviewer)
So really exercises that help the patient at that moment. So if I realise that I'm somehow on the verge of a panic attack, what could I do?

Julia Weber (Therapist)
So that's exactly how I used the book. The patient often has panic attacks and doesn't come to therapy because she often has them just before therapy. And I've now said I'll give her this book because I've already discussed a few exercises with her. But then there's always the question of what fits? And that's actually why it's also homework. So the patient always has to see does this help me? And then you can just, well, if I tell him three exercises, then that's often too much. My impression is that you can't memorise them anyway. And that's why I thought it would be helpful to have a book or this app and just have a look. There are ten exercises here now, but I'm just going to try out a few of them because I can look them up at the moment. Instead of, I have to remember what the therapist told me, what might help.

Luisa Jansen (Interviewer)
For example, do you have exercises, because I think that's generally an important part of therapy, do you sometimes use something like worksheets or something? Or is it mostly verbal when you give the patients something like that?

Julia Weber (Therapist)

So the exercises, so far I've always done them orally. And somehow, I lack a bit of confidence. I always have the feeling that I'll do the exercises with them in the session. But somehow I'm always worried that they won't really have it ready. And that's why I thought, okay, this little booklet is quite liberating, because then they can also try a bit, which is also a bit difficult, then you can see for yourself what's there and what I can try, what I like. Because, as I said, there are so many exercises. And then I have a repair of ten. There are 50 and maybe there wouldn't be any in the ten, but in the 50 there is one that suits the patient. Exactly. And worksheets are also used. But I tend to use them when it's a bit about reflection or, for example, in biographical work where I have people write things down. These are often very driven questions. I can't think of anything specific right now, but as an example, when it comes to biographic work where, it's a classic question, like from the job interview, where do you see yourself in ten years? For example, what would be important then?

Luisa Jansen (Interviewer)
Yes, okay. Exactly, so anamnesis forms or diagnosis forms, that would have been a question, because there are already some, so I was in therapy for a very short time and then I had to fill out ten forms at the beginning. And that was online for me, so I had to do it all by email. But I can imagine that if the patient fills it out by hand, there's a lot of paperwork, things are bound to get lost or something. How do you handle that? So, is that something you give to the patient at the beginning of the six hours? Or how does that work? Exactly.

Julia Weber (Therapist)
So when I started therapy at the institute, we still had this in paper form. And I simply gave them a few standard questionnaires in the first lesson. And that wasn't really a problem at all. They filled them in. I don't know about a colleague of mine who had several patients who weren't comfortable with it. They didn't fill them in either, but generally people did it without any problems. And then it's just a bit annoying because you have to analyse them manually and keep them, which takes up space. And that's why our institute has now switched to using a programme that we have, where we can also document and bill the health insurance company, for example. It's called Psycho-EQ. This is also a psycho-plan and Psycho-EQ is the counterpart for questionnaires and they can link these together. So now I also send them a link, these questionnaires are created in the programme and then they can simply fill in these questionnaires. And I can see this directly evaluated in my programme.

Luisa Jansen (Interviewer)
Okay, yeah, that's great. And that probably gave you a good view too. Ah yes. Right, then my next question would be. What are the most common challenges that you somehow encounter when conducting behavioural therapy?

Julia Weber (Therapist)
The most common challenges in behavioural therapy are, one challenge in any case is therapy participation, which is often cancelled at short notice. Because you can have a child sick and then you're in a bit of a dither. I think if you had a practice later on, it might not be quite so bad, because then there are often waiting lists where you say, okay, I'll have an initial consultation, I'll see someone now. But it's somehow very stressful at the moment and then it always comes at such short notice. And we also need our hours to complete this training in the first place. And then what behavioural therapy is not so good at is dealing with personality disorders or emotions. Behavioural therapy is often like, you do something now and then it will get better. We tackle the anxiety now and then it will get better. So, for depression and anxiety, it's a form of behavioural therapy. But when it becomes more complex, it sometimes reaches its limits.

And that's why behavioural therapy has now also incorporated many other forms of therapy, such as mindfulness-based methods, emotion-focused methods and other things, schema therapy and so on, which are also used. Or you do additional training because, in my opinion, behavioural therapy often reaches its limits when you simply look at what I can do differently right now and what are my cognitions? And then you work on the cognition on the whiteboard with the patient. What would be a more helpful thought? But then it's processed, but it's not processed properly. You know what I mean. You then have a new thought there and say, okay, now try it, if the next situation comes up and it goes through your head again, then call it up in your head and see if it gets easier. But then I think it often becomes difficult. Then there are patients who are just like, all right, I'll do that and it works great. And then there are patients who say that it won't be any different if I think otherwise. Exactly.

Luisa Jansen (Interviewer)
That's something I also find difficult, because patients who are really suffering from more severe depression or something like that have the symptom that they can't really get themselves together for things, right? And things like that, so I imagine it's generally difficult to actively change their behaviour,,right? Is that sometimes a problem?

Julia Weber (Therapist)
So if it's severe depression, then definitely. But then there's always the question of whether psychotropic drugs can be used for moderate depression and above, for example, according to the guidelines, but this is necessary for severe depression. Because then the idea is that the patient's drive is so diminished that they wouldn't be able to cope otherwise.
Exactly, so that's definitely true. Yes. In practice, I would say that mild to moderate depression is more common, because if it's really, really severe depression, you would also say, I think you need to go to a clinic, and you would try to build up motivation, for example by going to a clinic. Exactly, in the case of mild to moderate depression, that also helps. So you explain to the patients in psycho-education why it's important, even if you don't feel like starting to do these things now, and you don't make a plan, should they go for a walk every day? Instead, you would look at, okay, what is realistic right now, right? Would they manage to walk around the block for ten minutes once a week, three times a week, or something like that? Yes. So, you really start in such small steps, and the fact that the patients then come in activated again usually makes it really better. And then you can increase this plan a little, and then you can also influence more positive activity. Because then they say at the beginning, now I'm not enjoying anything. But actually, the fun comes later. Yes. And usually the drive comes back first. And if I then do it for a few weeks, the fun usually comes back at some point.

Luisa Jansen (Interviewer)
Exactly. Okay, great. So how do you track patients' progress? For example, whether symptoms change, whether mood improves, whether, I don't know, tasks are mastered. Is that tracked somehow, or is it by feel, I guess?

Julia Weber (Therapist)
So I always ask them at the beginning, how was the week. They usually say it was good or bad, or it stayed the same. The homework is also discussed, did they do it or not. And then I document that. And at the end of the therapy, let's say I applied for twelve sessions, and you can always apply for another twelve sessions without any problems. So as a rule, therapy lasts 24 sessions, I'll say. Because in twelve sessions you can, well, if it's really very mild illnesses, you can tick them off in twelve sessions, but that's almost never the case. And then, after 24 sessions, I always do the diagnostics from the beginning again, so I look at depression

symptoms again, or anxiety symptoms again. And then you also have an idea of whether things have improved, stayed the same or got worse over time. And then you decide together with the patient whether, for example, to continue with long-term therapy. Yes, okay. So you actually always look during the therapy to see how it's developing and whether the patient still needs it, and I would ask, for example, after ten sessions, do you still want to continue, do you still need it, even if I think he still needs it, but that always has to come for the patient. And then I would ask again after 15 sessions, because then I have to do long-term work and that takes a bit of time.

Luisa Jansen (Interviewer)
Okay, but it's not something that you somehow, for example you enter every hour and then at some point you can create a diagram of it or something, but it's really more of a, okay, we'll discuss it and see how it develops over time.

Julia Weber (Therapist)
Exactly, because I think it's quite helpful for research, for example, so that you can see how quickly therapies work and so on. But I don't think it's really that helpful for practice, so it's not really that relevant to document every week, because you get the feedback anyway, I say. And it's more the case that it fluctuates throughout the week, depending on whether something has happened or not. And that's why, of course, you could calculate an average, but you don't often do that. So we actually look more at how the patient's symptoms have changed overall over twelve weeks, for example.
That we say, okay, are we seeing an improvement or not? Yes. Okay. But that's for sure, it won't be numerical almost. But I think having it in a graphic way could be helpful, also for the patient to see his own progress and that he can see: Hey, I am actually improving. Life is getting better.

Luisa Jansen (Interviewer)
Okay thank you. Very good to know. Is there any kind of support that would help you, let's say, with patient care? So, something where you sometimes think, oh, how annoying, why isn't there a tool for that or somehow, yes, something that you've often noticed, where you think, something could really be developed, couldn't it?

Julia Weber (Therapist)
Yes. So I think I already know it's practical, for example, when I give out these worksheets, when I send them out by e-mail. But if, for example, I can also use an app to quickly see that the patient has worked on it, then I can get feedback straight away. And you could also take a look beforehand if necessary. Yes. If he comes tomorrow, I could have a look this evening to see what he has written. That would certainly make it easier. And above all, if you could perhaps also edit things online. Because the younger generation is involved, of course. Sure, it's difficult with the parents, but with the younger ones, I have the feeling that if I give them worksheets and tell them to fill them in every lesson. Your mood too or something like that. Sometimes they do. Or their state of tension. And then it's kind of stupid. Then you have this sheet. And then I often say, okay, just make a note in your notes app. And then we'll look at it next time. But if you also check something like that in the app, yes, I don't necessarily need to see that beforehand. But that there's also something for the patients that's a bit discreet, where I don't just pull out my therapy book. Yes. Or my strange sheet of paper that I got with me and write things on. Yes. I think that would be quite good.

Luisa Jansen (Interviewer)

Okay. Yes, very good. So that would actually be the most important thing. So now, for example, communication via text message or something, that's great for you. There's nothing there now.

Julia Weber (Therapist)
Yes, that's fine, but could be improved for sure. And I have something else. So, for example, when I'm thinking about my other patient, he should observe his thoughts every hour and see what he's thinking and write it down. And he doesn't do that because he's embarrassed to do it at work. And then he always does it at the end of the day and then he says, yes, yes, I was thinking something like that at 1 pm and that's when the tension was. And that's really stupid for the therapy because it's often really distorted. Especially when it comes to emotions and tension, because then you simply perceive it differently in retrospect. And it would be important for him to really do that at the start. And I think if it wasn't in paper form, he could for example just go in the app and quickly do it and people wouldn't notice.

Luisa Jansen (Interviewer)
Yes, that's clear. Then you could just go for a quick coffee at work, enter it in the app and you're done. And then you wouldn't have to get your sheet out or anything, right?

Julia Weber (Therapist)
Exactly, because he's only supposed to enter a number and a word, for example. So that we can talk about it. He didn't have to write anything in detail, but that's just too awkward in this sheet right now. What I can also understand.

Luisa Jansen (Interviewer)
Yeah, totally. Yes. Okay. That's a very good input. Right, then maybe a little bit more about the patients. Are there any challenges that you've heard more often from patients that they have in behavioural therapy? Or what do you also notice somehow?

Julia Weber (Therapist)
These are somehow not problems where I think something will come to me.

Luisa Jansen (Interviewer)
Yes, but also otherwise. Just somehow.

Julia Weber (Therapist)
Yes, it's often relationship problems.

Luisa Jansen (Interviewer)
Between the patient and you? Or relationship problems really in a romantic private relationship?

Julia Weber (Therapist)
In both directions, I'd say. So, yes, problems that then arise at home, for example. Let's say the therapy works and you also work on the surrounding factors. For example, setting better boundaries, saying no sometimes. That's often an issue. But if I do it more now and I'm someone who hasn't done it that often, then of course that's another change for those around me and it also leads to conflict. And I don't have the people around me in therapy. So I can't say to my husband, yes, but do it.

Luisa Jansen (Interviewer)
Yes, that's what I think. Yes, I think that very often during therapies. It's totally one-sided in itself. So, theoretically, the person can tell you whatever they want. So, also about family and stuff. You don't normally have any perspective on that.

Julia Weber (Therapist)
Exactly, but that's not bad for the therapy at first, because it's always about the person's experience. So, even if the parents are super, super nice, meant everything well, but the person always perceived that there was actually no one there because the parents worked a lot. Otherwise, they were super nice, but somehow the person was stressed because they felt so lonely. then that's still what we're working on. And of course, we also have to look at how I can overcome this loneliness, which is still active today, so is it still relevant at all? And how can I deal with loneliness? But if, for example, there are really things that make me behave differently in my dealings with other people, and of course they don't change, then you can also invite your partner, for example, or your parents. And do some psychoeducation. And perhaps also explain what the stresses and strains are for the patient. But of course, that doesn't mean that they will change. And then sometimes this is a breeding ground for new problems. As a rule, people simply need a little time to get used to new circumstances. Or the consequence is that you say, okay, this is no longer the person. She's just not good for me. Yes. But sometimes that's difficult.

Luisa Jansen (Interviewer)
Yes, okay. No, but I agree. I think it's difficult to somehow find a digital solution. It just makes sense if the patient changes their, let's say, yes, ways of thinking and behaviour, that this can sometimes probably offend people or somehow lead to difficult situations.

Julia Weber (Therapist)
What I'm still thinking is, but what might help for digital apps would be something like this. If you say, for example, that your partner is also super stressed by the fact that your wife has panic attacks all the time, for example, and he feels super helpless himself, then of course I can bring him into the lesson, do a bit of psycho-education and explain to him, for example, what behaviour encourages the panic attacks to occur. So, of course, I can also give him a bit of advice on how to deal with it. But for example, there are also a few exercises for people who, if they dissociate or something like that, it's sometimes quite helpful if another person is there at the beginning or if it happens with their partner, then I could imagine that it would also be helpful for them if they could access exercises via an app, for example, and say, okay, wow, you're feeling bad right now, I'll have a quick look, we have the exercise you did the other day here to guide them a bit.

Luisa Jansen (Interviewer)
So, good. Right, then a completely different point. Mmm. You've just said, for example, that an app for diagnostic forms or something like that would be helpful or that you wouldn't see anything there in any case. What about payments? Because you're not yet using any apps, how willing are you to invest money in digital tools, both on your part and perhaps on the patient's part, although that's probably difficult if it's actually covered by health insurance. Yes. Exactly.

Julia Weber (Therapist)
Exactly, so there are a few apps that are accredited by the health insurance company, but I think we need studies that clinically prove that it works. So I think, well, I don't really know about

an app, I think I would need something more comprehensive. So I think I would need something more like a real programme where I can do virtually everything on it, where I can save my diagnosis, er, well, my diagnosis in it, which I can also create, but where I can also document the hours. So that would be something, something that brings it all together. Yes. That would be kind of practical. Hm. An app. Hm. Well, we have that too. That's always the question, because it costs nothing to send the worktop by email. Hm, sure. So I think it would be super high if that wasn't there. So what are you going to pay? It all seems terrible to me, because I don't know how much work goes into it, but realistically I would probably think something like, yeah, for 50 euros a year or something. Hm.

Luisa Jansen (Interviewer)
Yes, well, to be honest, we've already, thought, it doesn't really make sense for the therapist to pay for it themselves, yes, I say, but it would have to be something supported by the health insurance company, so that it probably makes sense for both sides. Unless it would really make your work easier and you could somehow take on more patients or whatever.

Julia Weber (Therapist)
So admitting patients, unfortunately that's a really stupid job. It's a job that doesn't scale at all, because we only have so many hours in the day and unfortunately there's not much room for more. Yes.

Luisa Jansen (Interviewer)
And it's more like you have too many most of the time, right?

Julia Weber (Therapist)
So there are these super long waiting lists. Yes, I think there are a lot of people who would want to come. There are usually too few slots. Which would certainly be super helpful for patients if there was somehow, yes, more distribution, so that you can see better how full waiting lists are, right? Mhm. Yes. But that's why they're not kept digitally, right? Yes, that's, um. Then the distribution reporter simply has a list with ten names on it.

Luisa Jansen (Interviewer)
Yes. I'd like to go into a bit more detail about our app and that's actually that we were initially considering between what we're doing now or a digital waiting list, so to speak, because that's a problem that we've also totally seen, that you're somehow, um, to be honest, mhm. just totally overwhelmed, or also, I don't know, you, I mean, we live here in Lisbon right now, um, and you somehow don't know yet which city you're moving to, then it's somehow okay, where do I put myself on waiting lists now, then you have to somehow call 50 therapists until someone even has a waiting list that doesn't go on for a year or something. And then you do that with depression.
Exactly, that's what I think too. How are you supposed to get yourself up for it if you're already, well, exactly, not at all in a position to, um, exactly, so that's definitely a big problem. Erm, exactly, but we're, yes, we're developing more of a, Lynk is what we've called it for now, um, exactly, which is more or less a platform with some of the things that you've already mentioned. So, we just want to use it to handle secure communication, um, but above all, um, exactly, to give the possibility to send diagnostic forms, um, but also to give the patient, uh, yes, to do homework, to keep something like mood logs, um, exactly, and there is a bit, yes, we are now working out the exact, um, features. Exactly, so the question is, how helpful would it be, um, I say, if patients could digitally log their mood, thoughts or behaviour, um, yes, and then they or you could also, um, access it before the sessions to see, for example, okay, but the

week has been particularly bad, I say, we need to take a different approach to the therapy or do you see any need for it?

Julia Weber (Therapist)
So I, well, as I said, I think it's helpful for the patients, um, who can handle a mobile phone, um, to do something like that digitally, because it's just less conspicuous, um, and I think that would really have to be really basic, so, um, um, so I know there are also many apps with such psycho-education, that's not bad either, so I think it would be more helpful if you could make something like that available to the patient and not say that the app contains everything for every disorder, but that you can somehow select specific, um, content, because otherwise I find it kind of overwhelming.

Luisa Jansen (Interviewer)
Exactly, that would definitely have to be personalised, then, so, exactly, that the app somehow processes the diagnosis beforehand, so to speak, if you're at least on depression or anxiety disorders or if other things come along at some point, um, uh, exactly, that it's then personalised to that and it's not like this app, okay, here you have everything that you can somehow start with therapy and then you have a thousand exercises and you don't know at all, uh, where you should start, but rather how we imagine it, um, like you would now say, hey, um, this week please write down how the relationship with your parents is right now, if that is somehow a problem and then the patient has the opportunity to enter that somehow and if, for example, after four days that hasn't happened yet, another pop-up would come up somehow, hey, um, please enter, like this, no, something like that, um. Exactly, yes. That would be something. That would be helpful. Okay, okay.

Julia Weber (Therapist)
And really, so we work a lot with diaries like this, or I work a lot with diaries like this, which are really short, no, where the times are just like this and then, please enter your tension here now, enter here how strong, what feeling you're having right now or, um, enter what your thought is, depending on what is relevant to your patient right now, no, so whether it's about identifying the thoughts or identifying the feelings, um, exactly, and then, yes.

Luisa Jansen (Interviewer)
Exactly, that would be my next question, what kind of data would you want to see there, um, whether there is something that comes to your mind and also whether real-time data would be helpful or whether it would help you to look at it somehow after a week or something or whether you don't need it at all, but it might be more helpful for the patient himself, um, exactly.

Julia Weber (Therapist)
Exactly, so that would be a bit of a lot of work, um, it's good to have a weekly average, for example, and also to see a daily average, so I usually do that for the whole day, yes. And then I have every day on a worksheet, um, and that would actually be cool if you could click on the individual days and plot them the other way round, for example, to see a graph for the day. Yes. Which I would otherwise only have for the week. Um, depending on the disorder, no, because with anxiety, for example, the question would be, when do these anxieties come, what time was it, what did they do, what did they think, um, but with depression it's also like that, no, the patients say, I'm always feeling bad and then it's also helpful to see, okay, They felt really bad that week, but if we look at the individual days, you can see, for example, ah, okay, it's really bad in the morning, but in the afternoon the mood is often a bit better and why, and

then you can go into the dialogue, why is it better then, so what has changed over the day, mostly the activity. Exactly.

Luisa Jansen (Interviewer)
Okay, yes, interesting. Um, exactly, so real-time data would be something else. So at the beginning we briefly considered whether, for example, I don't know, if a patient really has suicidal thoughts or something like that and then somehow via the app, but I mean, that's something that you as therapists can't and probably shouldn't do, right? So that he enters SOS, I want to do something to myself or something.

Julia Weber (Therapist)
So I think the philosophy is a bit different, I think. But I tell my patients that I don't want to receive a farewell text message or anything like that, but that if they realise it's really difficult at the moment, I have business hours that I inform them of, and then they should call me during that time, for example, if I'm in a conversation, I'll call back as soon as I see it and have the opportunity to do so, and then this phone call would really be about what the crisis is right now and what we're going to do? So, how can I provide support, right? And if it's outside of business hours, for example, then I would agree directly with the patient that this is a telephone number for the ambulance, this is the clinic in their area, that you've already looked up the numbers, and in the conversation with the patient I would say, for example, no, I'll call the ambulance for them now, I'll let the clinic know that they're coming, right. It’s essential for us psychotherapists to manage accessibility, balancing patient needs with personal boundaries.

Luisa Jansen (Interviewer)
Exactly, then you just said that wouldn't be your main need, I'll say, but would you still see added value in somehow seeing secure messaging or other communication functions between you and the patient, both just normal messages like, hey, I have to cancel the appointment for next week or whatever, but also somehow, for example, if something comes to mind afterwards, or you would somehow send a reminder, such as with this shower or something like that, or are you like no, I think SMS is great and that's somehow enough for you?

Julia Weber (Therapist)
Hm, I would actually say that's enough for me, but for sure there is always room for impovement Mhm. Um, because my point would also be that I don't do so much during the week, because the point of the homework is that in the year of homework, they should. They should work on it, they should deal with it during the week. Um, and for me, I probably wouldn't do much tracking. I'd rather have a look the day before, did the person do it? Erm, or maybe ten minutes before the session I'd have a look, okay, did they do it, what should I prepare myself for now? But I wouldn't keep looking at it myself in between.

Luisa Jansen (Interviewer)
Okay, yes. Yeah, so it's really like, you always have therapy on Wednesdays at ten o'clock with, I don't know, Sabrina, whatever. Exactly. And then, when the therapy is over, Sabrina isn't really an issue until next week, Wednesday, ten o'clock.

Julia Weber (Therapist)
Exactly, so it just depends, for example, if it's a real crisis right now, like talking about the patient with the shower. We've also had other problems. Um, and I know that contact is also important, for example. And that's why I said, okay, I want to give her feedback during this time. Or if I know it's something really difficult for a patient who's going through it alone, then

I'm also available during the week or I'll contact them briefly or have them contact me. But that's really in individual cases. And not for the whole therapy, but every week or two weeks.

Luisa Jansen (Interviewer)
Okay. And therapy like this doesn't have that much follow-up? Or is there something that you always have to do after an hour or in between, where you would also say that could somehow be solved digitally much more easily than you're doing right now?

Julia Weber (Therapist)
So the documentation used to be in file form, in paper form. And I think that's terrible. I think it's good to have it digitally. We have that now, for example, with computer software. Erm, but I wouldn't want to have that in paper form again.

Luisa Jansen (Interviewer)
Yes, what's the name of the one you're using?

Julia Weber (Therapist)
That's psycho-plan. And I'm sure there are others, but the one our institute is using now. And exactly, I think it's a bit stupid, because if I save something and then I forget something, then I can no longer edit the document. But that's just a legal requirement or something, that the therapist can't write. And we talked about suicide counselling. But I didn't. And then I'll change it again later. Erm, exactly, but that, so in general, sometimes it would be good if you could perhaps create progress versions so that you can see that that was the original version that I wrote. But if it's only for my own documentation, that I can still say, ah, I forgot that. I'll add that to it. And then maybe I'll have a sequel or something. Mmm. That, yes, that's possible. Yes. Not like that. Okay. With us at the moment.

Luisa Jansen (Interviewer)
We had thought about integrating motivational impulses, um, into the app, sending them. So, for example, on the one hand, reminders of tasks that they still have to do. Mhm. But also, for example, something like positive affirmations or, yes, what exactly that could be now, for example, for fears or something. You'd have to go into that in more detail. But, um, would you say that this is generally something that could help to somehow, um, maintain or increase the commitment of patients? Um, or would you generally say that such impulses are more helpful? Or could it also be that patients are perhaps overwhelmed by them? Erm, yes. How would you see that?

Julia Weber (Therapist)
Well, I think sometimes like this, sometimes like this, no. Well, I think there are people who really get into it and find it really helpful. And then there are people who are annoyed when they keep getting a pop-up. Just like with Duolingo, no. Yes. Well, it's similar. But I can well imagine that it's so wrong for ADHD patients, for example. Mmm. Because they often simply forget. They set themselves a thousand alarm clocks. Um, but exactly, if they were simply reminded themselves via an app, for example, hey, do it now.

Luisa Jansen (Interviewer)
Okay. I mean, we've already talked about this briefly, but how do you personally feel about apps in general that somehow collect patient data and share it with you? Somehow, what are your biggest concerns about data security and data protection? Yes, I mean, did you actually

just mention that this is generally always an issue, that with, um, messages and things like that, that somehow data protection could be legally difficult? Erm, yes.

Julia Weber (Therapist)
Well, that's kind of difficult because I think there's so much that's always unclear to us. Mhm. What's legally okay and what's not? Um, that's why it would definitely help if it was somehow recognisable in the app, if it was somehow clarified through legal channels, that would help. Yes. So that you're allowed to do that. Um, and I personally would have few scruples about that. Well, I would also prefer to just use WhatsApp. But, um, I mean, apparently that's different, right? And patients in particular, I think, could also be more cautious, so.

Luisa Jansen (Interviewer)
Would you also see differences between, let's say, depression patients and anxiety patients? It just occurred to me. Because I can imagine that anxiety patients are often naturally more anxious. But well, that's usually a specific phobia or something, isn't it?

Julia Weber (Therapist)
Yes, it depends a bit on what kind of anxiety it is, that's true. Erm, exactly, it's more likely to be reflected in the personality, whether it's someone who is fundamentally more anxious, like that. Or even with depression, they often have anxieties that they wouldn't otherwise have. Yes. Um, I don't know if that would make a difference between the disorders.

Luisa Jansen (Interviewer)
Okay, then, yes, it would actually just be another question, um, whether there is anything else that you think is somehow important, um, to develop such a therapy-supporting tool or specific functions that you could imagine, um, yes, if you have any kind of ... of input, maybe.

Julia Weber (Therapist)
That's kind of a very personal opinion, I think, but I was once at the Chair of Work Organisation Psychology and they wanted to make an app that would accompany round therapy. And then somehow an AI, so to speak, um, no, it wasn't an AI, but it was a character that could talk and I don't know, I found that quite weird. But then this character asked questions, but it was so obvious that it was badly animated. Well, it was somehow not so well animated and then I always think to myself, that's somehow so much shishi for such basic things. Yes. Well, my impression would be that for an app to be really helpful, it has to be quick and easy to use. So, there doesn't have to be some kind of figure guiding you and asking you questions that you might not even be able to listen to. Or even if there's a long text where they greet you or something like that. I think that's for everyday life, it's kind of like that, it always looks so nice, but it's not something that's super practical in everyday life. Instead, you just want to open it quickly and say, my mood, click on diary and now it's 12 o'clock here, mood sucks. Yes. Like this.

Luisa Jansen (Interviewer)
So, really, keep it as simple as possible and not too playful. And this is Linky, your therapy assistant or I don't know what.

Julia Weber (Therapist)
Well, they just tried to create a very professional figure. But that's also somehow weird.

Luisa Jansen (Interviewer)
Okay. No, thank you very much for your input. I would perhaps just read it out to you again very briefly. Roughly speaking, what functions we have in mind right now. So that would be a therapy diary or a journaling function in general. Diagnosis, sheet processing, mood tracking, homework, communication. Self-observation too, perhaps also as a graphic somehow. In other words, how you track your own mood and so on. Exactly. Maybe, if at some point, but we don't want to focus on that right now, eating disorders will also become a topic. Something like tracking food, meals for bulimia, whatever. Exactly. Calendar functions, for example to keep track of therapy days and things like that. Exactly. And then a separate view for you, so to speak, with a patient file, note functions and so on. Is there anything you would say now 'No, that ... We don't need that at all.' Or maybe something else where you would say 'Cool, but I'm still missing that somehow.' Exactly. Or if you think of something afterwards, you can of course write me again.

Julia Weber (Therapist)
Exactly. So, I think what I really think about are these diaries that track mood, tension, things like that. I think that's a good idea with these journaling things. But I don't know if it's something that the therapist will access. Whether it might also help that the patient can simply use it for themselves. And then they can open the app during the lesson and say, yes, I've also been journaling here, doing the task or something. I want to talk about that. I'll have another look at what I wrote there. But that might not necessarily be something the therapist needs to see during the week, because A I don't have much time for that and B, I think you tend to do that kind of thing.

Luisa Jansen (Interviewer)
Now on your side. So, of course, you now have this psycho plan or whatever it's called. Exactly, how is it structured? So, do you have a separate patient file for each patient? Mhm. Okay, that's the main function, isn't it?

Julia Weber (Therapist)
Yes, that's currently the main function. There's the patient file, inside there are the billing numbers, where I can click on the tag to see what's being billed, for example the probationary session. And then there's a tab where I can also enter my supervision during my training. When was my last one? It has to be every four weeks. And then there's a tab where I can insert documents. Exactly, that's where I document the sessions. For example, I can now also see our diagnostics. Exactly, but that's just a programme. I don't have that kind of interaction with the patient or I don't have the work wave in there either. That's still a point, I really do print things out for each patient. And now I've already received feedback from the institute management. Yes, the cupboards are so full. I don't know, don't print them out. But at the same time I also think I don't want to send it home to my patients and have them print it out themselves, because not everyone has a printer. And that's also somehow where I think, come on, the few cent copy, that's something we can do at this point. But then of course it piles up in the folders, because then you might not get round to it at the meeting. And then you always have it lying around. And I would like it to be accessible online somehow, to be easy to send online and for patients to be able to edit it online.

Luisa Jansen (Interviewer)
Yes, okay, that's great. Exactly, and something like making appointments, do you just do that manually with a calendar or via Outlook or something?

Julia Weber (Therapist)
Right, I'll just put it in my iPhone calendar. Okay. So in the last five minutes, I'll see you next week. Yeah, okay.

Luisa Jansen (Interviewer)
Okay, these are usually regular appointments, so they're usually at the same time every week.

Julia Weber (Therapist)
I do, but I know that it also varies. There are therapists who make new arrangements with the people every week, but I have, actually Mrs B. always comes at 3.30 pm.

Luisa Jansen (Interviewer)
Yes, okay. Then we've actually discussed everything so far. Exactly, thank you very, very much. It was definitely super, super helpful. Exactly, we're still looking for more interview partners. So if you have anyone in mind who might be interested or something, please let us know. Otherwise, thank you very, very much for your time. You're welcome. Exactly, and good luck for the rest of your training. Thank you very much. Yes, and let's see, maybe something will come of the app at some point and then you can use it at some point. Yes, we're definitely looking forward to it. Thank you very much. Exactly. Thank you, that's super, super sweet. Exactly, enjoy your Sunday and if you think of anything else afterwards, feel free to get in touch with me or Sophia or exactly, great. Thank you very much. I will.

Appendix 37 Interview Transcript – Anna Jansen
Date: *30.10.2024*
Duration: *70min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Maximilian Schmittz*
Participant: *Anna Jansen*

Maximilian Schmitz (Interviewer)
Hello Anna! Can you quickly introduce yourself?

Anna Jansen (Therapist)
I am Anna Jansen, a psychologist who is currently training to become a psychotherapist. I have been working in acute psychiatry for three months.

Maximilian Schmitz (Interviewer)
Can you briefly describe what the focus is in acute psychiatry? Are there specific specialisms such as depression or pain disorders?

Anna Jansen (Therapist)
I currently work on an addiction ward. Around 50 per cent of our patients are addicts who come for detoxification. However, we also have patients without addiction problems, often psychotic or severely depressed patients who come to us after a crisis.

Maximilian Schmitz (Interviewer)
Do you only use behavioural therapy in your treatment?

Anna Jansen (Therapist)
Yes, exactly. I'm training to be a behavioural therapist, and everyone at the clinic is actually a behavioural therapist too. That's our main approach here.

Maximilian Schmitz (Interviewer)
We often read about "CBT" - that's cognitive behavioural therapy, right?

Anna Jansen (Therapist)
Exactly, CBT stands for cognitive behavioural therapy. In Germany, you can only do further training to become a cognitive behavioural therapist. Sometimes we just say behavioural therapy, but the correct term is actually "cognitive" behavioural therapy because it involves thoughts and assessments as well as behaviour. There is actually no such thing as behavioural therapy alone.

Maximilian Schmitz (Interviewer)
If studies only say "behavioural therapy", does that also refer to cognitive behavioural therapy?

Anna Jansen (Therapist)
This is the case in Germany at least. The approved form of therapy is cognitive behavioural therapy. In English-language studies, however, it could also be pure behavioural therapy; you have to look closely.

Maximilian Schmitz (Interviewer)
Could you take us through a typical session? Is there a framework that you always stick to, e.g. a short weekly review?

Anna Jansen (Therapist)
That depends somewhat on the setting. In psychiatry, there is no fixed framework, as patients have very different concerns and it is often unclear how long they will stay. In the first session, I usually get to know the patient and ask about symptoms in order to clarify diagnostically what their concerns are. I then look at what can realistically be realised in the clinic and address specific interventions in the following sessions.

Maximilian Schmitz (Interviewer)
What do you mean by these interventions? Do you also give them tasks to complete independently?

Anna Jansen (Therapist)
Exactly, interventions are exercises that are tailored to the patient's specific problems or symptoms. For example, I could set up positive activities with a depressed patient, such as mindfulness exercises where they pay attention to positive things in everyday life. It's about changing the focus and consciously recognising positive experiences again. You could also find things that the patient used to enjoy doing and try to reintegrate them into everyday life in order to increase the positive experience.

Maximilian Schmitz (Interviewer)
But you work as an inpatient, right?

Anna Jansen (Therapist)
Yes, exactly. Inpatient treatment is different from outpatient treatment because the patients are often so acute that no serious measures can be taken at the beginning. A certain degree of stability is necessary to be able to undergo psychotherapy. In the acute phase, with acute depression or crises, this is more difficult. In principle, however, I also give tasks, as the success of therapy is based on patients learning new behaviour - and this happens outside of therapy, through exercises and tasks.

Maximilian Schmitz (Interviewer)
How do you keep track of these tasks? Do you have digital support or is everything still done physically?

Anna Jansen (Therapist)
I usually provide worksheets or discuss the tasks verbally with the patients. Nothing is actually done digitally.

Maximilian Schmitz (Interviewer)
How likely is it that patients will actually do this homework? For example, if you tell them to think about positive moments in everyday life - do many of them do that?

Anna Jansen (Therapist)
In my experience, the rate is rather low. They should actually practise every day, but that doesn't usually happen. I hand out worksheets in the group sessions, but rarely has anyone worked on them for the next week. Many lose their worksheets or throw them away.

Maximilian Schmitz (Interviewer)
What could be the reason for this? The motivation, the ability to fulfil the tasks or perhaps the worksheets themselves?

Anna Jansen (Therapist)
That is probably very different. In the outpatient sector, motivation for therapy would be a prerequisite. If a patient repeatedly fails to fulfil tasks, this could be a reason to discontinue therapy, because motivation is crucial for the success of therapy. In a clinic, there are many tasks and a lot of paper is processed, which may become confusing. Patients are also often uncomfortable asking questions.

Maximilian Schmitz (Interviewer)
Could you imagine that a digital presentation would help?

Anna Jansen (Therapist)
Basically, it would be easier if everything was digital. Otherwise I always have to print out the worksheets, which is tedious. The only question is whether the patients have the right end devices. Tablets would be ideal, but mobile phones might be too small. It could also be problematic with older patients, as they are less tech-savvy.

Maximilian Schmitz (Interviewer)
Do you also have experience in the outpatient sector?

Anna Jansen (Therapist)
No, so far I've only had inpatient experience.

Maximilian Schmitz (Interviewer)
It would certainly be more difficult with older outpatients, but with younger patients there is a high probability that they have a digital device.

Anna Jansen (Therapist)
Yes, younger patients are much more likely to own a laptop or tablet.

Maximilian Schmitz (Interviewer)
If you think that digital support could help, why is nothing digital being used? Is it the institution's decision or the system?

Anna Jansen (Therapist)
There is simply no programme or system for this. I could of course give patients my private email address to send them materials, but the data protection risk is too great. The legal requirements are very important, especially as mental disorders are often stigmatised.
Maximilian Schmitz (Interviewer)
Do you think your institution has a budget for digital solutions?

Anna Jansen (Therapist)
I think that the budget in clinics, especially in the psychiatric sector, is very limited.

Maximilian Schmitz (Interviewer)
Have you heard of DIGA-Tools?

Expert: Anna Jansen
Yes, this mainly refers to online therapies. Some DIGAs are actually covered by health insurance companies.

Maximilian Schmitz (Interviewer)
Could such tools be used in your organisation?

Anna Jansen (Therapist)
I think that would be possible. But in order to prescribe it, I would have to make a diagnosis and prove the need. I haven't done that yet.

Maximilian Schmitz (Interviewer)
Are you allowed to prescribe things like software or other resources?

Anna Jansen (Therapist)
No, not normally. I usually have to make a diagnosis for a therapy in order to be able to bill the health insurance companies. It would probably be the same
with DIGAs. I would have to make sure that the tool is relevant and necessary for the patient.

Maximilian Schmitz (Interviewer)
Communication with patients is another big issue. Do you have difficulties with this?

Anna Jansen (Therapist)
Do you mean communication during the session or before and after?

Maximilian Schmitz (Interviewer)
Exactly. Suppose you have new patients who are given a schedule. What do you do if an appointment is postponed?

Anna Jansen (Therapist)
I actually have to look for the patients and let them know personally if there are any changes. This is often difficult because they are often not in their place or are busy with other therapies. So communication is sometimes a challenge.

Maximilian Schmitz (Interviewer)
Are patients allowed to use mobile phones?

Anna Jansen (Therapist)
Yes, they are allowed to do that on open wards.

Maximilian Schmitz (Interviewer)
An open ward means that patients can be admitted voluntarily, right? They don't have this choice on closed wards?

Anna Jansen (Therapist)
Yes, exactly. Patients on open wards are those who undergo treatment voluntarily and do not pose a risk to themselves or others. Closed wards are for patients who pose a risk to themselves or others or who have been admitted on the basis of a court order.

Maximilian Schmitz (Interviewer)
Since they have mobile phones, do you think a calendar function could be helpful so that they can keep a digital record of their organisation?

Anna Jansen (Therapist)
That could be helpful, but it would have to be authorised by the clinic and work via the relevant portal.

Maximilian Schmitz (Interviewer)
Do you communicate with patients between appointments? Do they use WhatsApp, for example?

Anna Jansen (Therapist)
No, we don't do that. I see inpatients in individual consultations and groups, and I am often on the ward, so there is direct contact.

Maximilian Schmitz (Interviewer)
Some therapists use such digital communication tools in the outpatient sector, right?

Anna Jansen (Therapist)
Yes, but I think it's important to protect my privacy. I wouldn't like to give patients the opportunity to write to me at any time. If I were to give out my number, I would certainly have a second mobile phone.

Maximilian Schmitz (Interviewer)
How important is it to you that you know what happens to your patient data?

Anna Jansen (Therapist)
This is very important. Strict data protection regulations apply in Germany, especially for sensitive patient data. For example, we are not allowed to take files home with us.

Maximilian Schmitz (Interviewer)
Do you think that reminders for homework would be helpful? This could be particularly useful in inpatient treatment.

Anna Jansen (Therapist)
Yes, I think that could be helpful for certain groups of patients, especially younger ones. A digital system that tracks tasks and sends reminders would be useful.

Maximilian Schmitz (Interviewer)
It might also make sense to give patients the choice of how many reminders they would like to receive - similar to a digital calendar.

Expert: Anna Jansen
That would make sense, as it would allow patients to take more responsibility for their own tasks.

Maximilian Schmitz (Interviewer)
Thank you very much, Anna. I think those were very valuable insights.

Anna Jansen (Therapist)
Yes, I'm curious to see what you can learn from this.

Appendix 38 Interview Transcript – Cosima Höflacher
Date: *01.11.2024*
Duration: *40min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Maximilian Schmitz*
Participant: *Cosima Höflacher*

Maximilian Schmitz (Interviewer)
Hello, I hope you’re doing well! May I call you Cosima?

Cosima Höflacher (Therapist)
Yes, of course.

Maximilian Schmitz (Interviewer)
Unfortunately, Elena and Luisa can't be here, so I'm taking over today. We're working together as a group on our Master's thesis. However, I don't want to say too much about us because we'd rather talk openly about the digital and administrative challenges in therapy with you. So I don't want to give any direction here. At the end, I can briefly explain what our project is. Basically, it's about supporting therapists and patients in their dialogue through a digital app or website. However, I would like to emphasise that none of us have any psychological training - so some of my questions may seem a little basic. But since we know how to develop such platforms, we hope to be able to make a contribution here. For this reason, we are talking to as many psychologists as possible.

Cosima Höflacher (Therapist)
Yes, I see.

Maximilian Schmitz (Interviewer)
Exactly, to get the expertise. I've heard that you have experience with DIGA tools.

Cosima Höflacher (Therapist)
Expertise perhaps not directly, but I passed on the reference to DIGAs because this is of course currently the subject of much discussion - for example in relation to AI-assisted therapy or the question of what can be covered more cost-effectively via DIGAs compared to 1-to-1 interaction between two people.

Maximilian Schmitz (Interviewer)
But you've never been directly involved in the development yourself?

Cosima Höflacher (Therapist)
No, I wasn't involved in the development, but DIGAs are always a topic of conversation in our company.

Maximilian Schmitz (Interviewer)
Okay. Then I would just start at the front.

Cosima Höflacher (Therapist)
Yes, let's do that.

Maximilian Schmitz (Interviewer)
Perhaps you can introduce yourself very roughly?

Cosima Höflacher (Therapist)
Sure, of course. I'm Cosima, 32 years old, and I've been working in a clinical setting for a good year and a half. I'm working towards my licence to practise as a psychological psychotherapist. Before that, I worked in business for five years in product management for an online recruitment platform. Then I decided to get my licence to practise and have now been working more intensively with patients for a year and a half.

Maximilian Schmitz (Interviewer)
Do you work on an outpatient or inpatient basis?

Cosima Höflacher (Therapist)
Both. Currently still inpatient. In the licencing system, you do a year and a half of inpatient training and then the outpatient phase. I'm currently in this inpatient phase, but I've also had outpatients and will be working more on an outpatient basis in future.

Maximilian Schmitz (Interviewer)
Okay, perfect. Now a general question: Can you take me through a typical therapy session? Just the structural issues!

Cosima Höflacher (Therapist)
A typical therapy session always starts with a small element of rejoining, i.e. nothing too

stressful right at the beginning. You discuss what may have lingered from the last session or how the last week went. The way in which the process is initiated then varies according to the school of therapy. In the systemic therapy that I do, I take a problem-orientated approach. The person brings a concern that we understand and analyse from different perspectives, e.g. how relatives or friends would view the problem. Towards the end, the process ideally becomes solution- and resource-orientated: What resources and skills does the person have? The session often ends with a kind of recap, i.e. with something that the person would like to try out in the near future.

Maximilian Schmitz (Interviewer)
That sounds exciting. But we're talking about systemic therapy here, not behavioural therapy, right?

Cosima Höflacher (Therapist)
Exactly, systemic therapy. There is behavioural therapy, which works heavily with skills and specific tasks, and systemic therapy, which has also been recognised by health insurance companies since 2018. I would say that therapists often work in a similar way, but it's not officially behavioural therapy.

Maximilian Schmitz (Interviewer)
How often do you give homework?

Cosima Höflacher (Therapist)
That depends very much on the problem. With anxiety patients, for example, I often work with tasks so that they actively tackle situations. With depression, it can be about small changes in everyday life. But there are also situations, e.g. after traumatic experiences, where it's more about stability and homework is less relevant. It also depends on the person - some develop ideas themselves, others need support and a kind of "control" from the therapist.

Maximilian Schmitz (Interviewer)
If you have a person who is not so proactive, how do you motivate them?

Cosima Höflacher (Therapist)
Ideally, I take the first steps, such as exposures, together with the person. It's important that the idea comes from the person themselves and doesn't come across as an "assignment". I tend to ask them how they would like to see progress so that they feel they have made a commitment.

Maximilian Schmitz (Interviewer)
That makes sense. The more intrinsic a person is, the more motivated they are.

Cosima Höflacher (Therapist)
Exactly.

Maximilian Schmitz (Interviewer)
Very brief change of subject: How do you communicate with patients between sessions?

Cosima Höflacher (Therapist)
I use a second mobile phone for professional contacts. Patients contact me and I often set time

slots in which I can be reached. It's important to maintain professional distance and treat sensitive information with discretion.

Maximilian Schmitz (Interviewer)
Does that bother you?

Cosima Höflacher (Therapist)
Sometimes the availability. My job is organised into 50-minute meetings with a 10-minute break in between. It's important to be well organised so that you can communicate asynchronously without using private messenger apps.

Maximilian Schmitz (Interviewer)
I see.

Cosima Höflacher (Therapist)
Calling patients with only a landline number can also be awkward, as you are not allowed to say what the call is about when a family member answers the phone.

Maximilian Schmitz (Interviewer)
Do you use digital tools, e.g. for voting protocols or questionnaires?

Cosima Höflacher (Therapist)
I leave that up to the patients. Some use apps, others write it down physically. For questionnaires, there are tablets in the practice to save the data directly in digital form. It's practical, but not everyone feels comfortable with it.

Maximilian Schmitz (Interviewer)
We want to develop a simple app that offers basic functions such as a messenger function for appointments, voting protocols and digital questionnaires. It should be as user-friendly as possible.

Cosima Höflacher (Therapist)
Anything that promotes patient activation is helpful. There could be reminders that the patients set up themselves. That could work, but it has to come from them.

Maximilian Schmitz (Interviewer)
That sounds sensible. The more intrinsic a person is, the more motivated they are.

Cosima Höflacher (Therapist)
Exactly.

Maximilian Schmitz (Interviewer)
Thank you very much for your time and your insights.

Cosima Höflacher (Therapist)
Good luck with your project!

Maximilian Schmitz (Interviewer)
Thank you.

Appendix 39 Interview Transcript – Patient 1
Date: *05.11.2024*
Duration: *45min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Sophia Schmitt*
Age*: 44*
Gender: *male*
Duration of Therapy*: 2 years*
Type of Therapy*: CBT*
Primary Diagnosis*: Depression*
Additional Information*: Depression linked to midlife crisis, struggles to stay engaged, unmotivated in life*

Sophia Schmitt (Interviewer)
Can you describe your typical therapy sessions? What usually happens during them?

Patient 1
Well, a lot of it revolves around identifying my negative thought patterns and trying to change how I react to situations. We go over recent events and try to figure out why I felt a certain way. Then my therapist usually gives me some exercises to work on until the next session. It's mostly about managing my thoughts, but honestly, I sometimes zone out or lose focus when we're discussing stuff—it's hard to stay engaged.

Sophia Schmitt (Interviewer)
Do you face any organizational problems with your therapy, like managing your schedule or other logistics?

Patient 1
Not really with scheduling. I make it to my appointments without any issues. The challenge is more with the tasks my therapist gives me between sessions. I often forget or don't feel motivated to do them.

Sophia Schmitt (Interviewer)
How do you feel between sessions? Do you find it difficult to maintain the progress or focus from the sessions?

Patient 1
Between sessions is where things fall apart. I don't always feel like the work we're doing sticks with me, you know? It's like, during the session, I understand everything, but after I leave, it's hard to stay on track. I lose focus easily, and the motivation fades quickly.

Sophia Schmitt (Interviewer)
Do you have any challenges staying engaged with the therapy process when you're not in a session?

Patient 1
Yeah, for sure. I think the main issue is that it feels like there's this huge gap between what we talk about in therapy and actually applying it in my life. The tasks feel overwhelming, especially when I'm already feeling low. I tend to just put it off.

Sophia Schmitt (Interviewer)
Have you ever needed additional support outside of your scheduled therapy sessions? If yes, what kind of support would you find helpful during those times?

Patient 1
Sometimes I think it would help to have more frequent check-ins. Not big things, just small reminders or even a message to keep me on track. I don't need someone motivating me with pep talks, but maybe something simple like a reminder to do the homework or a quick check-in to see how I'm doing.

Sophia Schmitt (Interviewer)
How do you handle therapy "homework" or tasks given to you by your therapist? Do you find it easy or difficult to complete tasks between sessions?

Patient 1
I'm supposed to do things like write down my thoughts or try certain techniques, but honestly, I don't always do them. It's hard to sit down and make time for it, especially when I'm feeling down. Sometimes I just don't see the point when everything else feels like it's falling apart.

Sophia Schmitt (Interviewer)
Would reminders or check-ins between sessions help you stay on track with tasks?

Patient 1
Yeah, probably. If I had some sort of reminder to do the exercises, I might actually get them done. But it can't be too pushy, you know? Something like an app reminder might work, just to nudge me without being in my face about it.

Sophia Schmitt (Interviewer)
How do you currently communicate with your therapist between sessions? Is this communication helpful, or do you feel there are gaps?

Patient 1
We don't really communicate between sessions unless I send an email, but I rarely do that. I feel like it would be better if there was a way to just check in quickly, without having to send an official email, you know? Maybe something more casual or easy to use.

Sophia Schmitt (Interviewer)
Have you ever experienced any difficulties in communication with your therapist?

Patient 1
Not technical difficulties, no. It's more that I wish there were more opportunities to touch base between sessions. The gaps between appointments can feel a bit too long sometimes.

Sophia Schmitt (Interviewer)
Did you ever feel uncomfortable with the way of communicating?

Patient 1
No, I wouldn't say uncomfortable. It just feels a bit disconnected when there's no interaction between sessions.

Sophia Schmitt (Interviewer)
How do you stay engaged in your therapy? Do you find it difficult to stay engaged?

Patient 1
It's hard to stay engaged, especially when I'm not in the room with my therapist. I feel like I lose momentum as soon as I walk out of the office, and by the time the next session rolls around, I'm back to square one. I think some kind of support in between would help.

Sophia Schmitt (Interviewer)
Would digital solutions make a difference for you?

Patient 1
Maybe. If there was something like an app to keep me accountable for the homework or check in with me, that could make a difference. But it has to be something simple—I don't want to feel like I'm being forced to do it, just gently reminded.

Sophia Schmitt (Interviewer)
How comfortable would you feel using an app to track or share your therapy-related progress with your therapist?

Patient 1
I'd be okay with using an app, but I'd want control over what gets shared. I don't want everything automatically sent to my therapist. It's important to me that I get to decide what they see.

Sophia Schmitt (Interviewer)
Do you have any privacy concerns when it comes to using digital tools?

Patient 1
As long as the app is secure and I'm in control of the data, I wouldn't be too worried. I just don't want all my information floating around without knowing who sees it.

Sophia Schmitt (Interviewer)
What kind of digital tools or features would help you better manage your mental health in and between therapy sessions?

Patient 1
Something that helps me keep track of my homework would be useful. And if it could remind me to do things without being too pushy, that would help too. It could also be helpful to have a place to record my thoughts so I don't forget what I need to talk about in the next session.

Sophia Schmitt (Interviewer)
If there were an app to support your therapy, what would be the most important feature for you?

Patient 1
The reminders for sure. Just little nudges to stay on top of things, and maybe a way to communicate with my therapist in a less formal way.

Sophia Schmitt (Interviewer)
Is there anything else you think would help you feel more supported in your mental health journey?

Patient 1
I think just having more frequent touchpoints, even if it's something small, would help me feel less like I'm on my own between sessions. Sometimes it feels like I'm left to figure it all out myself, and that's when I start to drift off track.

Sophia Schmitt (Interviewer)
Any other ideas or suggestions for tools that could enhance your therapy experience?

Patient 1
Maybe just a way to track how I'm feeling between sessions without it feeling like a chore. Something I can easily update, so I don't have to explain everything all over again in the next session.

Appendix 40 Interview Transcript – Patient 2
Date: *07.11.2024*
Duration: *45min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Luisa Jansen*
Age*: 21*
Gender: *female*
Duration of Therapy*: 6 months*
Type of Therapy*: CBT*
Primary Diagnosis*: Anxiety*

Luisa Jansen (Interviewer)
Can you describe your typical therapy sessions? What usually happens during them?

Patient 2
In therapy, we focus on my anxiety and try to pinpoint what triggers it. My therapist helps me recognize patterns in my thoughts and reactions, and we work on exercises to manage them. I usually leave the session with some tasks to try, like journaling or practicing breathing techniques. But once the session is over, I sometimes feel like I lose focus.

Luisa Jansen (Interviewer)
Do you have any organizational problems regarding your therapy, like managing your schedule or staying on top of exercises?

Patient 2
No, I don't have issues with scheduling or remembering the sessions themselves. It's more about remembering to follow through on the exercises between sessions. Sometimes I just forget or feel too overwhelmed to start.

Luisa Jansen (Interviewer)
How do you feel between sessions? Are there times when you find it difficult to maintain progress or focus from the sessions?

Patient 2
Between sessions, it's hard to keep up the momentum. I feel like the strategies we discuss work really well in theory, but when I'm on my own and anxiety kicks in, I sometimes don't know how to apply them in real time. The longer I go between sessions, the harder it is to stay on track.

Luisa Jansen (Interviewer)
Do you have any challenges staying engaged with the therapeutic process when you're not in a session?

Patient 2
Yes, it's difficult. I can do the exercises when I'm calm, but if my anxiety flares up, I end up avoiding them. It's hard to engage with the process when the anxiety feels so strong—it just makes me freeze.

Luisa Jansen (Interviewer)
Have you ever needed additional support outside of your therapy sessions? What would that look like for you?

Patient 2
Yes, I think more reminders or prompts would help. I like that we use WhatsApp to communicate because it's quick and easy, but I never really know where the boundaries are. It's hard to tell when it's okay to message, and sometimes I hold back because I don't want to bother her. I think if I had more structured ways to check in, like a guided reminder system through an app, I'd feel less unsure and it would help me to not feel overwhelmed.

Luisa Jansen (Interviewer)
How do you handle therapy "homework" or tasks given by your therapist? Do you find it easy or difficult to complete tasks between sessions?

Patient 2
I struggle with it, especially when my anxiety is high. I know what I'm supposed to do, but when it comes time to actually do the exercises, I tend to avoid them. It feels like just another source of stress, even though I know it would help.

Luisa Jansen (Interviewer)
Would reminders or check-ins between sessions help you stay on track?

Patient 2
Yes, definitely. I think having reminders that prompt me to do the exercises could help. It would be nice if the reminders weren't too pushy, though—just a gentle nudge that doesn't add pressure.

Luisa Jansen (Interviewer)
How do you currently communicate with your therapist between sessions? Do you feel it's effective?

Patient 2
We use WhatsApp, which I like because it's a quick and easy way to reach her. It's a short path if I really need something, but sometimes I'm unsure about how often I should message

or what's appropriate to share. I end up not using it much because I don't want to cross any boundaries.

Luisa Jansen (Interviewer)
Have you experienced any difficulties in communication with your therapist?

Patient 2
Not technically, but using WhatsApp sometimes feels a bit informal for therapy. I wish there was a clearer structure to our communication, something that helps me know when it's okay to reach out without feeling like I'm bothering her.

Luisa Jansen (Interviewer)
How do you stay engaged in your therapy? Do you have trouble staying focused?

Patient 2
It's hard to stay engaged when I'm not in a session. Therapy helps while I'm there, but afterward, the anxiety feels like it's pulling me in different directions. I need something to keep me connected to the process, like reminders or tips during the week to help me stay on track.

Luisa Jansen (Interviewer)
Would digital solutions or tools help you stay more engaged?

Patient 2
Yes, I think an app could really help. It would be great to have a system that sends me suggestions or techniques based on how I'm feeling, or reminders that don't feel like pressure but just help me stay focused on what I'm supposed to be working on. But I think what is really important is that they app is easy accessible because otherwise I feel like if could be difficult for me to access it if I am already feeling anxious.

Luisa Jansen (Interviewer)
How comfortable would you feel using an app to track or share your therapy-related progress with your therapist?

Patient 2
I'd be comfortable using an app, as long as I get to decide what's shared. I wouldn't want everything to automatically go to my therapist—I'd prefer to have control over what I share, depending on how I feel.

Luisa Jansen (Interviewer)
Do you have any privacy concerns when it comes to using digital tools?

Patient 2
Not really, as long as the app is secure and I know where my data is going. I'd want clear control over the information, but if that's in place, I'd be fine with it.

Luisa Jansen (Interviewer)
What kinds of digital tools or features would help you manage your mental health better between therapy sessions?

Patient 2
I'd like an app that helps me track how I'm feeling and gives me gentle reminders. It could also offer techniques based on how I'm doing that day, so I don't feel like I'm on my own between sessions. The app should integrate with what I talk about in therapy, like reminding me to practice specific exercises we've worked on.

Luisa Jansen (Interviewer)
If there were an app to support your therapy, what would be the most important feature for you?

Patient 2
Definitely reminders, but also a way to track my anxiety over time. If it could help me see how my anxiety levels change and remind me of the techniques we've talked about, that would be really useful.

Luisa Jansen (Interviewer)
Is there anything else you think would help you feel more supported in your mental health journey?

Patient 2
More structured support outside of sessions would help. I like using WhatsApp for quick communication, but having an app that combines that with reminders and progress tracking would make me feel more supported in between sessions.

Luisa Jansen (Interviewer)
Any other ideas or suggestions for tools that could enhance your therapy experience?

Patient 2
It would be great if the app could learn from how I'm feeling and adjust the type of support it offers. Something dynamic that fits with how my anxiety fluctuates would make a big difference.

Appendix 41 Interview Transcript – Patient 3
Date: *07.11.2024*
Duration: *45min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Maximilian Schmitz*

Age*: 34*
Gender: *female*
Duration of Therapy*: 12 sessions (completed)*
Type of Therapy*: CBT*
Primary Diagnosis*: General anxiety about the future*

Maximilian Schmitz (Interviewer)
Can you describe your typical therapy sessions? What usually happened during them?

Patient 3
My therapy sessions were really practical. Each one focused on working through specific

worries I had about the future, like whether I'm on the right career path or how my personal life is going. We spent a lot of time analyzing my thought patterns and trying to find realistic ways to reframe them. It was a bit tough at first, but I could see the value pretty quickly.

Maximilian Schmitz (Interviewer)
Did you face any challenges with the organization of your therapy, such as managing your schedule or keeping up with exercises?

Patient 3
Not really. I'm pretty organized, so scheduling wasn't an issue. I actually liked the structure that came with CBT, especially since I could do practical exercises on my own.

Maximilian Schmitz (Interviewer)
How did you feel between sessions? Did you find it difficult to maintain progress or focus from the sessions?

Patient 3
In the beginning, I struggled a bit. I'd leave the session feeling clear and motivated, but by the middle of the week, the anxiety would sneak back in. It wasn't always easy to apply what we talked about during those moments. But after a few sessions, I got better at catching myself when I was spiraling into anxious thoughts.

Maximilian Schmitz (Interviewer)
Did you have challenges staying engaged with the therapy process when you weren't in a session?

Patient 3
Sometimes, yes. I'd get caught up in work or life, and I'd forget to do the exercises. But what helped was having a clear routine. I found that when I made time to do them at a specific point in my day, I could stick with it better.

Maximilian Schmitz (Interviewer)
Did you ever need additional support outside of your therapy sessions? If yes, what would that have looked like for you?

Patient 3
I think it would've been useful to have something small, like a nudge to remind me of the tools I had learned when things got tough. I didn't need full-on sessions in between, but maybe a prompt to remind me to take a step back or apply one of the exercises.

Maximilian Schmitz (Interviewer)
How did you handle therapy "homework" or tasks given by your therapist? Did you find it easy or difficult to complete tasks between sessions?

Patient 3
I'm good at completing tasks, so I didn't find it too hard. That said, when I was feeling anxious, I'd sometimes delay the exercises because I didn't want to face those thoughts. But once I sat down to actually do them, I could see how helpful they were.

Maximilian Schmitz (Interviewer)
Would reminders or check-ins between sessions have helped you stay on track with tasks?

Patient 3
Honestly, yes. I would've appreciated something simple like a message that said, 'Hey, have you done your thought record today?' It wouldn't have to be more than that, but it would've kept me accountable.

Maximilian Schmitz (Interviewer)
How did you communicate with your therapist between sessions? Was it effective?

Patient 3
We didn't really communicate between sessions. I'm not the type to reach out unless something's urgent, so that was fine for me. If I needed help, I could've emailed, but I didn't feel the need most of the time.

Maximilian Schmitz (Interviewer)
Did you ever experience any difficulties in communication with your therapist?

Patient 3
Not at all. We communicated really well during sessions, and I didn't feel like I needed more between our scheduled appointments.

Maximilian Schmitz (Interviewer)
How did you stay engaged in therapy? Did you have trouble staying focused?

Patient 3
I stayed engaged because I was very motivated to reduce my anxiety. I wanted to move forward in my life, so that kept me focused. But there were times when the exercises felt like a chore, and I had to push myself to stay engaged, especially when the anxiety was intense.

Maximilian Schmitz (Interviewer)
Would digital tools or solutions have helped you stay engaged between sessions?

Patient 3
I think so. Something that could check in with me and ask how I'm doing, or maybe suggest an exercise when I'm feeling overwhelmed, would've been helpful. It doesn't have to be anything too intrusive, just something to remind me of the tools I already have.

Maximilian Schmitz (Interviewer)
How comfortable would you have been using an app to track or share your therapy-related progress with your therapist?

Patient 3
I'd be okay with that, as long as I could choose what gets shared. I wouldn't want everything I track automatically going to my therapist. I'd prefer to control what I share when I'm ready.

Maximilian Schmitz (Interviewer)
Did you have any privacy concerns when it comes to using digital tools?

Patient 3
Not really. As long as my data is secure and I have control over it, I wouldn't mind using an app to help me manage my anxiety.

Maximilian Schmitz (Interviewer)
What kinds of digital tools or features would have helped you manage your mental health better between therapy sessions?

Patient 3
Something that helps me check in with myself—maybe a mood tracker or a journal where I can write down my thoughts. It would also be helpful to have a tool that prompts me to practice the techniques we talked about in therapy when I'm feeling anxious.

Maximilian Schmitz (Interviewer)
If there were an app to support your therapy, what would be the most important feature for you?

Patient 3
For me, it would be tracking my anxiety levels and being able to see patterns over time. And then maybe getting a reminder to do a grounding exercise when I need it most. Something that's there when I need it, but doesn't feel like too much pressure.

Maximilian Schmitz (Interviewer)
Is there anything else you think would have helped you feel more supported in your mental health journey?

Patient 3
I think I would've liked to have some sort of follow-up even after the therapy ended. Something to remind me that it's okay to feel anxious sometimes, but also to use the tools I learned. It's easy to forget once you're on your own.

Maximilian Schmitz (Interviewer)
Any other ideas or suggestions for tools that could enhance your therapy experience?

Patient 3
A tool that's easy to use and gives me a gentle nudge when I'm stuck in my head would be perfect. Something that helps me recognize when my anxiety is creeping back in and suggests an exercise I could do in the moment.

Appendix 42 Interview Transcript – Patient 4 & 5
Date: *10.11.2024*
Duration: *45min*
Interview Type: *Conducted via Microsoft Teams*
Interviewer: *Maximilian Schmitz*
Age*: 23 (P4) & 27 (P5)*
Gender: *female & male*
Duration of Therapy*: Still ongoing (P4) & 12 Sessions completed (P5)*
Type of Therapy*: CBT*
Primary Diagnosis*: Depression (P4) & Burnout (P5)*

Maximilian Schmitz (Interviewer)
Thank you both for being here. Today, we're going to take a closer look at our calendar feature. I'd like to start by hearing your thoughts on what you feel is essential for managing therapy appointments and how you might typically use a calendar like this. Feel free to think out loud as we go—this is really a brainstorming session.

Patient 4
Thanks for having us! For me, I think a calendar in a therapy app should definitely be more than just a list of appointments. I need it to help me stay organized, and I'd love if it could actually integrate a bit with my daily life. Sometimes I want to keep personal notes about a session—maybe as a reminder for something I don't want to forget before the next meeting. But I wouldn't necessarily want those notes to be shared with my therapist.

Patient 5
I agree with Patient 1. I think a calendar like this should be a bit more dynamic than just a basic schedule. It would be really helpful if I could make notes or reminders for myself as well. And, thinking back to when I was in therapy, I sometimes had appointments with different specialists. It would be nice if the app could support that kind of complexity without feeling overwhelming.

Maximilian Schmitz (Interviewer)
Great points. So, for the notes feature, you'd like an option to keep some entries private, just for yourself?

Patient 4
Yes, exactly. There are things I like to jot down to help me reflect between sessions. It's not something I'd want to share directly, but having a place to keep it in the app would be really helpful.

Maximilian Schmitz (Interviewer)
Got it. And Patient 2, I hear you on managing multiple specialists. Would it make sense to have a way to distinguish between different therapists or even tag each appointment with the provider's name?

Patient 5
Yes, definitely. Even color-coding appointments based on the therapist would help. And maybe not just color-coding, but also letting us set certain details specific to each therapist or session type. For example, some sessions are longer, and some are more frequent. It would be great if the app could handle all of that without making things too cluttered.

Maximilian Schmitz (Interviewer)
Let's talk about that a bit more. So, you'd want to customize each appointment individually, like setting the start time and duration, and maybe even having certain ones recur automatically?

Patient 4
Exactly. Recurring appointments are a big one. If I have a weekly session, it would be annoying to have to add it manually every time. Also, it'd be good if we could adjust the

duration to match the actual session length. My sessions vary, and it doesn't feel very flexible if everything is stuck at a fixed time.

Patient 5
Yeah, I agree with Patient 1. And maybe there could be an option to set reminders before each session. I know we're brainstorming a lot here, but reminders are a big one. Sometimes I get busy and could use a nudge to start getting ready, especially if it's a virtual session where I need to be at my computer on time.

Maximilian Schmitz (Interviewer)
That's a good point. So you're both looking for reminders that could be customized—like choosing how far in advance you'd want to be notified?

Patient 4
Yes, and I'd love to have options like a day before, an hour before, or even just a quick alert ten minutes beforehand. Different reminders might be good depending on the type of session.

Patient 5
Agreed. And actually, speaking of reminders, it would be nice if we could attach files or notes to appointments too. Sometimes I had homework or exercises to do before a session, and it would have been helpful to attach those directly to the calendar entry. That way, I wouldn't have to dig through old emails or messages.

Maximilian Schmitz (Interviewer)
So, you're saying that being able to attach documents or notes to specific appointments could help you stay organized and prepared for each session?

Patient 4
Yes! That would be really helpful, especially when I have assignments to complete. Just having everything in one place would make it feel more connected to my therapy, and I wouldn't risk forgetting something.

Maximilian Schmitz (Interviewer)
Understood. And let's think a bit about the calendar view itself. Right now, it's fairly minimalistic—you can see each day individually, but not much else. How do you feel about that setup?

Patient 4
Honestly, it feels a bit too basic. It would be useful to see more of an overview, like a weekly or monthly view. When I open my calendar, I'd love to see if I have anything coming up that week without having to click through each day.

Patient 5
Yes, I was just thinking the same. Maybe there could be dots or some kind of marker on days with appointments so I can tell at a glance which days are busy. If I don't see anything, I know I'm free. And it doesn't even have to be super detailed, just something visual.

Maximilian Schmitz (Interviewer)
I see. So, you're suggesting that the main calendar screen could offer a summary view with markers for scheduled appointments, allowing you to quickly see which days have events.

What about being able to add different types of events or reminders besides therapy appointments?

Patient 4
Oh, that would be great. Sometimes I need a reminder to check in with my mood or maybe a task to review my progress. It's not necessarily an appointment, but it's something I want to keep track of within the same system.

Patient 5
Yes, I think that would be really useful. If we could add personal reminders like "Check mood tracker" or "Complete worksheet," that would make it a more holistic tool. I'd rather have everything in one app instead of juggling between different platforms.

Maximilian Schmitz (Interviewer)
It sounds like both of you are envisioning a calendar that functions as more than just an appointment book. You'd like it to be flexible enough to handle both formal therapy sessions and personal reminders. Maybe even adding categories like "Therapy Session," "Self-Check," or "Tool Reminders"?

Patient 4
That would be perfect. And honestly, if we're aiming for a comprehensive tool, I think it's important to offer customization options like that.

Patient 5
And maybe we could have an option to save certain types of appointments as templates? If I often schedule self-check reminders or recurring sessions, it would be helpful not to have to enter all the details each time.

Maximilian Schmitz (Interviewer)
That's a great idea, Patient 2. Templates could definitely streamline the process!

Patient 4
That all sounds perfect!

Patient 5
Yes, I think that's everything. Having a fully-featured calendar like this would make it feel like a central hub for therapy, instead of just a basic appointment reminder.

Maximilian Schmitz (Interviewer)
Thank you both for your input. This is exactly the feedback we need to make the calendar a truly useful tool. Your suggestions will be invaluable as we continue developing the app. Thanks again for your time!

9 Disclosure Statement

During the preparation of this work project, we used Chat GPT 4.0 to improve readability and language of the work project. After using this tool, we reviewed and edited the content as needed and take full responsibility for the content.