

# **Apps and online games for a better mental health**

***To what extent can gamification be considered an effective therapeutic tool?***



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## Abstract

**Aim:** The purpose of this research was to investigate whether an online game or an app using gamification elements could be used as a therapeutic tool for patients with mental health issues such as depression. The current pandemic situation has increased the number of patients rapidly and, hence, flooded the waiting lists of practitioners. Therefore, there is the apparent need for an alternative way of therapy. With students transferring to home schooling and employees staying in the home office, it should not be unusual to have options to get therapy at home as well.

**Methods:** This research investigates the participants' motivation to use technological devices for therapy and analyses which elements are necessary for a successful treatment. Twelve interviews have been conducted to inquire participants' personal preferences. People with strong and light mental health problems have been interviewed in semi-structured interviews. The conversations took place online as well as in a face-to-face setting. Additionally, two experts from the University of Twente have been interviewed. The four gamification elements investigated are personalisation, points and rewards, collaboration and challenge, and storytelling.

**Results:** The results confirm that many patients consider an alternative way of therapy due to the lack of therapists available. In this manner, however, more participants are motivated to use an app than to play an online game on a stationary computer. Further, gamification seems to be a promising method to engage users within the application. The results show that personalisation and storytelling increase the motivation to use an app or a game to deal with mental health issues, while collaboration and challenge were perceived ambiguously and a reward system received mainly negative remarks. Participants' wishes and ideas can be explained with the help of the social cognitive theory, which is a concept of behaviour change.

**Conclusion:** Gamification can be used to increase engagement and to motivate users to work on themselves. To develop a medical app, experts need to be involved in the process. The effectiveness can differ per patient and not every element will be adapted the same way by all users. Risks of addiction need to be diminished and the programme needs to be accessible by all patients who may need it.

**Keywords:** Mental health, depression, anxiety, gamification, storytelling, personalisation, points and rewards, collaboration and challenge, social cognitive theory

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## 1. Introduction

Mental health issues and depression are part of the most common illnesses in society nowadays. Often undetected or mistaken for bad mood, almost 264 million people in the world suffer from a mental disorder (WHO, n.d.). There is not one singular theory where depressions come from, they can be caused by experiences, some parts might be genetically influenced or predetermined. But there is a definite need to combat the ever increasing number of patients (Leigh & Flatt, 2015). The number is also increasing due to COVID-19, which is why, since the outbreak of the pandemic, depressions have increased trifold in US citizens (Van Beusekom, 2020). Mental health issues are not only a consequence of social distancing, they are also a symptom of the virus (Schraer, 2021). The lockdown and the resulting isolation are a huge challenge for many (Abbott, 2021). Following this, there are not enough therapists for the increasing amount of patients. A therapy in person may also not be the favoured option with regard to the limitation of contacts. Therefore, it can be a useful alternative to have technical support in this domain. In an attempt to find a helpful alternative to the overloaded practitioners, researchers have found apps and online games including gamification to be an effective tool (Ibrahim, Jamali, & Suhaimi, 2021). An article by Chandler (2020) published in Forbes magazine emphasises the idea of using technology for the treatment of stress and anxiety relating to the coronavirus.

A few apps and online programmes, for example, the German app MindDoc (barmer.de, n.d.) already exist. This app is designed to help with depression, anancasm and eating disorders. MindDoc is advertised on its website as a therapy without waiting time (MindDoc, n.d.). The developer himself highlights the advantage of a lower burden being there to cross for a patient to open the app than to have a real-life appointment (Cayir, 2019). Another example is the Dutch programme DEEP. This programme uses virtual reality to dive into an underwater world (medium, 2019). The escapism element is an interesting one, for patients who may want to 'flee' to another world. Netflix has also realized the need for social support and is offering a show in collaboration with the meditation app 'Headspace' (Correa, 2021). Nevertheless, this app does not deal with mental health in specific, it is rather intended to decrease stress levels. Further, it is not medically supported. Apart from these quite concrete examples, a number of meditation apps is available in the app store. However, apart from DEEP, these apps do not include any specific elements.

Gamification is an element often used to increase interaction and motivation. Gamification is the application of gaming elements in non-gaming activities and often used to enhance engagement (Business Insider, 2019). Therefore, gamification seems to

be a promising tool to engage patients within their therapy and maybe even increase the effectiveness. Gamification is not one single component but consists of many smaller elements. Alone in the field of education, several elements like rewards and challenge do exist (Jackson, 2017). A research by Toda et al. (2019) identified 19 gamification elements for education.

This study is aimed at analysing peoples' motivation to use technology in the form of an app or an online game and apply gamification for treatment purposes, and to evaluate patients' willingness to apply the different gamification elements in a health context. The aim of the research is to examine the effectiveness of gamification as a therapeutic tool and to investigate the suitability of technology for therapeutic purposes.

## **2. Theoretical framework**

Mental illnesses such as depression are increasing due to the Covid-19 pandemic. People are impacted by a loss of control and uncertainty about their future (Bueno-Novitol, et al., 2021). Not only does the threat to the own health translate into decreased mental well-being caused by stress (Bueno-Novitol et al., 2021), the heavy changes to our daily life also impact our behaviour (Giuntella, Hyde, Saccardo, & Sadoff, 2020). Conditions of patients worsen due to too less therapists (Leigh & Flatt, 2015). Hence, there is an increasing demand for an alternative way of therapy. This research will examine if technology can help in the treatment of mental illnesses, like it already does with other medical cases.

### **2.1 Social cognitive theory**

The social cognitive theory is a theory from psychology introduced by Albert Bandura. The author argues that perceived self-efficacy is driven by motivation (Bandura, 1998). The theory states that motivations influence a change in behaviour (Wong & Monaghan, 2020). Behavioural change is determined by the perceived self-efficacy and expectancies of the outcome (Sutton, 2001). Self-efficacy is an individuals' perception of their own abilities (Gallagher, 2012). Already in 1998, Bandura wrote that the social cognitive theory can be applied in health promotion and disease prevention. In another article, Bandura (1999) writes that people are self-reflecting and decide about their own actions. This leads to the assumptions that a human is able to evaluate the benefits they can obtain when using an app or playing a game intended to improve mental well-being. Beliefs about the personal efficacy are an important influence for change (Munro, Lewin, Swart, & Volmink, 2007). Hence, accomplishments in the app are expected to increase those beliefs about self-efficacy. The internal process of motivation leads to behavioural outcomes like choice and effort (Schunk & DiBenedetto, 2020). The patients' willingness to change something about their medical situation can therefore persuade to try an alternative way of treatment using technology.

### **2.2 Gamification as therapeutic tool**

Gamification is receiving increased attention in different domains from communication.

Gamification is “the use of game elements in nongame contexts” (Hoffmann, Christmann, & Bleser, 2017, p. 2). This method has proven to be effective in gaining users’ attention and engaging them into activities. Gamification can be used for cognitive behaviour therapy (Vajawat, Varshney, & Banerjee, 2020), which is often used in the treatment of anxiety and depression. Studies show the effectiveness of computer-based programmes as a support of regular treatments from a therapist (Leigh & Flatt, 2015). However, there is more research needed investigating the effects of an app or online game as a stand-alone therapy tool.

Apps do have many advantages; they can be used by many patients at the same time (Leigh & Flatt, 2015), while a practitioner can only help one person at a time. Particularly during the pandemic, with the increasing number of patients, an alternative way of treatment could heavily relieve the length of waiting lists. Further, the application of a game can be a preliminary support while being on the waiting list (Miloff, Marklund, & Carlbring, 2015). Pine, Fleming, McCallum and Sutcliffe (2020) showed in a study that gaming does decrease anxiety in such situations of having to wait for a physical appointment. In a systematic review, the authors analysed videogames in relation to mental health, anxiety and depression and found that games can be supplemental to regular treatment and medicine (Pine et al., 2020). Thus, an app or a game is able to support common therapies.

An interest app intended to help with depression and including gamification features is being developed in Sweden. The Stockholm university has created the ‘challenger’ app. The app includes goal-setting, which is argued to be an integral part of psychotherapy (Miloff et al., 2015). The developers claim that the app is not only free to use for the patient, the app itself is also cost-effective, since it is once developed and can then be used by thousands of users at the same time (Miloff et al. 2015). Hoffmann, Christmann and Bleser (2017) also emphasize the immense financial savings for the health sector. They argue that the full potential of games and apps is not made use of (Hoffmann et al., 2017). Still, patients should remain cautious, since medical apps are not the same as well-being apps (Leigh & Flatt, 2015). A medical app is one that deals with diagnosed conditions, while an app improving well-being is rather a motivator in stressful times (Leigh & Flatt, 2015). For serious illnesses, medical

support is required.

Many different gamification elements exist and can be applied for different purposes. Four specific gamification elements and their effectiveness will be examined in this research. These four elements are personalisation, points and rewards, collaboration and challenge, and storytelling. An overview of these elements is given in Figure 1. The elements are chosen because they are the most mentioned elements throughout literature relating to persuasive and serious gaming. Moreover, these elements are considered very effective in educational context. Since persuasion and education are important aspects of evaluating the personal mental well-being, these elements possess promising qualifications to use when designing a mental health programme. Hence, these four elements will be outlined in the following paragraphs.

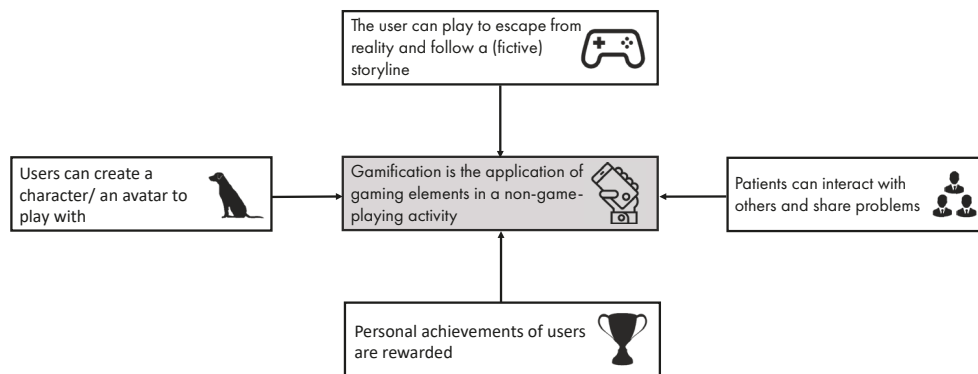


Figure 1. Overview of analysed gamification elements

### 2.2.1 Personalisation

Through personalisation the patient can identify with a character within the game. A study from Rodrigues et al. (2020) found out that personalised gamification increases the success of gamification tasks. Personalisation has been found to influence human behaviour. This was not only tested in the context of education but also for mental health (Busch et al., 2015). Busch et al. (2020) write that addressing personal traits can have an influence on the subjects' mood. Personalisation can also support persuasion (Orji, Tondello, & Nacke, 2018), that is why personalisation through characters or an avatar is often applied in serious gaming as well. Besides the impact on persuasion, personalisation also increases motivation (Roosta, Taghiyareh, Mosharraf, 2016). These findings indicate that the element of personalisation can lead

to promising engagement rates and effective support provided by the app if used in a mental health context.

### **2.2.2 Points and rewards**

A point and reward system could be useful in engaging the user within the game or the app. The point system is the most used gamification element (El-Khuffash, 2013). Rewards systems are often used in persuasive gaming as they increase the motivation to play and continue (van Dooren, Visch, Spijkerman, 2018). A game intended for mental health improvements can, in this sense, be seen as persuasive as well, as it intends to change the users' perception of problematic situations. One especially useful aspect of points and rewards is that it leads to long-term engagement (Rahman, Ismail, Noor, & Salleh, 2018). As a therapy is not completed within a few days, long-term is a relevant element to include.

### **2.2.3 Collaboration and challenge**

This element actually consists of two components which are usually combined. Still, collaboration and challenge entail different aspects. While collaboration encourages group work, challenge often leads to competition. Further, there is a difference between inter- team competitions and competing against others (Morschheuser, Hamari, & Maedche, 2019). However, it is not sure if this in-game experience will transfer to the real-life behaviour (Sailer & Homner, 2019). Morschheuser et al. (2019) proposes that collaboration should be encouraged instead of competition. In a mental health context, challenge could invite the users to work on themselves but could also generate new stress. Here the question is these two elements should be used as one or be dealt with separately.

### **2.2.4 Storytelling**

Storytelling helps us human to make sense of what we see and experience. The concept is largely used in marketing as well, as it grabs the customer's attention (Pulizzi, 2012). Facts are remembered better if learned through storytelling (Stott & Neustaedter, 2013). In the context of games, storytelling is proven to make gamification more powerful (Giakalaras, 2016). The effects of storytelling for learning purpose have already been researched in a gamification context (Palomino et

investigate whether the element of storytelling can also help mentally ill to learn from positive experiences and help to escape from their problems for a while.

These four gamification elements seem to have promising effects and are expected to support people with mental illnesses. There is of course also the option to combine some or all these elements in one application. Nevertheless, like with many games and also with the opportunity to 'flee' from the real world, there is of course a risk of addiction included. This research will focus on the willingness of patients to use an app or an online game to support them with their mental health issues. Moreover, potential risks and consequences will be evaluated.

### 2.3 Purpose and research question

The purpose of this study is to find a way to support patients with mental health problems during and after the pandemic. It is to be evaluated if findings from other research areas about intrinsic motivation and willingness to use transfer to the application of these elements in app and game design. The aim is to find a way gamification elements can be incorporated into a system to provide digital help for mentally ill people. To get a deeper insight into which characteristics could be helpful for the development of an app or a game, the research question for this study is as follows:

- *To what extent can gamification be considered an effective therapeutic tool?*

The research question is supported by two sub-questions:

- *To what extent do patients willing to use online games or apps intended for mental health during their treatment consider gamification elements suitable?*
- *To what degree can an app or a game be the only form of treatment and possibly replace medicine?*

## **3. Methods**

### **3.1 Design**

To collect data, interviews have been conducted. Interviews are a useful tool to research the experiences of the participants. They can be used to collect a large amount of data at once (Opdenakker, 2006). Questions are open-ended and therefore require some more elaboration from the participant, in contrast to quantitative research, where the participant have to select their answers from a pre-selected list of possible answers. In comparison to closed questions, interviewees can formulate answers in their own words (Doody & Noonan, 2013). A method of semi-structured interviews has been applied, so that the questions and follow-ups could still be adapted during the interview (Boeijs, 2010).

After an interview scheme had been created, it was discussed with two experts from the University of Twente, Ruud Jacobs and Hanneke Scholten. In two separate conversations via video call, the interview questions have been outlined to the experts and the idea of designing an app for mental health purposes has been evaluated. Ruud and Hanneke gave valuable input and added further relevant aspects to consider when interviewing the participants. Their feedback on the value of the questions as well some suggestions have been incorporated before the interviews with the participants. Then the interviews with the participants have been conducted. After the first two interviews, the order of questions has been changed, to enhance the flow of the conversation. Still, all 12 participants have received the exact same set of questions.

To ensure the participants that their data will be dealt with confidentially and that the study has been ethically approved by the ethics committee of the university, the participants were handed an informed consent before the start of the interviews. This consent form is added to the document in Appendix A. Consent was given orally by the participants in the beginning of each interview. In preparation for the interviews, an interview scheme has been created. The interviews consisted out of 17 questions, of which six concerned the mental health of the participants. The remaining questions asked for the participants' elaboration on gamification and the perceived usefulness of applying such gamification elements in an app. The complete set of questions can be found in Appendix B.

### **3.2 Sample**

For this research, participants with special preconditions were required. The participants should have experienced a switch from regular school or working life to home schooling or home office. Additionally, the participants were selected based on their mental health

condition. Since there were some requirements for a participant to be eligible, a random sampling method was not applicable. Hence, a convenience sampling has been applied (Elmusharaf, 2016). As it would have been unethical to ask for a persons' mental state, only participants whose health status was known to the researcher have personally been invited. The participants included in this study do all have mental health issues of some kind. While some do have severe illnesses like depression and anxiety, others are dealing with an increased stress level causing mental distress. Four participants have such strong problems that they are in therapy right now, while others have been in therapy or are waiting for a spot. Further, participants had to be adolescences. Hence, the participants are ranging between an age of 21 and 59. A sample of 12 participants is deemed as a sufficient size for a good analysis (Ando, Cousins, & Young, 2014) Therefore, twelve people have been interviewed, of which five are male and seven are female. An overview of the participants' demographics and their health status is illustrated in Table 1.

The participants have been personally asked to participate based on their background and previously shared experiences. Due to the close relation with the researcher, the participants were either asked personally or contacted via WhatsApp. The recruiting of the participants started at the beginning of the research during the process of writing the theoretical framework.

**Table 1.**  
*Demographics and characteristics of participants*

Participant	Age	Gender	Nationality	Employment status	Health status
1	21	Female	Dutch	Student	In therapy
2	21	Female	Dutch	Student	No therapy
3	58	Female	German	Working from home	In therapy
4	52	Male	German	Working from home	No therapy
5	21	Female	German	Student	In therapy
6	59	Male	German	Working from home	No therapy
7	24	Male	German	Student	No therapy
8	22	Female	German	Student	No therapy
9	23	Male	German	Student	No therapy
10	25	Female	German	Student	No therapy
11	52	Female	German	Working from home	No therapy
12	48	Male	German	Working from home	In therapy

### 3.3 Data collection

The data collection was carried out in two ways by one researcher alone, namely face-to-face interviews and video calls. Since the interviews could not all be held in person due to the

pandemic and to ensure the safety of all people involved, some interviews were conducted via video calls, to come as close to a face-to-face situation as possible. The video calls have been recorded in order to transcribed and translated afterwards. Those interviews that could be held in person were only voice recorded. Five interviews were held in person. To ensure a secure environment for the interviewer as well as the participants, the conversations took place outside and with a distance of around two metres between the persons. The other seven interviews had to take place online. For most of the online interviews Microsoft Teams was used. One interview was conducted via Skype, since the participant did not have an account in Teams. The length of the twelve interviews is ranging between 26 and 54 minutes. The total amount of collected data adds up to 345 minutes.

### **3.4 Data analysis**

To prepare the data for the analysis, all participants' data has been anonymised. All data to possibly identify a participant has been deleted. The names of the participants have been replaced by numbers to still be able to distinguish the interviews. Only the researcher alone knows which number stands for which participant. The transcripts of the interviews are attached in Appendix C. One recording was broken, hence there is no transcript for this interview. Nonetheless, notes were taken during the interview and those are added in the Appendix. The audio and video recordings of the interviews have been deleted after transcribing the data. Access to the recordings for downloading them from Teams or Skype expires automatically after 30 days.

To begin with the coding process, open coding was applied. Open coding is used to create categories (Khandkar, 2009). Based on the notion from the participants, the codes for sentiment as well as for motivation have been created with this method. In the next step, in-vivo coding has been used. According to Strauss and Corbin (as cited in Boeije, 2010), in-vivo codes are "specific codes that are derived from the participant's terminology" (p. 101). Codes that have been created like this are, for example, the codes 'risky', 'helpful', 'stressed' and 'depressed', as those are words that have been used like this by the interviewees themselves. Based on these different codes, the codebook has been developed. The codebook has been further extended by axial coding, where the text is analytically read and meaning is inferred (Scott & Medaugh, 2017). The created codes were then given labels and put into categories. The codebook with the corresponding Cohen's Kappa's is shown in Table 2. The complete codebook with explanations of the codes and examples for each category can be found in Appendix D. The (dis-) agreement for the intercoder reliability are to be found in Appendix E.

The unit of analysis varied for each case but was at least one sentence and maximum

one paragraph long. The process of coding was carried out within the programme atlas.ti. after every interview had been coded by the researcher, ten percent of the data were coded by a second coder to check for the intercoder reliability. A Cohen's kappa between 0.61 and 0.80 means that there is substantial agreement (Landis & Koch, 1977). The codebook has an overall Cohen's Kappa of 0.8.

**Table 2.**  
*Intercoder reliabilities*

Main code	Sub-code	Cohen's Kappa
1. Sentiment	1.1 Positive	0.88
	1.2 Neutral	
	1.3 Negative	
	1.4 Ambiguous	
2. Mental state	2.1 Healthy	0.6
	2.2 Stressed	
	2.3 Depressed	
3. Pandemic	3.1 Before	0.85
	3.2 During/after	
	3.3 Change	
4. Gamification	4.1 Helpful	0.81
	4.2 Risky	
	4.3 Unpredictable	
5. Gamification element	5.1 Personalisation	1
	5.2 Points and rewards	
	5.3 Collaboration and challenge	
	5.4 Storytelling	
6. Motivation to use an app	6.1 High	0.69
	6.2 Low	
	6.3 Undecided	
	6.4 Desire	

## 4. Results

Several participants gave the clear indication that an application for mental health purposes can be used as a therapeutic tool. The most important notion concerning the applicability of technological devices has to be that an app or a game can support therapy, but not replace it. This opinion was also shared by the experts. Dr. Hanneke Scholten from the Games for Emotional and Mental Health (GEMH) lab warns that the currently existing apps are better suitable as a prevention for mental health issues, but do not provide adequate support as a therapy. The input of the interviewees refers to a hypothetical app or game that does not exist yet. As expected, participants, who are prospective users of such an application, realise the urgent need for an alternative way of therapy to handle the large amount of patients. There is overall agreement among the participants of the study that including gamification elements in an app or a game will be of added value. There were 101 sequences coded as 'helpful'.

As indicated in the theoretical framework, participants have confirmed that their stress level has increased. Feelings of being overwhelmed have grown, in some cases those feelings even first started with the pandemic. Three times as many sequences have been coded as 'stressed' and 'depressed' than as 'healthy', with 'stressed' being coded 28 times and 'depressed' being coded 21 times opposed to the 'healthy' being 9 times. A frequency table for the five most used codes is shown in Table 3.

Due to emotional distress and being depressed, even optimistic people feel like they lose control over their emotions. Social distancing and the consequential loneliness have a huge impact on the mental health state. Many participants say that they are desperate for a change, for seeing other people. One participant said that "you can also be lonely without being alone" (Participant 11), indicating that the contacts during the pandemic are not enough.

**Table 3.**

*Frequency of codes applied in atlas.ti*

Number	Code	Frequency
4.1	Helpful (gamification element)	101
1.1	Positive (sentiment)	84
1.4	Ambiguous	82
1.3	Negative (sentiment)	48
6.1	High (motivation)	47

The overall sentiment throughout the interviews was mostly positive when talking about apps and gaming, followed by a high amount of ambiguous remarks. An alternative way of therapy is perceived as helpful in this situation of the pandemic. In 53 sequences of the transcripts, 'helpful' was coded together with 'positive'. An app or a game can solve the problem of too less therapists; it can be used at all times and by many users simultaneously. An online alternative could also be of help to bridge the time that a patient spends being on a waiting list. This becomes clear in a sentence from participant 3. The participant says that the worst thing is "that they often cannot even tell you how long your perseverance on a waiting list will be". Further, patients are reluctant to look for help at a practitioner's office. As one participant put it, "I think that admitting to yourself that you need help or that you want help is a big step." (Participant 5), therefore having the option to use an app and stay anonymous can be a huge advantage. In the same sense, Participant 2 noted that an app takes the burden when "daring to ask for help".

The general motivation to use an app was very high among participants. As indicated by the social cognitive theory, the expectation of an improvement of the participants' medical state motivates them to use an app or play a game. As gamification tries to change the users' perception and behaviour, the effect of the application of such elements will be very high. Figure 2 illustrates the social cognitive theory model. The graphic has been used by Munro et al. in their article (p.8) and has been altered to apply to the case of app usage for mental health purposes. The different boxes show how motivation to improve the mental health status influences the willingness to use the app.

A high motivation was coded 47 times in the interviews, with a low motivation receiving only 12 codes. Even people who say that they are less interested in gaming imagine an app as therapy to be helpful and engaging. Motivation to use was equally high among students and working adults. Participants who are interested in gaming in general have a very high motivation to try out another game, but people who have no interest in gaming at all can imagine to use an app to help with their mental health. Accomplishments within the game are expected to be transferred to feeling better or more capable in real life afterwards.

With regard to the gamification elements, they were evaluated as being engaging on the one hand, but also potentially causing stress and leading to disappointment on the other hand. Participants were mostly undecided about their intention to use the app if they perceived the consequences as unpredictable.

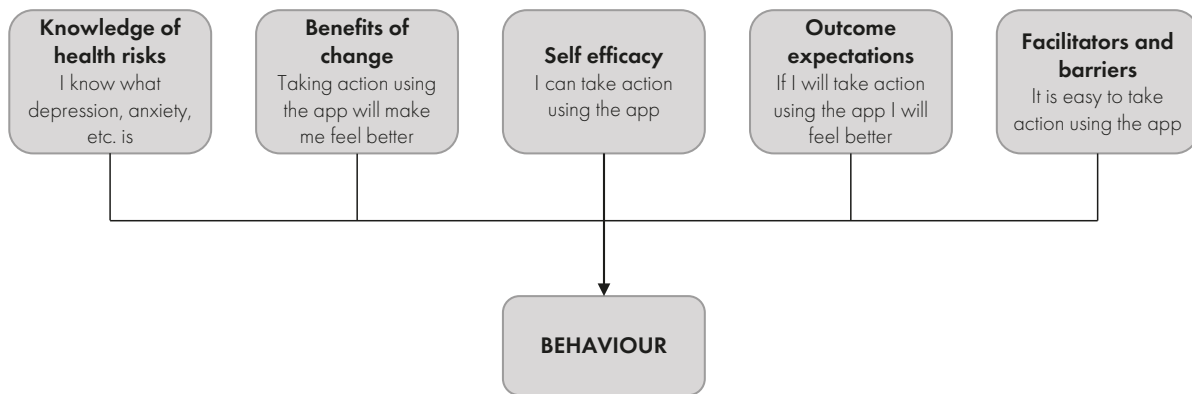


Figure 2. Social cognitive theory in the context of app usage for mental health purposes

#### 4.1 Personalisation

The motivation to use such an app or a game was the highest when having the option for having an avatar. Personalisation is expected to increase the engagement with the app. “It does help you calm your thoughts and kind of reflect upon your day”, participant 1 stated. For this element it was also discussed if participants would prefer to see the game through the lens of the character or from the bird’s perspective. About half of the participants would like to see the game as the character itself and face the upcoming problems directly. What is happening is the immediate result of what the user has done. The other participants who preferred the bird’s perspective indicated that in this way it would be easier to distance from their problems. Seven out of twelve participants thought it might be the best to have the option to select when opening the game.

Participants also expressed wishes about the avatar being an animal or a fictional character. Opinions on this and its effectiveness differed largely. Therefore, similar to the matter with the avatar, this should only be an option to choose from when opening the app or the game. For some participants, it is easier to see someone portraying them and therefore handling their problems for them, for others the confrontation is a relevant aspect they think a patient should not miss.

#### 4.2 Points and rewards

The gamification element of points and rewards was evaluated to increase the risk of becoming addicted the most. One participant also expected that people might not become addicted to the game itself but to the feeling of being more relaxed within the game environment. Thereupon, participants feel that a game is more engaging than an app in general. Still, the motivation to use an app was the lowest among participants in relation to the element of points and rewards. As one participant put it, the joy about gaining points can

be very high but the disappointment about not receiving a reward may be even larger and thus reduce the pleasure. These typical game elements cannot be used the same way they are originally created for. An environment that is too game-like poses risk for people trying to improve their mental health. A gamer plays to gain points; a patient should play to get a distraction or a relief.

If a reward system is included, a supervision by a real therapist is advised because the aim should be to learn that specific steps are not taken to reach the same number of points as the day before. An important notion regarding this this topic was made by the gaming expert Dr. Ruud Jacobs. He says that mental well-being is a subjective topic and the health statuses cannot be compared. With regard to collaboration, it is impossible to argue that one person's mental health is better than the other person's. The effort to get the same kind of reward also needs to increase. Like in a regular therapy, the patient needs to work on themselves stepwise. In the beginning it may be a huge step for a depressed person to get out of bed, over time getting showered and having breakfast have to become components of a regular morning.

### **4.3 Collaboration and challenge**

For this element the two parts, collaboration and challenge, have to be discussed separately. Collaboration was perceived positively and compared to group therapy. An important notion made by three participants is that they wish to know the people they are collaborating with. The app could either give the option to enter as a group or an algorithm can introduce users with similar problems to each other. The understanding of collaboration also differed among participants. For some, collaboration means to work on the same task together, others imagined to work on their activities individually and only communicate with others for emotional support.

While collaboration was mainly evaluated positively and sometimes ambiguously, challenge was mostly perceived negatively. Nevertheless, here a distinction has to be made as well. A challenge with other people which leads to a competition was evaluated as counterproductive while a personal challenge for the patient was rather welcomed by the participants. This element could therefore also include an option to select. Collaboration is not automatically equal to challenge. Patients have the option to work together to reach the same goal while supporting each other and sharing thoughts and problems.

### **4.4 Storytelling**

Storytelling also evoked high amounts of motivation. Participants imagined the element to be incorporated in a way that the user can engage in a dream travel or to support the escape

into an alternative life. One participant gave the example of a game called "Second Life". This game gives the user the opportunity to build up their own environment. If a person wants to be at the beach, they can go to a beach within the game. The participant explained that "the bottom line of the game is, that it does everything you want" (Participant 11). The two elements of personalisation and storytelling are expected to work well when combined. Storytelling can be compared with a dream travel or a thought experiment in a regular therapy session at a psychologists' office. The original thought experiment can even be deepened or supported by the app. However, the game world must not lose the connection to reality. Participant 9 fears that "if you just always 'flee' into this parallel world, that certainly is not going to help a lot". Hence, sequences within the game or the app should be limited in time.

#### **4.5 Risks**

Besides all the advantages, apps and games can also pose several risks. The most mentioned negative consequence is the risk of becoming addicted. An important note from one participant is that the escape from reality must not become permanent. "It shouldn't be a distraction of life; it should distract you from your problems to some extent" (Participant 8). The code 'risky' was most often used for sequences which dealt with the risk of becoming addicted. It was also frequently used in relation to disappointment and frustration, may it be due to losing points or not reaching an anticipated goal. One participant feared that getting caught up in the app could generate a new kind of stress. Participant 8 commented: "I wouldn't like to be distracted from my problems for too long because that would stress me out even more afterwards." Nevertheless, the advantages are expected to outweigh the risks. The prospective users of a medical app trust the developers to evaluate the consequences. In this regard, it is also wished by participants that the application is created and supervised by humans. Therapists and psychologists should analyse the effectiveness and "if the app does not yet exist, it would be good if people who have problems themselves are involved in the development" (Participant 3).

#### **4.6 Other relevant features**

The participants mentioned some other concerns relating to the usability of the application as well. For elderly people it might be a hurdle to learn how to use the application. Moreover, a software can always be tricked, meaning that either the developer can make a mistake or the user can lie about his or her emotional well-being. In contrast to a psychologist, the app cannot detect the sentiment and body language and through this sense the true feeling of the patient. The factor of honest interaction with another person will get lost when only using the app

without combining it with regular therapy.

Additionally, patients who are desperate for help do not want an online solution. One participant mentioned: "We shouldn't say that the digital solution can replace the human touch!" (Participant 5). However, one participant who did not have any motivation to use the app themselves could imagine that it can be of help for someone else. Some participants also expressed some desires of elements to be included in an app or a game. Such desires include options for selection when opening the app. An example is to have the option to choose between a single-player and a group mode.

Another element important to the participants of this study is a limitation in time. This limitation is concerning the duration of the whole therapy as well as the length of a single session. While the constant availability of the app is a main strength, access must be limited to prevent complete withdrawal from reality. To end a session within the app or the game after one hour guides the patient back to reality. As one participant argues: "If my time in the app is limited, it is like a real therapy where I also have a limited amount of time." (Participant 12). The same participant also suggests to limit the period of time the patient can have access to the app or game. Like in a regular therapy, the patients will have to learn to deal with their problems differently and be able to live without further help. The app should not give permanent access but adopt some characteristics of a common therapy situation.

## **5. Discussion**

This thesis investigated the effectiveness of using apps or online games to improve mental health problems. For this research, twelve interviews with people with mental health issues and two conversations with experts from a gaming environment were held to answer the research question, "To what extent can gamification be considered an effective therapeutic tool?". Different gamification elements were discussed and motivation to use those was evaluated. Participants expressed many positive remarks and gave a lot of insightful input. The research discovered that gamification elements are able to increase willingness to use. On the other hand, negative consequences were brought up and risks were discussed. Storytelling and personalisation are perceived as the most effective gamification elements, while points and rewards pose a risk of becoming addicted and collaboration and challenge might lead to disappointment with the users of the programme. It was not clearly mentioned by the participants if there is a preference for an app or an online game to play on the computer. Additionally, there was no particular difference in motivation between students and employees, although it seems that the younger people may have larger problems due to social distancing.

### **5.1 Theoretical implications and discussion of findings**

This study's findings partly overlap with results from previous experiments. As written in an article by Mekler, Brühlmann, Opwis and Tuch (2013), elements like points and rewards are proven to enhance specific user behaviours. Gamers who participated in this study confirmed that they become more engaged and captivated in case a reward system is included. This research also confirmed an experiment by Mazarakis and Bräuer (2017) that storytelling is an effective gamification element when it comes to motivation. Participants in this research expressed that their motivation to use an app would decrease if a point system would compare them to others and the game would turn into a competition. This finding is in line with an experiment from Chan, Nah, Liu and Lu (2018), where the researchers found out that intrinsic motivation is lower when a point system and a leaderboard is included. Further, Chan et al. (2018) state that a point system has a negative effect on learning. This translates to participants' expectations of experiencing negative emotions when comparing themselves based on a point system.

Relating to the social cognitive theory, participants' motivation to use an app in this research shows that there is a willingness to change behaviour as well. Integrating gamification elements in fitness apps to increase motivation has already become popular and is proven to be effective (Lister et al., 2014). Hence, this finding is an important aspect to take

into account when programming and developing such an app for mental health purposes.

## **5.2 Practical implications**

To be able to bring such an app or a therapeutic game to the market, the feasibility should be discussed with a developer. The possibilities for programming such a system need to be evaluated in cooperation with a software designer. Additionally, the financing of the development must be assured. Likewise, the availability of the app has to be guaranteed. To be accessible for everyone, the system must run for Windows, Android, as well as IOS. Further, the patients in need of such an application need to be informed about the existence of the programme. Since many patients do not want to talk to a doctor or will not even be given an appointment, the health insurance companies could act as a mediator.

Moreover, it should not be forgotten that there are some real life exercises like taking a walk or being outside that cannot be replaced by an app. In this regard, the programme should act as a motivator to encourage the user to do a physical activity. As it was also continuously mentioned by the participants, the programme needs to include some kind of time limit, may it be a natural fade out or a warning about the usage time. A very relevant implication is that the app or game is there to help and must not cause any new problems like addiction. Therefore, it is inevitable to cooperate with medical staff or the design of the programme.

Based on the participants' remarks it seems wise to restrict the usage time of the application. This will lower the risk of escaping for too long. Then again, this will also decrease the availability of the digital help and the app will lose a huge advantage it has over regular therapy. Therefore, it may be an option to make more than one session per day available to the user but limit the time spent per session. Predominantly, the purpose of the app or game is to give the patient a way to escape from their problems and dive into a world free from anxiety and stress. The amount of time needed and the way the patient uses the app cannot be predetermined by the developer of the programme. The personal preferences and the severity of the problems of the user are very subjective and best discussed with a practitioner. In this regard, it is advised to include a disclaimer about possible consequences when starting the app or the game for the first time. Since the participants did not clearly indicate whether they would prefer an app or a game for the computer, the programme should be made available with both of the two options, a gamified programme to download for the computer and the smartphone.

### **5.3 Limitations and further research**

It is important to note that this research is mainly based on participants' opinions. The statements are neither scientifically proven nor medically evaluated. The whole topic is very subjective and answers were based on preferences. Hence, there will not be a fit-for-all solution. Moreover, some participants could not give a clear answer to each question. They indicated their preference but could imagine that other people would have another opinion on the topic. Furthermore, the results need to be discussed with psychologists and therapists. For further research, medical staff should be invited to collaborate. In another step, a prototype of the programme should be tested with the supervision of psychologists and therapists.

It has to be mentioned that one recording could not be used completely. The audio was of bad quality due to wind and was therefore not transcribed and coded. Nevertheless, the researcher had enough memory of the conversation and notes were also taken during the interview. Therefore, the results still consist out of answers from all twelve participants.

Another restriction for the research was the Covid-19 pandemic and the regulations regarding social distancing. The majority of the interviews could not be conducted face-to-face. The atmosphere during the conversation was not as relaxed as it would have been under normal conditions. Further, the section shown in the video calls only covers the participants' head. Facial expressions were caught but body language was missing. Additionally, the sample size was limited, as it critical to approach people based on their mental health status.

If possible, the research should be extended with more participants and carried out under regular conditions. A further extension to the research can be prototype of the programme that is now being tested by participants. In this way, theoretical ideas will be proven or rebutted in the implementation.

### **5.4 Conclusion**

In this study, the main research question "To what extend can gamification be considered an effective therapeutic tool?" was answered with the support of two sub-questions. This research has confirmed many pre-existing studies but also contributes with some new findings. A special strength of this study is that patients themselves were interviewed and the sample was not random. The impression given by the participants resemble the desires and expectation of prospective users.

Storytelling and personalisation are very helpful to include. Collaboration should be an option but no need. The developers should be careful with including points and rewards. It is better to give some positive feedback and send the user some motivating messages than giving points. The programme should be available in the form of an app and as a game, so

that the user can decide whether to play it on a stationary device or to take it with them on their smartphone. Additionally, a way to finance the project needs to be found. The whole development process should be supervised by medical experts and the programme needs to be made available for the large amount of patients.

To conclude, gamification is perceived as being helpful to include for therapeutic purposes. There is a willingness among participants to use such an app or play such a game. There is obviously a need for an alternative way of therapy and patients would also welcome a digital solution. The incorporation of gamification is considered very valuable in this regard.

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## Appendix A – Informed consent

Dear participant,

Thank you very much for taking part in this study. The interview will take place online via Skype or phone call. For very few interviews, the circumstances will allow for it to be in person. The time and day will be arranged so it is comfortable for you and for the researcher.

The conversation will take approximately 30 to 45 minutes of your time. You were chosen as you are (or have been) dealing with some personal and mental stress. I am interested in your experiences and feelings and wishes you might have to change your situation. I would like to know if you are playing or have played video games in the past and if you are familiar with gamification. Further, I would like to know if you could image games or an app as a form of therapy. You can withdraw from this study at any time. You can end the interview prematurely and you can also demand to have your information deleted after you have completed the interview. Know that there are no right or wrong answers in this interview, I am interested in you as a person.

Please be aware that I do not expect you to disclose any information you feel uncomfortable with. This study has been approved by the ethical committee of the university. To be able to better analyse the interview, it will be voice or video recorded. I assure you that this material will be deleted when it is not used anymore and will only be shared with direct supervisors. Do you consent to being video recorded? Furthermore, do you consent to your quotes of this interview being used in a research report?

## Appendix B – Interview questions

- Do you often feel overwhelmed by your feelings? (Does it have to do with the lockdown? Did it become worse due to the pandemic?)
- Do you often feel alone and wish someone or something could help you?
- Do you sometimes wish you could 'flee' your life and escape to another world for awhile?
- Could you imagine to use an app/ play a game in situations where you are overwhelmed?
- Could you imagine an app or a game to be a therapeutic tool?
- Do you think it is easier/ less of a burden to use an app or a game than to actively ask a doctor or therapist for help?
- Are you interested in gaming at all? Do you think gaming is engaging?
- Do you know what gamification is? (Explain if they don't know) What do you imagine it to be?
- An app is available at all times opposed to an appointment you have to make with your therapist. Is that an advantage or is there a risk of overusing the app?
- What kind of gamification elements would you consider as most effective or helpful? (Give examples and ask for evaluation)
  - o Personalisation
  - o Points and rewards
  - o Collaboration and challenge
  - o Storytelling
- Would you prefer to see the game through a lens, so that you can experience everything yourself OR would you like to see it from the bird's perspective, so that you can portray your problems to another character?
- Would you like to have some options to choose from? (ego-perspective vs. bird's eye view; single player mode vs. group mode)
- Do you think an app or a game could pose a risk of becoming addicted?
- What are things that help you when you feel down? Is there a special location you feel better at? (sitting at a lake, walking through the forest, etc.)
- Could this activity take place in a game? Can this place be shown to you in a game?
- Would you prefer the environment in the app to be very natural or would you like it to be a fantasy world?
- Are there any additional elements that did not mention, where you think they would add more value to the programme?

## Appendix C – Transcripts

### Transcript Interview 1

*Interviewer:* Great, it is recording now, so first thing, do you agree to be recorded?

*Participant:* Yes.

*Interviewer:* OK, great. So, then you know my topic of course, this is about apps and online games to support you with mental health and for the treatment of such mental health issues. And the question is, if apps or a game could be a support for therapy or could even be like a whole therapy on its own. So, first I have a few questions that are about psychological stuff. And then the next part of questions is about gaming. So the first question is, do you often feel overwhelmed by your feelings? With the emphasis on often because obviously everyone is overwhelmed at times.

*Participant:* Well, I mean, it's gotten better over the years. Like in the past, it has been worse, but I mean, right now with the thesis, yes, I do feel overwhelmed more often. And then, I mean, it's mostly stress and then just... I just ...My head is really busy with all kinds of thoughts about whether I can do it and yeah, just part perfectionism, part fear of failure, and then combined with the stress, it's sometimes overwhelming in the sense that when the falls sometimes tend to take over and then... Yeah, it's just a bit hard to get anything done at that point.

*Interviewer:* Does the pandemic have an impact on it so that you have less contact and less structure in your life?

*Participant:* Yeah, it's I mean, it's definitely been a challenge. I mean, last year was worse because it happened very suddenly and, yeah, it was kind of like finding a way to, you know, keep going, keep studying, finding a structure. Especially because I was living with my parents at the time because everything was so new and now I mean, it's gotten a bit better because until September, I just lived on my own in Enschede and then it was just a bit easier. But then in September, when it started again, I was living on my own so I could just build up my own routine. But then I also still had to minors going on. So, there was the structure of lectures and working together in a project group. And right now it's really this last phase of doing everything on your own. And then it just tends to get harder because you don't have the structure of lectures and the deadlines are just like, I mean, they're getting closer, but they're still like, there are no in-between deadlines. So, it's also just trying to make your own deadlines and trying to stick to them. But it has become more difficult. So, yeah, and then, of course, contacts are, well, I mean, not a lot. I do have dance lessons again, so that helps a little bit. But still, you really need to, like in those contact moments, you know, stick to the rules and it's not without risk. So, for example, last week we got an email like one of the dancers from Salsa got infected. So, you know watch your own health and et cetera, et cetera. And luckily, I remembered that lesson quite well still. So I knew, like, yeah, my partner and I really kept our distance from the rest of the group. So the risk is not that high. But I've had it before where we got such an email and I was like, yeah, well shit, I kind of

stood relatively close to that person, so I should probably get tested just in case. So, yeah, also, like on the one hand, it's nice to have social contact again, on the other hand, it also brings some stress with it when you then need to get tested because there is a risk of having Covid.

*Interviewer:* And do you often feel alone or do you wish that something or someone would help you?

*Participant:* I mean, alone, yes, a little bit, because, I mean, of course, during the week, I'm also living on my own. So, yeah, it kind of depends how many contacts I have. I mean, of course, I do have some meetings during the week and talking with friends as well every morning if possible. So that's nice. But, for example, if dance lesson gets canceled or my friend who lives a few doors down from me is busy or something else, then yeah, the contacts I have are, well, not a lot during the week, during the weekend I am with my parents, so that's nice to just, you know, do some stuff together, just take walks, etc. But during the week, it can get a bit lonely and then, especially if I'm just getting stressed or having a lot of thoughts about, like failure or not doing good enough, then I know I just noticed that it's kind of hard to be on your own because normally when you're living together with someone, you can basically just kind of go up to them and talk about it immediately. And during the week now, it's basically like in the evening that I sometimes then call my mom like, hey, how was your day? How was my day? And talk about it a little bit. But yeah, I mean, you can only do that in the evening and then it's not like you can then still do a lot for the study or something. So you're kind of just stuck with your thoughts the whole day. And it kind of depends on sometimes I'm more aware of it than other times. And even then it's still hard to get out of it, out of that thought process and just do something.

*Interviewer:* And if you are experiencing such moments or if you then feel alone or overwhelmed, do you then wish that you could kind of 'flee' your world and escape to another world?

*Participant:* I mean, I do sometimes have this, yeah, that I kind of avoid studying or procrastinate a little bit. But then, yeah, it's a little bit like trying to escape by watching YouTube videos or reading something, but at the same time this stressful feeling is still there. So, it's not really relaxing either. Like it's not like I make a conscious decision, like, OK, but I'm studying for now, I'm now going to relax a little bit, it's really like, OK, studying is just not really going well and then just wanting to avoid doing that or realizing, like, OK, it's just not happening right now. And then just trying to escape those thoughts by doing something else.

*Interviewer:* You already mentioned that you then watch YouTube videos or read. Do you think an app or a game could support you, could help you, kind of be a therapy for you?

*Participant:* That's difficult because there are so many apps out there, what I do know is this one I have this one forest app which basically lets you grow trees or plants, etc. The longer you kind of, well, you set a timer and then during the time you can't use your phone. So it kind of encourages you or forces you to stop using your phone and study. And it has this nice function where you can have like rainforest sounds, but I haven't used it in quite some time,

so. Yeah, but then it's also... You need to have the motivation to use it, to really commit to it, and then, of course, I still have my laptop and on my laptop, there are plenty of ways to also distract myself. But, yeah, that could help and... I'm not sure what else, because if you really need to do something, then... using an app, unless it's directly study related or helps you with studying, it can also be counted as a distraction, I guess.

*Interviewer:* Yeah, exactly. And what do you think about a meditation app?

*Participant:* I mean, I've used one before and I mean, it's nice as well, and it does help you calm your thoughts and kind of reflect upon your day, like I used to do it a lot in the evenings, but at the same time, it's also hard to keep doing it and to really commit to, I don't know, doing at least one meditation exercise each day. So, I mean, it could help. But then once again, it also feels a bit contradictory that you first need to spend time on this motivation app when you're busy with something like a thesis. So that's... And of course, I mean, if you're not able to do anything or if it's not really going well, then of course it's better to just do five minutes of meditating or ten, but it still feels... maybe not as the most logical choice you would make in the moment, and especially I'm kind of a person that's... I'm not that willing to just easily give up or to acknowledge to myself that something is not working or not going well. So in that sense, I do think I would rather keep struggling, then acknowledge, like, OK, it's not going well, just use this app for five or ten minutes to meditate, to calm your thoughts and then try again. So, I also do think it has to do a bit with your mindset and, yeah, whether you feel like the app is useful in the moment, and maybe that's also just trial and error and just trying for yourself some time, just be like, yeah, OK, even though I feel like it's a waste of time, just try to use it for five minutes. And do that like, I don't know, at least three times or something, and then just see what your experience is, but. Yeah, it's a time issue, definitely.

*Interviewer:* And for someone who needs therapy, someone who knows that they need support, do you think it is easier or less of a burden to open an app or game than to actively go to therapy, make an appointment with the doctor?

*Participant:* Well, I mean, I basically schedule my next appointment at the end of each appointment, so that's not a lot of work. And to be honest, after each appointment, the thought process of what we talked about during therapy is still ongoing. And even during the week when I notice that something's not going well or especially like one or two days before my next therapy appointment, I tend to be very self-reflective anyway, so that I really like what am I going to talk about with my therapist, what issues are going on? And also when something's really like, well, a struggle for me, then it's also sometimes said I just in my head, try to think about like, OK, something is going on. Imagine I would have a therapy appointment right now. What would I tell my therapist? And logically, what would his answer be? Because a lot of the times he just asks me like probing questions and lets me find my own solutions. So in that sense, it's also very easy to just think about it myself, kind of feel like, OK, I'm telling this, what kind of question is he going to ask me? And then what would my answer be? So, that sometimes helps to just, yeah, be a bit more reflective on what's going on and, yeah, I'm not sure if that would then require opening an app. But maybe in that sense, I just thought about this. Maybe it would then help in my specific case,

if I would have an app that I could open, for example, every morning or every evening, and that would just help me reflect because now I just reflect right before an appointment or when something's really not going well. So maybe in that sense it would help if I would have an app where I can just maybe not even write stuff down, but just record my own voice or even just seeing the questions and thinking about it in my head and then just to reflect each day, like, OK, what went well, what went not so great, but also to then shift this focus from everything that went wrong in my opinion, to what did go well, you know, so what did I accomplish in a day? And then to set realistic expectations for what I can do at the next day.

*Interviewer:* If you wouldn't be in therapy already, if you would only think about going to therapy, and then you would have to find a therapist and make the first ever appointment, would it, in that, case be easier to use the app than to call a therapy office?

*Participant:* I do think it would be, like the threshold would be lower, because it's kind of like a big deal to acknowledge that you need therapy and yeah, especially in the health care system, you then need to get like reference to it. So you first need to go to your general practitioner and then get a reference to, like, OK, you can go to therapy. And then of course, there are a lot of long waiting lists as well. On the other hand, there are so many apps, the same with like there are so many self-care books and even just Instagram accounts with like self-care tips, et cetera, et cetera. And it's just, I do think it would be hard to find the thing that would be suitable for you. So in that sense, it also would be... the stress would also still be quite high, maybe not as high as scheduling an appointment or getting a therapist, but still. You have then maybe an app that just does this or for general diagnosis or at least that you... Somewhere where you can find information of what the possibilities are and what could maybe suit you to just get like a narrowed down list of apps that would suit what you're going through at the moment would help. But I do think that right now, that is it's just hard to find some things, and it's also not always like that, sometimes by chance you discover that you can use a certain app for free or that a certain resource exists. But I don't think there's a clear overview of everything that's possible. Or I don't even know if there's like a certain section in the play store or in the App Store that shows you which mental health apps there all are. I mean, you would look for mental health, but then maybe not everything connected to mental health has 'mental health' in their title or description.

*Interviewer:* OK, so now we're going more into gaming with the questions. Are you interested in gaming at all or do you think games are engaging?

*Participant:* I do like them. But then especially the ones that you can do together with other people. Maybe also because of the pandemic, but now, for example, Among Us is kind of funny sometimes to do, and then, for example, my sister got a Nintendo switch and then we sometimes play like Monopoly or something on it together. So that's nice as well. But yeah, I don't tend to game quite a lot. It's like sometimes. It's more like my go to thing is just like watching YouTube videos or that sort of thing. But it's not like, oh yeah, let's game because I'm not feeling well.

*Interviewer:* Ok. Do you know what gamification is?

*Participant:* Honestly, I know we had a module about it, but I don't have the exact definition in my head.

*Interviewer:* OK, so very simply put, gamification is having game playing elements in another situation, in another type of activity. So, for example, if the app would be a meditation app, then there would be some game like elements in there.

*Participant:* So it's like getting points or...

*Interviewer:* Exactly, yeah. So the next question.....OK, so then there are some gamification elements that I will tell you about, but first, we will talk about it a bit about the app stuff again. So, an app that you would use, for example, the meditation app is available at all times as opposed to an appointment, for example, that you would have to make with your therapist that will be only once a week then. Do you think that is an advantage or would there be a risk of overusing the app?

*Participant:* I mean, for meditating or a meditation app, I don't think you can necessarily overuse it. It's more like, honestly, I don't expect someone to meditate 24/7. So, yeah, it's probably that you're going to use it based on how much you need it. And then, I mean, in the beginning, it can be that you kind of need to find a routine or like how many minutes of meditating you need that works best for you and at which time you do it. Like, do you start your day with meditating? Or do you end your day with meditating? Or maybe both or maybe even in between? So yeah, but I don't think overuse would be an issue here.

*Interviewer:* if there would be such elements that you could actually 'flee' your world, that you are going into another environment where you feel very safe, where you forget about your problems with the risk be higher?

*Participant:* I mean, it could be if you, for example, have a meditation that's just like, you know, the ones where they have you lay down and pretend that you're in a boat on a lake and then hear all the noises around you. I can imagine that that would be something that maybe you would then do a bit more often to just find some inner peace and relax a little bit. But those are then also, like in general, meditation exercises where you need to lay down, especially if they last a bit longer. For me, those are also the exercises where I tend to fall asleep. So. Yeah, in that sense, if you really want to escape everything, it kind of depends on your mental state as well. But yeah, I can imagine that people would use it more often. But then on the other hand, there's always this point where you need to face reality or at least get up to go to the bathroom or eat or drink something. So, it's always going to come back anyway. Yeah, maybe people will do it at the beginning, but then after a while, they also know that if they do something for too long, that then getting out of it, the stress will get higher because they just spend like two hours doing nothing. That's .... I do think the chance would be a bit higher.

*Interviewer:* I will tell you a few examples of gamification elements. For example, there is personalization. So you would become a character then. Either it is yourself or you could also have an avatar, for example, or you could be an animal or something so that the character is then you and either you have to do some tasks or you make the character do

the tasks. Then you can also collect points. That's what you've already mentioned yourself. So you could, for example, get rewards in the end, or, for example, you have succeeded a task very well. And if you then have an animal, the animal gets a lot of food or gets a new toy, something like that. Then, if you collaborate with others, for example, if you play in a group, that could also be a challenge, for example, that you game against another person and you could be the winner or the other person can be the winner or something like that. And there's also storytelling. That's mostly and then in combination with being a character so that it's another word, for example, like I mean, of course, if you are an animal, the word of an animal is different than your own world. Which one of these elements do you think would be most effective? And do you think that some of them maybe don't make sense at all?

*Participant:* I think for personalization, that will probably make sense that you feel more connected to at least what you need to do in the app because there's someone or a figure or an animal representing you. And in a sense, I don't know, it might even be used for looking at yourself from a third person perspective, so that you don't take your whole situation very personal, but that you have the ability to kind of take a step back, look at it from a third person perspective, and maybe also get new insights as to what you can do or even just about the situation itself. Whereas when you're in it, it might feel really bad and really stressful. But when you take a step back, you can look at it and just be like, OK, but if I do these two or three small things, then I already don't feel stressed about it anymore. Or it might not even be as bad, but just feel bad. Then for two points, I mean, it probably makes sense that with points you are able to keep someone committed to using the app or doing it on a more frequent basis. So I do think that would be useful. Then, yeah, collaborating, of course. I mean, in a sense, if you're doing something together with someone else, especially if, for instance, it would be like a family member or friend also using the app, then I would also feel like I would also feel more committed because you're doing something together. So on one hand, you know, you're not alone. On the other hand, even if you're having a bad day, you would still have a higher chance of using the app and committing to the goal because you don't want to disappoint the other person. So that's, I think, also helpful. And then what was the last one?

*Interviewer:* Storytelling was the one.

*Participant:* OK, storytelling yeah. So, I'm having a hard time imagining what that would look like. Um. Yeah, maybe that would then really make it even less personal, because it's like someone is telling a story about your character. So yeah. But I mean, I'm not sure if it's if something like this exists, but, for example, if you use an app and let's say in the beginning, you fill in like on a Likert scale how stressed you are or how you're feeling. And then based on that, it shows a story of, I don't know, you, your character as an animal in the forest or something. And then there are certain representations of like how stressed you're feeling or to kind of go through a story of like, OK, the trees or the forest looks really big and dark, but then I don't know, maybe the animal goes into the forest and discovers all kinds of like flowers or new friends or something like that. So that the app in that sense through storytelling can reassure you that even though something looks really scary and big and dark, it can still give you positive things or have like positive aspects to it. But then again, I'm

not sure if that would make sense because every person's story is so unique and so personal, I'm not sure if an app could generalize that. So in that sense, it probably makes more sense to have a therapy appointment where just one on one the therapist can reassure you and help you further along.

*Interviewer:* So you've already said that personalization would make sense, and you've also said that there's a difference if you are the character or if you would, for example, be an animal. Would you prefer to see the game through a lens so that you can experience everything from your own view? Or would you like to see it from the bird's perspective so that you can portray your problems to another character? So maybe you would also distance yourself from your own problems then more?

*Participant:* Well, yeah, I think the bird's eye perspective. Because, to be honest, you already see everything through your own lens the whole day. So in that sense, I do think it would be nice to have an app where you can have a bird's eye perspective and just, yeah, project your problems and thoughts onto an avatar or an animal, whatever it may be, so that you also then have the opportunity to reflect. Because as I said before, reflection is kind of a big thing that does help me. So, yeah, I do think that that would help. Just a bird's eye perspective to really take a step back from it and look at your own thoughts and situation from another perspective.

*Interviewer:* So you could also distance yourself more from your own problems, someone else could deal with the stress that you would normally have to deal with?

*Participant:* Yeah, and I also feel with your own problems, sometimes problems can seem very big or you make them very big, whereas when you then take a step back and look at it, then a problem that you might have is just like maybe not even a problem. Like, for example, when I live on my own, it's always every evening, of course, I still need to do the dishes or I noticed that, oh well, I still need to vacuum my studio or that kind of stuff. And then depending on my day, it sometimes takes a bit longer to get motivated, to get up and do that. And sometimes when I'm really struggling with that or just not really feeling up to it, then it sometimes helps. Like I've had that a few times where I didn't just reflect. And I'm like, yeah, but who's telling me I need to do the dishes today? Like, I can also do it tomorrow. And then in that reflection, I kind of weigh the importance of like, OK, what does it like... Should I do today? Shall I do it tonight or should I do it the next morning? And then sometimes like, no, I have enough energy right now to do it. So then tomorrow morning everything is clean. I have a clean start. But sometimes I'm like, yeah, I just can't be bothered today. So I'll just plan in some time for it the next day. Or even with just feeling like I need to vacuum my studio or something, where I'm then sometimes like, yeah, but who said I need to use the vacuum? Like I can just also grab a broom or something and get everything together and just put it in the bin and then I mean it's not as thorough, but the few things laying on the floor that were bothering me are gone. So that's just enough for then. And these are just very basic household chores examples. But, if such a thing is kind of like becoming a problem for you or a big thing, then yeah, it sometimes helps to just take a step back and really be like, OK, but first of all, is it even a problem? But also how big of a problem is it really? What would it take for me to solve it or to get rid of said problem?

*Interviewer:* If then in the game or the app, you could kind of let go of your problems and your avatar is dealing with your stuff and you think, oh, well, this character has such a better life than me, I really appreciate being with the character; do you think then there could be a risk of being addicted or maybe forgetting about time and escaping into the world for too long?

*Participant:* I mean, addicted... Well, I mean, I guess the goal for mental health app is that you do use it on a frequent basis. So, yeah, if that's also connected to addiction, then. I mean, yeah, you're going to use it on a more frequent basis, especially if it works for you. And when it comes to escaping... Honestly, I do feel like I would need to be very realistic to completely escape in it, that it would almost need to be like some kind of VR contraption to really escape into another world. And that's just not possible. Not everyone has that, and at least not in the sense that you have a VR set that really makes you feel and immerse yourself into another world. Yeah. When it comes to escaping into the game... I mean, yeah, of course, there is a chance, but then I also see opportunities for the app to have some kind of mechanism where someone can only use the app for so many minutes or like maximum one hour, like in just one setting, and that then the person needs to wait at least one or two hours before he or she can use the app again. So, yeah, I do think, yeah, there is a risk. But then again, you can also build something in the app to contradict or solve that risk. And in that sense, I mean, it could even be that you then have it like, OK, say a user can only use the app for one hour, then it might even be that you kind of like... The app ends the session. Like the last five minutes of using that app, that there may be certain things built in to encourage the user to get started on work or study stuff or to at least solve one of the problems they're dealing with at the moment, to be like in the last five or ten minutes, to have to use or pick one of your problems, be it an easy one or a bit of a bigger one, and then just have to think about like, OK, which are the first three steps I can now take to solve or combat or deal with the problem and in some cases might just be a very small thing. And then the problem is gone. But it might also be something that's like it's just taking a step into the right direction. So. Yeah, I do think there are lots of possibilities there to just give the user a certain amount of time, maybe one hour is too big of a time frame then, but maybe just 30 minutes to just escape a little bit while also kind of building up the support towards the end as to like, OK, you can do this. Now you're ready to deal with whatever you need to deal with during your day. And then that they can check in after three hours or something.

*Interviewer:* Yes, good idea. So the next question is a bit more personal, bit more about elements that you would personally prefer. So what are things that help you when you feel down? Is there a special location or a special activity where you feel better when doing it or when you are at the location, for example, is there something like sitting at a lake or walking through the forest that helps you personally?

*Participant:* I mean, in general, especially right now during the pandemic, it just helps to reflect, but also to just talk about my problems. So in that sense, sometimes it just really needs to be personal contacts or really talking with someone who knows me like family or friends and then just really getting personalized responses back. So I don't think an app could necessarily replace that. But when something like that is not possible, then just a self-reflective or self-evaluative aspect of taking a step back to bird's eye perspective and then

thinking about your problems. And then when it comes to location, do you mean the location, like in the app then? Yeah. So then I do feel like it would help to have some kind of representation of what's going on. So, for example, that you, if your avatar would be an animal, for example, that you would then have this representation of... I'm immediately thinking of Hogwarts as a Harry Potter fan, but if you, for example, would have the choice to either go to the Black Lake or go to the Forbidden Forest with the lake kind of being more of like being able to escape and finding a bit more like peace and rest for yourself and the forbidden forest kind of like the representation of the problems and the issues that you're dealing with at the moment. So that you can then choose to first go to the lake to find some rest and maybe meditate a bit. But that you can also say like that sometimes you used to app and you're like, no, I just immediately need help to get some encouragement and some reflection on the problems that I'm dealing with. So you immediately walk towards the forest to get that kind of help. And then, of course, in the app, it would only make sense that your Avatar animal always ends up in the forest anyway, that you can just choose to first go to the lake if you need it, to calm down and meditate a bit and then. Or immediately go to the forest and dive a bit deeper into the problems that you have, or maybe even have a shorter session where you only need to use the app for 10 or 15 minutes to just have this kind of support of, OK, what is your problem? How big is it actually? Can you make it smaller? What steps can you take to make the problem smaller or make it go away? And then, I mean, eventually, it would, of course, be great that the help that you get in the app, that those questions slowly translate into your own routine outside of the app so that it just becomes easier for you to ultimately not have to use the app anymore because you know which questions to pose to yourself when you're struggling with something.

*Interviewer:* Yeah, very good. Interesting perspective. So you've, on the one hand, talked about a very natural setting with the lake and the forest, but then on the other hand, also some fantasy elements, for example, then being in Hogwarts. Would you prefer to be everything very natural so that it's really related to the real world, or do you think some fantasy elements would make it easier to escape and kind of calm you down more because you are then in a world that's not that related to the actual one?

*Participant:* To be honest, even in nature scene of only nature around you is still kind of like... I mean, of course it's natural, but your normal day to day life doesn't take place in those spots or those locations. Those are only locations that you go to on vacation. And you need to take a really long car ride or even go by bike because you can't get there by car. So in that sense, it's already a little bit like not normal, so to say, and... Yeah, for me, a little bit of like fantasy elements or like instead of a lake and a forest to really have, like Hogwarts going on and then ultimately after your use of the app to have to go into the castle, like, OK, back to work, back to studying, back to normal life. I do think it would make it a little bit more fun that you can then just.... Yeah, on the one hand, it's more fun for you and on the other hand, you can even just make this just like personal jokes where just like when something's not going well. You just kind of say like, oh, well, I just need to go to Hogwarts for like 15 minutes and then I'll be all right again. So in that sense, yeah, I do think it would help a little bit. But that's also personally for me. I mean, I started reading the Harry Potter books when I was six. So, I mean, my whole childhood has been Harry Potter. So I really, I grew up with it and I immersed myself in these books, and even as a six year-old, just like,

you know, when you're reading a book and then you're immediately trying to visualize the scenario or the scenes in your head. So and I mean, at first, because I was young, I wasn't allowed to watch the films either. But then you just kind of make up these images in your head of what it should look like. And then, I mean, of course, the films are beautiful as well, so just the images of the forest and the lake and then the castle on the hill, and that's just....

*Interviewer:* Great. Yeah. Interesting. Nice. So that's been all my questions. Is there something you would like to add? Is there something that I haven't asked, where you think that would really help an app or a game, or is there something more about mental stress that you would like to point out that can't be solved with an app?

*Participant:* Well, I mean, for the app, I do think it would be important that there are like licensed therapists or people who know what they're doing working on the app. So the app really provides good solutions. And of course, for the app itself, I do think it would be important to frequently reflect on it and even get some feedback from the user in a way to really keep updating and keep improving such an app. Of course, there are still limits to what it can do as well. As you said, some mental issues are just not meant to be solved by just an app. I mean, an app can be a worthwhile contribution to the whole process as like some sort of thing to fall back on when you don't have a therapy appointment but still need some help. But then I do think it would also be interesting to see whether you can develop it together with therapists, that therapists can also refer their clients to this app to be like, yeah, OK, so you can use it in between or maybe even somehow integrated into the whole therapy triject that they're going through. But then it's also, I think, necessary to differentiate between different mental health issues, so I'm not sure if everything can be solved with an app because right now we talked a lot about reflecting on yourself and on your problems and issues. But of course, if someone's really depressed and just lying in bed all day, then I'm not sure how helpful it would be for them. So maybe that app should focus a little bit more on encouraging more the smaller things or even just getting out of bed. And then I also feel like privacy is a big issue, so really make sure that the app is just safe. I mean, nowadays you hear a lot of, like, apps that are not safe or that share your data. So in that sense, that is really important. And then I can also imagine that if you still want to offer this app for free, that might also be done a bit more difficult if a lot of money goes into the development of an app that's also like private and not commercialized. Then again, I do know of this one meditation app that one of the insurance companies in the Netherlands offer and they offer it for free to everyone. So you don't even need to be a member of their insurance company. But they still offer it just because they believe that meditation is very important for everyone and that it shouldn't just be limited to their members. So I also see some possibilities or opportunities there.

*Interviewer:* Great. Thank you. So I will stop the recording.

## Transcript Interview 2

*Interviewer:* Alright, so first question. I mean, you know how it goes. Do you agree to be recorded?

*Interviewer:* Yes

*Interviewer:* OK, so do you have any further questions before we start?

*Participant:* No, not yet.

*Interviewer:* OK, great. So there are first some questions about mental health. And then in the second half, I would go into gamification. The first question is; do you often feel overwhelmed by your feelings with emphasis being on often? Because, I mean, the situation has changed in the last year.

*Participant:* I would say it goes up and down, but overall it's still quite often.

*Interviewer:* And does it have to do with the lockdown and with the situation not having too many contact and not having such a structured life?

*Participant:* I think indirectly it does. At the beginning of the whole corona, so during the first lockdown, it definitely did. Now it's more indirectly, I would say, because it's not really because of this whole situation that I'm feeling down or so. But it's due to the current situation. Everything is online and therefore I do not really enjoy or sometimes I enjoy, but not as much as I did. Like participating in committees and that kind of stuff, because it's all online as well as my studies online and work online and that kind of stuff. So that's also why I left a few of those things behind. So now I'm doing less overall, but still, like I said, indirectly. So partly because of the lockdown, because everything being online feels like too much while, when it was partly physical or completely physical, it didn't feel like that. So. I think it's still sort of because of the lockdown.

*Interviewer:* Yeah, do you feel alone and do you wish someone or something could help you?

*Participant:* No, I don't feel alone. I definitely know I can ask lots of people for help. Actually, I have my roommates here, so I'm never really alone. I can always step to one of them. And my family is also quite near. And my boyfriend and I are also still seeing each other despite the lockdown. So I know, I know I can ask people for help. And I know I also do that. Not immediately maybe, but after some days or some hours or weeks or whatever, I'm still going there. So after I've been trying myself, I do ask for help.

*Interviewer:* And when you are overwhelmed, do you wish you could 'flee' your life or do you want to escape into another world for a while?

*Participant:* Well, I've been thinking about what it would mean to actually not really have a full time job later on, but just do some voluntary work and actually just live life. Have minimal resources, let's just say it like that and just live your life, basically. But it sounds like a dream in some way, maybe not a dream, like I don't know, a tale. Yeah, a fairytale or so.

And it sounds good, but I also think I would like to have some structure and actually have a job and have a house, you know, have everything in order basically.

*Interviewer:* And could you imagine to use an app or to play a game to go into a different world?

*Participant:* Not really. I think for some people that might help, but for me it doesn't, because I'm also quite often annoyed by the usage of my phone, basically. So I'm also trying to make that a little bit less. So, I'm also... I also have time slots of my apps for my apps and a notification when I use my phone for so many hours or whatever a day. So I don't think I would... And I'm also already looking at a screen a lot every day. So I think I would not really want to use anything like an app because that would involve a screen as well. So I don't think that could... it could really make me that relaxed. I think it should come from a book or a piece of paper or just in my mind or anything. Yeah.

*Interviewer:* And do you think it could be a tool for therapy for maybe other people?

*Participant:* I think it could. I think it really depends on the person, though, but I think it could. Yeah.

*Interviewer:* And do you think it is easier or maybe less of a burden to use an app or game than to make an appointment and actively call a doctor and go there?

*Participant:* Um, I think it can be, yes. But I think it can also be more difficult to continue using that app because there's less of an external force basically saying, OK, you're going to work on yourself now because it's really just you making that decision. And I think personally, I would miss that external force, let's call it that. And I think it's also one of the things in lots of therapies... I think it's, um, being able. No. Uh. Sorry, I'm looking for the word, but I'm just... I can't find it. Uh. Sorry. Oh, yeah, of course, to dare, dare to ask for help, I think that's one of the starting points. So I think it's still very important that some external party is involved.

*Interviewer:* Mm hmm.

*Participant:* Yeah.

*Interviewer:* And are you interested in gaming at all? Do you think gaming is engaging?

*Participant:* For me, it isn't really. No, I think, you know, I like board games, but just online games or so. I haven't been playing online games for years, I guess. So it's not really my thing, no.

*Interviewer:* So then we're going into the gamification part. Do you know what gamification is?

*Participant:* I do. It's like two years ago I read about it and learned about it, but I still do somehow. Yeah.

*Interviewer:* OK, so just to quickly remind you, it is the application of game playing elements in other non-playing activities. Then we are talking about gamification and apps, so what I'm asking you about now is an online game or an app or something for mental health that would include such gamification elements. So, an app is available all the time as opposed to an appointment you have to make with a doctor. Do you think that is an advantage? So you have it at hand, whenever you need?

*Participant:* I think so, yes. I think it could also be very useful in case waiting lists for a doctor are way too long. So you can sort of already start with something yourself, like a pre therapy thing. Yeah.

*Interviewer:* Do you know some gamification elements? Can you give examples?

*Participant:* I'm sorry, no, that's too long ago. I have no idea.

*Interviewer:* I will give you some examples. OK, so a very common one is personalization; so that you become a character or you have a character. Then there's collaboration, so you play with others. That also goes into challenge because you have a competition with the others. Then there's this with where I'm gathering points, a point system. And that also results then in rewards. And also another element is storytelling, so that you go on a journey, for example, or your character experiences something. So, of these elements, which ones do you think would be most effective or helpful or do you think they are helpful at all? Or maybe some of them aren't?

*Participant:* So can you sum it up again, so it's personalization and also challenge, you said, right?

*Interviewer:* Exactly, yeah. Rewards, storytelling, collaboration with others.

*Participant:* I'm somewhat thinking of storytelling actually because... Just a thought, but maybe it's easier to actually open up, even to yourself, by reading about someone else or reading about you in some situation or so, so I can imagine storytelling can do a lot, but I'm no doctor.

*Interviewer:* And do you think a reward system would somehow engage you more into being more into the game and taking it more seriously?

*Participant:* You might be more into the game. I'm not sure if you really take it more seriously as well. I think those are two separate things. I do think there's a.....It can turn the other way as well as... I mean, it should keep... it should continue to be challenging, of course, and at a point it doesn't anymore as it used to be at first. And I think people easily quit using it maybe. So then maybe not having it, being challenging at all or solely be involving in another way, like the personal or stories dealing with a personal or storytelling character might be more beneficial then.

*Interviewer:* You said you could imagine personalization, so being a character Would you then prefer to see the game through a lens, so you are experiencing everything yourself, or

would you like to see it from the bird perspective, so you can portray your problems onto the character? You can distance more from your problems?

*Participant:* I'm not sure. I've no idea what would be better... better in a way that it helps you to acknowledge your struggles, for example. Maybe then it's easier to actually do it yourself as a character. Um, but actually seeing it from a bird view indeed can maybe also be very helpful as you maybe suddenly recognize the patterns that are being laid out. I'm not sure. Sorry.

*Interviewer:* Doesn't matter. It's just your personal opinion ....And do you think then the app or a game could pose a risk of becoming addicted if you flee into the world too much or if you are too engaged into the game?

*Participant:* Well, of course, there's always an option for that, there's always a possibility for that, but therefore I would maybe refrain from making it too much challenging, then it would be more of a game than a mental health app, let's say that. I wanted to say something else as well. Oh, yes, flee into the world you said. Yeah, there should be some reminder, I guess. That there's something in the app that should still remind you that it's not like a whole new world you're entering and that you cannot escape, basically. So I think it should also be maybe, if there's some sort of session or so, it should not take too long. It should still be very much real, yeah.

*Interviewer:* So the next question is a bit more personal, again. What are things that help you when you feel down, is there a special location that you would maybe feel better at, like sitting on a lake, walking through the forest?

*Participant:* I think it really depends. Sometimes when I feel down, I really just want to be alone, of course, but sometimes it's also ... because I'm struggling with things and I really need distractions, so that I'm just calling up people and go for a walk or show and then sometimes not even talking about it. But at least I've got my distractions and I'm happy afterwards and then I can continue working. I don't know. So it really depends, I guess. I can be very happy reading a book in my room or going to bed early and just having a cup of tea. I like that, but also just playing games with people. I don't know. I sometimes I think it's either just taking my time for myself or just purposefully looking for contact with people. So I actually get distracted in some way. Yeah.

*Interviewer:* And what would you like to see in a game? How would you like the world to look? Would it be better if it was very natural or would it also be good if it was like a fantasy world that has nothing to do with the real world?

*Participant:* I think it should be very much natural, also because what we said earlier is that it might be... a risk might be that people actually try to escape from the real world to go in there because there might not be real struggles there. So then I would keep it very real, I guess, because making it a fantasy ...yeah, or the way around, of course, because if it's a fantasy, it's definitely fake, let's call it that. But I guess I would actually make it very much real.

*Interviewer:* Great, is there something that I haven't asked about? Other elements where you think that they would make sense that I didn't mention?

*Participant:* No, I don't think so.

*Interviewer:* Ok, great. Well, then that's been all of my questions for you. Thank you for your time. And I mean, you will, of course, find out what the studies have been like, you will see it in the end, you can look it up on the UT page.

*Participant:* Yeah, I'm curious what you will come up with, which conclusions you will draw from all interviews. Yeah.

*Interviewer:* Thanks for taking your time. Have a nice day. And also, of course, good luck with your own study.

*Participant:* Thank you. Thank you. And you too. Bye

*Interviewer:* Bye.

## Transcript Interview 3

*Interviewer:* Okay, stimmst du zu, aufgenommen zu werden?

*Participant:* Ja, stimme ich zu.

*Interviewer:* Also in der ersten Hälfte des Interviews geht es mehr um persönliche Fragen, um psychische Gesundheit, Mental Health und um Gefühle. Und in der zweiten Hälfte geht es dann um die App und speziell um Gamification. Also die erste Frage ist, fühlst du dich häufig von deinen Gefühlen überfordert? Betonung auf häufig.

*Participant:* Ja. Das tue ich, dann weiß ich auch nicht, wohin damit.

*Interviewer:* Und hat sich das geändert, seit des Lockdowns und ist das häufiger geworden?

*Participant:* Ja, weil man ja häufiger mit seinem Gefühl alleine ist und viel weniger Ablenkung hat.

*Interviewer:* Fühlst du dich häufiger alleine und wünschst du dir, dass etwas oder jemand dir helfen kann?

*Participant:* Absolut. Ja, nicht etwas, sondern jemand. Aber etwas ist auch okay.

*Interviewer:* Und wünschst du dir, dass du deiner Welt entfliehen kannst und dass du für eine Zeit in eine andere Welt abtauchen kannst?

*Participant:* Ja, die andere Welt muss jetzt nicht etwas Anderes sein gegenüber dem, wie es vor dem Lockdown war. Oder wie es in schönen Zeiten vom Leben war. Es könnte also durchaus auch etwas sein, was irgendwie so sich aus schönen Erinnerungen, Urlaub in den Bergen am allerliebsten oder sowas ergibt. Das schon. Eine ganz andere Welt, die nichts mit der gemeinsam hat, in der ich so krank bin, kann auch sein.

*Interviewer:* Und könntest du dir vorstellen, dass du ein Computerspiel oder eine App dafür verwendest?

*Participant:* Ich könnte mir das schon vorstellen, ja. Ich spiele ja auch so, wenn ich nicht in einer anderen Welt bin. Ich spiele ja dieses Kartenspiel, das heißt Solitär, wo man überlegen muss, logisch überlegen muss. Und dann ist man ja eigentlich auch in einer anderen Welt, weil man im Moment nicht in der aktuellen Welt ist.

*Interviewer:* Also möchtest du eine Art Ablenkung?

*Participant:* Ja.

*Interviewer:* Denkst du, dass das ein therapeutisches Hilfsmittel sein kann? So eine Ablenkung?

*Participant:* Da bin ich mir nicht sicher. Es hilft manchmal schon, aber ich bin mir...es ist zweifelhaft, ob das dauerhaft helfen könnte. Aber eben nur für einen Moment, dass man jetzt gerade ein bisschen entspannter als. Weil ich das auch manchmal mache, wenn ich z.B.

an der Steuererklärung sitze und mich gerade etwas wahnsinnig nervt, ich dann so ein Kartenspiel spiele.

*Interviewer:* Einfach als kurzzeitige Ausflucht?

*Participant:* Ja, so als Runterkommen, als ganz kurze Entspannung, damit man dann auch was Anderes weitermachen kann, wo man sich wieder voll konzentrieren muss. Und dann ist diese Anspannung, die man da vorher hatte, weil man sich fragt, wie soll das denn jetzt schon wiedergeben? Das ist dann weg. Oder weniger.

*Interviewer:* Und denkst du, es ist einfacher oder eine kleinere Hürde, dass man ein Spiel öffnet oder eine App anfängt, als dass man beispielsweise zu einem Therapeuten geht oder sich einen Arzttermin macht?

*Participant:* Auf jeden Fall ist es ja viel weniger Aufwand. Ich kann das ja mal ganz kurzfristig für mich entscheiden. Ach, jetzt wäre ein guter Moment, wo ich das einfach machen könnte. Und so könnte man jetzt niemals zu einem Therapeuten gehen. Obwohl, es ist schon besser geworden, seit es diese Videosprechstunden gibt. Das ist dann schon bisschen besser, weil die ja auch weniger Aufwand haben damit, dass du dann nicht da hinkommen musst. Aber dazu muss man trotzdem erstmal irgendwo angenommen sein. Man muss eine lange Wartezeit oder was durchlaufen haben und es ist ja oft bis zum Jahr Wartezeit bei so Therapeuten. Oder was noch viel schlimmer ist, dass die das gar nicht sagen können, wann die Wartezeit endet, weil die nicht wissen, ob ihrer aktuellen Patienten eine Verlängerung kriegen.

*Interviewer:* Also ist das dann auch... Man hat dann weniger Angst, weil wenn man auf einer Warteliste ist, dann hat man eine Unsicherheit und die App, die kann man einfach dann schnell öffnen?

*Participant:* Ja, genau.

*Interviewer:* Interessierst du dich für Spiele im Allgemeinen? Denkst du, Spielen, Online-Spiele sind ...Denkst du Spiele beziehen ein so ein? Denkst du die sind unterhaltsam oder in ihren Bann ziehend? Macht das Spaß?

*Participant:* Ich habe noch nie so ein Onlinespiele gespielt, das sowas ist wie Geschichten oder sowas oder was man mit anderen Leuten spielt. Sowas gibt es ja. Oder so Spiele, die viele Bekannte spielen. Die ziehen auf so einem virtuellen Bauernhof irgendwie Pflanzen oder Tiere groß oder sowas. Das wäre etwas, was mich wirklich überhaupt nicht interessieren würde. Was ich bisher gespielt habe, das waren immer irgendwelche Spiele, die was mit Logik zu tun hatten, mit Mathematik. Und dieses, wo man so Pyramiden auf und abbauen musste, wo man sowas ähnliches wie den Zauberwürfel gespielt hat. Und dann gab es sowas, das hieß Tetris oder eben sowas wie diese Solitär Kartenspiele, wo man mit Logik und Geschick und Überlegung irgendwas so machen muss. Das ist das, was ich bisher gespielt habe.

*Interviewer:* Wo man also die ganze Zeit aktiv spielen muss. Denn wenn du bei Tetris die Steinchen nicht drehst, dann geht's nicht weiter.

*Participant:* Ja, genau. Man muss schon immer dabei sein. Du bist nicht der Zuschauer dabei. Du guckst nicht, was andere machen. Sondern nur, das sind die Ergebnisse dessen, was du da aktiv machst.

*Interviewer:* Also du wirst aktiv beschäftigt im Spiel?

*Participant:* Genau richtig. Nicht zugucken, aktiv sein.

*Interviewer:* Weißt du, was Gamification ist?

*Participant:* Ich kenne nur den Ausdruck Game. Irgendetwas spielerisch über Spiele machen? Keine Ahnung. Nee, weiß ich nicht. Könnte ich mir nur überlegen.

*Interviewer:* Also was stellst du dir darunter vor unter dem Ausdruck?

*Participant:* Irgendetwas durch Spiele machen, was man sonst anders macht.

*Interviewer:* So in etwa. Also Gamification ist das Verwenden von spielerischen Elementen in anderen Aktivitäten, beispielsweise, dass man gegen andere Leute antritt bei irgendeiner Sache, die man normalerweise alleine macht, oder dass man beispielsweise eine Sprache lernt. Und es geht eigentlich um das Erlernen der Sprache. Aber wenn du gute Fortschritte machst, bekommst du dafür Punkte oder eine Belohnung.

*Participant:* Das ist ein Spiel?

*Interviewer:* Das sind spielerische Elemente, die in einer anderen Aktivität drin sind. In diesem Fall, in der App geht es dann beispielsweise darum, dass diese Elemente irgendwo als quasi Ansporn drin vorkommen, bei einer Aktivität, die du dann spielerisch angehst, die aber dann kein Spiel im Sinne ist.

*Participant:* Ach so, ich kann ja nicht, ein Spiel muss ja nix mit Gewinn zu tun haben. Wenn ein Kind im Sandkasten spielt, kannst du auch nix gewinnen.

*Interviewer:* Nein, natürlich, aber es geht um diese Art von Online-Spielen. Also das kann... ja Gamification kannst du ja eigentlich eher im Online-Bereich anwenden.

*Participant:* Also ja. Also ich kann nicht gewinnen, wenn ich nicht verlieren kann, kann ich auch nicht gewinnen.

*Interviewer:* Also in dieser App beispielsweise, wo es darum geht, dass es deiner mentalen Gesundheit bessergeht, kann es natürlich sein, dass du denkst, dass es dir gut geht, das ist dein persönlicher Gewinn. Aber du bekommst keinen Pokal oder irgendwas dafür. Die App kann ja nicht einschätzen, ob du gewonnen hast. Die App kann nur sagen, du hast heute deine Aufgaben des Tages gut gelöst und bekommst 30 Punkte.

*Participant:* Ach so, ja okay. Ja das ist ja bei so einem Kartenspiel eigentlich auch gar nicht anders. Denn je nachdem, mit welchem Stand du das beendest, kriegst du auch Punkte. Wobei ich eigentlich immer nur sagen würde, Ich habe gewonnen, wenn ich es wirklich gelöst hab und nicht, wenn ich irgendwie, was weiß ich, 200 von 400 Punkten bekommen habe.

*Interviewer:* Das ist dann beispielsweise, was du selbst für dich einschätzen kannst. Deswegen sagt die App dir nicht, wenn du deine Atemübung, deine Meditationsübungen gemacht hast, hast du gewonnen, sondern du musst entscheiden, ob es für dich ein persönlicher Gewinn ist.

*Participant:* Aber die App sagt mir...

*Interviewer:* Die App sagt, Du hast es heute gemacht. Ja gut, das ist schön. Mach morgen weiter.

*Participant:* Und die sagt jetzt nicht... Was weiß ich..... Du hättest jetzt vierzig Punkte kriegen können. Du hast aber heute nur eine halbe Stunde gemacht, also kriegst du 20?

*Interviewer:* Die App gibt es ja nicht ist. Ist ja alles hypothetisch. Die App darf natürlich nichts machen, was dich demotiviert.

*Participant:* Ah, okay. Und weil manche Menschen davon demotiviert werden, nur die Hälfte gemacht zu haben, dürfte sie es nicht machen, obwohl andere Menschen, wieder andere Menschen sich dadurch motiviert fühlten. Die sagen, ich habe nur fünf Minuten gemacht, also die halben Punkte. Dann kann ich morgen ja auch zehn Minuten machen, dann habe ich die volle Punktzahl. Das weiß man nicht?

*Interviewer:* Das muss ja nicht unbedingt ein Punktesystem sein. In diesem Sinne geht es .. es geht natürlich in Spielen um Punkte. Aber in dieser App, die ich jetzt hier vorschlage, würde die App einfach bloß sagen, Du hast dich heute mit dir selbst beschäftigt, gut gemacht. Ohne Wertung, ohne Punkte, ohne Vergleich zu gestern.

*Participant:* Das ist so gedacht, so geplant?

*Interviewer:* Ja.

*Participant:* Und man könnte nicht eine App machen, wenn man sagt, Ich starte die App jetzt und die App fragt mich, Bist du der Typ, der wissen möchte, wo er auf einer Skala ist oder bist du der Typ, der einfach nur hören möchte, Ich hab's gut gemacht oder nicht gemacht?

*Interviewer:* Das mit der Skala halte ich generell für sehr problematisch, weil das ja immer ein subjektives Empfinden ist.

*Participant:* Ja, sicher.

*Interviewer:* Wenn du dich gerade sehr schlecht fühlst und jemand fragt, Wie fühlst du dich von 1 bis 10, dann sagt die Person 12. Im Nachhinein, wenn es der Person wieder bessergeht, sagt sie, es war vielleicht doch nur eine 5 ...

*Participant:* Ach so, ja, okay, stimmt ja.

*Interviewer:* Und außerdem kann man kann ja nicht sagen, Mir geht es schlechter als dir.

*Participant:* Nee, nee, obwohl ganz viele Leute das glauben. Ganz viele Leute sagen Ach, warum sollte es dir denn schlecht gehen? Dir geht's doch gut. Du hast doch das und das und das.

*Interviewer:* Das ist ja dann das von außen Gesehene. Dein subjektives Empfinden kannst du ja immer nur du bewerten. Und schlecht alleine reicht schon als Aussage. Da muss man ja nicht noch sagen auf einer Skala von so und so. Ja, es gibt eine offizielle Skala aus England, womit Depressionen bewertet werden. Sie wird aber als sehr kritisch gesehen.

*Participant:* Ja, für Schmerzen gibt es das hier auch. Wie sind Ihre heutigen Schmerzen auf einer Skala von bis

*Interviewer:* Das kannst du ja vergleichen.

*Participant:* Ja, aber auch nur für dich.

*Interviewer:* Auch nur für dich. Aber wenn du beispielsweise ein Drücken im Finger hast, ist das weniger als ein Brennen und weniger als ein richtiger Schmerz. Wenn du einfach traurig bist, dann geht es dir schon sehr schlecht. Dann muss es... Du musst du nicht vergleichen, ob es dir schon mal schlechter geht.

*Participant:* Okay, ja.

*Interviewer:* Eine App ist immer verfügbar, du musst keinen Termin machen, du musst nicht zum Arzt hingehen. Ist das ein Vorteil?

*Participant:* Absolut ein Vorteil. Ja, klar. Wobei, ich habe es ja noch nie gemacht, ich nicht weiß, ob der Nutzen, den ich hätte, der gleiche wäre, wie wenn ich beim Arzt gewesen wäre und wirklich mit dem richtigen Menschen gesprochen hätte. Das hinge davon ab, wer diese App entwickelt hat, ob da Ärzte z.B. auch mitgemacht haben.

*Interviewer:* Das ist richtig, das stimmt. Also, um so einer App zu vertrauen, würdest du sagen, da müssen auf jeden Fall Ärzte dahinterstehen? Da muss auf jeden Fall eine Studie gemacht worden sein?

*Participant:* Auf jeden Fall, Ärzte und Therapeuten. Die müssten am Anfang auch wirklich in so einer Studie gucken. In mehreren Wochen vielleicht gucken, was da....

*Interviewer:* Also hältst du eine Kombination für sinnvoll, dass man zum Arzt geht? Und vielleicht auch mit dem Arzt in die App rein sieht und er dann sagt, in den nächsten zwei Wochen bis zum nächsten Termin machst du das und das?

*Participant:* Ja, das auf jeden Fall.

*Interviewer:* Also du glaubst nicht, dass die App Termine ersetzen kann, sondern sie kann sie unterstützen?

*Participant:* Das! Ersetzen vielleicht, in einer Phase, wo man denkt, Ach, eigentlich geht's mir nicht richtig schlecht, aber es könnte mir bessergehen, zum Arzt muss ich nicht, ich mach

vielleicht auch mal wieder sowas. Aber wenn es ein richtig schlecht geht, denke ich, dann kann das nur ergänzend zu einem Arzt sein.

*Interviewer:* Und wenn man dann mal keine Termine bekommt, glaubst du, dann gibt es da ein Risiko, dass man die App oder das Spiel zu viel benutzt?

*Participant:* Dass man da so süchtig nach wird beispielsweise ja. Ja, was soll das denn dann machen?

*Interviewer:* Wenn es beispielsweise ein Spiel ist, bei dem man in eine Traumwelt abdriften kann.

*Participant:* Ach so, dass man sich der Realität dann nicht mehr stellt? Dass man das viel zu häufig machen würden, hatte ich noch nie, da ich nicht solche Sachen mit so virtuellen Welten gespielt habe, kann ich mir das jetzt für mich selbst, das speziell, nicht vorstellen. Aber ich kann manchmal nicht aufhören, dieses Kartenspiel zu machen. Also könnte ich.... wahrscheinlich könnte das andere dann auch sein. Ja, das könnte schon sein. Wahrscheinlich müsste man das begrenzen. Wie häufig ...oder nicht wie häufig. Wie lange und wie häufig das jemand vielleicht macht. Aber da brauchst du auch wieder Studien für. Es wäre wahrscheinlich schon besser, weil ja gerade auch einige Psychopharmaka wirklich Spielsüchtig machen. Und wenn man die parallel kriegt, steht ja in den Beipackzetteln, und dann hätte man eine App, die ein Spiel ist, ja, dann könnte sich das zusammen aufschaukeln, dass man dann irgendwie gar nicht mehr aufhören würde. Das könnte ich mir schon vorstellen.

*Interviewer:* Spielst du das Kartenspiel, weil du dich von etwas anderem dann so lange ablenken möchtest. Oder spielst du es so lange, damit du nicht ohne Gewinn aufhörst?

*Participant:* Oh, beides. Beides. Ich fange an, um dich abzulenken. Aber ich höre oft nicht aus, weil ich nicht häufig genug gewonnen habe. Ja, das ist so.

*Interviewer:* Es gibt verschiedene Elemente von Gamification. Ich erzähle dir ein paar und dann möchte ich, dass du die einschätzt. Ob du denkst, dass die hilfreich sind, welche am ehesten hilfreich sind und welche vielleicht gar nicht unbedingt hilfreich sind. Es gibt Personalisierung, dass du quasi einen Charakter im Spiel hast, eine Art Avatar oder ein Tier oder irgendwas, was dich darstellt. Dann gibt es Challenges, dass man gegen andere Leute antritt. Es gibt Kollaboration, dass man mit anderen Leuten was gemeinsam macht. Dann gibt es natürlich dieses Punktesystem. Dann gibt es Belohnungen. Und es gibt auch Storytelling, dass du beispielsweise so eine Traumreise machst oder so. Oder dass du die Geschichte von dem Charakter erlebst. Was glaubst du, was könntest du dir....

*Participant:* Sag nicht so viele nacheinander, ich habe das Erste schon wieder vergessen.

*Interviewer:* Das erste war Personalisierung, das mit einem Charakter oder ...

*Participant:* Ja, das kann ja kombiniert sein mit den anderen.

*Interviewer:* Natürlich! Die können alle gemeinsam auftreten.

*Participant:* Ja, ich könnte mir schon vorstellen, dass ich lieber jemanden hätte, der mich darstellt. Oder das ich wirklich als Person in dem Spiel drin bin, wenn ich es nicht alleine mit mir mache. Bei einer Traumreise brauche ich das zum Beispiel nicht, denke ich.

*Interviewer:* Glaubst du, so Traumreisen oder Storytelling oder sowas könnte einem helfen?

*Participant:* Ja, Traumreise kenne ich ja so als angeleitete Sache. Ich habe das ja noch nie gemacht und was ich mir denke ich; jetzt leg dich mal hin. Mach mal die Augen zu und jetzt denk mal an was Schönes aus dem Urlaub oder stell dir Landschaften vor oder irgendwie sowas. Da muss ich ja dann auch angeleitet sein dazu. Das kann ich mir jetzt vorm PC nicht vorstellen.

*Interviewer:* Die App könnte dir ja auch was sagen. Entweder du musst es lesen oder sie kann dir ja auch Tipps geben oder mit dir reden. Man kann ja auch eine Stimme...

*Participant:* Eine Traumreise, die stelle ich mir vor, da liege ich auf dem Sofa oder sitze...

*Interviewer:* Es muss ja keine Traumreise sein, kann ja auch einfach nur eine Erlebnisreise sein. Eine Ablenkung.

*Participant:* Und ich guck die an oder ich hab die in meinem Kopf?

*Interviewer:* Du kannst sie angucken, du kannst aktiv daran teilnehmen. Das ist die Frage. Was würdest du eher haben wollen? Was glaubst du, was hilfreicher ist?

*Participant:* Ja, dann müsste das eine App sein, die nicht nur auf dem PC, die vielleicht auch auf dem Handy läuft. Das könnte ich ja neben mich legen, mich aufs Sofa setzen oder legen. Dann könnte ich mir schon vorstellen, dass mich das irgendwo hinschickt. Es müsste mir dann vielleicht auch nicht meine eigenen..... Ach, es kann mich ja nicht fragen, es kann ja nicht mit mir kommunizieren und es kann mich ja nicht fragen, wo möchtest du jetzt gerne hin? Und mich dann da drin weiterreichen? Das würde ja nur eine Person, die mir gegenüber sitzt.

*Interviewer:* Und wenn da eine künstliche Intelligenz mit drin wäre?

*Participant:* Nee, das würde ich in dem Fall glaub ich nicht machen. In dem Fall müsste das jemand sein, der eine richtige, also eine natürliche Intelligenz hat. Die künstliche Intelligenz, die kann, zumindest heute noch nicht, mich ja nicht spüren, wie ich spreche, wie die Stimmungen sind, die von mir so rüberkommen, das kann ja nur praktisch meine Sprache analysieren. Nee, dann würde ich mir wünschen, dass es ein echter Mensch ist, aber wenn es mich auf eine Reise schickt, die mir vielleicht aufgrund meiner Interessen vorgeschlagen wird, und ich könnte sagen, was weiß ich, begleite mich auf einer Wanderung durch die Berge oder sowas zum Beispiel. Dann kann mich etwas Anderes anleiten. Du kannst jetzt hier hochgeklettert, du kehrst jetzt hier ein. Die Sonne geht unter. Also das könnte ja jemand praktisch ...eine künstliche Intelligenz könnte das ja hervorrufen. Das wäre bestimmt auch ganz schön.

*Interviewer:* Glaubst du, ein Punkte und Belohnungssystem macht Sinn.

*Participant:* Ja, weil ich ja dieser Spieler bin ...bei Kartenspiel ja da schon, aber ich glaub ne, doch nicht, wenn es um meine psychische Gesundheit geht weil, dann werde ich insofern entweder enttäuscht, weil es nicht klappt oder süchtig, weil ich so lange machen will, bis ich genug Belohnung gekriegt hab. Ist wahrscheinlich doch nicht so gut. Ne, ne. Außerdem, ja Punkte sowieso. Was ich als Belohnung empfinde und was nicht in Punkten ist, wenn es etwas Kalkulierbares ist, also wo man es sehen kann. Können ja nicht nur Punkte sein, es könnte, was weiß ich, Fake Geld oder irgendwie sowas sein. Dann macht es mit Sicherheit irgendwo süchtig weiterzumachen, bis man einen gewissen Score erreicht hat. Ne, man sollte das, glaube ich, nicht machen.

*Interviewer:* Und was hältst du von Kollaboration, mit anderen Leuten gemeinsam was machen?

*Participant:* Gibt es die wirklich oder sind die erzeugt in dem Spiel?

*Interviewer:* In diesem Fall gäbe es die dann wirklich.

*Participant:* Gäbe es die wirklich. Was soll ich denn mit denen tun?

*Interviewer:* Beispielsweise wissen, dass du nicht allein bist, dass ihr die Reise gemeinsam geht, dass irgendetwas gemeinsam überwunden wird.

*Participant:* Dann müssten die aber ja zu mir passen. Das könnte ich mir nur vorstellen, wenn die wirklich ähnliche Probleme hätten. Und vielleicht nicht .... auf jeden Fall ähnliche Symptome. Das ist klar. Aber am besten auch dann eben ähnliche Probleme und das kriegt man mit Datenschutz glaub ich nicht hin. Dass man das zusammenführen kann.

*Interviewer:* Da du gesagt hast, Punkte und Belohnungen hältst du für nicht so sinnvoll, weil man dann merkt, dass man auch etwas nicht geschafft hat, glaubst du dann, ne Challenges, also quasi ein Wettbewerb ist dann auch nicht sinnvoll?

*Participant:* Es kommt auf das Ziel des Wettbewerbes an. Es könnte ja sein, dass ich mir sowas gar nicht zutraue und denke, ich bin da drin viel schlechter als Andere. Dann könnte es ja sogar so sein, wenn ich an einem Wettbewerb teilnehme und merke, dass andere auch gar nicht so viel besser sind, dass das dann ja nett ist für mich. Aber wo drin sollte die Challenge bestehen? Wenn es um meine psychische Gesundheit geht? Außerdem könnte ich ja immer lügen. Weiß ich nicht, ich bin mir da echt nicht sicher.

*Interviewer:* Also denkst du, das mit der Personifizierung ist vermutlich das Sinnvollste, das Hilfreichste.

*Participant:* Ja, das glaube ich schon. Es kann ja auch durchaus sein, dass .... du musst ja irgendwo.... Du musst... Irgendwas musst du ja der App geben, damit die App weiß, was dein Problem ist. Die wird ja wahrscheinlich, oder hoffentlich, nicht nur Standards haben. Wenn man schon so ein bisschen, was weiß ich, was auf Leute mit Angststörungen oder Depressionen oder Traurigkeit oder sowas eingeht und wie häufig Menschen das haben, in welchem Situationen, dass sich das Ding anpasst. Und ... die Frage war mit der

Personifizierung, ne? Genau. Dass dann die Personifizierung in einem Ding, in der App, ja auch auf das eingeht, was dich ausmacht. Nicht nur... Der muss deine Eigenschaften ja irgendwie haben. Ich steuere da jetzt nicht irgendwie so ein Männlein durch irgendwelche...irgendeinen Hindernisparcours. Sondern das muss ja wirklich ich sein, da das Ding, was ich da habe. Diese Puppe oder egal was das da ist. Sonst hat es ja keinen Zweck. Und dann könnte man ja, wenn viele Leute das machen, wenn die irgendwelche Persönlichkeitsprofile oder Krankheitsprofile eingeben. Dann müsste das System daraus lernen können, die App. Wenn sie das genügend anonymisieren kann. Es ist schon wichtig, denke ich, dass so eine App daraus lernt, aus ihren Benutzern. Das geht ja theoretisch.

*Interviewer:* Wenn du dann so einen Charakter hättest, würdest du es bevorzugen, dass du quasi durch die Linse der Person siehst, dass du alles selbst erleben kannst? Oder würdest du das lieber aus der Vogelperspektive beobachten können, dass du dich von den Problemen des Charakters distanzierst?

*Participant:* Ja, aber das sind ja meine, die er dann hat. Irgendwie muss er die ja kriegen in der App, diese Probleme. Das ist eine schwierige Geschichte. Das kann ich nicht sagen. Ich glaube, ich würde das erst einmal ausprobieren wollen. Beide Perspektiven. Ich könnte mir vorstellen, dass einem das dann Angst macht dadurch, in bestimmten Situationen. Manchmal sagen ja auch Therapien, man muss irgendwo durch und um... Man muss das erleben, man darf das nicht vermeiden. So Phobien oder sowas, wenn einer Angst vor Spinnen hat oder so. Aufzug zu fahren. Oder im Aufzug steckenzubleiben. Dann wäre es vielleicht wirklich besser, was von außen zu begucken. Vielleicht am Anfang, dass man das erstmal von außen beguckt und sieht, wie ist das und dann für sich zu entscheiden, wie groß sehe ich Gefahr für mich, dass ich Angst kriege, wenn ich da drin wäre und dann könnte man vielleicht einfach mal ausprobieren. Ich finde, das müsste man wechseln können. Aufgrund der Erfahrung, die man gemacht hat, müsste man das wechseln können, glaube ich.

*Interviewer:* Hältst du es für wichtiger, dich mit deinen Problemen direkt auseinanderzusetzen oder möchtest du dich von den Problemen distanzieren?

*Participant:* Ja, das möchte man im Alltag immer, man möchte sich davon distanzieren, aber das ist ja auch so Quatsch. Wenn du dich dem nicht stellst, kriegst du es vielleicht im Moment eben hin, das zu verdrängen. Aber wenn es dann mal wiederkommt, hast du dann kein Rezept in der Hand. Aber es kann auch überfordern in dem Moment, sich dem zu stellen, kann im Moment total überfordern. Könnte ich keine allgemeingültige Aussage zu machen.

*Interviewer:* Was sind Dinge, die dir helfen, wenn du überfordert bist oder dich schlecht fühlst? Gibt es eine bestimmte Sache oder einen bestimmten Ort, was dir hilft? Möchtest du gerne an einem See sitzen? Tut es dir gut, durch den Wald zu gehen?

*Participant:* Ich muss raus. Auf jeden Fall raus und bewegen. Körperliche Bewegung. Wald ist gut. Ich gehe oft durch den Wald. als. See ist auch gut, das Schönste wären die Berge.

*Interviewer:* Und wenn die App oder so eine Virtual Reality oder so, dir sowas zeigen könnte, dass du in die Berge gehst?

*Participant:* Wie so eine 3D-Brille beispielsweise, ja? Ja, das wäre, glaube ich, schon ganz gut, aber die körperliche Aktivität müsste auch irgendwie dazu kommen. Ich müsste irgendwas körperlich machen.

*Interviewer:* Also kann die App dich dabei begleiten?

*Participant:* Ja, das könnte sie wahrscheinlich.

*Interviewer:* Könnte sie dich motivieren, rauszugehen, beispielsweise?

*Participant:* Ja, das tue ich ja sowieso schon.

*Interviewer:* Aha

*Participant:* Also Menschen, die nicht rausgehen, bei denen könnte ich mir das vorstellen. Aber ich bin ja schon jemand, der so viel wie möglich rausgehen will. Wenn es jetzt mal regnet und ich konnte das nicht, würde ich das ja auch gerne drinnen angucken wollen. Vielleicht könnte man sich dabei auf den Heimtrainer setzen, oder sowas.

*Interviewer:* Du hast das schon mal angedeutet vorhin, aber nochmal als Frage: Würdest du das bevorzugen, die Natur zu sehen in der App? Oder eher eine Fantasiewelt?

*Participant:* Das beides, glaube ich. Also möchte ich entscheiden können. Die Natur wäre toll, weil ich dann das sehen könnte, was ich mir wirklich wünsche, was ich weiß, dass es das gibt. Eine Phantasiewelt ... ja, gut bei Phantasiewelt denke ich immer irgendwie an so etwas Künstliches und Animiertes, das muss es ja gar nicht sein. Ist ja kein Zeichentrick.

*Interviewer:* Nein, muss es nicht. Es kann einfach was sein, was es nicht gibt, wie beispielsweise Harry Potter. Dass du dich auf einen Besen setzt und wegfliegen kannst.

*Participant:* Ach sowas. Ja, das ist auch schön.

*Interviewer:* Es muss ja nicht unbedingt Drachen und Elfen dort geben.

*Participant:* Ja, das weiß ich nicht. Ohne das ausprobiert zu haben, könnte ich das nicht sagen. Aber Natur auf jeden Fall wäre besonders wichtig. Tiere, Pflanzen.

*Interviewer:* Okay, das waren meine Fragen. Gibt's was, was du gerne noch dazu anmerken möchtest? Möchtest du irgendwas beitragen, wonach ich nicht gefragt habe.

*Participant:* Ja, die Frage ist: Wo käme so eine App her? Woher wusste ich, dass das die Richtige ist? Das könnte mir mein Arzt sagen, vielleicht, wenn er das wüsste und wenn er diese speziell kennt.

*Interviewer:* Es gibt beispielsweise Meditationsapps oder Apps, die deinen Herzschlag und sowas bewachen, die die Krankenkasse beispielsweise auf ihrer Homepage empfiehlt. Würde dir sowas Sicherheit geben?

*Participant:* Ja, ein bisschen schon. Ich weiß das auch, dass die Krankenkassen das machen. In der Hoffnung, dass das auch gut genug überprüft ist. Dass die nicht einfach nur Ihre

Arztkosten damit drücken wollen. Dass du dann da...ja jetzt nimm das dann mal. Und dann geht's dem vielleicht, wenn es ihm vorher 10 schlecht ging, geht's ihm jetzt vielleicht nicht eins gut, aber vielleicht nur fünf schlecht. Und er rennt nicht zum Psychiater. Und es sind natürlich viel weniger Kosten für mich als Krankenkasse. Da denke ich, da muss noch wer anders was zu sagen können. Dann am besten Menschen, denen es nachweislich wirklich geholfen hat. Vielleicht Patientenvereinigung oder irgendwie sowas. Also nicht nur jemand, der aus meiner Nutzung der App über drei Ecken finanziellen Vorteil zieht.

*Interviewer:* Okay, gut, das war's. Danke, dass du dir Zeit genommen hast. Möchtest du noch etwas Anderes anmerken?

*Participant:* Also, wenn es diese App noch nicht gibt, wäre es sehr gut, wenn wir man es hinkriegen könnte, dass an der Entwicklung der App auch Menschen schon mitmachen, die Probleme haben.

*Interviewer:* Also auch die Patienten, nicht nur die Ärzte?

*Participant:* Und Psychologen, ja.

*Interviewer:* Okay. Dankeschön. Dann stoppe ich jetzt die Aufnahme.

## Transcript Interview 4

*Interviewer:* Okay. Aufnahme läuft. Stimmst du zu, aufgenommen zu werden?

*Participant:* Ja

*Interviewer:* Okay. Also worum es geht, das Thema habe ich dir erklärt. Es gibt erst ein paar Fragen, die sich auf die Psyche und auf mentale Gesundheit beziehen und später geht es dann um Spiele und um Gamification. Es gibt kein richtig oder falsch. Du kannst deine Antworten gerne ausformulieren. Du kannst gerne persönliche Erfahrungen erwähnen und du kannst natürlich auch jederzeit Rückfragen stellen. Bist du bereit?

*Participant:* Ja.

*Interviewer:* Die erste Frage ist, fühlst du dich häufig überfordert oder kommst mit deinen Gefühlen nicht zurecht? Mit Betonung auf häufig.

*Participant:* Nein, häufig nicht. Hin und wieder mal, aber ich denke mal, das ist auch normal. Es wird wohl jeder haben.

*Interviewer:* Hat sich das durch den Lockdown oder die Pandemie verändert?

*Participant:* Nein, eigentlich nicht. Bei mir persönlich nicht. Bei vielen anderen wird das wohl anders sein. Weil ich habe halt verhältnismäßig viel Ablenkung und deswegen betrifft mich das nicht so.

*Interviewer:* Fühlst du dich häufiger alleine? Oder wünschst dir, dass jemand oder etwas dir helfen könnte?

*Participant:* Nö, eigentlich fühle ich mich nie alleine. Selbst wenn ich alleine bin, bin ich nicht allein. Ich habe einen Hund.

*Interviewer:* Und wenn du mal überfordert bist, wünschst du dir dann Hilfe?

*Participant:* Also bei mir persönlich ist es so, wenn ich überfordert bin, dann brauche ich eigentlich in erster Linie mal Ruhe.

*Interviewer:* Wünschst du dir manchmal, dass du deinem Leben entfliehen könntest oder in eine andere Welt abtauchen für eine Zeit?

*Participant:* Schwierig zu beantworten, weil selbst wenn man in eine andere Welt abtauchen könnte, ist die große Frage: Ist da die Welt, in die man abtaucht, dann die Wunschwelt? Gibt es da nicht neue Probleme? Und so weiter und so fort. Ich denke mal von daher. Nee, eigentlich nicht.

*Interviewer:* Wenn jemand den Wunsch hätte, in so eine Welt abzutauchen, glaubst du, dass eine App oder ein Spiel dabei helfen könnte?

*Participant:* Definitiv. Ja, absolut.

*Interviewer:* Und glaubst du, kannst du dir vorstellen, dass eine App oder ein Spiel als therapeutisches Instrument genutzt werden könnte?

*Participant:* Kann es mit Sicherheit, bin ich fest von überzeugt. Es ist natürlich eine große Frage, wie das dann realisiert wird, weil es muss ja einen gewissen Bezug zur Realität haben, sonst wird es wahrscheinlich den therapeutischen Effekt nicht erfüllen, weil es zu weit von der Realität entfernt ist.

*Interviewer:* Glaubst du, es ist einfacher oder eine geringere Hürde, wenn man eine App öffnet oder ein Spiel spielt, als aktiv zum Arzt zu gehen oder einen Therapeuten um Hilfe zu bitten?

*Participant:* Ich schätze mal schon. Weil wenn ich eine App öffne, dann ist das eine sehr anonyme Geschichte, weil... letztendlich läuft die App auf dem Computer. Und wenn ich zum Therapeuten oder Arzt gehe, dann habe ich immer noch eine Person vor mir, der ich, ich sage jetzt mal, mein Leid klagen muss. Und ich glaube, dass das für verschiedene Leute schon eine Hürde ist, da ja nun gerade psychische Erkrankungen dann immer noch so ein bisschen, ja, so ein Stigma sind. Und ich glaube schon, dass der eine oder andere damit.... Oder dass es dem einen oder anderen leichter fallen würde, mit einem Computer oder mit einer App was zu unternehmen als mit einem Therapeuten.

*Interviewer:* Glaubst du, die App oder das Spiel alleine könnte helfen oder sollte Unterstützung zur Therapie sein?

*Participant:* Definitiv Unterstützung, weil halt...tja, aus eigener Erfahrung ich weiß, dass gerade bei solchen Apps und Spielen, je komplizierter die sind, der Suchtfaktor enorm hoch ist. Und ich denke mal, dass es ausgesprochen schwierig ist für jemanden, der so eine App benutzt und so eine App braucht, sich nicht darin zu verlieren. Ne, so dass so diese Realitätsflucht ja eine permanente Realitätsflucht wird.

*Interviewer:* Interessierst du dich für Spiele? Findest du Spiele ziehen einen in ihren Bann?

*Participant:* Auf alle Fälle. Auf alle Fälle, bestes Beispiel, aus eigener Erfahrung World of Warcraft. Jahrelang gespielt, 20 Stunden am Tag. Alles andere fallen lassen und war sehr schwierig, da wieder rauszukommen.

*Interviewer:* Weißt du, was Gamification ist?

*Participant:* Nicht wirklich.

*Interviewer:* Was stellst du dir darunter vor?

*Participant:* Eigentlich stelle ich mir darunter gar nichts vor, weil ich nicht weiß, was es ist.

*Interviewer:* Also Gamification ist die Verwendung oder Einbringung von spielerischen Elementen in eine andere Art von Aktivität, beispielsweise, wenn man eine Sprach App verwendet, ist das eigentliche Ziel, dass man die Sprache lernt. Aber um es spielerischer zu gestalten, um einen mehr zu motivieren, gibt es dann beispielsweise eine Art Punktesystem

oder du kannst Sterne sammeln für jeden Tag, den du dich eingeloggt hast. Oder du spielst gegen andere Leute und dann bekommst du einen Pokal, weil du mehr Vokabeln an einem Tag gelernt hast als eine andere Person beispielsweise. Also das spielerische Element in anderen Aktivitäten eingebracht zu motivieren. Du hast schon sowas ähnliches erwähnt. Aber nochmal als Frage, eine App ist immer verfügbar. Ein Termin bei einem Arzt oder Therapeuten musst du extra machen. Ist das ein Vorteil? Dass die App immer verfügbar ist?

*Participant:* Definitiv ja. Zumindest wenn ich mal versuche, mich in eine Person hineinzusetzen, die so eine App benötigen würde. Ich denke mal, da gibt es brenzlige Situationen von jetzt auf gleich, wo Hilfe halt nötig wäre. Weiß ich nicht, in Form von Entspannung oder sonst irgendwas. Und bei Therapeuten und so weiter, denke ich mal, ist es so, dass ich da nicht mal gerade sagen kann, ich komme mal eben rum. Weil ich denke mal, gerade bei psychischen Erkrankungen ist es so., dass ich die Hilfe jetzt brauche im Moment, weil es mir jetzt gerade im Moment schlecht geht. Und ja, wenn ich dann zwei Tage auf einen Termin warten muss, hilft mir das jetzt gar nicht. Also denke ich mal, dass so eine App in diesem Fall da schon sehr hilfreich wäre.

*Interviewer:* Jetzt geht's dann mehr um Spiele und um Gamification in den nächsten Fragen. Und zwar, was für Gamification Elemente würdest du als am meisten effektiv oder am hilfreichsten einschätzen? Ich werde dir ein paar Beispiele nennen. Eins ist Personalisierung, dass du einen Avatar oder einen Charakter in deinem Spiel hast, mit dem du dann spielst. Eins ist Kollaboration, dass du dann mit anderen Charakteren gemeinsam spielst oder eben auch Challenges, dass du gegen andere Charaktere spielst, dass du also eine Art Wettbewerb im Spiel hast. Und dann gibt es das Point and Reward System, dass du eben Punkte oder Sterne sammelst, wenn du was gemacht hast. Und wenn du dann Erfolg hattest, dann gibt es dann eben eine Belohnung dafür. Und ein weiteres Element ist Storytelling, das eben das Spiel, die App, eine Art Geschichte erzählt oder das eben dein Charakter eine Art Geschichte durchlebt. Welche von diesen Elementen hältst du für sinnvoll und am effektivsten? Oder gibt's auch vielleicht welche, die du als gar nicht sinnvoll erachtest?

*Participant:* Also im optimalen Fall wäre es ja so, dass die App alle Möglichkeiten von denen, die du gerade aufgezählt hast, bietet. Weil dann kann es auf eigentlich, ja, ich sage mal, jede Möglichkeit des Benutzers oder des Users eingehen. Weil auf der einen Seite ist das natürlich schön, wenn ich ein Rewardsystem habe, auf der anderen Seite setzt das natürlich den Benutzer rein prinzipiell auch wieder unter Druck. Und steigert natürlich auch den Suchtfaktor. So nach dem Motto, ich muss immer weiterkommen oder ich will immer weiterkommen oder es ist toll, immer weiterzukommen. Und dann ist ja der Unterschied noch, dem einen hilft der Stress, der im Spiel aufgebaut wird, für den anderen ist der Stress, der im Spiel aufgebaut wird kontraproduktiv. Für den wäre dann eher so diese Storytelling Geschichte interessant, um nicht unter noch mehr Druck zu geraten. Sondern nur halt eine Geschichte durchleben oder einfach nur durch eine virtuelle Welt laufen und chillen. Also der optimale Fall wäre wahrscheinlich alles. Und dann von Person zu Person und Fall zu Fall zu differenzieren wer was benutzen könnte, sollte, wollte.

*Interviewer:* Glaubst du, das point and reward system sollte überhaupt drin sein?

*Participant:* Ja, ich denke, das habe ich schon ein bisschen mit beantwortet.

*Interviewer:* Glaubst du nicht, dass das ein Risiko ist, wenn man eigentlich die App als Hilfe verwendet und dann beispielsweise nicht genügend Punkte sammelt und dann eher enttäuscht ist? Und wofür sollten die Punkte sein?

*Participant:* Ja gut, das ist wieder so eine Geschichte. Ich denke mal, das hängt von Person zu Person ab, weil je nachdem in welchem Zustand sich die Person befindet, kann auch ein Punkt schon ein Fortschritt sein und ein Erfolgserlebnis. Für andere sind 10 Punkte nicht einmal einen Fortschritt. Das ist ja auch immer ein bisschen eine Frage der Erwartungshaltung. Denn die Möglichkeit, denke ich, sollte schon gegeben sein, weil für manche Leute ist es ja auch hilfreich, sich unter Druck zu setzen und die Geschichte, dass man enttäuscht ist oder die Sache, dass es ein, dass man enttäuscht ist, kann man bei so einer App sowieso nicht ausschließen. Egal in welchem Umfeld.

*Interviewer:* Und Zusammenarbeit mit anderen ist auch sinnvoll oder sollte man sich mit seinem eigenen Problem lieber individuell auseinandersetzen?

*Participant:* Ist auch wieder so eine Geschichte, die halt je nachdem auf den User ankommt. Manche Leute sind lieber alleine, wenn sie gestresst sind. Manche Leute sind lieber in einer Gruppe, wenn sie gestresst sind. Auch die Möglichkeit sollte dann in so einer App gegeben sein, das von Situation zu Situation zu entscheiden, ob ich was alleine machen will oder ob ich was in einer Gruppe machen will. Ob ich was für mich mache oder ob ich was gegen jemand anderes mache. Also so eine Art Person versus Person. Es sollten, wenn man so eine App macht, natürlich möglichst viele Sachen abgedeckt sein. Weil sonst wird halt einfach der Personenkreis, auf den sich die App bezieht, zu klein und dann wird es auch zu schwierig für die Personen abzuschätzen, ob für sie die App hilfreich ist.

*Interviewer:* Wenn wir mal auf das Personalisierungselement eingehen, mit dem Charakter oder dem Avatar, würdest du es dann bevorzugen, dass du das Spiel durch die Linse des Charakters siehst, dass du alles selbst erleben kannst? Oder würdest du es bevorzugen, aus der Vogelperspektive zu sehen? Dass du quasi deine Probleme auf den Charakter projizieren kannst und dich mehr davon distanzierst?

*Participant:* Auch hier denke ich, dass es sinnvoll wäre, wenn beide Möglichkeiten gegeben wären, weil so ein Charakter oder so ein Schar natürlich ein Blitzableiter sein kann, in vielen Situationen aber auch gerade die Sache der Personalisierung wichtig ist. Es muss ja in diesem Fall nicht mal so sein, dass man das auf sich selber personalisiert, sondern halt einfach nur eine virtuelle Person hat, auf die man es überträgt. Ich denke mal, dass die Frage, ob das aus der Vogelperspektive ist oder aus der Ego-Perspektive, gar nicht mal so wichtig ist. Es gibt natürlich viele Geschichten. Dabei hängt es dann auch wieder davon ab, wie die App oder das Spiel gestaltet ist. Wenn es zum Beispiel grafisch sehr aufwendig ist, dann würde natürlich die Ego-Perspektive rein haptisch deutlich mehr bringen, dann sind die visuellen Anreize halt größer.

*Interviewer:* Und dann, also wenn die Reize relativ groß sind und wenn man sich wirklich in das Spiel einfinden soll, dann ist auch der Suchtfaktor wahrscheinlich höher?

*Participant:* Auf alle Fälle, auf alle Fälle. Ich sage jetzt mal, je interessanter das Spiel gestaltet ist und je aufwändiger das Spiel gestaltet ist, desto mehr Zeit möchte man natürlich auch da verbringen, weil das Ziel des Spieles ist es ja, dass es mir bessergeht und da entwickle ich dann natürlich automatisch eine Sucht danach, dass es mir besser geht. Wenn es mir ständig in einem Spiel bessergeht, warum sollte ich denn dann in mein reales Leben zurückkehren wollen, um mich da wieder mit den Problemen auseinanderzusetzen? Ist halt eine sehr brisante und sehr gefährliche Geschichte. Und deswegen hatte ich auch vorhin gesagt, dass das nur unterstützend wirken kann, weil da bin ich auch der Meinung, dass es zumindest eine Möglichkeit geben sollte, wenn es halt unterstützend eingesetzt wird, dass ein Therapeut oder so, eventuell die Zeit nachvollziehen kann, damit man da der, sagen wir mal, der Proband in dem Spiel verbringt. Dass man da von der Seite auch schon gleich im Vorfeld erkennen kann Oh, da baut sich eine Sucht auf oder nicht.

*Interviewer:* Denkst du, im Spiel oder in der App sollte eine Begrenzung sein, dass man es beispielsweise nicht länger als eine halbe Stunde am Tag verwenden kann.

*Participant:* Schwierige Frage. Die Möglichkeit wäre sinnvoll, das einzubauen, so nach Art der Kindersicherung im Internet. Kann einen unter Druck setzen, kann aber auch hilfreich sein. Ist sehr schwierig. Die Möglichkeit sozusagen eine Zeitbegrenzung sich einzustellen, auch für sich selber, sollte vorhanden sein. Ist manchmal vielleicht hilfreich, weil man sich halt auch sehr schnell in einem Spiel verliert und demzufolge auch die Zeit vergisst und man dann gerade in so einem Spiel deutlich mehr Zeit verbringt, als man es eigentlich vorhat.

*Interviewer:* Was man so ungern unter Druck setzen? Dass man Angst hat, nicht genug Zeit in dem Spiel zu haben, dass man lieber länger drinbleibt?

*Participant:* Ja, gerade die Konstellation Zeitfenster und Punktesystem, zum Beispiel, erhöht natürlich ganz enorm den Leistungsdruck. Nämlich in dem Zeitfenster, das mir zur Verfügung steht, pro Tag möglichst viel zu schaffen, um möglichst viele Punkte oder Sternchen oder weiß der Kuckuck was zu erreichen. Die Konstellation ist natürlich sehr, sehr, sehr gefährlich. Weil das wäre ja absolut kontraproduktiv zu dem, was eigentlich erreicht werden soll, nämlich eine Entspannung.

*Interviewer:* Wäre es dann nicht besser ohne Punktesystem?

*Participant:* Ja.

*Interviewer:* Wer möchte denn einschätzen können, ob man was erreicht hat. In dem Sinne eine App, die auf deine Gesundheit basiert ist, die kann ja nur dein subjektives Empfinden verbessern.

*Participant:* Genau.

*Interviewer:* Da kann ja niemand einschätzen, ob du einen Punkt erreicht hast.

*Participant:* Richtig, in der Tat. Die Möglichkeiten...es sollten... meines Erachtens sollten alle Möglichkeiten gegeben sein.

*Interviewer:* Die nächste Frage ist auch eher wieder subjektiver? Was sind Dinge, die dir helfen, wenn du dich unter Druck gesetzt fühlst oder einfach gestresst bist? Gibt es einen speziellen Ort, an dem du dich besser fühlst? Gibt es eine bestimmte Aktivität, beispielsweise an einem See sitzen oder durch den Wald zu laufen?

*Participant:* Wenn ich gestresst bin, ja. Entspannt sitzen, eine Tasse Kaffee trinken und eine Zigarette rauchen.

*Interviewer:* Ist der Ort ist dann egal?

*Participant:* Der Ort ist dann eigentlich relativ egal. Das Wichtige ist das Entspannende. Und ja, die Verbindung von Entspannung, Kaffee und Zigarette.

*Interviewer:* Wie würdest du das Umfeld in einer App bevorzugen? Sollte das eher natürlich sein oder würdest du es bevorzugen, wenn es eine Art Fantasiewelt gäbe?

*Participant:* Also ich persönlich würde natürlich eine Fantasiewelt bevorzugen, weil es halt dem, was ich mag und meinen Interessen entspricht. Das kann bei anderen Leuten ganz anders sein. Es gibt Leute, die halten von Fantasy oder Science-Fiction gar nichts. Für die ist dann natürlich eine Fantasiewelt relativ uninteressant.

*Interviewer:* Wenn man den therapeutischen Aspekt nochmal mit einbezieht, ist es dann eher kontraproduktiv, wenn es eine Fantasiewelt ist, die mit dem richtigen Leben nicht viel zu tun hat.

*Participant:* Ich denke, dass es da dann schon sinnvoller wäre, eine Welt zu erschaffen. Ist jetzt die große Frage, was ist Phantasie und was ist Realität? Auch in Fantasy Spielen gibt es Wasserfälle und schöne Landschaften. Die Fantasiewelt wird ja eigentlich nur dadurch zur Fantasy Welt, dass da, ich sag mal, dass sie jeglichen Bezug zur Realität verloren hat in Form von nicht-existierenden Tieren, die rumlaufen oder sonst irgendetwas. Also ich denke, dass sowas schon sinnvoll wäre.

*Interviewer:* Es muss ja auch nicht unbedingt eine komplette Fantasiewelt mit Elfen und Drachen sein. Es können ja auch einfach Fantasy Elemente in der richtigen Welt mit drin sein, beispielsweise, dass man sich auf einen Besen setzt und seinen Problemen wegfiegen kann.

*Participant:* Sehr interessante Überlegung. Klingt interessant. Könnte hilfreich sein, denke ich.

*Interviewer:* Okay, das waren meine Fragen. Gibt's was, was du noch sagen möchtest, wonach ich nicht gefragt habe? Gibt es irgendwelche Elemente, die du als sinnvoll erachtest? Oder gibt es irgendwas, wo du ein Risiko siehst, was du gerne noch weiter ausführen möchtest? Irgendetwas, was weißt du über Spiele sagen möchtest?

*Participant:* Ja, die Sache mit dem Risiko, das empfinde ich in diesem Zusammenhang als extrem wichtig. Da es ja auf eine Personengruppe abzielt, die ja im Allgemeinen schon mentale oder psychische Probleme hat. Und deswegen finde ich die Sache hochgradig

wichtig, dass man darauf achtet, dass der Suchtfaktor hier auf keinen Fall unterschätzt werden darf.

*Interviewer:* Okay. Das war's. Danke schön für deine Zeit. Ich stoppe die Aufnahme.

## Transcript Interview 5

*Interviewer:* OK, so now it's recording. So, you know how it goes. I have to ask you now; do you agree to be recorded?

*Participant:* I agree to be audio and visually recorded.

*Interviewer:* Great. So I have told you about the topic already. There are two sets of questions. The first questions are about mental problems, psychological problems. And then later on, we go into gaming, gamification, games, apps. There's no wrong or right. You can answer whatever you like. All of your answers are, of course, subjective. You are always welcome to elaborate on your answer, to evaluate your opinion. And yeah. So I would say we just start. Do you have any further questions?

*Participant:* No, everything's okay.

*Interviewer:* Great. So the first question is, do you often feel overwhelmed by your feelings? So with the emphasis being on often.

*Participant:* Well, it really depends. I wouldn't say often, that's not the case. Not often, but there are times where I get overwhelmed, where minor setbacks happen, and then I get so frustrated that it overwhelms me and that I get really upset about something that is actually nothing. Yeah, it's nothing you don't have to be upset about it, but then I get very upset about it anyway, or sometimes it's also the case that I'm so overwhelmed with my feelings that I don't manage to see clearly and I don't manage to take in all the information. If I would do that, I would realize there is no reason to freak out. There is no reason to be overwhelmed. But I just don't have... I don't see clearly in that time anymore. And then the feelings overwhelm me. And that can be very upsetting. And it's very... I'm very low on energy after I have this, after my feelings overwhelm me. And it's a bit silly because if I would just take my time and try to look at the situation clearly as it isn't taking all the information that I have, I would probably come to the conclusion that there's no reason to be overwhelmed. But I would say these are not the rule. These are sometimes, so most of the time I have my feelings under control and I can handle everything very well. But there are times where I do get overwhelmed with my feelings, but I wouldn't say that it happens often.

*Interviewer:* Has it changed in the past months? Has it increased since the lockdown?

*Participant:* Oh, it definitely has increased since the lockdown. What usually happens maybe once or twice a year now happens maybe once or twice a month. So it definitely...the frequency definitely increased. I think there are also other factors that play into this as well. But I think mainly the lockdown has a great contribution, not being able to see your friends and not being able to share your concerns or your problems with your social network or only through online means, which I'm not the biggest fan of. So I don't use it as much as I could and probably could engage in more social online interactions if I wanted to. But I don't want to. And it's stupid, but I just don't... I just don't see the point. So I think that definitely this whole year of social distancing, it definitely has increased me being overwhelmed by simple

situations that I would usually handle like very easily. Or where I could just talk to my friends about it and then they could help me cope. But since this is not taking place anymore, I think I get easier overwhelmed.

*Interviewer:* And do you then feel alone with your feelings? Do you wish that someone or something could help you?

*Participant:* I do actually not feel alone with the feelings because I do have close friends that I could turn to when things are getting rough, but I feel like a lot of things could be prevented if this whole lockdown weren't there. Um, so I don't necessarily feel alone, because when I open up to my friends about it, they actually tell me that they feel the same way. And because of that, they can also accurately respond in a way that actually helps me and makes me feel understood. So I wouldn't say that I feel alone. Maybe in that moment of "overwhelmingness", but as soon as I contact my friends about it, they can help me and then I don't feel alone.

*Interviewer:* Do you sometimes wish you could 'flee' the world or do you want to escape into another life for a while?

*Participant:* Oh, for sure. Definitely. Now, with the whole covid situation, the whole lockdown situation, I'm frequently catching myself daydreaming about life before covid and already daydreaming about life after covid. But then at the same time, I was very hopeful when this whole situation started and I saw a lot of opportunities. And I would also describe myself as a very optimistic person. I'd rather see my glass half full than half empty. So when this whole lockdown started, I was like, this is going to be so great. It's going to teach us a lot about digital learning environments and remote school, remote studying. So I saw a lot of opportunity and I still think there is a lot of opportunity. But because not only one part of my life was placed remotely, but our entire life was placed remotely and every social interaction was cut off, this is not the life that I envisioned. And now also this whole optimistic feeling has gone away. It's rather very pessimistic now, I feel very unmotivated. And I doubt a lot about my abilities and how well my development was going because of it being all online. So when I now think about a future and I try to escape in a future where there is no covid or post covid and everything goes back to normal, I sometimes actually have very sad, futuristic views on the world. I think maybe we will never go back to the way it used to be, or we will always be very concerned about the vaccination procedure that if people don't want to get vaccinated, that there will then be a two class society where people will be the vaccinated one versus the non-vaccinated one, and then one group will hate the other. And then maybe at some point there will be labelling and then you have to wear something to show that you're not vaccinated. You get my point. But this is just a very dystopian view. While at the beginning of it I was like, oh, as soon as the virus is over, everything's going back to normal. No one is going to care. No one's going to ask. We're going to hug each other again. But now that the first social events are taking place again, I see that it's weird and this is scaring me. So I do daydream about or I do wish to escape the current situation because I'm very unhappy and I'm unmotivated. And this is not how I envisioned my university life. But while the daydreams initially were quite positive, now when I tried to escape this world, it's quite a negative scenario that I'm painting, which probably also doesn't help.

*Interviewer:* Could you imagine to use an app or to play an online game to support you or to bring you to another reality, to another world?

*Participant:* Well, I must say, I don't... I'm not a big video game player. So I was never big on playing video games. I do play a game on my smartphone that's called Woody Puzzle. And it's a puzzle where you have to fit wood blocks and then make rows. And so this is really something that helps me disengage with the world, that helps me focus on just one thing. When I get overwhelmed, I can play woody puzzle and it helps me calm down and it helps me also forget about what's going on right now. I can just focus on those little wooden blocks that I have to stack in a most strategic way. It calms me down, but it's not really putting me in a different world or anything. It's more calming me down and helping me gather my thoughts and my feelings again. So I'm ready and re-energized to start again.

*Interviewer:* Do you think it could be an alternative for someone who needs therapy, to use an app to not feel alone or to drift away?

*Participant:* I think there are great apps out there and I think there are very useful apps out there. However, I think with such a complex topic as the mental health of humans, I don't think an app could replace the work that a therapist does just because a therapist has so much more things that they can read into. If an app would ask me how I am doing, I could write, I'm fine. But if the therapist asks me how I'm doing, they see my body language. They hear the tone of my voice. And there are also a lot of cues that they can just gather from my presence and also my frequent behavior. For instance, maybe I'm always on time and once I'm late, that could also indicate something or...I don't know. But I just think these nuanced things cannot be captured by an app. And I also think especially now people are missing social contact. And I think this is having a huge impact on their mental health. So I was in a similar situation where I felt very overwhelmed and I was like, maybe there's no shame in asking for help. Maybe I should contact a therapist. And then the people were on the website. They said, you can have a Skype call. And that made me so upset. I was like, I don't want to Skype call. This is exactly the problem that I'm having. I don't want an online solution. What I want is a person that I can talk to that is there with me and they can read my body language and they can have the whole atmosphere and can take that in. So I think there are great apps and I think we shouldn't cast them aside. But I also think we shouldn't say that the digital solution can replace the human touch because I am not a big fan of that, personally.

*Interviewer:* If you would be looking for a therapist now and they would put you on a waiting list, you would know that you can soon have an appointment. But to bridge the time until you have that appointment, would then maybe the app be helpful to maybe take away some anxiety or just to overcome the time.

*Participant:* What I think, it's definitely a nice thing to show the patient that you are not forgotten and that they are aware that there is a waiting time and that they're trying to do something to make this time, this waiting time until you can have the appointment as convenient or as nicely as possible. So I do think that providing an app could have a nice impact. I am not sure how.... I'm not familiar with any apps that help tackle anxiety. So I'm not ...I don't know how they would work on me personally. I do think that if there are apps

that already help you gather your emotions, paint a clear picture of your situation, I do think that this could be very handy for both the participant or the patient and the therapist, because over the app, the patient can already paint a better picture of how he's feeling, what emotion he's experiencing every day. He could maybe use it as like some sort of diary or where he can put down situations that caused some mental distress. So I think this could be like a nice addition to the therapy where the patient can also give some input and some input that is not necessarily asked by the therapist, where the patient then on the spot has to think about it like, oh, what are possible triggers? What helps me? What upsets me? So I think that the app could be of good use. But, um, yeah, as I said, I'm not sure if we could replace the whole therapy, but maybe if you're waiting for an appointment and you know that you're getting there soon, it could maybe be a nice way of introducing the patient to the therapy and to show the patient that, yeah, they are...something is happening. You know, it's not just a wait, but something is happening. And there is something that you can already do now to help you improve your mental health. So I think that could also, just even if it maybe doesn't necessarily help, it could maybe be a good way to put the patient in the right mindset to show them the more active you are and the more help you're looking for and the more you're engaging, the better the outcome will be in the end.

*Interviewer:* Do you think it is easier or less of a burden to use an app or to open a game than to actively ask for an appointment at the therapist or to go to a doctor?

*Participant:* I think that admitting to yourself that you need help or that you want help is a big step. And it's not easy because for some people, maybe they feel like asking for help is a sign of weakness. So I do think there is some kind of obstacle that one has to take in order to sign up for therapy. While, when you download an app, it's very anonymized. You can... no one knows your apps on your phone and no one knows what you're using it for and how it works and why you're using it for. So there is this kind of anonymity to the app, while when you have a doctor's appointment, obviously, you don't have to tell anyone about it, but you would have to make time. You have to free your schedule. You have to go there. Maybe you meet someone you know. And then is this if you personally feel ashamed about it, about going to a therapist, then that could present an obstacle. With using an app, this obstacle is definitely smaller or maybe not even there, especially because there are already apps that people are using for anything. Basically there is an app for everything, there's an app for tracking your poop. There is an app for doing your groceries, listening to music for, you know, there's an app for anything. So adding an app that helps you with therapy would not be unusual. And I do think that the burden would be lower, or the obstacle to do... to take the action would be lower. But I think it starts with the same stuff that you admit to yourself that you need help. And I think maybe people were like, oh, I'm not that bad, or I don't want to be a burden to the psychiatrist. Or there are people who need the appointments more than me. I think people who have this kind of mindset, they could benefit from looking into the app first because it's a nice way to introduce them, as I said before, to this mindset helping, doing something to help your mental health. But eventually, I think you have to start with admitting that you need help and then actively searching for something. And I think that's a big step either way.

*Interviewer:* An app is available all the times opposed to an appointment you would have to make, is that an advantage?

*Participant:* That is definitely an advantage, the app is always available. As I said before, it could be at any point in time when you realize something, you could just open the app and write it down, or if you are in distress, you can just do it. But then, sometimes maybe having an app or computer to talk to is nice that it's available all the time, but if you are in need of a human person, the advantage of, hey, it's available all the time might not count because it doesn't matter if it's available, if it's not what you need. But I do see the point that it's convenient, of course.

*Interviewer:* OK, so that's it's about mental health. Now we're going more into games. Are you interested in gaming at all or do you think gaming is engaging?

*Participant:* Well, as I said earlier, I'm not personally that much.....I don't play computer games that much. I just have woody puzzle installed on my phone. But I do think, like this game that I'm playing with the puzzle, it's very engaging and it really helps me calm down and focus on one thing at a time, sort out my feelings, my emotions, my thoughts. And I do think there are some really fun games out there. But I'm personally more into a board game where there are multiple people involved. I'm a social person, so I don't necessarily play games just to entertain myself. I play games to calm myself down, but I enjoy games more if they're played in a group of people, which again I guess is probably my type of therapy, just being around friends and having a good time.

*Interviewer:* You know what gamification is?

*Participant:* I do know what gamification is. It's when you have a yeah, not necessarily a game, but any type of app that uses some game like elements to make the interaction more fun. So, for instance, if it's just a... I don't know....Shopping app where you buy groceries, and then if you get to a certain point, if you have that many items in your basket that you come to twenty-five euros, then you get a badge and then suddenly you are a premium shopper or something. So it's like this is like a game like element that doesn't necessarily add anything to the app, but it makes it more engaging and more fun and probably also more addicting to play because then people want to collect more rewards. Or it could also be a .... if the time is running out and you're paying playing Candy Crush or whatever. Well, I don't know that it could be like a time bomb that is slowly being eaten or something like something that is related to the game or to the app. But yeah, it has a similar theme, but it's more like an extra nudging element. That's how I would describe gamification.

*Interviewer:* Exactly. Very well explained. So I would give you some examples of some gamification elements. And I would like you to consider which one is most effective or which ones do you think are helpful at all? Or maybe some of them don't even make sense for you to include for a mental health app. So the first one is personalization, so that you would have a character or an avatar in the game so that you play as a character. Then there's collaboration, so you can do it with others. You can play the same game, which also includes a challenge, so you can have a competition against other people, then that's what you've already mentioned yourself. So points and rewards. So you do get a point for every task that

you've finished, you can get a reward afterwards. You get a badge or maybe a star or something like that. And then there's also storytelling. So, for example, the character has a special experience that you can follow through.

*Participant:* I think...what I think would be very important, the personalization might be a nice thing to do because with this personalization you could create a character that resembles your current state. But it could also... you could also create a character of what you aspire to be as sort of motivation. So I think that could be a very big part. I also think the collaboration might be nice because, yeah, this is maybe a bit of a tricky part, because as I said earlier, some people might be a little bit afraid to admit that they need help or they don't want to go to a therapist because they might want to use it more anonymous. So they're using an app. If they now need friends to collaborate, which on the one hand side is nice but then at the same time, you would have to tell your friends, like, hey, I'm using this app that's helping me with my mental health. It's pretty fun. You want to play it with me? So I'm not sure if I would have this function that you can play with friends, but maybe you could just play it with other users. A bit randomized, for instance, Among Us. Oh, I played Among Us. I'm a gamer girl after all. With Among Us there's the option that you play either with friends or you play with random people. So that might also be nice that you just engage with other people who have who are in a similar situation like you. And you can really understand what is happening and why they're using the app. I think this could be... the collaboration part could be nice, could be a disadvantage depending on how it's used. Then you had the storytelling. Yeah. Personally, I'm just not the biggest fan of storytelling. I know that it's been used a lot and I, I'm pretty sure it's researched a lot and it has some kind of positive effect. I just personally don't like storytelling that much. And what was the third one?

*Interviewer:* Points and rewards.

*Participant:* Oh, points and rewards. I mean this is a very serious game, right? It's a very serious topic. I do think that points and rewards make it a little bit competitive, a little bit more engaging so it could help people to just stick with it if they are maybe threatened to lose their status that they worked for if they don't come back to the game. But at the same time, maybe it shouldn't be too difficult to get the topic, so to get the rewards, so the people are not demotivated to play it.

*Interviewer:* And if we go with the element of personalization, for example, if you have a character, would you prefer to see the game then through the lens of the character so that you can experience everything yourself or would you like to see from the bird's perspective so that you can portray your problems to the character and maybe have more of a distance between you and the character?

*Participant:* That's a very difficult question because I think there are advantages and disadvantages for both of them. So I think if you take the bird perspective, it's very clear that you are you and you are talking to this character. So that could be a very... it's a very, very similar to maybe the.... Well, no, it's not very similar to the therapy session, because in the therapy session, you are looking through your own eyes and watching the scenario. But at the same time, it's you who tells the problem to a second character, someone else. While when you are experiencing everything yourself, I feel like it could be maybe too much of a

game, so people might take it less serious, but maybe they also take it more seriously. I'm not certain. I think it depends a little bit on how much research is done that looks into the different advantages and disadvantages. If I would now imagine a game that tackles the problem of mental health, I think, well, I'm currently thinking about animal crossing, where you are kind of.... It's a mix of ...well in animal crossing you're not really seeing anything from the character's perspective, but you are controlling the character. So you are the character, even though you're not seeing through his eyes. So I think maybe this could be like a nice mix where you have... you are looking onto the scenario and you're looking into what is happening. But at the same time, you're in control about the actions. And yeah, but there is you're right, there is some kind of distance. So if I'm just controlling the character and I'm looking to what is happening with the character, if something happens to the character, there is this kind of distance where you're like, oh, well, that's not me. While if it's literally you and you see the whole game through the eyes of the character, it could definitely be a more personalized experience.

*Interviewer:* And if then the game is very engaging, you can really drift into another world. If you would then forget your problems, would you think that there is a risk of overusing or maybe even becoming addicted?

*Participant:* There's definitely the chance, but I think it depends on how old the user is, so when I compare myself to when I was 12, 13, 14, I was definitely more prone to get addicted to a game. And I would... back then I played like hay day and stuff. So I would literally set myself an alarm at the middle of the night to not miss when the ship is leaving or whatever. So I do think once a person gets older, it's easier to distinguish between what is a game and what is a reasonable time to spend on a game. So I think the addictive power is less strong or the chance of getting addicted is less high when you are older than when you're younger. But I do think there is the chance that you very deeply engage with the game and spend maybe more time on it than anticipated. But I don't think it would be that someone who has a normal Internet usage or play some games in his free time, I don't think he would suddenly be completely addicted to one game if that hasn't happened before

*Interviewer:* And since this is a mental health app comparable to therapy, do you think it should maybe be restricted to the usage time of one hour per day?

*Participant:* Hmm, that might not be the worst idea in order to already suggest the kind of therapy feeling, the therapy atmosphere that you are like, OK, now I'll take one hour to really focus on the game and then when the hour's up, then that's it. But at the same time, it would also kind of take away the disadvantage that it had, because what if you used the hour and then you need it again because something upset you and then you can't use it? It's basically just like an unavailable therapist at that point. So maybe it could be like, you know, how you have the time restriction on apps, where they basically say, are you sure you want to use this game? You already used it for an hour or you already maxed out on the recommended time. And then you can just say, yes, I'm sure I want to give it more. Or maybe you could have like a three or four, um, how do you call it, plus ones basically where you can just... you can't do it all the time. But if there are like three days or two days in a week or whatever, where you have to take more time on your way, then you can just use it.

*Interviewer:* Good idea.

*Participant:* Maybe you can also learn it during the game within the hour.

*Interviewer:* What are things that help you when you feel down or when you are stressed out? Is there a special location you feel better at, like sitting at a lake or walking through a forest or is there a special activity that helps you feel better?

*Participant:* In general, I would say being outside makes me feel better. I am very prone to feeling more calm when I see big open water. So that is something that really, really, really calms me down and that just washes away a lot of emotions and that just helps me think very clearly. However, this is not always available and going to a pond has not the same effect, sadly. But if I can't have the big open water, what also helps me exercise. So I am... in December I started running. So I go running every other day, that's just my rule. But if I feel overwhelmed or if I feel very unmotivated and I just can't bring myself to do anything, or if I feel very discontent with what I achieved on that day and I go for a run afterwards, I feel better. I moved my body. I was outside, so it was definitely going outside. Sometimes it's even just going for a walk. But being outside, exercising, getting your body moving, getting your blood flowing. That's definitely something that helps me personally to reset. Calm down.

*Interviewer:* Yeah, of course, exercising is something that you definitely have to do for yourself, but you mentioned also the open water. Would that be then maybe an atmosphere that an app could give you that would help you then?

*Participant:* Maybe. I don't think if I would just look at my screen and I see waves. I personally haven't tried it, but I don't think it would suggest the same feeling. But what I could imagine to do is maybe have an app that provides the sound of wind and waves and water crashing to the shore and then just maybe standing with my feet in a little pond. So I have the sensation of water or of standing in the sand and then I have the sensation and I'm outside and I can smell that I'm outside and I feel the fresh air and then over... more like an audio app, I could also get the audio effect of being at the beach or being at an open, big open lake or sea, maybe that could help me. But I don't think that just being in my room watching waves on the screen would have the same effect.

*Interviewer:* Would you like the environment in such an app or in a game to be very natural, or would you prefer if it was like a fantasy world?

*Participant:* Um, personally, I would prefer if it's natural, it does not have to be realistic, so it doesn't have to be a virtual reality of a video of someone walking through the forest and then that's the base of the game. I think it can be a little bit more like gamified. It could be a little bit more maybe cute. Like, I don't know, it sounds stupid now that I make the reference again, but a little bit like Animal Crossing where there are trees and your own nature and you recognize this is a tree and this is a plant. But at the same time, you... it's also a bit simplified and a bit cute and everything. So I think... but I would prefer this where it's still realistic and natural over a game where there is fire and dragons and dinosaurs and just... Yeah, I mean, it doesn't have... it's just... it should be like a realistic scenario personally. But I

think that also depends on the needs of the patient. And everyone is different and everyone has different needs. So maybe it could also be an option for the people when they personalize their character, that they also choose a world where they want to play and if it should be a realistic world or a fantasy world, because if people are using this app to actively disengage with the real world, I think then having a fantasy world definitely would help for people who are like, I'm OK in the real world, I just need to calm down or I need to focus on what's important. Maybe for them, they don't need all these extra crazy dragon fire. Oh, I don't know, fantasy world, but it's fine to just live in a very peaceful, little realistic village and walking around, collecting your coins, doing your tasks, talking to people. So I think, um, I wouldn't say one is better than the other. Personally, I would prefer realistic world. Because my problems are also realistic, and I don't think... the app could maybe suggest that in a fantasy world, your problems don't exist and that's nice. But as soon as I close the app, I'm not in the fantasy world anymore. I'm in the real world where the problems do exist. So I don't know. I I'm not an expert in gaming or I also don't know much about psychology, but I could imagine that, um, it's better to tackle the issue than just to pretend that the issue isn't there. And once you come back, then you're again overwhelmed.

*Interviewer:* Very nice answer. So that's been all my questions. Is there something like an element or something that you would prefer to see in an app that I haven't asked about? Or is there something like from a psychological view where you think that it could be a bit risky?

*Participant:* Well, from the risk psychologically, it maybe depends on what the characters are able to do in the game. So if someone who has very severe depression plays this game and I mean, obviously the game is to help people with mental health. So it probably has some kind of, um, you have restrictions to it. But if I could play a game where I could kill myself, for instance, I think that might be very risky. I think that would be very counterproductive. So I think it's very important to keep in mind that the target group and the people playing it are already vulnerable people and they are opening up towards this app. So it has to also be very tailored to their needs and to have a clear goal in mind. So I think this is important, but otherwise, everything that you said seems very clear and very good to have.

*Interviewer:* OK, great. Very nice answer. Thank you. So that's it for the interview. I will stop the recording.

## Transcript Interview 6

*Interviewer:* Die Aufnahme läuft. Stimmt du zu, aufgenommen zu werden?

*Participant:* Ja.

*Interviewer:* Also in diesem Interview geht es um Spiele und Apps, die dabei helfen sollen, psychische Probleme zu bekämpfen. Es gibt erst ein paar Fragen, die über die mentale Gesundheit gehen und später geht's dann um Gaming. Du kannst deine Antworten gerne ausführen und begründen. Es gibt kein richtig oder falsch. Die erste Frage, fühlst du dich manchmal von deinen Gefühlen überfordert?

*Participant:* Nein.

*Interviewer:* Hat sich durch den Lockdown irgendetwas verändert in Bezug auf Stress oder Situationen?

*Participant:* Ja und nein. In manchen Situationen schon, in manchen kaum.

*Interviewer:* Wo beispielsweise hat es sich verändert oder hat es sich irgendwo verschlechtert?

*Participant:* Ja, es hat sich verschlechtert insbesondere da, wo viele Termine, die früher in der Präsenz stattgefunden haben, jetzt online Termine sind, weil teilweise die Gesprächspartner nicht so aufmerksam sind bei den online Terminen. Weil sie teilweise etwas nicht verstehen, aber trotzdem nicht sagen, dass sie es nicht verstanden haben. Und am Ende das drei-, vier-, oder fünffache Arbeitszeit kostet, das zu korrigieren, was in einer Präsenzveranstaltung wesentlich einfacher zu erklären gewesen wäre.

*Interviewer:* Fühlst du dich manchmal alleine und wünschst du dir manchmal, dass jemand oder etwas dir helfen könnte?

*Participant:* Bezogen auf Projekte ja.

*Interviewer:* Und wünschst du dir manchmal der Realität zu entfliehen und in eine andere Welt abzutauchen?

*Participant:* Nein.

*Interviewer:* Kannst du das verstehen, dass andere Menschen sich das wünschen.

*Participant:* Ja.

*Interviewer:* Glaubst du, wenn andere Menschen so der Realität entfliehen möchten, in eine andere Welt eintauchen möchten, glaubst du, dass es hilfreich wäre, da eine App oder ein Spiel als Unterstützung zu verwenden?

*Participant:* Kann ich mir vorstellen, dass das vom Alltag ablenkt? Ja.

*Interviewer:* Glaubst du, es könnte therapeutisch genutzt werden?

*Participant:* Wenn es mit entsprechender wissenschaftlicher Unterstützung programmiert ist ja.

*Interviewer:* Und glaubst du, dass es einfacher oder eine geringere Hürde für einen Patienten, eine App oder ein Spiel zu öffnen, statt aktiv zum Arzt zu gehen oder einen Therapeuten um Hilfe zu fragen?

*Participant:* Auf jeden Fall.

*Interviewer:* Eine App oder ein Spiel ist immer verfügbar, im Gegensatz zu dem Termin, den du beim Therapeuten erst machen musst. Ist das ein Vorteil?

*Participant:* Auf jeden Fall auch ganz klar.

*Interviewer:* Oder glaubst du, dass die App auch zu viel benutzt wird.

*Participant:* Das ist die Frage, ob man die zu viel nutzen kann. Also ich sehe eher die Situation, wenn jemand jetzt glaubt, diese App zu brauchen, dass sie oder er ein Riesenvorteil hat, zu wissen, dass es immer verfügbar ist. Immer, wenn ich glaube, ich brauche es oder ich hätte es gerne, kann ich es nutzen, wenn die Tagessituation es zulässt. Aber wenn ich einen therapeutischen Termin brauche oder einen Arzttermin brauche, weiß ich, ich kann sie eben nicht nutzen und ich werde so schnell keinen bekommen. Demzufolge wird die App, wenn sie denn hilfreich ist, auf jeden Fall viel besser sein oder parallel dazu erhebliche Unterstützung leisten können.

*Interviewer:* Gerade in Situationen wie jetzt, wo ganz viele Leute zur Therapie gehen möchten?

*Participant:* Genau.

*Interviewer:* Wenn man dann auf der Warteliste steht, dann könnte das z.B. die Zeit überbrücken?

*Participant:* Ja.

*Interviewer:* Auch kann der Therapeut immer nur für eine Person da sein. Und wenn du dann die App verwendet, dann können das ja mehrere auf einmal nutzen.

*Participant:* Genau.

*Interviewer:* So, das war es jetzt so ein bisschen zu den psychischen Sachen. Jetzt geht's in den nächsten Fragen dann um Spiele. Interessierst du dich im Allgemeinen für Spiele, für Online-Spiele oder sowas?

*Participant:* Gar nicht.

*Interviewer:* Glaubst du oder kannst du dir vorstellen, dass Spiele unterhaltsam sind, dass sie einen in den Bann ziehen? Dass sie fesselnd sind?

*Participant:* Mit Sicherheit. Bei manchen Spielen ist es so, da wird ja davon berichtet, dass Menschen stundenlang gespiegelt haben, tagelang gespielt haben, ganze Nächte spielen.

*Interviewer:* Weißt du, was Gamification ist?

*Participant:* Nein.

*Interviewer:* Kannst du dir unter dem Begriff was vorstellen?

*Participant:* Vielleicht sowas wie Spielsucht?

*Interviewer:* Nee, Gamification sind spielerische Elemente, die man in einer anderen Aktivität mit einbaut. Zum Beispiel, wenn da eine App oder ein Programm wäre, mit dem man eine Sprache lernt, dann kommen solche Dinge wie, dass man Punkte sammelt oder Sterne oder am Ende des Tages einen kleinen Pokal kriegt oder so, dass eben spielerische Elemente da als Motivation mit drin sind, es aber eigentlich nicht ums Spiel geht in der eigentlichen Aktivität.

*Participant:* Ah ja, kenne ich sowas.

*Interviewer:* Es gibt viele verschiedene Elemente von Gamification. Ich gebe dir ein paar Beispiele und dann möchte ich gerne wissen, welche du am effektivsten einschätzt oder welche du glaubst, welche überhaupt sinnvoll oder hilfreich sein könnten und welche möglicherweise gar nicht. Es gibt Personalisierung. Das heißt, man hat im Spiel einen Charakter oder einen Avatar, der einen dann darstellt und der dann eben die Spielfigur ist. Es gibt Kollaboration, wo man mit anderen Spielern zusammenarbeitet. Daraus kann auch Challenge beispielsweise entstehen, dass man dann gegeneinander in Wettbewerben antritt oder solche Sachen. Aber natürlich kann man auch gemeinsam dasselbe Ziel verfolgen. Dann gibt es Points and Rewards. Dass man eben Punkte sammelt für Dinge, die man hinbekommt und dann danach eben entweder einen Pokal bekommt oder eine Nachricht wie; Du hast das heute ganz toll gemacht, solche Sachen. Und dann gibt es noch Storytelling, wo man eben durch so eine Geschichte geführt wird, dass man beispielsweise die Reise eines Charakters mitmacht. Glaubst du davon Elemente sind sinnvoll oder hilfreich?

*Participant:* Ja, auf jeden Fall. Jetzt weiß ich nicht bei psychischen Problemen. Aber ich kann mir durchaus vorstellen, dass es dabei auch hilfreich ist. Ich habe mal ein Spiel gemacht vor 30 Jahren, vor über 30 Jahren. In einer Gruppe mit unterschiedlichen jungen Menschen. Alle in meinem Alter. Berufsanfänger aus unterschiedlichen Branchen oder unterschiedlichen Ausbildungsberufen, unterschiedlichen Studiengängen. In einem Spiel, in einem internationalen Spiel mit anderen Gruppen der gleichen Voraussetzung, das hieß Market Game und damals ging es darum, Strategien zu entwickeln, ein Produkt herzustellen, es optimal unter optimalen Bedingungen zu produzieren, unter optimalen Bedingungen zu verkaufen und natürlich am Ende vom Gewinn her erfolgreich zu sein.

*Interviewer:* Und da ging es dann eher um Zusammenarbeit?

*Participant:* Da ging es um Zusammenarbeit, ja.

*Interviewer:* Glaubst du, Wettbewerb wäre in so einer App angemessen?

*Participant:* War auch mit dabei. Es ging ja darum, dieses Spiel gegen andere Gruppen zu gewinnen.

*Interviewer:* Glaubst du, für Leute mit psychischen Problemen ist es sinnvoll, in einem Wettbewerb zu stehen?

*Participant:* Kann ich nicht beurteilen. Möglicherweise nicht, weil der Druck einfach zu groß ist. Wenn sie verlieren, kann es sein, dass die Probleme noch größer werden. Wenn Sie gewinnen, haben Sie den Vorteil vielleicht.

*Interviewer:* Und was hältst du vom Punktesystem? Glaubst du, dass es motiviert, dass man Punkte bekommt oder glaubst, dass es eher demotivierend ist, wenn man mal einen Tag lang keine Punkte bekommt?

*Participant:* Kann ich schlecht beurteilen. Für mich wäre es motivierend, wenn ich Punkte bekommen würde. Ich würde versuchen, noch mehr zu bekommen.

*Interviewer:* Und in so einem Moment, wenn du dann versuchst, immer besser zu werden, glaubst du, dann steigt auch der Suchtfaktor?

*Participant:* Wahrscheinlich.

*Interviewer:* Wenn wir nochmal über Personalisierung reden und die Sache mit dem Avatar oder dem Charakter ....Mal angenommen, ein Spiel hätte das und dieses Spiel würdest du dann spielen, würdest du dann bevorzugen, dass du das Spiel durch die Augen oder durch die Linse dieses Charakters siehst, dass du alles für dich selbst erlebst? Oder würdest du es bevorzugen, das aus der Vogelperspektive zu sehen? Dass du siehst, was der Charakter tut. Dass man sich eher von den Problemen des Charakters distanzieren kann?

*Participant:* Wird wahrscheinlich das Einfachste sein, um Distanz zu halten. Auf der anderen Seite kann ich mir vorstellen, es für diesen Charakter zu spielen hat auch den Vorteil, Einfluss darauf zu nehmen, wie der Charakter sich verhält.

*Interviewer:* Denkst du, es wäre sinnvoll diese Elemente zu mischen?

*Participant:* Ja.

*Interviewer:* Denkst du, es ist überhaupt sinnvoll, spielerische Elemente in so einer App oder in so ein Programm einzubauen? Denkst du, das ist motivierend für die Leute, die sich damit auseinandersetzen?

*Participant:* Kann ich mir schon vorstellen. Auf jeden Fall, weil es eben den Unterschied ausmacht zu einem Therapeuten auf der einen Seite und auf der anderen Seite das Spielerische auch den Druck da rausnimmt, irgendwelche Situationen .. Mit irgendwelchen Situationen fertigwerden zu müssen oder zu wollen, was vielleicht im realen Leben schwierig ist, aber im Spiel dann möglicherweise ganz andere Wege eröffnet.

*Interviewer:* Und glaubst du, so eine App könnte eine normale Therapie ersetzen?

*Participant:* Nein.

*Interviewer:* Sollte die das unterstützen?

*Participant:* Sie sollte es auf jeden Fall unterstützen. Ersetzen kann sie es auf keinen Fall, weil das Individuelle dabei mit Sicherheit abhandenkommt und mit Sicherheit auch die Probleme nicht erkannt und demzufolge auch nicht tiefgründig gelöst werden können. Aber um ein Stresslevel abzubauen oder überhaupt erst mal eine Hemmschwelle abzubauen, sich mit solchen Dingen zu beschäftigen, das ist ja schon mal der erste Schritt.

*Interviewer:* Was sind Dinge, die dir helfen, wenn du mal gestresst bist? Gibt's da eine bestimmte Aktivität oder einen bestimmten Ort, wo du dann gerne sein möchtest? Sowas wie durch den Wald zu laufen oder an einem See zu sitzen?

*Participant:* Ja, oder gute Musik zu hören.

*Interviewer:* Und glaubst du, wenn das mal nicht möglich wäre, dass eine App sowas darstellen könnte?

*Participant:* Mag sein. Vielleicht ja, wenn es schöne Bilder enthält und vielleicht entspannende Musik dazu, kann es durchaus sein. Also bei mir geht's auch, wenn ich mir einfach nur vorstelle, ich könnte das jetzt.

*Interviewer:* Würdest du das besser finden, wenn die Umgebung in so einem Spiel oder so einer App absolut natürlich ist? Oder wäre das besser, wenn es eine Art von Fantasiewelt wäre?

*Participant:* Kann ich pauschal nicht sagen. Wahrscheinlich mal so, mal so. Kommt auf die jeweilige Person an, die das jetzt spielt. Manche mögen es vielleicht lieber abstrakt und fantasievoll. Manche sind lieber... Also ich wäre lieber näher an der Realität.

*Interviewer:* Sollte es dann also Wahlmöglichkeiten geben, welche Welt man haben möchte?

*Participant:* Ja.

*Interviewer:* Ebenso mit diesen Collaboration und Challenge Elementen, dass man auswählt, ob man Einzelspieler sein möchte?

*Participant:* Ja.

*Interviewer:* Und was denkst du, wer ist der wichtigere Entwickler? Sind das die Leute, die wissen, wie man Spiele animierend entwickelt oder wie man da Motivation und Spaß reinbringt? Oder sind es eher die medizinischen Fachleute?

*Participant:* Ich sehe alle gleichberechtigt. Denn das geht nur im Team, das zu entwickeln und zu erstellen.

*Interviewer:* Das waren meine Fragen. Gibt's noch irgendetwas, was ich nicht gefragt hab, was du gerne erwähnen würdest? Oder gibt es irgendwelche Elemente, nach denen ich nicht gefragt habe, die ich nicht vorgestellt habe, wo du glaubst, dass die grundsätzlich hilfreich sein könnten?

*Participant:* Fällt mir jetzt nichts zu ein.

*Interviewer:* Okay, danke schön. Dann mache ich die Aufnahme aus.

## Transcript Interview 7

*Interviewer:* Aufnahme läuft. Stimmt du zu, aufgenommen zu werden?

*Participant:* Ja, da stimme ich zu.

*Interviewer:* Super! Also dann geht's los mit der ersten Frage. Fühlst du dich häufiger gestresst oder überfordert?

*Participant:* Eigentlich nicht. Also würde ich mit Nein beantworten.

*Interviewer:* Hat sich durch den Lockdown oder die Pandemie irgendetwas an deiner Situation verändert?

*Participant:* Das Problem ist ja, dass man quasi die Uni und Privatleben nicht mehr so gut trennen kann, weil man hier im Haus alles machen muss. Und ja, ich merke schon, dass ich halt nicht mehr so viel für die Uni machen wie sonst, sondern dass alles ein bisschen gechillter sehe, also ein bisschen weniger für die Uni mache.

*Interviewer:* Stresst sich das dann manchmal, wenn du es im Nachhinein merkst, dass du weniger gemacht hast?

*Participant:* Eigentlich nicht. Also man kann sich das ja jetzt relativ gut einplanen oder einteilen, was man wie machen möchte und dann macht man da auch ein bisschen weniger, aber gestresst fühle ich mich da eigentlich nicht.

*Interviewer:* Fühlst du dich jetzt durch den Lockdown und der Social Distancing häufiger alleine? Oder wünschst du dir manchmal, dass jemand oder etwas dir helfen könnte?

*Participant:* Eigentlich auch nicht. Ich wohne ja mit meiner Freundin zusammen. Ich treffe mich ab und zu mit meinen Freunden zum Mountainbiken oder so. Also eigentlich habe ich genauso viel soziale Kontakte wie vorher. Also vielleicht... man trifft sie nicht mehr so viel in Innenräumen oder so. Es gibt keine Partys mehr oder so. Das fehlt schon ein bisschen, aber ich glaube, ich könnte es schlimmer treffen.

*Interviewer:* Wünschst du dir manchmal, dass du der Welt für eine Zeit entfliehen könntest oder dass du in einer Parallelwelt sein könntest? Für ein paar Minuten?

*Participant:* Eigentlich auch nicht. Ich hätte mal wieder Bock auf Urlaub, aber ich weiß nicht, ob du das damit meinst.

*Interviewer:* Ja, auch zum Teil, genau, dass man...

*Participant:* Ja, manchmal schon. Also, dass man halt auch mal hier rauskommt und was Anderes sieht, das auf jeden Fall.

*Interviewer:* Andere Leute, die da stärker leiden unter der Situation, die sich wünschen, dass sie mal irgendwie Abwechslung hätten. Glaubst du, eine App oder ein Spiel könnte diesen Leuten helfen?

*Participant:* Also das gibt es ja schon, dass viele Leute, die, weil sie nicht so viele soziale Kontakte haben, dann halt so Online-Spiele machen und dort mit ihren Leuten

kommunizieren. Also mein ehemaliger Mitbewohner z.B. hat die ganze Zeit, also schon vor der Pandemie quasi, nur gezoxt und mit irgendwelchen Leuten online kommuniziert und anscheinend hat das für ihn als Sozialausgleich irgendwie ausgereicht.

*Interviewer:* Kannst du dir vorstellen, dass das auch eine Art therapeutisches Hilfsmittel sein könnte?

*Participant:* Schwierig. Da würde ich vielleicht eher dann doch den Menschen sehen, dass man in einem persönlichen Gespräch irgendwie mehr erreicht anstatt mit einer App. Aber da bin ich mir unsicher.

*Interviewer:* Glaubst du, für jemanden, der merkt, dass er Probleme bekommt, ist es vielleicht einfacher oder ein geringeres Hindernis, eine App zu verwenden oder anzufangen, ein Spiel zu spielen, als beispielsweise aktiv beim Arzt oder beim Therapeuten um Hilfe zu bitten?

*Participant:* Ja, das glaube ich schon. Es ist, glaube ich, eine viel geringere Hemmschwelle, einfach eine App herunterzuladen, als dann tatsächlich irgendwie einen Arzttermin zu vereinbaren.

*Interviewer:* Und eine App, die ist immer verfügbar. Ein Termin beim Psychologen oder beim Arzt, den musst du erst machen. Glaubst du, das ist ein Vorteil?

*Participant:* Ja, auf jeden Fall.

*Interviewer:* Glaubst du auf der anderen Seite, dass da vielleicht aber auch ein Risiko sein kann, dass man die App zu viel verwendet?

*Participant:* Nun, das denke ich, könnte passieren. Aber ich denke, es ist besser, wenn es sowas gibt, als wenn es das nicht gibt. Also da überwiegt der Nutzen quasi das Risiko, würde ich sagen.

*Interviewer:* Okay, das waren die stressbezogenen Fragen. Jetzt geht's dann im nächsten Teil um Spiele. Interessierst du dich für Spiele, für Online-Spiele im Allgemeinen? Glaubst du, das ist ablenkend oder in den Bann ziehend?

*Participant:* Also, eigentlich interessiere ich mich nicht so für Spiele tatsächlich. Also ich zocke vielleicht mal so ein paar Handy Spiele. So nebenbei halt, diese typischen IO eben Spiele auf dem Handy, die Apps, die man so kennt. Aber eigentlich nicht.

*Interviewer:* Kannst du dir das vorstellen bzw. kannst du das verstehen, dass andere Leute das gut als Ablenkung verwenden?

*Participant:* Ja, das kann ich mir schon vorstellen.

*Interviewer:* Und auch, dass es für die Leute so eine Art Flucht in eine andere Welt ist, quasi Stressabbau?

*Participant:* Ja, das kann ich mir auch gut vorstellen, dass das für andere funktioniert.

*Interviewer:* Weißt du, was Gamification ist?

*Participant:* Nee. Oder ist das nicht, wenn man irgendwas Ernstes spielerisch irgendwie macht, quasi.

*Interviewer:* So in etwa, genau. Also Gamification sind Spielelemente in anderen Aktivitäten eingebaut. Beispielsweise, wenn du eine Sprache lernst, dass du dann für jede erreichte Vokabel quasi einen Punkt bekommst, spielerisch motiviert wirst. Genau. Ich sag dir jetzt ein paar Elemente, die es gibt, die Gamification Elemente sind, die in so einer App oder einem Spiel vertreten sein könnten. Und dann würde ich gerne von dir wissen, was du denkst, ob das hilfreich ist oder vielleicht gar nicht hilfreich, welche davon am effektivsten sind, welche man auf keinen Fall verwenden sollte.

*Participant:* Ja, ok.

*Interviewer:* Ein Element ist Personalisierung, dass man einen Charakter im Spiel hat oder einen Avatar, dass man eben einen Spielcharakter für sich hat. Dann gibt es Kollaboration, also Zusammenarbeit mit anderen. Dass man mit anderen spielt, woraus natürlich auch Wettbewerb entstehen kann, dass man gegen andere spielt. Dann gibt es das Points and Rewards System, das du eben Punkte sammelst und am Ende dann einen Stern kriegst oder den Preis bekommst oder sowas. Und dann gibt's noch Storytelling, dass du quasi den Charakter... also der Charakter nimmt dich auf eine Art Reise mit, dass du quasi eine kleine Geschichte im Spiel erlebst. Kannst du dir vorstellen, dass davon was hilfreich ist?

*Participant:* In welchem Bezug denn?

*Interviewer:* Wenn jetzt jemand, der psychische Probleme hat, ein Spiel spielen würde, was wäre für den ...oder jemand, der Stress abbauen möchte durch das Spiel..... Was wäre für diese Person vielleicht ein ganz gutes Element?

*Participant:* Dann könnte ich mir vielleicht Storytelling gut vorstellen. Das andere war, die Sache mit dem Avatar zu machen. Da bin ich mir unsicher, weil die Menschen ja eventuell dann auch ein schwieriges Verhältnis sage ich mal mit sich selbst haben, und wenn sie dann quasi sich selbst als Charakter erstellen müssen, könnte das irgendwie eine unangenehme Beschäftigung mit sich, seinem eigenen Ich quasi sein. Also das stelle ich mir irgendwie merkwürdig vor. Und points and rewards, also dieses Belohnungssystem. Naja, hier könnte natürlich dann helfen, dass die Leute dann quasi so die Bestätigung kriegen, wenn sie quasi in einem Spiel belohnt werden.

*Interviewer:* Glaubst du, das könnte auch nachteilig sein, dass man beispielsweise zwar motiviert wird dadurch, dass man Punkte bekommt, aber auch demotiviert ist, wenn man mal einen Tag keine Punkte bekommt?

*Participant:* Ja, das kann ich mir vorstellen, oder wenn man grad schlecht abschneidet, dass das einen dann nochmal herunterzieht. Wenn man das Spiel dann sehr ernst nimmt, kann das schon mal passieren.

*Interviewer:* Und bei der Collaboration, wenn man mit anderen spielt, ist das eher so, dass man dann motivierter ist, weil man weiß, andere machen das auch? Oder würde man dann anfangen, sich zu vergleichen?

*Participant:* Ich denke, das könnte auch motivieren, denke ich. Also das so meine Meinung, dass man mit anderen irgendwie was macht, so Multiplayer-mäßig. Ja, finde ich auf jeden Fall sinnvoll.

*Interviewer:* Wenn man jetzt das Element mit der Personifikation, mit der Personalisierung wählen würde, dass man einen Charakter im Spiel hat, würdest du es dann bevorzugen, dass du das Spiel durch die Linse des Charakters siehst, dass du quasi alles selbst erleben kannst? Oder wäre das besser, wenn man es aus der Vogelperspektive sehen würde, dass man es eben sich mehr von den Problemen des Charakters distanzieren kann?

*Participant:* Schwierig zu sagen. Ich glaube, da kommt es eher dann auf die App an, wie die aufgebaut ist und was das Ziel ist. Ich glaube, das wäre tatsächlich mir relativ egal. Also da würde ich sagen, es kommt darauf an, wie das dann im Endeffekt umgesetzt wird.

*Interviewer:* Wenn du mal gestresst bist oder mal gerne Ablenkungen haben möchtest, was sind dann die Dinge, die dir helfen? Gibt's da einen bestimmten Ort oder eine bestimmte Aktivität? Sowas wie am See zu sitzen oder durch den Wald zu gehen? Sowas in der Art...

*Participant:* Ja, bei mir hilft da vor allem Sport. Also biken gehen. Joggen gehen. Sowas halt. Und sowas, wo man sich in die Sonne setzen kann, zum Teich oder See gehen. So was hilft mir sehr.

*Interviewer:* Also Sport ist natürlich eine körperliche Aktivität. Das kannst du natürlich nicht ersetzen. Aber wenn du beispielsweise am Teich sitzen möchtest und das gerade nicht geht wegen des Wetters oder weil du nicht in der Nähe bist, könntest du dir dann vorstellen, dass du dir das auf einer App oder in einem Spiel ansiehst? Sowas ähnliches, eine ähnliche Situation.

*Participant:* Da bin ich mir unsicher, weil eigentlich geht es ja darum, dass man quasi draußen an der frischen Luft ist und die Sonne vielleicht noch genießt. Ein bisschen Vitamin D tankt und keine Ahnung, eventuell, wenn das Spiel recht hell gestaltet ist und nicht so dunkel, dass man irgendwie so helle, freundliche Farben uns so sieht, dass einen das quasi positiv bestärken könnte. Naja, also.

*Interviewer:* Was findest du besser? Wenn das Umfeld in der App eher natürlich gehalten ist oder würdest du es bevorzugen, wenn das eine Fantasiewelt wäre?

*Participant:* Also ich persönlich hätte keine Meinung dazu. Ich kann mir halt vorstellen, dass Leute, die in der realen Welt unglücklich sind, sich dann doch lieber in eine Fantasiewelt flüchten würden.

*Interviewer:* Glaubst du, der Aufenthalt in so einem Spiel muss zeitlich begrenzt werden? Wie eine Art Therapiestunde? Dass man sich eben nicht in dem Spiel verliert.

*Participant:* Ja, das auf jeden Fall sinnvoll, weil das ja gerade auch psychisch labile Menschen machen würden, die natürlich auch eine hohe.... ja auch süchtig werden können, denke ich mal, nach dem Spiel, wenn es gut gemacht ist. Und wenn ihre Probleme groß genug sind, da irgendwie so eine Begrenzung zu machen, wäre sicher sinnvoll.

*Interviewer:* Glaubst du, dass diese App oder dieses Spiel dann eine Therapie beim Arzt unterstützen könnte?

*Participant:* Ja, also unterstützen denke ich schon. Also wenn man da auch parallel mit einem Psychologen arbeitet, der auch mit der App dann weiß, wie er damit umzugehen hat, kann das wirklich helfen.

*Interviewer:* Du hast jetzt unterstützen besonders betont. Also ersetzen nicht?

*Participant:* Ja, also das ist halt wie gesagt sehr schwierig. Wenn man halt nur gestresst ist oder so, sage ich mal, dass da was hilft. Wenn in der App auch darauf hingewiesen wird, wenn man wirklich ernsthaft psychische Probleme hat, dann doch besser zum Arzt zu gehen. Weil das ist ja auch so ...es gibt ja auch so Apps für körperliche Beschwerden. Also irgendwie kann man seine Symptome eingeben und dann wird einem gesagt, welche Krankheit man hat. Aber die sagt dann ja auch Okay, wenn es mal ernst wird, sollte man besser zum Arzt gehen. Das ist ja bei psychischen Krankheiten eigentlich genau das Gleiche.

*Interviewer:* Glaubst du, die Ärzte sollten die App mehr oder weniger überwachen? Dass man sich nicht darin verliert und dass Ärzte auch gucken, was in dem Spiel passieren kann. Dass Ärzte in der Entwicklung beteiligt sind, solche Dinge?

*Participant:* Ich denke, dass wäre auf jeden Fall sinnvoll. Vielleicht kann man das ja auch irgendwie in einen Algorithmus, sag ich mal, programmieren, dass, wenn Auffälligkeiten auftreten, die dann quasi gemeldet werden.

*Interviewer:* Kennst du sonst irgendwelche ähnlichen Apps, die vielleicht sinnvoll sind? Oder kennst du noch irgendwelche spielerischen Elemente, wo du sagen würdest, das ist auf jeden Fall sinnvoll, sowas einzubeziehen?

*Participant:* Da fällt mir gerade ehrlich gesagt nichts ein dazu. Also wie gesagt, ich benutze ja solche Apps auch nicht, also ich weiß nicht, was es da so gibt.

*Interviewer:* Wenn du Probleme hättest, wenn du bereit wärst, so ein Spiel zu spielen oder so eine App zu nutzen, gäbe es da was, was du dir besonders wünschen würdest, was da dich erwartet?

*Participant:* Also eventuell, dass keine Werbung geschaltet. Das ist praktisch bei jeder kostenlosen App. Also da muss man halt gucken, wie sich das dann finanziert. Dass sie ansprechend gestaltet ist und dass es auch nicht so schwer ist, mich da einzuloggen. Also eventuell über E-Mail-Adresse oder so. Sowas halt.

*Interviewer:* Und wie sollte man davon erfahren, von der App? Sollte das beispielsweise über die Krankenkasse gehen.

*Participant:* Ja, ich denke, dass die Krankenkasse aufklären kann oder irgendwelche Werbung geschaltet werden kann.

*Interviewer:* Denn die App soll ja quasi ein bisschen diese Hürde verringern, zum Arzt zu gehen. Wenn dann nur der Arzt von der App erzählen kann, dann kommst du natürlich nicht dahin.

*Participant:* Genau. Also wie gesagt, Werbung irgendwie im Internet schalten, wo man das sieht oder in den öffentlichen Verkehrsmitteln. Irgendwo in der Stadt. Sowas halt.

*Interviewer:* Und glaubst du, es sollte alles vorbestimmt sein? Oder wäre das besser, wenn man Auswahlmöglichkeiten hat? Wenn man beispielsweise wählt, ob man ein echtes oder ein Fantasieumfeld haben möchte? Wenn man wählt, ob man alleine spielt oder gegen wen anders?

*Participant:* Ich denke, wenn das umsetzbar ist, am Anfang so zwei, drei Kriterien festzulegen, könnte das glaube ich schon helfen. Da gibt's ja Leute, die da gewisse Präferenzen haben und das könnte dann ja helfen, dass die dann eben dabeibleiben. Ja.

*Interviewer:* Okay, das waren meine Fragen. Hast du noch irgendwelche Anmerkungen oder gibt's irgendwas, was du da zu dem Thema sagen möchtest, wonach ich nicht gefragt habe?

*Participant:* Ich denke mal kurz nach. Also wie gesagt, ich habe da echt nicht so viele Erfahrungen gesammelt. Ich bin ja auch nicht so oft gestresst und wenn, dann regle ich das halt über körperliche Aktivitäten irgendwie, nicht über Apps oder so ...

*Interviewer:* Glaubst du, dass es grundsätzlich besser ist, dass die Leute gar nicht unbedingt eine App nutzen sollten, sondern körperliche Aktivität in jedem Falle immer besser.

*Participant:* Es kommt halt drauf an. Es gibt ja auch Leute, die gar keinen Bock auf Sport haben. Ich glaube, die wird das dann nochmal abfucken.

*Interviewer:* Kann sein.

*Participant:* Also vielleicht gibt's ja auch Leute, die bei beruhigender Musik oder so...Also das könnte ich vielleicht noch anmerken, dass es ja auch bestimmte Musik halt gibt, die entspannend wirkt, dass man mit sowas noch arbeitet.

*Interviewer:* Auf jeden Fall.

*Participant:* Genau. Aber mehr fällt mir wohl nicht mehr ein.

*Interviewer:* Ja. Du hast gerade gesagt, nicht, dass das mehr stresst oder unter Druck setzt? Also das darf die App natürlich auch nicht machen. Die darf nicht einen quasi so anleiten, dass man dann noch gestresster ist.

*Participant:* Genau.

*Interviewer:* Was man vielleicht auch über Auswahlmöglichkeiten machen kann. Dass die dann nicht sagt, Du musst jetzt jede Übung machen, sondern möchtest du diese oder diese machen? Beispielsweise sowas in der Art?

*Participant:* Ja, genau.

*Interviewer:* Ok, cool, dann danke für deine Zeit. Danke für deine Antworten.

*Participant:* Jo kein Ding.

*Interviewer:* Ich mache mal eben mit der Aufzeichnung aus.

## Transcript Interview 8

*Interviewer:* Alright, so now it's recording. First question, do you agree to be recorded?

*Participant:* Yes, I agree.

*Interviewer:* Great. So as I've explained to you, this interview is about psychological problems and depression. And if an app or a game can help with that to be a therapeutic tool, for example. And the first set of questions is a bit about personal stress level and feelings and stuff like that. And then in the second half, it's about gaming. You are very welcome to elaborate on your answers. There's no wrong or right. So this is all about your subjective opinion. Do you have any further questions before we start?

*Participant:* No, everything is clear.

*Interviewer:* OK, great. So do you often feel overwhelmed by your feelings in the last time since the pandemic?

*Participant:* Probably a lot of people have that, yes.

*Interviewer:* Has that increased? Do you feel like your stress level has increased?

*Participant:* I wouldn't say that my stress level increased itself, but like not stress itself, but like negative emotions did.

*Interviewer:* Do you often feel alone? Do you wish something or someone could help you?

*Participant:* I think that's not the case for me.

*Interviewer:* Do you sometimes wish you could 'flee' the life for a few minutes or you would like to escape into another world for a few minutes?

*Participant:* Who doesn't?

*Interviewer:* And if you would like to escape into this world, could you imagine that an app or game could help you there?

*Participant:* Yes, I think so, especially games.

*Interviewer:* Could you imagine that it could be used for therapy?

*Participant:* I think it depends on the kind of therapy, because if there's like a game where you can have some kind of exposure therapy, then, yeah, I think a game can definitely help. But if it's something like depression, then I think, like regular therapy would be better because then you have to find out why you are depressed and it's very specific for each individual person. So it kind of depends on the kind of problem you have.

*Interviewer:* So not like a single therapy, only with a game, but to support the regular one?

*Participant:* Yeah.

*Interviewer:* Do you think it is easier for a patient or maybe less of a burden to use an app or to open a game than to actively ask a therapist for help?

*Participant:* Yeah, definitely. Especially in the beginning, because I can imagine that if people are, I will just use the example of being depressed again... For people who are depressed, I think the last thing they want to do is get up, get dressed, look for a therapist with time. But it's also about money because if you can't afford a therapist, then you don't really have any options. So I think that way a game or an app can really help people to get started, to help themselves like the first time, but also to see the benefits of seeking out a therapist, because I think a lot of people don't know how good it is to go to therapists. And then there would be like a game focused on mental health that shows people that people can go to therapists and everything will be fine afterwards. I think that's also a good first step.

*Interviewer:* Yes. An app is available all the time opposed to an appointment you would have to make with a therapist. Is that an advantage?

*Participant:* Yeah, definitely. Especially because you can take out your own time when you want to play. If you feel bad in the middle of the night, you can just start to play a game or pick up the app. And then I think even those small changes that are already helping are better than just having to wait for a therapist next week or something like that.

*Interviewer:* So if you can use the app all the time, do you also see a risk of overusing it?

*Participant:* Yeah, I think it depends on what the person's aiming for, because playing a game or using an app to escape from reality can be a good distraction. But if you engage with it too much, I don't think it's very... It shouldn't be a distraction of life, it should distract you from your problems to some extent, but if you use it way too much, I don't think that it's helping.

*Interviewer:* So, that have been the questions about stress and emotional well-being. So now we're going into gaming. Are you interested in gaming at all? Do you think that gaming is engaging?

*Participant:* Yeah, I do think that games are engaging.

*Interviewer:* So, do you know what gamification is?

*Participant:* Yes, just taking game elements of games and putting them into real life situations or apps?

*Interviewer:* Exactly, yes. So I will now give you some examples of gamification elements. I'm sure you already know what they are, but I will shortly elaborate them for you. And then I would like to know from you which ones you could consider as helpful or effective in such a game. So, one is personalization, so that you have a character or an avatar playing for you. Then there's collaboration, so that you can play with other players, which also can turn into a challenge. So you have a competition with others. Then there's points and rewards, so that you can gain something, you can collect points or a star or something like that. And then

there's storytelling, so that you dive into a story within the game or that you follow a character on his journey.

*Participant:* I think all of them are really good gamification elements for those kinds of apps. I think, again, it depends on the kind of problem you have, because if I would have some serious issues, then I wouldn't really want to collaborate with other people, but I would rather focus on it myself. But like but for the other things, I think they are all good. The point system...I think there it also depends on the game designer. There are some games where you get trophies and sometimes I feel like when I'm playing, I get a trophy for everything. I open the door and I get the trophy. I'm not sure how I would feel about that if I would be depressed, for example. I mean, it would be nice to get some points for just doing the bare minimum. I think it's nice. But at some point I will be really annoyed by it, I would feel like I would be kind of a child. So I think that needs to be carefully designed in collaboration with, like, psychologist. But the other points... yes, storytelling is really nice I think. It shouldn't be over the top, it should still focus on the program itself, but it should allow to kind of escape and to show how people deal with it. And also personalization because. I can imagine if you have a character you're playing that you can relate to, it might be easier to take care of the character in the game, than taking care of yourself in life. And that way you can kind of learn the benefits of doing that and then getting a routine again and like some kind of structure. So I think in that way, those elements are really nice in general.

*Interviewer:* And do you also see a problem there with, for example, the point and reward system, so that you maybe don't get a point one day, so you are actually even more depressed?

*Participant:* I think it can really upset people. But I cannot, yeah...I don't... I'm not a therapist, but I would not want to be rewarded for everything. I can see how if I'm not getting a point for getting up and getting dressed, I might get upset because for me, it would be a big accomplishment but the app would tell me that it's not. But on the other hand, maybe it would be nice in beginning to get a lot of points. But as you go through the app and use it many times, it would be better to reduce the points. So you get used to... Yeah, it's normal that you get dressed. It's nice that you do, and maybe for the points you can just get some messages like, oh yeah, you did a good job, instead of getting points. Then you only get the points for more challenging things. So that way you have a challenge with the game. Yep. But you still advance in your normal life and get the motivation to do things, to not just getting dressed, for example.

*Interviewer:* Interesting aspect. So, if we would focus on the personalization element, if you would have a character in the game, would you prefer to see the game through the lens of the character, so that you can experience everything yourself? Or would you like to see it from the bird's perspective, so that you could maybe portray your problems onto the character and have more distance between you and the character?

*Participant:* I think that depends on personal preference. I'm not sure if there is a right or wrong answer. I think I would like to see it from like a bird's perspective, because then I can see how my character is working around and can see how it's working within the

environment. I think if I would see it first person, it might be a bit more engaging for the character. But if I would be aware of my own problems I think, then I would like to have a game with some distance where I can... where I can decide myself when I relate to the character. And if I don't really want to relate to a character in that moment, then I think the bird's perspective is a bit easier to distance myself, especially when I get upset about not getting points, for example. Then I can just close the game and just go away and then come back to it with some distance.

*Interviewer:* And in general about these elements, for example, your own perspective or the bird's perspective, or collaboration versus single player mode, reward system and stuff, do you think there should be the option to choose?

*Participant:* Where you choose which things you want to have in the game when you play?

*Interviewer:* Yes, for example, if you open it and then you go to single player mode or to group mode or something like that.

*Participant:* Yes, I think it would help. Especially with some psychological problems, it differs per person. So I can imagine some people would not like to just play the odd character and personalization. They would rather focus on someone else. I think they would still project their feelings towards the character, but if they don't want to, then they can just choose not to do it. Or with the points, they get upset. Like I said, I wouldn't like to get points for everything, maybe other people would like that so then they can choose. And I don't like to play against other. There's just a personal preference. So then I can also just choose to not use that. I think it would help people to play the game because if I would play a game, I think, oh yeah, it's great. But then it has some elements that I wouldn't like. And if I would be depressed...I'm still using the example, I know that there's more... but if I would be depressed and then there would only be a single element that I wouldn't like, but within the game that I can imagine myself just not using it anymore, so then choosing would probably help to get people to continue to play the game.

*Interviewer:* Um. So if you personally feel down or if you are stressed, what are things that are helping you in such a situation?

*Participant:* Relating to games in general?

*Interviewer:* In general, so if you, now in this pandemic, or in your situation now, if you feel down or if you feel stressed, is there a special occasion you like to go to or is there an activity that helps you?

*Participant:* I do play games a lot, especially to just relax. But also, besides gaming, just like to take my dog for a walk and then go outside and when I'm back I'm a bit more relaxed. But also games.

*Interviewer:* OK, so the next question would have been if you could imagine such an activity to take place in a game, but then the answer is probably yes.

*Participant:* Yes.

*Interviewer:* So you... if, for example, the thing that you would have done in real life is not available, like if you, for example, would like to sit at a lake but you don't have a lake now nearby, it would also help you to see the lake in a game or in an app?

*Participant:* Probably. I never tried it, but I can imagine myself... especially games with like really high quality graphics where you just walk around like an open world and there just go through some kind of nice environment and just listen to the music of the game and then just walk around. And then there would be a lake, I think that would also help.

*Interviewer:* Are there more or other gamification elements or in general some elements for a game that I haven't mentioned, that you would say that they are definitely helpful?

*Participant:* Oh wait, let me think about that. I think it was also already implied with those points and achievements, but if there would be some kind of challenge, some challenges in the game, like very specific ones, like, you know, do something like brush your teeth twice a day or something like that, and then you get extra points. But I think there are countless achievements and points. What you said.

*Interviewer:* So that's personal challenge, that's not like a competition versus other people.

*Participant:* Yeah, that personal challenge I think would help. Yeah, I didn't really elaborate on storytelling, but I think storytelling has a lot of potential to help people, not only to deal with problems, but also to engage people in the game and to get them to continue to play the game. So I think those gamification elements should not only be used to help people, but also to get them to really engage with the game and continue to play it and then build up the whole environment. So I think... that depends if it's an app. I wouldn't like the app to have some kind of specialist...I mean; some kind of therapy would be nice. So it has a purpose, but it shouldn't have some kind of complete story like a game. I think that would distract me a bit. But if it would be a true game, the thing would be nice to have the story. It's kind of based on reality, but not completely. So you can still choose, maybe you can have some kind of freedom in the game to do whatever you want to try some things out. So I think that's also important. So it shouldn't just be some kind of simulation, I think simulations do count as games, but I think there should be a distinction between games and simulations. So within the game, it would be nice to have some other game characters you can engage with and then you can just try out some things. And even if they go bad, there might be some kind of a consequence, that shouldn't be too big. But just that you can walk around in some kind of open world where you can just try stuff.

*Interviewer:* Would you like the environment in the app to be very natural or would you prefer a fantasy like world?

*Participant:* I think both work. Sometimes I would like to play games that are a bit more fantasy like, sometimes I like to play games that are a bit more realistic, but they both work. I think it would work in different ways. I think those fantasy worlds would create some more distance. But I think they would also get people to try out some more things. And then if your game character can achieve something in a fantasy world, it would probably take a bit longer for you to project into your own life. But I think in the fantasy world, you can do

bigger things. But I would just say, I don't know, some kind of magic... If I will play a game with some magic and my character would be like the hero of the story, I wouldn't really think, Oh, yeah, and now in real life, I could also be a hero. But on the other hand, I think if you have a great accomplishment in the game, it's also... you also have some more positive feelings, even if it's not your own accomplishments in reality. But it's just a personal achievement. I think it's bigger for those fantasy games, but those realistic or more natural games would be a bit easier for... Now that I think about it, those realistic games are probably a bit better for people with more severe problems. I don't know if I can say that, because my first thought would be that if you're really depressed and some kind of realistic game would help because then you can see what's normal and then you can follow those steps yourself, your accomplishment through the game, and then later you get better. Then those really big accomplishments in fantasy worlds would be easier because, yeah, I can also imagine someone who would be depressed and then would play some kind of really big fantasy game with a whole storyline, could also feel a bit overwhelmed by the whole world. But yeah, I'm lucky I was never depressed, so I can't say how I would feel. But that's just what I would think, that there should be some kind of balance. But those fantasy worlds can of course also have some minor achievements that could also help. So I think both would work.

*Interviewer:* And from your personal experience, is there a difference? It is a fantasy world more engaging?

*Participant:* Yeah, I think it doesn't necessarily have to be fantasy, but I think I like games more that are a bit less about reality. Because, for example, my brother played a game yesterday and I watched him play. There was just a setting in New York and there were some enemies, but the enemies kind of looked out of place and I didn't like it because it was just weird. I wouldn't expect to walk around New York and suddenly see some enemies dressed like those typical game enemies. So I would then prefer to play a game that's surrealistic, like some kind of different timeline or something. But then I would probably be more engaged and less put off if I would suddenly see reality and then some kind of weird character compared to an environment where I'm already expecting it to not be completely realistic. So I would say those fantasy worlds would be a bit better, doesn't necessarily have to be some kind of magic RPG or something, but just something from a different timeline or something. Yeah, I think that would be better, for me personally.

*Interviewer:* Have you personally ever experienced that you did get lost in the game, so that you lost track of time and that you stayed very long in such a game?

*Participant:* A few times, but not in a bad way. There's a difference between staying in the game too long just because it's fun and you just ...like when it's late, when it's dark outside and you just have headphones on and you're going through a game, especially when it's the beginning and then when you... At least I play a bit longer than I intended if I really liked the game. But it's not like I can't stop because afterwards I know if I am playing until 1:00 or 2:00 a.m., I know that it's long and then I can stop, knowing that I can come back to the game. I still get lost because then time passed faster.

*Interviewer:* Do you think then for a person with stress or depression, for example, who would like to get lost in the game, should there be a time limit that they can spend playing?

*Participant:* I think there shouldn't be a limit that's forcing people to stop, but I know that for some games the characters are kind of saying like, oh yeah, don't you want to take a break? I think that would help people. I like games. I like it when I get lost in games. But I wouldn't like to be distracted from my problems for too long because then that would stress me out even more afterwards. So, yeah, it shouldn't force people with some kind of extreme pop-up message like, oh, yes, stop playing now. That would really annoy me and I think I probably wouldn't like the game that much anymore. But some of the games just have, like, some NPC characters that just tell you, oh, yeah, you look tired. Don't you want to take a break or something? I think that would work.

*Interviewer:* Can you imagine that it would kind of come to an end naturally, so that the task you've done just comes to an end and there's nothing more to do?

*Participant:* You have to play for a long time. It depends on the game, because some open world games have really a lot of side quests and everything, and then I really just stop playing when I'm bored, or feel like I have played enough. But those side missions never stop. Except, if I spend like four hundred hours on the game, but I don't do that most times. But, yeah, I think if it's some kind of game that is a bit more linear than some points or if it's like a story game, at some point the story down again. You can't have a story game where everything's exciting all the time. Otherwise they would be weird. So, yeah, it depends on the game.

*Interviewer:* OK, interesting insight. So that's it for my questions. Is there something you would like to mention or is there something that I have to ask about where you think that would definitely be helpful in a game or an app?

*Participant:* Now I'm thinking. Yeah, I think if someone would develop such an app or game, I think they should do it together with psychotherapist's because I can imagine that a game, a lot of games would be available and they should be really carefully designed because a lot can go wrong if it's not properly researched. And they also should... I know the games designers, they should get some kind of money, of course. But I think it's difficult to do with those apps or games because if there's suddenly some pop up message with advertisements, I don't think that that's the right approach. So, yeah, that should be some kind of way to make the game, I would say, free. And it should be researched, with everything that can go wrong and could probably make everything worse. And it should also... depending on the problem...if I'm stressed then I think a game... I can just play a game that works and everything is fine without having the need to talk to a therapist. But if it's like some really extreme problem or psychological problem, then I think a game can help. Especially you have the benefits, you can play whenever you want. You can play it in your free time, you can do whatever you want. But I don't think that it would solve the problems too much. It would help to make people feel better. But I think that's a bit more short-term. And I don't think that you can go out of depression just with the game. I think it should be in collaboration with some therapists or something like that.

*Interviewer:* Yeah. Very good remark. OK, so that's it. That have been all my questions. Thank you for taking your time. I will stop the recording.

## Transcript Interview 9

*Interviewer:* Yep, so now I'm recording. So the first question, of course, do you agree to be recorded?

*Participant:* Yes.

*Interviewer:* Great. So I have elaborated my topic to you. It is about mental health, depression, stress, and in relation to gaming. So the question is, if an app or a game could help people with mental stress to calm down or to be used as a therapeutic tool, for example. The first few questions are a bit more personal, so about your stress situation, and then the last set of questions is about gaming, gaming in general and gaming elements, stuff like that. So you are very welcome to elaborate on your answers. You can give some personal ideas. You don't have to answer, of course, if you don't want to, there's no right or wrong. So everything is very subjective. Do you have any further questions before we start?

*Participant:* No, not necessarily.

*Interviewer:* OK, so then the first question is, do you experience a lot of stress at the moment?

*Participant:* I'd say generally, yes, because of the bachelor thesis and also, well, the fact that some things have gone south pretty much so that there's a lot of time constraint at the moment, which leads to stress in some sense. Yes.

*Interviewer:* Do you often feel overwhelmed by your feelings?

*Participant:* No, not really overwhelmed, and I think I'm generally quite good with coping with them. So, no, I wouldn't say so.

*Interviewer:* And the stress that you're experiencing at the moment, does it have to do with the lockdown, and did it become worse due to the pandemic?

*Participant:* Hmm, that is a hard question to answer, because the overall circumstances have changed a lot, I would say that. Yes, maybe in part due to the lockdown. Especially if I compare the earlier parts when we were still working on modules. While the amount of work hasn't necessarily changed a lot, a lot of the recreational parts of just being together, for example, with student bodies just fell away. So it was just harder to relieve oneself from a lot of the stress that was well present in that circumstance. So while you would sit together with other people at the university and work on the same topic, but just make fun along the way, basically, you're now just sitting alone at home working on stuff and would only call for specific purposes at specific times to talk about work related stuff. And while there were some shenanigans going on at those moments, it was very much scheduled and not as free or open as it used to be. So I don't think this amount of stress causing things has changed much, but the level at which one can relieve oneself from stress has decreased during the lockdown.

*Interviewer:* Do you sometimes feel alone and do you then wish that someone or something could help you?

*Participant:* Mmm, no, not really. Especially during the lockdown, my girlfriend and I, well, are really trying to see each other at least once a week. So I wouldn't say that I really feel alone because I'm also not alone here at home. There's other people around. So I certainly can't say that about myself. But I certainly know also about other people who don't have, for example, other people at home that they really feel alone and they openly communicate that. So I think in general, that might be a problem during the lockdown, but luckily not for me.

*Interviewer:* If you are stressed or if you have moments where you feel down, do you then sometimes wish that you could 'flee' your life or escape to another world for a while.

*Participant:* Hmmm, I wouldn't say that I wish to do so, um, but I think that's certainly something which happens. To flee to another world, especially because we're talking about computer games, well, that's certainly something where I can lose myself in and basically just switch off the real life for some time and don't think about, I don't know, political ramifications or whatever, but, um, basically living this this parallel world for quite some time. And just forget about the Real-Life situation. And as well, as I said, I wouldn't say that I wish to flee. It's not an on purpose decision that I want to flee. But obviously, I make the decision to, for example, start a computer game, and it certainly happens in those situations that I do flee the real world. So I do escape the real world, yes.

*Interviewer:* You have already gone in the direction of my next question. So the question was, could you imagine to use an app or to play a game to then do this thing as escaping the real world? So that's probably a yes?

*Participant:* Yes. As I said, um, yeah, not really as a conscious decision, but I certainly feel that I do escape into another, let's call it realm, when opening a game and basically just try to forget about whatever is happening in real life, because I'm just concentrating at this parallel world that is happening and the PC at that moment.

*Interviewer:* Can you imagine that a game or an app could be used as a therapeutic tool?

*Participant:* Um. Yes, certainly. Well, it depends. I'm usually not really a fan of just saying, well, something will work perfectly or is just inherently bad. A lot of people are, for example, bashing about computer games. They're just so violent and shooting. At the same time, people who are for computer games are saying computer games are the best thing in the world and you can just train your three dimensional skills perfectly or whatever. I wouldn't say it's either of those absolutely, because there are certainly a lot of dangers with computer games, for example, addiction problems. And if you just always flee into this parallel world, that certainly isn't going to help you a lot. And I could see people that feel relieved from their stress by escaping through the parallel world a lot falling in that trap off of, for example, becoming addicted without having any real knowledge in that in that area. But I would just say that that is something that could theoretically happen or which I could imagine happens. On the other hand, if not, for example, talking about extreme cases, but

just people who do experience stress, I think it could certainly be a valuable tool to escape the real world for a while and basically, well, not... it might help in preventing the extreme cases. Instead of, well, being a medicine for the extreme cases where somebody says, OK, I just don't know what to do and then escapes where it might become a problem, people could just use it to well, not... I'm not sure if we could call it therapeutically in that sense, but it might be a tool to escape stress. Yes.

*Interviewer:* Yes. Very good aspect. Do you think it is easier or maybe less of a burden for someone who needs help to just use an app or game than to actively ask a doctor or a therapist for help?

*Participant:* Yes, and no, on the one hand, I would say yes, it's certainly less of a burden just because people are generally used to digital technology. On the other hand, there's certainly a learning curve to gaming. For example, if I see my girlfriend game, if I give her a controller because she has never really done that before, it's a major problem for her because she's just not used to doing it. So that's certainly a hurdle for her to get used to. And I can't imagine her just taking this step and picking up a game to relieve herself of stress, especially because she has so little experience that it might actually add a level of stress for her in that case. On the other hand, for people who are used to the whole idea of digital gaming anyways, it might be a massive opportunity because it's certainly also obvious that it can be very hard to get psychological help. And there are not many actual appointments available for psychiatrists or psychologists. So in that sense, for people who are already in that realm, it might be a great opportunity to get some therapeutic help without actually having to go ...to do this step towards a doctor.

*Interviewer:* Yes, very right. An app is available at all times opposed to an appointment that you would have to make with a therapist. Do you think that is an advantage or is there then the risk of over using the app?

*Participant:* Um. I'm not really sure if I can generalise that much, because, again, as I said before, I would think that that very much depends on the level of, well, psychological incidents of this subject that needs help. So that is certainly going to influence whether it could be overused or not. But also, on the other hand, yes, I could see it being an advantage just because of the higher availability, not only because it's available 24/7, but also because it is always available in a very near future. While you might have to wait for several weeks for a doctor's appointment, which is certainly an advantage. So I would say that. I can't really give a good answer on that, I kind of have mixed feelings towards that.

*Interviewer:* That's all right. It's just about your personal opinion. OK, so that was then it for mental health states and for stress relief. So now we're completely going into the gaming part. Are you interested in gaming at all? And do you think that gaming is engaging?

*Participant:* Yes, and yes. Absolutely, but also for gaming, there is like the good kind of engaging where you are just really into a games universe or into a game itself because of its gameplay. And there's the bad kind of engaging which usually comes with free to play titles or mobile games, which do kind of have an addiction factor that is not necessarily healthy, but in either way, it's certainly engaging. Yes.

*Interviewer:* You know what gamification is?

*Participant:* Yes.

*Interviewer:* Can you explain it in your words?

*Participant:* Gamification is, if I remember correctly, it would be very embarrassing, if not...If you take, well, let's say everyday tasks, for example, doing sports and basically add a gameplay level to it, for example, that you can compare some sort of score with your friends to track who's doing better or running more miles or doing a certain kilometre number faster or whatever, so you're basically adding this competitive part of it, not necessarily competitive, but, for example, competitive part to an otherwise not gaming experience.

*Interviewer:* Yes, exactly, correct. So gamification is having game like elements in another activity that is not a game.

*Participant:* That's a much easier explanation.

*Interviewer:* Yeah, I mean, I have written it down. So, of course, that is very easy for me. So there are a few gamification elements. I will give you some examples. I will briefly explain them to you and then I would like you to consider them as effective or helpful, for which ones you think they would make sense in an app or a game to help people with mental health issues. And maybe there are some where you would say, no, they don't make sense at all, or maybe they are even counterproductive. So one element... first one is personalization. So that you have a character in the game, you might have an avatar that's then portraying yourself, then there is collaboration, so you can play with or against other people, which can then also be linked to challenge. So you have competition with someone else. Then there's points and rewards, which is also what you've mentioned with the football player. So you gain a point, for example, when you have done something correct and when you have enough points, you, for example, get a star as a reward. And the last element is storytelling, so that you kind of follow the story of the character or just go into a story within the game or within the app. Are there some, where you would say, well, that's definitely a good idea to include or are there some, where you say, no, better leave that out?

*Participant:* I would generally say that games for that particular genre could benefit from all of those things you have mentioned overall, although that very much depends on the actual game. For example, the very first thing you mentioned with a personalized character could, for example, benefit in a way that the person playing the game could, well, better engage with the person playing in the game, so that might help to get deeper into this... to the game itself and well, yes, that might help. Just to pick it up better, for lack of a better word in that case. Also, the last two things you mentioned, which were, if I remember correctly, scores and storytelling, right? Yeah, well, both of them would certainly help for a long term engagement so that players don't just download the app, create a character, play for five minutes and throw it aside, because there isn't much to do because having a score to work towards and also maybe a little competitive element in what you can see how others are doing can help for long term engagement. Although, especially for the competitive part, that could be a problem because if people feel stressed anyways, well, having the feeling that

you have to gain a certain score might not be the most helpful thing. On the other hand, for example, a story, a good storyline is a very effective tool in keeping players engaged, especially if they are able to connect with the characters in that storyline, if they're able to follow them. Well, that certainly helps a lot. I mean, there's really good examples also from other games. I mean, one example that kind of comes to mind is, for example, of a story about my uncle, which doesn't have a lot of story, but it does have a storyline which makes it very easy to connect with him, which really helps to go through that game. Um, so I could think that that, for example, would help to keep players engaged and to be able to, let's say, help them longer. On the other hand, having a multiplayer experience, I think you said, I'm not sure how you phrased that. Can you help me out?

*Interviewer:* Yeah, it was just called collaboration.

*Participant:* Oh, collaboration. Yes. Um, that can certainly be helpful. But that's also kind of the two sides of a coin from the Internet. So, on the one hand, there's always very helpful people and there's just really good things happening, people helping each other out, which is just awesome and pretty much perfect for this kind of application or game. Well, on the other hand, there's also always trolls and idiots on the Internet and there's practically no way to get rid of them. And that might lead to very destructive circumstances, especially in the context of games or apps of this particular genre.

*Interviewer:* Yes, you have mentioned a very important aspect also with the collaboration and with the points and rewards. So, as someone who is also playing games, sometimes, do you think it is the better thing to gain points and rewards to be motivated, or do you think maybe not gaining points one day is even more demotivating and makes you more frustrated?

*Participant:* Well, that again, very much depends on the game itself, because, well, if you do, for example, have a leader board and you see that yourself are making a thousand points, while other people, for example, you're comparing yourself with or that do have some significance to you as a player, regularly gain a million points or whatever. Well, that's most certainly frustrating. On the other hand, if the game itself is, for example, built on a level system where you gain levels just naturally while progressing through the story line, for example, I don't think that would be motivating because if it's well done, you will only feel rewarded. So, a thing that regularly happens in multiplayer games, for example, is that you start off at level one and the max level would, for example, of the level of one hundred or something and you can only access certain parts of the game if you do have a certain level which serves for two things. On the one hand, you always have the feeling of progressing through the game. So you have the reward of getting higher levels. On the other hand, you discourage behaviour where people would, for example, go into areas that they are not prepared for yet and where they would only get discouraged by getting, for example, beaten to death by an opponent who is a much higher level and which they wouldn't have any chance of fighting anyways. So they simply don't get to see those opponents. So that would, for example, be an example of a very good score system that might help to balance out the game and also help the players in gaining more confidence in themselves, for example.

*Interviewer:* Hmm, interesting idea.

*Participant:* On that hand there's, for example, games like, well, let's say Dark Souls or so, which are just brutally hard. The whole concept of the game is to be brutally hard. And you can go everywhere and you have to collect... or there are ways to level up. But you could theoretically go practically everywhere and are just beaten down always, which is the concept of the game and which is a lot of fun to some people. But in that case, you just gained levels for the sake of gaining levels, and it might not do much to keep you motivated or if you're not the kind of person for that type. So that might, for example, not be a good case of scores for this particular genre.

*Interviewer:* OK, good insight. So if we now come back to the element of personalization, so we say there's an avatar or a character in the game. Would you personally prefer to see the game through the lens of the character, so that you can experience everything yourself, or would you like to see it from the bird's perspective, so that you can portray your problems to the character? Maybe you have a bit more distance?

*Participant:* Uh. That is a very good question also regarding how that might affect the learning process myself. Let's see.

*Interviewer:* Or maybe you would prefer a combination?

*Participant:* No, I don't think a combination works well, at least from my experience, because, in that case, it just kind of creates dissonance between the player and what I am playing. I'm usually quite good at engaging myself in a game, either in third person or in first person. But I find it really hard to switch, for example. You certainly do have a lot more distance to the character, if you're a third person and you're perceiving it as a different character. So, for example, if I play GTA in third person and my character hits somebody, I would say... or does something that I didn't intend to do, although I am steering it, I usually say, for example, why did he do that? On the other hand, if I play Minecraft in a first person view and I do something stupid, I would say, why do I do that? So I can perceive for myself a difference in how I perceive the game itself. I'm not sure whether I can actually give an answer to what would work better or what I would prefer for a helpful game, because that also depends on how the game itself is structured and if it would be more helpful to actually portray the own problems or take your own problems into the game or just project your own things into the player you're steering in the third person view. But I think the most helpful thing I can say to that is that I myself definitely perceive a difference whether I play a character in first person or third person in how I look at them and how I interact with them.

*Interviewer:* OK, very great. I mean, as I said, there is no right or wrong answer. So this is just about what you would personally prefer. So if you are feeling down or if you are stressed sometimes, what are the things that do help you then. Is there, for example, a special location that you feel better at, like sitting at a lake, or do you do a certain activity like walk through a forest or something like that?

*Participant:* In game or in real life?

*Interviewer:* In real life.

*Participant:* OK, well, throughout the pandemic, I certainly got used to going outside a lot. I mean, as many people did, but I've been actually going hiking a lot. And I also developed a habit of doing that in the evenings. So if I've been working a lot and I just kind of feel stressed out, um, I just go outside, walk for three or four hours and I don't know, have a look at the nature around. Um, well, yeah. Look at some of the animals outside and that kind of stuff. So, um, yes, I'm certainly going outside. There isn't really a specific spot I'm going to although I'm often visiting the same spots, but that is often just because of the feasibility of going somewhere, because it's close by, but it's not because I do prefer a specific spot, it's just because it's there. But I do certainly have habits of just going outside. For example, if I do feel stressed out, yes.

*Interviewer:* So then going outside or having fresh air is obviously something that you can't do in a game. So you would still have to stick with it. But if there, for example, would be kind of a happy place for you, could you imagine that that could be in an app or a game?

*Participant:* Uh. Well, as I said, I'm not really the kind of person that goes to a particular place to, um, or to a particular spot to relieve myself of stress, but what I can say is, for example, that I specifically choose the games based on how I feel. So if I just kind of feel like gaming, I might, for example, open a game like portal, which is like a puzzle game, for example, where I do have to think a lot, whereas if I just kind of want to chill out or I don't really feel like, well, thinking a lot. So I, for example, open up games like Minecraft where I don't have to particularly think even in a world where there's practically no monsters in that particular world, I can just walk around, collect some resources and build something just because it's super relaxing to go there, or, for example, that there's really good games. I mentioned, for example, a story about my uncle, which has a really nice and pleasant story, but it's also visually very pleasing where I would go because it's not a very hard game to play, but it's just pleasing to go there as it is easy and relaxing to play. Well, I wouldn't say I have a particular or I would have a particular place in a game where I would go, I would say that I do have particular games I go to in those situations.

*Interviewer:* And about the environment in an app, would you like the environment to be very natural or would you prefer a fantasy world or maybe even a mixture?

*Participant:* Well, I think that is very much based on preference. I'm, for example, no real fan of, well, complete fantasy games or even movies. So, for example, to give a movie equivalent, I'm not a massive fan of Harry Potter because it's all just super unrealistic, let's say, compared to, for example, James Bond, which isn't realistic, but at least has some context in the real world, let's call it that. And I think the same translates for games as well. I usually, not always, but usually I prefer games that do have some Real-Life context, for example, Minecraft, which well, it looks different, but well, the general concept of the world is fairly comparable to life, although we don't have, I don't know, a nether in the real world. But it does have at least a comparable context.

*Interviewer:* And if we go back to engagement once more and about people fleeing their world or escaping into another environment, do you think the activities within the app or within the game should be limited in time?

*Participant:* So you mean that I could, for example, only play an hour or two per day, for example?

*Interviewer:* Yeah.

*Participant:* I'm not sure. No, I don't I don't really think that limiting the time like a hard limit per day would particularly help because I do think or I do have the feeling that the engagement with the app or the game is very much... or the helpfulness of the app is very much dependent on the engagement with the game. So if people feel very engaged and can emerge into the game, that is very helpful and playing for two hours and then suddenly there's just a hard cut where the game itself says, well, no, you can't play anymore. I don't think that is particularly helpful towards that goal. On the other hand, I do see why something like that might be necessary to not, well, create an addiction problem or something, but maybe there is there's other ways to do so. A possibility could, for example, be to have natural breaks within the game where this story, for example, has breaks or something, for example, that the game itself was based on a day and night cycle or whatever or something has to... I don't know... if you're a baker or something in that game, just to give a stupid example, if you bake bread, you would just have to leave the bread there for three hours to go and for the dough to rise. And that would be a natural break in the game where the game doesn't specifically say, hey, you can't play anymore. But there also isn't really much to do for you in the game during that time. So that might create natural breaks, which doesn't inhibit the engagement itself, but it does provide a way to control the addiction problem.

*Interviewer:* Yes, very good. So if the activity would then somehow naturally come to an end and bring the person back to real life, that would be then the best solution?

*Participant:* I think at least that would be an opportunity to create a better way of solving that addiction problem. I'm not sure if it's the best solution. There's certainly plenty of others out there, but that is at least one better way. Instead of saying, well, you can't play anymore. Good luck.

*Interviewer:* OK, very good. Thank you for your answers. That has been all for my questions. Is there something that I haven't asked about where you think I should definitely pay attention to that, or if there may be something, some element of gaming that you would say that would definitely make sense or something that would be a risk, which I haven't asked about. but you would like to mention?

*Participant:* No, not necessarily. Maybe the only thing that comes to mind is that I feel like many of those educational games or games with purpose feel very limited. In that they have a very strict structure and are, for example, in an open world games or anything, and this is not to say that open world games are better, but to say that open world games, for example, there are other genres as well, but they do offer the opportunity to create innovation within the game yourself. So, for example, having a game like, I don't know, GTA, which is most certainly not educational or GTA online has so many opportunities for things you can do that you're not only limited to the things that the creator of the game envisioned. But you can also do a lot more things, for example, coming together with friends and coming up with

challenges yourself, because the game itself isn't restricting in that way., whereas I have the feeling that many educational games are indeed very restricting. And they want you to stick very much towards what the creator of the game envisioned. And that can be a major hindrance, not necessarily in engagement itself, but certainly in a long term engagement to the game. And I think long term engagement might be a goal for such a game to not only have players there for a day or two, but to help them over a longer period. So that might be something to take into account.

*Interviewer:* So by limited you mean not too many opportunities?

*Participant:* Yes, for example, or just a very strict sense in what you can and can't do. I mean, what are good examples for that of popular games? Um. Well, I already mentioned GTA as a game or GTA online that isn't very restrictive in what you're able to do because there you can practically go everywhere and do more or less everything, even things that the creators themselves didn't intentionally put into the game. You can come up with things to do yourself, whereas, for example, if you do have a Super Mario game, it's a bit different in the newer games, but especially in the older ones, you simply had that 2D world and you could jump between the two poles, but there wasn't much else to do. You couldn't come up with a lot of challenges yourself to do because the gameplay itself was much more restricting. So in that sense, giving more opportunity for the player itself to come up with things to do in that world might also help with the engagement and how much the player itself is able to feel like a character in the game itself.

*Interviewer:* So, would it make sense to give some selection options, for example, that you can select if you want a fantasy or a natural environment, if you want the single player mode or group play, something like that?

*Participant:* I mean, that would certainly help, although in many cases, for example, the examples I just gave, for example, GTA and Super Mario, well, there isn't much possibility of giving a choice because they're just fundamentally different. They're just absolutely different games that don't really ... they aren't really interchangeable because they're going in such different directions. Not to say that any of those are those two games is bad, but they just have very different ways they're going and they're not really combinability in that the creator could say, OK, do you want to do the one thing or the other thing? Because they don't really combine well. So I'm not sure if that's feasible at all.

*Interviewer:* OK, very good. Well, thank you for your answers. So that's it. Thank you for taking the time. And I will stop the recording then.

## Transcript Interview 10

*Interviewer:* Dann muss ich dich jetzt als erstes fragen: Stimmst du zu, dass du aufgenommen wirst?

*Participant:* Ja, stimme ich zu.

*Interviewer:* Also das Thema habe ich ja erläutert. Also es geht darum, um Apps und Spiele, die man für den therapeutischen Bereich einsetzt und zur Stressbewältigung und so ein bisschen, um abzuschalten. Die erste Hälfte der Fragen handelt ein bisschen mehr von Stressbewältigung, so ein bisschen auch die Psyche. Und in der zweiten Hälfte geht es dann um Spiele. Du kannst deine Fragen gerne ausführen und begründen. Es gibt kein richtig oder falsch. Es geht immer nur um deine subjektive Meinung. Hast du noch Fragen, bevor wir anfangen?

*Participant:* Nein.

*Interviewer:* Okay. Dann die erste Frage: Fühlst du dich häufiger gestresst in letzter Zeit?

*Participant:* Nicht nur in letzter Zeit, eigentlich regelmäßig.

*Interviewer:* Hat sich das durch den Lockdown oder die Pandemie geändert oder verschlechtert?

*Participant:* Das bei mir jetzt nicht. Dadurch, dass ich ja ein sehr großes Grundstück habe und meine Tiere habe, habe ich es wahrscheinlich etwas besser als die Anderen.

*Interviewer:* Fühlst du dich denn manchmal ein bisschen überfordert mit den Gefühlen?

*Participant:* Also überfordert mit gewissen Sachen schon. Also auch mit dem Stress. Teilweise überfordert. Ja.

*Interviewer:* Fühlst du dich ab und zu mal allein und wünschst du dir, dass jemand oder etwas dir helfen kann?

*Participant:* Ja, ich sag mal so, man kann natürlich auch in der Menge einsam sein. Na also, manchmal schon. Manchmal habe ich gerne Leute um mich und manchmal bin ich gerne alleine. Aber es gibt schon so Phasen, wo ich mir denke: Ja, wäre jetzt nicht verkehrt. Ja, so genau das Gegenstück was jetzt, sag ich mal, zu dem Zeitpunkt da ist ja so, wie man es gerade braucht. Ich drücke es mal so aus.

*Interviewer:* Wünschst du dir manchmal, dass du der Realität entfliehen kannst oder dass du in eine andere Welt flüchten kannst für eine gewisse Zeit?

*Participant:* Hab ich in gewissen Phasen gehabt, ja.

*Interviewer:* Und könntest du dir vorstellen, dann eine App oder ein Spiel für solche Zwecke zu verwenden?

*Participant:* Ja, App weiß ich nicht, aber Spiel jetzt schon.

*Interviewer:* Kannst du dir auch vorstellen, dass gewisse Leute eine App oder ein Spiel als Therapie verwenden könnten?

*Participant:* Ja, denke ich schon. Das Problem, was ich da immer nur sehe ist, wenn Spieler oder Apps programmiert werden, dann wollen die Leute mal Geld dafür. Logisch, sie haben Arbeit gehabt. Und ich denke, wenn es zur Therapie zwecken eingesetzt werden soll, dann müsste es zumindest für alle zugänglich sein, weil sonst haben ja wieder die den Vorteil, die Geld zur Verfügung haben und die, die kein Geld haben, hätten einen Nachteil, weil die sitzen immer noch mit ihren Depressionen zuhause.

*Interviewer:* Und hältst du es für einfacher oder für eine geringere Hürde, dass man dann eine App oder ein Spiel öffnet, statt, dass man aktiv beim Arzt um Hilfe bittet?

*Participant:* Also ich fände es wahrscheinlich sogar besser und ich kann mir vorstellen, dass auch gewisse Leute gar nicht gerne zum Arzt gehen, weil sie sich da noch schlechter fühlen, weil sie dann irgendwie meinen weißt du, so psychisch daneben. Jetzt bin ich total down und mir geht's nicht gut und ich habe einen Weg oder so, das kann ich mir schon vorstellen, dass wenn sich dann einer mit einem Spiel beschäftigt, dass das neutraler ist, als wenn du wirklich in dem Moment zum Arzt gehst, weil dir in dem Moment ja selber bewusst wird, dass bei dir irgendwas nicht stimmt. Es könnte auch weiter runterziehen.

*Interviewer:* Eine App ist immer verfügbar im Gegensatz zu einem Arzt, wo du dann immer deinen Termin machen musst. Ist das eher ein Vorteil oder ist da eher ein Risiko?

*Participant:* Also ich finde es ist ein Vorteil.

*Interviewer:* Okay, das waren dann die Fragen so zum Stress Teil. Jetzt geht es dann direkt nur noch um Spiele. Ich weiß zwar die Antwort, aber interessierst du dich für Spiele? Denkst du, Spiele sind unterhaltsam?

*Participant:* Ja, also man sollte es vielleicht nicht 24 Stunden am Tag machen und nichts Anderes mehr. Aber ja. Kommt immer drauf an, was man spielen möchte.

*Interviewer:* Weißt du was Gamification ist?

*Interviewer:* Nein.

*Interviewer:* Also Gamification ist so das Einfügen von spielerischen Elementen in andere Aktivitäten.

*Interviewer:* Okay.

*Interviewer:* Wenn du beispielsweise jetzt eine App hast und du eine Sprache lernst, dann bekommst du Punkte oder sowas. Also Punkte sind ja dann das spielerische Element und die motivieren dich dann. Und das ist dann Gamification, wenn das in einer nicht spielerischen Aktivität mit einfließt. Es gibt verschiedene Elemente von Gamification. Ich stell dir ein paar vor und dann würde ich gerne von dir wissen, welche du für effektiv hältst und für hilfreich oder ob du bei manchen denkst, die sind absolut nicht sinnvoll.

*Participant:* Okay.

*Interviewer:* Also das erste ist Personalisierung, dass du eben einen Charakter, einen Avatar hast, der für dich im Spiel ist. Dann gibt es da Kollaboration, also das Zusammenspiel mit anderen, was dann auch zur Challenge werden kann, dass du im Wettbewerb mit anderen stehst. Dann gibt's Point and Rewards. Also das ist das ganz normale Punktesystem, was ja sehr viele Spiele haben. Und dann gibt's Storytelling. Das ist wenn das Spiel fortgeführt wird. Also, dass du eben so eine Geschichte in dem Spiel miterlebst.

*Participant:* Ich finde jetzt eigentlich alles nicht wirklich negativ. Ich sage mal, ein gewisses Maß von allem kombiniert wäre mit Sicherheit fast das perfekte Spiel.

*Interviewer:* Und glaubst du auch so Punkte und Belohnungen? Ist das immer ein Vorteil? Oder wenn du jetzt mal einen Tag lang zum Beispiel deine Aufgabe nicht so gut machst und dann keinen Punkt kriegst, wird dich das eher demotivieren?

*Participant:* Nein, würde es nicht. Aber ich kann mir schon vorstellen, dass es schon zu einer gewissen Sucht führen kann, wenn wirklich Punkte verteilt werden. Das heißt, dass dann wirklich jemand denkt, oh Gott, ich muss aber jetzt noch, weil er sich so da rein steigert, dass das für ihn da irgendwo ein unbewusster Zwang ist. Das kann also schon dazu führen, dass er dann, was weiß ich, eine Frau, die ihren Haushalt nicht macht oder ein Mann, der seinen Rasenmähen will oder sowas... Dass er das dann nicht mehr macht, weil er nur noch auf dieses Spiel fixiert ist. Es kann schon so einen gewissen Suchtfaktor haben. So.

*Interviewer:* Wenn wir mal auf das Element, mit dem sich mit Personalisation eingehen, also dass du dann diesen Charakter hast, wirst du dann bevorzugen, dass du das Spiel durch die Linse des Charakters siehst, dass man alles selbst erleben kannst. Oder wäre das besser, wenn du es aus der Vogelperspektive siehst? Dass du dann vielleicht dich mehr distanzieren kannst von dem Charakter?

*Participant:* Ja, also ich den Avatar, jetzt nicht durch eine Linse, sondern einen Avatar an sich, fände ich schöner.

*Interviewer:* Oder eine Kombination, dass du die Perspektive wechseln kann?

*Participant:* Nö. Also für mich jetzt nicht. Ich werde mir dem Avatar eigentlich ganz zufrieden. Zumindest werde ich jetzt so an Spiele denken, so wie ich sie mir vorstelle.

*Interviewer:* Und wenn, also außerhalb des Spiels, wenn du dich mal schlecht fühlst oder nicht so gute Laune hast, gibt es da Dinge, die dir helfen? Gibt es einen speziellen Ort oder eine besondere Aktivität?

*Participant:* Ja, Tiere. Bei mir sind die Tiere. Also da kann ich auch mal ganz gut abschalten.

*Interviewer:* Also du hast ja jetzt die Tiere auch um dich. Könntest du dir vorstellen für jemanden, der dann nicht die Möglichkeit hat, dass der vielleicht in einem Spiel dann was findet? Dass das Spiel etwas darstellt, was der Person helfen könnte, dass das Spiel beispielsweise den Ort wiedergibt, wo man sich hin wünscht?

*Participant:* Ja, das denke ich schon. Ort oder Personen, die man möchte. Tiere, die man möchte. Zuhause, was man möchte. Einen Job, den man möchte. Ja, kann ich mir vorstellen.

*Interviewer:* Wie sollte das Umfeld in so einer App oder in einem Spiel sein? Sollte das natürlich sein oder ein Fantasy-Welt?

*Participant:* Naja, ich denke schon, dass es natürlich sein sollte. Also ich möchte kein lila Rasen und keinen grünen Himmel oder so. Also ich denke schon, dass es wirklich sein sollte, wie es natürlich auch ist. Nur dass man sich eben selber aussuchen kann, wie man lebt, was man lebt, was man erlebt. Ja, was für Tiere man sich anschafft, dass man sozusagen sich das selber so zusammenbauen kann, wie man sich vielleicht schon immer gewünscht hat.

*Interviewer:* Du hattest gestern oder vorgestern dieses Second Life angesprochen. Kannst du mir erklären, was das ist?

*Participant:* Ja, es ist im Endeffekt ein Spiel, das ja, ich sag mal... die Umgebung ist wie die echte Realität. Ja, das heißt also, du musst wie im echten Leben auch dir ein Grundstück kaufen und ein Haus bauen oder irgendwo zur Miete einziehen. Du musst arbeiten gehen, um Geld zu verdienen. Du kannst dir Haustiere anschaffen. Du kannst Kurse belegen, damit deine Haustiere Kunststückchen lernen. Du kannst shoppen gehen. Also im Endeffekt ist es wirklich die Realität. Nur dass du die Wahl hast, wie du aussiehst, wie du wohnst, was du möchtest. Was weiß ich. Wenn du schon immer am Meer leben wolltest, dann mietest du dir da halt ein Grundstück, baust ein Haus drauf, lebst dann halt am Meer, kannst dein Haus einrichten, wie du möchtest, kannst am Strand sozusagen alles aufbauen. Was weiß ich, baust dir da noch ein Teich irgendwo in den Garten oder stellst dir Liegestühle hin oder Strandkörbe oder....Also im Endeffekt kannst du in diesem Spiel alles machen, was du möchtest. Na, egal ob es Beruf ist, ob es das Leben ist. Du kannst ja auch deine eigenen Freunde sozusagen kreieren. Es gibt in diesem Spiel allerdings natürlich auch....das ein Live Spiel. Das heißt, du triffst also auch wirklich andere Menschen, echte Menschen. Aber auch da kannst du ja im Endeffekt dann wählen, wen du magst, wen du nicht magst, kannst du übrigens auch in Diskotheken gehen. Du kannst da auch und wird zu einem Radiosender. Du kannst da Sängerin werden. Du kannst... Eigentlich kannst du alles wirklich machen, was du möchtest.

*Interviewer:* Und denkst du, das ist ein guter Zufluchtsort?

*Participant:* Ja. Also ich muss sagen, ich habe dieses Spiel selber bestimmt 5 Jahre gespielt. Zwar jetzt nicht aus rein psychischen Gründen, sondern weil ich es einfach toll fand, mir eine Welt zu erschaffen. Genauso wie ich die möchte. Das heißt, wenn ich der Meinung war, jetzt genau in diesem Moment möchte ich am Meer schwimmen gehen, dann war ich halt am Meer und bin schwimmen gegangen. Oder wenn ich jetzt gesagt habe, ich möchte jetzt eine Villa haben, dann habe ich mal eine Villa gebaut, hab mir die eingerichtet. Also das war schon sehr entspannt. Also du tauchst dann wirklich da ein. Du lebst dann auch in der Welt. Ich habe sogar einen Mann gehabt in dieser Welt. Ja, es war tatsächlich ein echter Spieler. Wir haben dann auch da zusammengewohnt und haben geheiratet. Das kannst du auch machen. Da gibt's auch Pfarrer, also Leute, die da den Pfarrer machen und so. Es war schon toll.

*Interviewer:* Und wenn das dann so eine Art Zuflucht ist, glaubst du, das kann passieren, dass man dann zu lange ist? Sollte das irgendwie begrenzt sein, die Zeit, die man da verbringen darf?

*Participant:* Ich sag mal jein. Das ist natürlich eine zweischneidige Sache. Auf der einen Seite kann ich mir gut vorstellen, wenn du in einem Zustand bist, wo es dir da besser gefällt als in deiner realen Welt, kann es durchaus passieren, dass einer zu lange da ist und da ständig eintaucht. Auf der anderen Seite, wenn du sagst, du würdest das jetzt begrenzen und sagst, so da kannst du halt immer nur zwei Stunden drin sein oder so. Wenn ich mir gerade vorstelle, ich bin z.B.... Ich habe mich zu einem Training mit einem Hund angemeldet und plötzlich mittendrin macht der Computer 'Patsch'. Ich glaube, das wird dann stimmungstechnisch und Launen technisch nichts .... Wäre nicht so toll. Außerdem finde ich es schwer zu beurteilen, weil ich sag mal der eine ist ja vielleicht ja.....sagen wir mal so, alle sind anders psychisch drauf. Der eine braucht ein bisschen länger, um sich zu entspannen, der andere macht das eine halbe Stunde und ist ein glücklicher Mensch. Wie willst du das dann einstellen? Woher willst du Oder wie willst du dann beurteilen, was weiß ich, wenn du ja z.B. ein Mensch bist, der vielleicht zwei Stunden braucht, um runterzukommen von irgendwas und ich bin jetzt ein Mensch, der braucht nur eine Stunde, wie willst du das beurteilen? Willst du zum Arzt rennen und dann sagen, beurteile mal eben, wie lange ich dieses Spiel spielen muss? Das wäre vielleicht ein bisschen doof. Also da sehe ich ein Problem.

*Interviewer:* Wenn das dann nicht so eine komplett andere Welt wird, wo das Spiel immer weitergeht, wo du was verpasst, wenn du nicht weitermachst, sondern wenn es kleinere Aktivitäten wären, wie wäre es dann möglich, dass das natürlich zum Ende kommt?

*Participant:* Ja, denke ich schon. Also du meinst jetzt, was weiß ich, wenn das nur so Etappen sind, wie so Serien im Fernsehen oder so. Es ist immer komplett abgeschlossen, es kann zwar im Prinzip weitergehen. Aber es sind immer abgeschlossene Ja, das kann ich mir schon vorstellen.

*Interviewer:* Wäre es dann trotzdem auch noch hilfreich, wenn du zum Beispiel dann immer nach einer halben Stunde wieder aufhören musst, aber trotzdem deine Aktivität erledigt hast?

*Participant:* Auch wieder jein. Weil wenn ich, sage ich mal, jetzt entspannen will oder runterkommen will, weil ich vielleicht stinksauer bin, irgendwie mich runterpegeln will oder so, ist es jetzt wieder eine Frage: Schaffe ich das eine halbe Stunde? Also auch das ist wieder eine Zeitsache. Du kannst ja auch kompakte Sachen, die abschließen, kannst du eine halbe Stunde machen, eine Stunde machen, 2 Stunden. Kommt ja immer drauf an, wie du es ausschmückst, welchen Umfang das Ganze hat. Würde ich sagen, ist sehr schwer zu beurteilen. Und hätte ich dasselbe Problem wie davor. Naja, du brauchst eine halbe Stunde und sagst jetzt geht's mir gut. Ich finde das toll. Jetzt reicht mir das auch. Und ich sage aber mir geht doch genauso beschissen wie vor. Ich würde gerne noch ein Stündchen abtauchen, also würde ich jetzt einfach mal als schwierig bezeichnen.

*Interviewer:* Gibt es noch irgendwelche Eigenschaften im Spiel oder irgendwelche Elemente, die ich nicht aufgezählt habe, wo du sagen würdest, was mir auf jeden Fall sinnvoll

*Participant:* Fällt mir jetzt ehrlich gesagt so nichts weiter zu ein.

*Interviewer:* Wenn du selbst spielst, was ist dir dabei am Wichtigsten oder was sorgt dafür, dass du da am besten abtauchen kannst?

*Participant:* Die Vielfältigkeit der Möglichkeiten, das heißt, je mehr Möglichkeiten ich habe, desto umfangreicher das ist, desto mehr Auswahl ich sozusagen habe, was ich tun kann, wie ich damit arbeiten kann. Ich denke mal, das ist für mich ausschlaggebend.

*Interviewer:* Ja, Auswahlmöglichkeiten. Grundsätzlich denkst du, dann kann man auch auf jeden Fall mehr Leute damit zufriedenstellen.

*Participant:* Ja, denke ich mal. Zum Beispiel, wenn jetzt einer sagt, ich entspanne ich beim Shoppen oder der andere sagt, ich entspanne mich, wenn ich mit Tieren etwas mache. Der dritte sagt, ich entspanne mich, was weiß ich, wenn ich mich irgendwo an Strand lege, am Meer. Der vierte sagt, Ich möchte gerne frühstücken mit irgendeinem Freund oder sowas. Das sind alles so Sachen... Je vielfältiger das ist, ich denke mal, desto eher ist auch für jeden irgendwas dabei, was er sich auswählen kann.

*Interviewer:* Ja, okay, super. Das waren all meine Fragen. Hast du noch Anmerkungen oder möchtest du noch irgendwas mir mitteilen, wo ich aufpassen sollte oder wo du denkst, das könnte schwierig sein?

*Participant:* Ja, also ich denke mal die Problematiken, die kommen können ...halt die Spielsucht, wenn man es nicht einschränkt. Die Probleme einzuschätzen, wer braucht wie lange? Nein. Also mehr sehe ich da jetzt eigentlich nicht. Wenn es vielfältig genug ist, denke ich mal, für jeden wirklich was dabei ist... der eine will Bootfahren, der andere will Fliegen. Ich denke, da sind alle ganz gut bedient. Ich meine, ich kann mir schon vorstellen, dass es Menschen gibt, bei denen klappt es nicht. Es gibt ja mal welche, die so gar keinen Hang dazu haben. Das kann ich mir schon vorstellen, aber ich denke mal den größten Teil der Menschen... weil ich muss dazu sagen, ich bin eigentlich überhaupt kein Gamer gewesen. Gar nicht. Ich hatte mal irgendwie so ein Spielchen, so ein Rollenspiel, das hab ich mal gemacht, wenn gerade nichts da war, einfach nur, weil... um mal zu gucken. Wenn die gut waren, habe ich es auch durchgespielt. Ja und dann kommen plötzlich so ein, zwei Spiele, wo du auf einmal sagst, Boah ist toll. Ich habe zwar nicht 24 Stunden dagesessen und wirklich nonstop ohne rechts und links gespielt, aber plötzlich fand ich Spiele ganz toll. Ist einfach so!

*Interviewer:* Super, danke für deine Zeit. Dann stoppe ich jetzt die Aufnahme.

## Notes Interview 11

- About to leave to another country
- Stressed because has to leave family behind and is unsure about pandemic situation
- Likes apps and is sure they are a help
- Knows that a close friend would wish to have something like this app as a support between therapy sessions
- Time with friends and animals calm her down
- Is sure that the app cannot work without additional support
- Users must not get lost within a game
- Treatment of addiction must not happen with diving into the next/ other addiction

## Transcript Interview 12

*Interviewer:* So, das läuft. Muss ich dich natürlich als erstes fragen: Stimmst du zu, dass ich dich aufnehmen darf?

*Participant:* Ja, darfst du.

*Interviewer:* Super. Also dann. Es geht um meine Bachelorarbeit. Es geht um Apps und Spiele im Bereich Psychologie. Und ob Apps und Spiele bei psychischen Problemen und Stressbewältigung helfen können, ist die Frage. Es gibt erst ein paar Fragen, die eben ums Stresslevel gehen, die vom Stresslevel handeln und wo es so ein bisschen um Gefühle geht. Und dann im nächsten Teil geht es dann um Spiele und Apps und eben die Kombination. Du kannst deine Fragen, deine Antworten gerne ausführen, gerne begründen. Es gibt kein richtig oder falsch. Es ist eigentlich alles deine persönliche Meinung. Hast du noch Fragen, bevor es losgeht?

*Participant:* Nee.

*Interviewer:* Okay. Die erste Frage ist: Fühlst du dich häufiger von deinen Gefühlen überfordert?

*Participant:* Nein.

*Interviewer:* Hast du seit dem Lockdowns oder seit der Pandemie mehr Stress?

*Participant:* Nein, im Gegenteil.

*Interviewer:* Echt? Ja, cool. Fühlst du dich manchmal alleine?

*Participant:* Nee, gar nicht.

*Interviewer:* Wenn es dir doch mal schlecht geht aus irgendeinem Grund wünschst du dir dann, deinem Leben quasi entfliehen zu können oder für eine Zeit in eine andere Welt abzutauchen?

*Participant:* Ja, das schon. Aber dann mach ich das meistens auch. Also ich bin dann quasi in meiner eigenen Welt. Also das hat... Das sind keine Spielwelten oder Fantasiewelten, sondern einfach irgendwie diese Flucht aus der Realität.

*Interviewer:* Ja, so in deine Gedanken?

*Participant:* Genau.

*Interviewer:* Könntest du dir denn vorstellen, App oder ein Spiel zu verwenden in diesen Situationen, wo du gerne mal woanders sein möchtest?

*Participant:* Ja.

*Interviewer:* Und kannst du dir auch vorstellen, dass das zu Therapiezwecken verwendet werden könnte?

*Participant:* Nein.

*Interviewer:* Könntest du dir vorstellen, dass eine App oder ein Spiel eine Therapie unterstützen kann?

*Participant:* Mit Sicherheit. Klar.

*Interviewer:* Und für jemanden, für den das dann infrage käme, könntest du dir vorstellen, dass es dann einfacher oder eine geringere Hürde ist, eine App zu öffnen oder ein Spiel als ein Arzt oder Therapeuten aktiv um Hilfe zu bitten?

*Participant:* Ja klar, auf jeden Fall. Weil die Wartezeiten für einen Therapieplatz oder alleine schon für ein Erstgespräch teilweise so lang sind, dass ich da.... Das kenne ich aus meiner eigenen Erfahrung auch. Ja, dass man da gerne mal Unterstützung braucht, die man dann nicht bekommt, weil ja keiner Zeit hat quasi.

*Interviewer:* Also wäre dann diese Anwendung auch eine gute Möglichkeit, um dann die Zeit zu überbrücken, bis man den Termin bekommt.

*Participant:* Klar, also es kommt ja immer auf die Problematik an. Ich für meinen Teil bin ja eher... Also ich habe mich viel in schwierigen Zeiten, viel wirklich an den Computer geflüchtet. Hab dann allerdings weniger gespielt. Also das war auch, dass ich gespielt habe. Irgendwie. Oder irgendwelche sinnloses Zeug gemacht hat. Oder halt auch programmiert habe. Oder versucht habe, irgendwelche Sachen zu programmieren. Also weil ich mich damit einfach nicht mehr mit mir selbst auseinandersetzen musste. Ich dann aber auch nicht mehr präsent war. Also für meine Umgebung. Und ich konnte die dadurch immer gut ausblenden.

*Interviewer:* Und wenn es dann die Möglichkeit gäbe, dieses Spiel zu spielen, diese App zu nutzen, diese andere Art der Therapiemöglichkeit, würde dir das vielleicht ein bisschen Angst oder Unruhe nehmen? Wenn du weißt, du hast das als Überbrückung, bis du zur Therapie gehen kannst?

*Participant:* Nee, also in meinem Fall war das ja auch nie so, dass ich Angst hatte keinen Therapieplatz zu bekommen. Also ich habe immer eine ...also das lag auch an der Art und Weise der Beziehung zu meiner Frau. Mit der Kommunikation, die wir innerhalb der Beziehung führen. Und ja, ich habe mich da auch nie alleine gefühlt oder alleingelassen gefühlt. Ich habe auch immer Unterstützung bekommen, hab aber auch nie....Also ich musste ...das war die Anleitung zum Selbermachen quasi. Ja, wie war die Frage nochmal?

*Interviewer:* Die Frage ist bereits beantwortet. Und wenn du beispielsweise was in der Therapie lernst, könntest du dir dann vorstellen, das mit Hilfe der App dann zu Hause zu wiederholen?

*Participant:* Ja, sogar sehr gut.

*Interviewer:* Also sagen wir mal, der Arzt gibt dir eine Anleitung und du weißt quasi, was du zu tun hast. Aber brauchst du die Motivation? Könntest du dann die App öffnen?

*Participant:* Ja, finde ich sehr gut.

*Interviewer:* Und eine App ist immer verfügbar im Gegensatz zu einem Termin, den du erst machen musst. Ist das ein Vorteil?

*Participant:* Was ich nicht. Könnte ich jetzt so aus dem Stehgreif nicht beantworten, ob das von Vorteil wäre, dass sie immer verfügbar ist. Ich glaube, in bestimmten Situationen ja. Auf mich bezogen wäre das tatsächlich so, dass ich einen sehr starken Verdrängungsmechanismus habe und dieser Verdrängungsmechanismus bei mir auch dafür sorgt, dass ich Sachen, um die ich mich... also um mich selbst kümmern muss, einfach vergesse. Also Aufgaben, die ich mit meiner Therapeutin bespreche einfach in den Hintergrund treten. Weil ich da in dem Augenblick... entweder geht es mir ganz gut und wenn es mir dann wieder schlecht geht, ich da auch nicht mal dran denke. Also von daher wäre so eine App in solchen Situationen für mich sehr hilfreich. Und dann wäre es auch gut, weil sie immer da ist und ich dann auch immer reingucken könnte. Aber ob das grundsätzlich als positiv.... Also ich weiß nicht, ob ich dann vielleicht auch da reingucken würde oder dann.... weiß ich nicht. Vom Grundsatz her, weiß ich nicht. In bestimmten Situationen mit Sicherheit ja.

*Interviewer:* Und dann gehen wir jetzt zum Teil, der aktiv vom Spielen handelt. Interessierst du dich für Spiele im Allgemeinen? Findest du spielen unterhaltsam?

*Participant:* Ja.

*Interviewer:* Findest du Spiele Online-Spieler im Allgemeinen eine gute Zuflucht?

*Participant:* Ja.

*Interviewer:* Weißt du, was Gamification ist?

*Participant:* Hab ich schon mal gehört, aber noch nie mit beschäftigt.

*Interviewer:* Gamification ist das Einbringen von spielerischen Elementen in andere Arten von Aktivitäten. Beispielsweise lernst du eine Sprache. Und für jede Vokabel, die du gelernt hast, bekommst du Punkte. Für zehn Punkte bekommst du einen Pokal oder sowas. Also dass du aktiv spielerische Elemente in einer anderen Aktivität mit drin hast. Ich habe hier einige Beispiele für Gamification Elemente. Ich würde die dann gerne kurz vorstellen und dann würde ich dich gerne bitten, die einzuschätzen, ob du denkst, die sind effektiv. Welche davon ist am hilfreichsten? Vielleicht ist was davon gar nicht hilfreich. Das erste ist Personalisierung. Da geht es dann um einen Charakter. Also dass du eben einen Avatar im Spiel für dich hast. Kollaboration, also die Zusammenarbeit mit anderen Spielern, ist ein Element. Das kam dann natürlich auch zur Challenge werden, dass du eben im Wettbewerb mit anderen stehst, dann gibt's das Point and Reward System, was ich gerade erwähnt habe. Also du sammelst Punkte, bekommst Sterne, sowas in der Art. Und dann gibt's noch Storytelling, dass das Spiel quasi so fortlaufend funktioniert, dass du eben eine Geschichte im Spiel verfolgst.

*Participant:* Und jetzt möchtest du wissen, welche ich davon sinnvoll erachte?

*Interviewer:* Ja, kannst du dir vorstellen, irgendwas davon zu verwenden? Glaubst du, irgendwas ist hilfreich? Glaubst du, irgendetwas sollte man weglassen?

*Participant:* Ich glaube, dass ist auch ziemlich personenbezogen, also z.B. mit anderen Leuten interagieren kann ich für mich...finde ich persönlich nicht so toll. Also ich spiel für mich alleine. Ich bin auch nicht derjenige, der gerne... also online spielen schon, aber keine Kommunikation dann darübermacht. Ich spiele dann ganz gerne, da können auch andere Charaktere dabei sein in so einem Rollenspiel oder so, aber diese Kommunikation ist nichts für mich. Ein Avatar erstellen finde ich schon mal prinzipiell nicht schlecht. Also ich kenne es auch aus den Rollenspielen, die man auch entwickeln kann. Das finde ich schon mal nicht schlecht. Und storytelling... Ja klar, das könnte ich mir auch noch vorstellen. Also, dass man da eine Geschichte um ein Grundgerüst webt irgendwie und die dann immer weitermacht, aber dann halt für mich alleine.

*Interviewer:* Was hältst du vom Punktesystem? Wirst du dich eher freuen, Punkte zu bekommen oder wärst du eher enttäuscht einen Tag lang mal keine zu bekommen?

*Participant:* Ja, ich...Das ist.... Also Zweigestalten. Also so ein Punktesystem finde ich prinzipiell für mich nicht so gut, also da ich bestimmt auch ein bestimmtes Suchtverhalten an den Tag lege, ist das bei mir eher problematisch. Also ich kenne das vom Sport her. Ich kenne das von vielen Bereichen her, wo ich dann bis zu einem gewissen Grad ein Suchtverhalten an den Tag lege, was ungesund ist. Und ich könnte mir vorstellen, dass mich das ....Also mich persönlich. Nein, ich glaube, dann würde ich, wenn mir das gefällt und ich dann da mitmachen würde, dann würde ich auf Punktejagd gehen und dann wäre der Sinn und Zweck ja wahrscheinlich nicht mehr erfüllt. Also in Bezug auf meine Krankheit.

*Interviewer:* Wenn wir mal speziell auf das Element mit dem Charakter, mit dem Avatar eingehen; würdest du das dann bevorzugen, das durch die Linse des Charakters zu sehen, das Spiel? Dass du dann eben alles selbst erleben kannst? Oder wird es dir besser gefallen, es aus der Vogelperspektive zu sehen, dass du deine Probleme auf den Charakter projizierst? Vielleicht hast du dann auch mehr Distanz zwischen dem Charakter und dir.

*Participant:* Ich glaube, die Vogelperspektive würde mir besser gefallen. Also bei so Shootern oder so, dann finde ich schon diese Ansicht, diese persönliche Ansicht, dass ich der Charakter bin schon interessant, aber ich glaube, in dem Sinne finde ich es dann schöner, einfach aus der Vogelperspektive darauf zu gucken.

*Interviewer:* Du hast schon sowas erwähnt, dass du auch dich gerne dann darin verlierst oder da relativ lange spielst. Also glaubst du grundsätzlich, eine App oder ein Spiel, was aber auch für psychische Probleme entwickelt ist, kann trotzdem süchtig machen?

*Participant:* Ja.

*Interviewer:* Und was hältst du von einer zeitlichen Begrenzung, wenn die Aktivitäten...

*Participant:* Finde ich gut.

*Interviewer:* Wenn du dann beispielsweise aber in dem Spiel alles erledigt hast, was du hättest erledigen können und es steht dann immer noch nicht bessergeht, wäre das dann ein Problem, wenn es zeitlich begrenzt ist?

*Participant:* Finde ich nicht. Also ich finde man .... Also Therapie heißt ja auch, dass man irgendwann mal Abstand gewinnen muss. Also man kann sich ja nicht permanent 24 Stunden therapieren. Ja, und wenn ich unbegrenzt Zugang hätte, zu einer Therapiemöglichkeit, weiß ich nicht, ob mir das gut bekäme. Ich kann .... Ich kann mich ja auch in meine Therapie verlieren. Also dass ich dann nicht mehr da rauskomme aus diesem Kreislauf. Und dann kann ich hinterher ohne Therapie nicht mehr leben.

*Interviewer:* Könntest du dir vorstellen, dass die App oder das Spiel sich dann auf natürlichem Wege in die Welt zurückbringt? Sowas wie: Jetzt hast du in diesem Spiel das und das geschafft. Versuch es doch mal morgen in der echten Welt.

*Participant:* Natürlich. Ich glaube schon, dass das funktionieren kann.

*Interviewer:* Wenn du dich mal gestresst fühlst oder dich nicht so gut fühlst, was hilft dir dann? Gibt es da einen speziellen Ort oder eine bestimmte Sache, was dir dann hilft? Sowas wie spazieren gehen oder an den See setzen. Gibt es da was Bestimmtes?

*Participant:* Ja, mittlerweile gehe ich ganz gerne dann... Also, bei meiner letzten Reha habe ich ... seitdem neige ich dazu, halt spazieren zu gehen. Vorher war es einfach, dass ich mich zurückgezogen hab. War schlecht ansprechbar. Hab mich dann..... Hab mich zurückgezogen.

*Interviewer:* Also, Spazieren gehen natürlich, körperliche Aktivität musst du beibehalten, da kann die App dir nicht helfen. Aber könntest du dir vorstellen, das in anderem Sinne einzubeziehen? Wenn es dich beispielsweise beruhigt, an einem Wasserfall zu sitzen, könnte das Spiel sowas für dich darstellen?

*Participant:* Nein.

*Interviewer:* Also wäre das nicht realistisch genug?

*Interviewer:* Nein.

*Interviewer:* Und grundsätzlich vom Design her, würdest du es bevorzugen, wenn die Umgebung natürlich ist? Oder hättest du auch gerne eine Fantasywelt?

*Participant:* Also grundsätzlich eher so Fantasywelt und auch eher so retro. Also es muss nicht unbedingt in HD und irgendwie 8K oder was weiß ich sein und ich bin dann mitten im Spiel. Das muss es nicht unbedingt sein.

*Interviewer:* Und warum Fantasywelt? Gefällt dir das oder kann man da besser abtauchen?

*Participant:* Fantasywelt ist, glaube ich, interessanter. Man kann .... also so ein Spiel ist ja immer, also auch für mich, immer so ein Stück Flucht und die Realität habe ich ja hier. Und wenn ich aus der Realität raus will, dann hilft es mir nicht, wenn ich in ein Spiel tauche, das

wie die Realität ist. Also dann zum Abtauchen und zum Abschalten bräuchte ich eine Welt, die einfach außerhalb des Realen ist.

*Interviewer:* Was wären denn Elemente, die dir helfen könnte? Gibt es etwas Bestimmtes, wo du dir vorstellen kann, das sollte da drin vorkommen? Bestimmte Aktivitäten, bestimmte Übungen?

*Participant:* Ne, gar nicht. Also ja, das müssten... Also für mich ist das Spiel dann interessant, wenn ich actionreiche oder anspruchsvoller Passagen habe, aber auch ruhige, einfache Passagen oder so im Wechsel ist, dass ich da nicht permanent gefordert werde, sondern auch Ruhemomente habe. Das wäre so das. Also es gibt keine bestimmten Spiele, wo ich sage, ich muss das so machen und das so. Nein.

*Interviewer:* Ok. Das waren dann meine Fragen bis hierhin. Hast du noch irgendwas anzumerken? Gibt's irgendwas, wo du denkst, das wäre im Zusammenhang mit dem Thema wichtig?

*Participant:* Also was mir wirklich...wenn es um sowas geht, immer diese zeitliche Begrenzung. Ich glaube, das wäre mir ganz wichtig, weil ich doch schon denke, dass wenn ich zu lange da drinnen bin einfach der. ... also der Weg wieder raus einfach zu schwierig wird. Also wenn ich begrenzte Zeit habe und die in so einem Spiel oder mit so einer App verwende, dann ist das wie in der Therapie, wo ich ja auch nur eine bestimmte Zeit bin. Also selbst wenn du in einer Klinik bist, psychosomatisch, dann hast du da viel Therapie. Aber die ist ja auch immer begrenzt auf eine bestimmte Zeit. Also du kommst dann ja nicht irgendwie auf 8 Stunden Therapiezeit pro Tag, sondern so hast dann da 3 Stunden, was weiß ich, 2, 3 Stunden maximal Therapie am Tag und das finde ich ganz gut. Ich glaube, dass solche Sachen auch immer ein hohes Suchtpotenzial tragen. Und wenn ich irgendwo flüchten kann und mit der Realität nicht klarkomme, dann unbegrenzt Zugang zu sowas habe, kann es auch sein, dass ich mich darin verliere. Von daher finde ich es ganz wichtig, wenn man zeitlich begrenzten würde, also nicht dieser permanente Zugang. Und natürlich, was auch mit zeitlicher Begrenzung ist, auch nach hinten hin. Also dass man nicht Monat für Monat da drin festhängt, also, dass man auch den Anreiz hat, sich tatsächlich einen Therapeuten oder einer Therapeutin zu suchen und eine Therapiemöglichkeit. Das kann auch eine Selbsthilfegruppe sein. Es kann ein Klinikaufenthalt sein. Und dass es sowas wie eine Kontrollinstanz in der App gibt. Ich hatte nie das Problem, dass ich suizidal war. Wenn du aber Menschen hast, die zu Selbstverletzung neigen, dann muss es Mechanismen geben, die da irgendwie noch... oder.... Ich weiß nicht, ob sowas möglich ist, aber die da auch eingreifen. Und ich glaube, das ist auch nicht für jede Art der Erkrankung gut. Also auch nicht psychisch.

*Interviewer:* Wahrscheinlich nicht, nein. Was meinst du mit Eingreifen? Beispielsweise, dass es von Ärzten und Therapeuten überwacht wird, dass die merken, bestimmte Verhaltensmuster verändern sich?

*Participant:* Naja, ich glaube nicht, dass sie von ..Also ich glaube, das wird nicht funktionieren, dass da wirklich ein Mensch hinter steckt. Aber es gibt ja bestimmte Reaktionen auf bestimmte Sachen, die vielleicht auf irgendwas hindeuten können, dass eine

Person da ist, der es schlechter geht und dass man dann vielleicht da Sachen einbaut, die einen Hinweis geben. Oder die erkennen: Du bist in Deutschland? Ja, und es gibt in Deutschland die und die Notrufnummern. Ja, und es gibt die unterschiedlichsten Sachen. Wenn man dann einfach so Hinweise gibt: Dann ruf da an. Also wie gesagt Telefonseelsorge 24Stunden, da kann man immer anrufen. Da haben wir wenigstens jemanden mal reales dem man sprechen kann, wenn es einem schlecht geht. Das finde ich, glaube ich irgendwie so. Das meine ich mit Eingriffsmöglichkeiten. Also nicht... so eine App kann schlecht... auch ein Spiel kann ja schlecht sagen, so, jetzt hörst du an der Stelle auf. Aber du kannst ja so Hinweise einblenden. Ich glaube, das wäre ganz wichtig als Eingreifen.

*Interviewer:* Und mit zum Ende kommen meinst du dann, dass quasi die App dir nicht immer im Moment nur hilft, sondern auch dir einen Fortschritt bietet?

*Participant:* Ne, mit zu Ende kommen tatsächlich so, wie ich das ...also so, dass man zu Ende kommt, dass tatsächlich dieses Spiel oder diese App irgendwann sagt: Pass mal auf, Du hast jetzt hier so solange diese App genutzt, es wird Zeit, dass du eine Therapie hast und dann einen Ausstieg schafft. Bei der LWL in Dortmund z.B. hast du die Möglichkeit, wenn es dir richtig schlecht geht ....Also a) kannst du da sofort hingehen und du kriegst immer einen Platz, also in einer Klinik, die müssen dich aufnehmen und was sie ambulant anbieten ist, wenn du noch kein keinen Psychologen gefunden hast, dass du bis zu 6 Monate den Psychologen dort in Anspruch nehmen kannst. Aber die Voraussetzung dafür ist, dass du dir selbst Hilfe suchst noch. Also deswegen ist das zeitlich begrenzt. Diese 6 Monate und das ist von vornherein ganz klar. Also du kriegst sie Hilfe, aber die sagen dir ganz klar so nach 6 Monaten, die hast du Zeit, in den 6 Monaten dir Hilfe zu suchen. Also du fängst jetzt an, dir Hilfe zu suchen und wenn du die einen eine Arzt hast, der dich aufnimmt, dann fällt unsere Hilfe weg, aber spätestens nach 6 Monaten ist die Hilfe weg.

*Interviewer:* Ah ja, okay.

*Participant:* Ich glaube, dass man sowas in so einem Spiel einbaut und dass der ... also, wenn man seine Charakterentwicklung hat, dass die sagt, nach 6 Monaten ist vorbei. Du kannst jetzt diesen Charakter 6 Monate spielen. Dann ist man gezwungen sich also entweder einen neuen zu machen oder halt irgendwie sich Hilfe zu holen.

*Interviewer:* Also man braucht auf jeden Fall einen Punkt; Jetzt musst du dich auseinandersetzen?

*Participant:* Genau. Also sonst könnte das so ein Fass ohne Boden werden einfach. Du spielst immer weiter und dann da... Spielsüchtige gibt's ja schon wie Sand am Meer.

*Interviewer:* Ja. Also du glaubst, selbst wenn man das länger verwendet hat, muss man danach zum Arzt gehen und glaubst nicht, dass das Spiel alleine schon genug helfen kann?

*Participant:* Nein. Also auch da kommt es immer auf die Störung an. Wenn du jemanden hast, der nur eine leichte depressive Episode hat, dann kann alleine schon das Spiel vielleicht helfen. Bei anderen Sachen wird es vielleicht schon schwieriger, weil ab irgendeinem Punkt muss man auch mal darüber reden, vielleicht Medikamente einzunehmen, die einem helfen. Ich habe eine Essstörung und diese Essstörung an sich hätte....ich wäre nicht so weit

gekommen, wenn ich nur ein Spiel gehabt hätte, das mir gesagt hätte, ich soll mein Essverhalten normalisieren. Also das ist ja wie jemanden, der depressiv ist, zu sagen: Hab doch einfach mal gute Laune. Das funktioniert einfach nicht. Also von daher muss es da irgendwelche Mittel und Wege geben, dass das weitergeht. Ich glaube nicht, dass eine Appalleine das schafft. Also es wird vielleicht für den einen oder anderen gehen. Das will ich nicht abstreiten.

*Interviewer:* Also braucht man doch quasi einen richtigen Coach? Jemand menschliches, der einen betreut?

*Participant:* Ich mag den Begriff Coach nicht. Also ich finde, mit einer psychischen Störung, einer Krankheit, muss man zwar einen Therapeuten. Also Coach hat sich für mich an wie...Coach kann jeder werden. Also ich kann mir ja jetzt sagen, ich werde zum Psycho Coach. Da gibt es keine Ausbildung für. Das gibt's nichts, keine Grundlage für. Das kann jeder Scharlatan werden. Es ist wie beim Heilpraktiker, Heilpraktiker kann jeder werden. Aber um Arzt zu sein, musst du eine Ausbildung haben. Und um Therapeut zu werden, dich Therapeutschimpfen willst oder Therapeutin, dann musst du eine Ausbildung haben. Und ich finde gerade solche Sachen einfach immens wichtig. Irgendwie, dass da Leute mit einem bestimmten Hintergrundwissen auch therapieren und nicht irgendjemand, der meint irgendwie, ich komme mit anderen Menschen klar und deswegen bin ich Therapeut. Das finde ich schwierig.

*Interviewer:* Also ein ausgebildeter Mensch, nicht nur eine künstliche Intelligenz, die weiß, das und das ist wichtig?

*Participant:* Genau!

*Interviewer:* Ok. Super. Sehr interessante Antworten. Danke, dass du dir Zeit gekommenhast. Ich stoppe dann die Aufnahme.

## Appendix D - Codebook

Main code	Sub codes	Definition	Example
<b>1. Sentiment</b>	1.1 Positive 1.2 Neutral 1.3 Negative 1.4 Ambiguous	1.1 The participant makes a positive remark 1.2 The participant makes a neutral remark 1.3 The participant makes a negative remark 1.4 The participant makes positive as well as negative remarks	1.1 "I think it could be very useful in case waiting lists for a doctor are way too long." 1.2 "Also ich persönlich hätte keine Meinung dazu" 1.3 "I don't see clearly in that time anymore." 1.4 "I'm not sure if that would make sense"
<b>2. Mental state</b>	2.1 Healthy 2.2 Stressed 2.3 Depressed	2.1 Apart from the emotion during the interview, the participant considers himself/herself as mentally healthy 2.2 Apart from the emotion during the interview, the participant considers himself/herself as stressed 2.3 Apart from the emotion during the interview, the participant considers himself/herself as depressed	2.1 "Gestresst fühle ich mich nicht." 2.2 "There are times where I get overwhelmed." 2.3 "Sometimes when I feel down I really just want to be alone."
<b>3. Pandemic</b>	3.1 Before 3.2 During/After 3.3 Change	3.1 The mental of the participant before the pandemic 3.2 The mental state of the participant during/ after the pandemic* 3.3 How the pandemic has impacted a change in mental well-being	3.1 "[...] there were some shenanigans at those moments, it was very much scheduled [...]" 3.2 "Especially right now during the pandemic, it just helps to reflect." 3.3 "It definitely has increased me being overwhelmed by simple situations that I would usually handle like very easily."
<b>4. Gamification</b>	4.1 Helpful 4.2 Risky 4.3 Unpredictable	4.1 Perceived as very valuable to include 4.2 Perceived as useful on the one hand and a factor to cause addiction on the other hand 4.3 Some factors or elements might have different impacts on different people. It is hard to evaluate the consequences. Some people may get frustrated from something that is helpful for another person.	4.1 "If you feel bad in the middle of the night, you can just start to play a game or pick up the app." 4.2 "A risk might be that people actually try to escape the real world." 4.3 "Wenn sie verlieren, kann es sein, dass der Druck noch größer wird."

Main code	Sub codes	Definition	Example
<b>5. Gamification element</b>	5.1 Personalisation 5.2 Points and rewards 5.3 Collaboration and challenge 5.4 Storytelling	5.1 The player has an avatar within the game 5.2 The player can gain points and is being rewarded 5.3 The player can play with and against others 5.4 The user can follow a story throughout the game	5.1 "I can imagine if you have a character you're playing that you can relate to, it might be easier to take care [...]" 5.2 "Für mich wäre es motivierend, wenn ich Punkte bekommen würde." 5.3 "I think a collaboration might be nice." 5.4 "I can imagine storytelling can do a lot."
<b>6. Motivation to use an app</b>	6.1 High 6.2 Low 6.3 Undecided 6.4 Desire	6.1 Participant would appreciate to be supported by an app 6.2 Participant would not appreciate to be supported by an app 6.3 Participant is interested in apps and gaming but cannot imagine to use it for therapeutic reasons 6.4 What the participant wishes to change about their mental health in the future and how that could be influenced by an app or therapy	6.1 "Storytelling has a lot of potential [...] to engage people in the game." 6.2 "I think I would not really want to use anything like an app" 6.3 "I'm not sure if that would require opening an app" 6.4 "Dann würde ich mir wünschen, dass es ein echter Mensch ist."

\*"after" cannot clearly be analysed since the pandemic is still continuing, participants can only guess how their mental state may evaluate

## Appendix E – (Dis-)agreement tables

### Code 1. Sentiment

	1.1	1.2	1.3	1.4	Nothing	Total
1.1	4				1	5
1.2		1				1
1.3			9			9
1.4				7		7
Nothing	1					1
Total	5	1	9	7	1	23

\*Kappa = 0.88

### Code 2. Mental state

	2.1	2.2	2.3	Nothing	Total
2.1	2				2
2.2		1			1
2.3			2	1	3
Nothing	1				1
Total	2	1	2	1	7

\*Kappa = 0.6

### Code 3. Pandemic

	3.1	3.2	3.3	Nothing	Total
3.1	2				2
3.2		3		1	4
3.3			4		4
Nothing					0
Total	2	3	4	2	10

\*Kappa = 0.85

### Code 4. Gamification

	4.1	4.2	4.3	Nothing	Total
4.1	4				4
4.2		1	1		2
4.3			3	1	4
Nothing					0
Total	4	1	4	1	9

\*Kappa = 0.81

**Code 5. Gamification element**

	5.1	5.2	5.3	5.4	Nothing	Total
5.1	1					1
5.2		1				1
5.3			3			3
5.4				1		1
Nothing						0
Total	1	1	3	1	0	6

\*Kappa = 1

**Code 6. Motivation to use an app**

	6.1	6.2	6.3	6.4	Nothing	Total
6.1	2					2
6.2		1			1	2
6.3			2			2
6.4				1		1
Nothing					1	1
Total	2	1	2	1	0	8

\*Kappa = 0.69