# UT Student's Conceptualisations of Mental Health and Gender Differences therein – A Qualitative Study

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### **Abstract**

**Introduction.** Nowadays, mental health concerns are steadily increasing, especially in university students, who suffer from depression, anxiety and mental disorders more and more often. As opposed to the traditional psychological approach, in the last decades the perspective of positive psychology, became increasingly popular. Followingly, to provide effective treatments for students, their perspective on mental health must be considered. Therefore, this study aimed at investigating the mental health conceptualisations of university students. Furthermore, possible gender-differences in those conceptualisations have been explored, in order to specifically tailor campus-based mental health services to female and male students.

**Methodology.** A qualitative study with semi-structured interviews was conducted. The participants consisted of 10 female and 10 male students from the University of Twente. The interviews have been transcribed and a coding scheme has been developed in ATLAS.ti. According to *thematic analysis*, all interviews were analysed and the major themes in students' mental health conceptualisation have been identified. Lastly, those themes have been analysed with regard to possible gender differences.

**Results.** It was found that students mainly conceptualise mental health in terms of the positive psychological approach. *Balance* and *happiness/life-satisfaction* were found to be especially important to female students. Male students tended to highlight the importance of *functioning*. Even though most of the aspects of students' mental health conceptualisations are of positive psychological nature, the theme *disorder* was strongly associated with mental health by students of both genders.

**Discussion and conclusion.** Overall, on-campus mental health services should consider students' mental health conceptualisations and gender differences thereof in greater detail. The treatment should largely consist of positive psychological approaches and reinforce students' skills to cope with negative experiences. Lastly, in future research, the study should be conducted again, outside of the influence of the ongoing COVID-19 pandemic.

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### Introduction

In the modern, achievement-oriented society, mental health has increasingly become a fundamental factor in evaluating life quality, as well as a burden for an expanding number of individuals. Matthews (2019) states that over the last 20 years, mental health issues have gradually developed, which can be largely attributed to the nature of modern society. This increase can be illustrated by the fact that in 14.1% of the population suffered from depression or anxiety in 1993, whereas the percentage of people suffering from the same issues lies at 17.5% in 2014. In addition to that, the severity of the complaints experienced by individuals significantly increased (Matthews, 2019). As current research declares, one of the groups especially affected are university students (Oswalt et al., 2020). More specifically, students display a remarkably high prevalence of the previously mentioned mental disorders and symptoms (Blanco et al., 2008). Henceforth, this adverse development and the current status of mental health complaints among students gives rise to the need for more effective and sustainable solutions in terms of campus-based mental health services.

However, one major difficulty in creating cohesive treatment approaches specifically tailored to university students stems from the emerging divergence between two professional perspectives on mental health. To begin with, traditional psychology focuses on defining mental health as composed of pathological issues (Maddux, 2002). Practitioners working within this approach to mental health strive to diagnose patients based on the presence of symptoms (Maddux, 2002).

In recent years, however, another, less illness-oriented perspective is on the rise, namely positive psychology (Lamers et al., 2014them). More specifically, positive psychology does not focus on human malfunctioning but rather aims to identify and reinforce the strengths and capacities of individuals in order to improve their mental well-being. Furthermore, those individual strengths are thought to possibly function as a 'bumper' for hurtful experience and negative experience in general (Seligman & Csikszentmihalyi, 2000). Thus, instead of focusing on the treatment of already existing mental health issues, the positive psychological approach aims to provide people with a range of skills and resources which enable them to overcome possibly difficult situations on their own (Seligman & Csikszentmihalyi, 2000).

In addition to that, positive psychology also strives to explore mental health from a less illness-bound perspective than the traditional approach does. More specifically, its focus lies on investigating possible facilitators for individual flourishing (Seligman & Csikszentmihalyi, 2000). From the perspective of positive psychology advocates, the traditional psychological approach creates a negativity bias and is overly reductionist with regard to the nature of mental health (Sheldon & King, 2001). Therefore, the professional perspectives on mental health can be described as rather complementary than a coherent, unified framework, which might reinforce one-sidedness in campus-based mental health services.

In addition to this discrepancy between positive psychology and the traditional psychological approach, differences might also exist between professional and lay perspectives on mental health (Drawert, 2013). Possible differences could, for example, be that lay perspectives focus on happiness to a greater extent than professional perspectives. Furthermore, in order to gain a coherent overall picture on mental health conceptualisations, it seems necessary to understand the perspectives the student population might have on mental health (Lauber et al., 2005). Concludingly, the study at hand strives to gather a coherent and overarching understanding of students' conceptualisations of mental health to develop a holistic approach for effective campus-based mental health resources.

## Students' Mental Health Conceptualisations

In order to gain insight into students' perception of mental health, existing scientific literature needs to be taken into consideration. Regarding students' mental health conceptualisation, a study found that university students view mental health as a domain strongly associated with rather clinical and pathological aspects, which is in line with the traditional psychological approach (Laidlaw et al., 2015). This was also found by a study investigating the factors influencing female and male adolescents' perspectives on mental health (Landstedt et al., 2009). More specifically, Landstedt et al. (2009) identified that, among adolescents, negative factors like (mental) sickness and distress are strongly associated with mental health. Moreover, students tend to distinguish between mental health and mental well-being, in which the latter is characterised by positive psychological properties like happiness and satisfaction (Laidlaw et al., 2015). Nevertheless, until this point of time, only few studies have been conducted about mental health conceptualisations among university students.

Hence, further research in this domain is necessary to establish a well-grounded knowledge base for the development of campus-based mental health care approaches which are aligned with student's perceptions. This might lead to an increased likelihood of students making use of campus-based mental health services. In addition to that, aligning the existent treatment approaches with students' mental health conceptualisations could lead to more beneficial and sustainable outcomes for students. If, for example, students conceptualised mental health in a rather positive psychological way, mental health services could aim at fostering students' skills and strengths, and would, thus, meet the students' demands regarding their definition of mental health.

## Gender as a Factor in Mental Health Conceptualisations

Another factor playing a role in mental health issue prevalence is gender. Even though the numbers of mentally ill individuals are rather equally distributed, multiple gender-related disparities are manifesting themselves in the specificity of mental health issues (World Health Organization, 2001). Those gender differences in the prevalence of mental health issues suggest that both genders have, at least to some extent, a different relationship with mental health, which could also include different mental health conceptualisations. Even though research on gender differences with regard to mental health conceptualisations is relatively scarce, some insights can be drawn from existing studies. Firstly, one study found that conceptualisations of mental health issues and symptoms are relatively stable across female and male adolescents (MacLean et al. 2012). This finding is supported by another study investigating gender differences in adolescents' relationship with mental health (Landstedt et al., 2009).

The latter study specifically identified a range of factors as being crucial with regard to mental health. Firstly, social support and positive relationships with other individuals were found to be equally important to adolescents of both genders (Landstedt et al., 2009). Secondly, especially female adolescents regarded academic performance as an important factor in mental health, since it oftentimes results in being respected and appreciated by other individuals (Landstedt et al., 2009). Nevertheless, the previously discussed findings do not provide a well-founded knowledge base yet. Therefore, in order to prevent and treat the existing gender-specific mental health issues, further in-depth investigation of mental health conceptualisations across genders can provide valuable insights for improving the status quo.

## The Present Study

Taking the previously discussed factors into consideration, it can be concluded that mental health problems tend to become more prevalent among university students. However, even though extensive research on the prevalence of mental health issues among students has been done, there is still a lack of insight into student's conceptualisations of mental health. By researching students' mental health conceptualisations, campus-based mental health services can be improved according to the factors that are identified as important components of mental health by students. Hence, the first research question of this study has been formulated as follows:

RQ1: "How do university students conceptualise mental health?"

Moreover, even though students, in general, display a higher prevalence of symptoms, there are multiple differences with regard to the nature of mental health problems among female and male students. Differences in the perception of mental health among female and male students could therefore be an influential factor in the gender-specific prevalence of mental health problems. The importance of further investigation in this field is also highlighted by the currently existing lack of research. Hence, gathering new insights is necessary for the development of more considerate and tailored treatments in campus-based mental health services. Consequently, the second research question has been formulated as follows:

RQ2: "To what extent do gender differences in mental health conceptualisations among university students exist?"

## Methodology

Based on the previously discussed theoretical framework, a qualitative study aiming at investigating university students' mental health conceptualisations as well as gender differences therein will be conducted. The data collection will be executed by semi-structured interviews. Moreover, concerning the subject at hand, a qualitative investigation appears to be the most beneficial, since interviews with open-ended questions allow for detailed and specific insights of participants (Byrne, 2004).

Furthermore, the research will be conducted by two psychology students, one focusing on gender-specific mental health conceptualisations and one focusing on major-specific mental health conceptualisations (i.e. the differences between mental health conceptualisations among Psychology and Engineering students). Regarding the outcomes of the study, both researchers initially assumed that there are a variety of differences between female and male students, as well as between Psychology and Engineering students.

## **Participants**

This study was conducted from September to November 2020, focusing on Psychology and Engineering students at the University of Twente. The participants were chosen to be Psychology and Engineering students in order to balance lay participants (Engineering students) and proficient participants (Psychology students). All of them were either enrolled in a bachelor or masters' program, while PhD students have been excluded because they exceed the proficiency level and do not represent lay perspective. In addition to that, students who have any kind of relationship to the researchers have not been included in this study. This has been decided in order to avoid biases stemming from the relationship of participant and researcher.

In order to recruit suitable participants, the snowballing system was used. Both researchers (the author of this thesis and the other student researcher) started searching for participants by asking people they knew who could fit the conditions of their particular study. Followingly, the possible participants have been contacted online (via social media platforms, e.g. Facebook and WhatsApp) and asked if they were willing to participate. In addition to that, each of those students was also asked if they knew other individuals matching the previously mentioned inclusion criteria.

In total, the participants consisted of 20 students. 10 Psychology and 10 Technical Science/Engineering students were interviewed. Moreover, the sample was developed to balance gender and study programs, meaning that three male and two female Engineering students, as well as three female and two male Psychology students, were included.

Furthermore, 10 participants included in this study were native German speakers in order to be able to conduct the interview in their native language and, thus, avoid possible language bias.

For the same reason, the remaining 10 participants are of Dutch nationality and have been interviewed in their native language. The subjects' ages range from 18 to 25 with a mean of 21.55 and a standard deviation of 2.04.

### **Interview**

The interview guide used by this study has been developed by Lamers et al. (2014) (see Appendix A for the full interview guide in English, and Appendix B for the translated, German version). It is semi-structured and solely consists of open-ended questions. In total, the interview consists of 11 main questions and two optional sub-questions that can be used in case the struggle with providing an answer. In addition to that, participants were, if applicable in the flow of interaction, asked probing questions like, for instance, "What exactly do you mean by that?" and "Could you explain that a little more in-depth?".

Going more into detail of the interview's structure, the first and second questions aim at gaining an overall image about the participant's personal conceptualisation of mental health by assessing the participant's associations with mental health and what components make up mental health in their opinion. The third and fourth questions concern characteristics of a possibly mentally healthy person and have been designed to gain a diverse insight into the participants' perception as possible. The fifth and sixth question have been developed to gain insight into the characteristics of a mentally unhealthy person.

Furthermore, the seventh question asks participants to report important and less important components of mental health. Followingly, in the eighth question, the participants are asked to indicate whether they think their definition of mental health is shared by others or a rather individual conceptualisation. Moreover, in response to the ninth question, the participants are supposed to estimate the overall percentage of mentally healthy individuals. The tenth question functions as help to summarise the discussed aspects of mental health by asking the participant to repeat or adjust their conceptualisation of mental health.

Lastly, the eleventh question provides the participant with the opportunity of giving their feedback and sharing their thoughts on the interview itself as well as the experience of being a participant in the study. At the end of the interview, each participant has been asked to indicate their age and their study program.

## **Procedure**

Firstly, a request to conduct the study at hand was submitted to the ethics committee of the University of Twente, which was approved shortly afterwards (approval number: 201121). After the participants have been recruited, a time and a place for conducting the interview was scheduled. Due to the second wave of the COVID-19 pandemic, only the first four interviews could take place in person. For those interviews, to keep the risk of a COVID-19 infection as small as possible, the researcher and the participant sat down approximately two meters apart from each other. Before the start of the interview, a printed, English version of the informed consent, which can be found in Appendix C, was given to each participant. After they read it, they were asked to sign it, given they understood everything and agreed to take part, as well as being audio-recorded. Followingly, a brief text containing all information about the interviews' nature and the way the gathered data is used was read to them. Then, they were given the opportunity to ask questions of any kind. This text can also be found in the introduction part of the interview scheme (Appendix A (English version) and Appendix B (German version).

In contrast to the first four interviews, the remaining 16 interviews have been conducted online. More specifically, similarly to the first four participants, the online participants have been contacted via social media and a suitable time has been agreed upon. Shortly before each interview, a Google Hangouts chat invitation, as well as the informed consent form has been sent to each of the participants. They were instructed to reply with an email stating that they have read the informed consent and agree with participating in the study. After the clarification of the interview process and possible questions, all 20 interviews have been voice-recorded by a mobile device. Overall, the interviews ranged from 6.42 minutes to 29.56 minutes, which equals a mean of 14.54 minutes and a standard deviation of 6.38 minutes.

However, even though it has been pointed out in the introduction text, a large number of participants indicated being somewhat confused by the questions' similarities. For instance, the third and fourth question contains the same content (i.e. "Do you know anyone who is mentally healthy?"). The same principle applies to the fifth and sixth question (i.e. "Do you know anyone who is not mentally healthy?"). Followingly, the fourth and sixth question have oftentimes not been answered in great detail. Nevertheless, most of the participants were fairly talkative and answered the questions by at least a few specific sentences.

After completion of each interview, the individuals have been thanked for their participation and were given contact details in case they had follow-up questions.

## **Data Analysis**

For all interviews to be coherent and coded by both researchers, each of the researchers transcribed ten interviews in their native language. Afterwards, both translated their interviews from German or Dutch to English. To correct for possible language bias, all interviews have been re-translated into the original language by other individuals. Furthermore, since the eleventh interview question ("How did you find the interview? Do you have any recommendations? Do you think these questions capture your understanding of mental health well enough or should we ask differently?") merely functioned as a feedback tool, it has been excluded from the coding and data analysis process. Lastly, in order to ensure the anonymity of the participants, their names have been replaced by numbers.

Followingly, the researchers coded the first five interviews together in ATLAS.ti and developed an initial coding scheme. Based on this, the remaining 15 interviews were distributed between both researchers. Furthermore, each researcher coded their share of those 15 interviews individually. Subsequently, both researchers discussed their coding choices for each of the 15 interviews, resolved individual disagreements and improved and developed the coding scheme until full consensus was reached. Based on this coding scheme and the work of Clarke et al. (2015) on thematic analysis, main and sub-themes have been developed.

Furthermore, the 'inter-coder agreement' function in ATLAS.ti was utilised for computing the inter-rater reliability. Firstly, however, to calculate the inter-rater reliability of the final coding scheme, a third person independently coded five interviews which have then been compared to the same five interviews coded by one of the researchers. A Krippendorff's alpha of  $\alpha = 0.98$  (Krippendorff's alpha values range from 0 to 1, in which 1 is the highest possible reliability), has been calculated based on those five interviews and thus indicates high reliability. Followingly, this process was repeated and another five interviews have been coded by the third person. More specifically, based on those five interviews, the Krippendorff's alpha value lies at  $\alpha = 0.76$ , which can also be considered high, since it lies in the upper quartile between  $\alpha = 0.75$  and  $\alpha = 1$  (Krippendorff, 2004). Hence, the overall inter-rater reliability is satisfactory and the coding scheme could be approved.

## **Results**

The study at hand aims at answering the following two research questions: RQ1: "How do university students conceptualise mental health?" and RQ2: "To what extent do gender differences in mental health conceptualisations among university students exist?". Those questions have been investigated by means of the coding scheme. In total, 13 main themes (as presented in Table 1) and 10 sub-themes (as presented in Table 2) have been identified in the coding-process and used throughout the data analysis. More specifically, all main themes have been alphabetically numbered from 1 to 13. The sub-themes have been listed under the number of their main theme and additionally numbered according to the number of sub-themes in the specific code. For instance, life-goals/direction (theme 5.1.) is the first sub-theme of happiness/life-satisfaction (theme 5.).

Table 1.

Main themes in students' conceptualisations of mental health in alphabetical order.

Theme	Description	Example
1. Autonomy	<ul><li>- (In)dependence on other individuals</li><li>- Extent to which a person is capable of managing a situation on their own</li></ul>	"you can deal with your emotions wellyes, and you can cope with problems yourself."
2. Disorder	- Includes all mentions of mental and physical disorders (e.g. depression, psychoses, burnout, disability etc.)	"So, paranoid, uh, obsessive and neurotic about everything, depressed, uh, dependent, so yes"

Theme	Description	Example
3. Functioning	- Ability of an individual to fulfil their daily-life duties (e.g. going to work, taking care of chores)	"Because on the one hand, functioning well shows that you are able to deal with daily life, and you fit in with society and are able to deal with what society asks of you."
4. General attitude	<ul> <li>Concerns general persistent and fixed attitudes</li> <li>Generalised optimism/pessimism</li> <li>Tendency to interpret things in an inherently positive or negative way</li> </ul>	"And a liking towards life and uhm, sort of a lust for it so to speak."
5. Happiness / Life-satisfaction	<ul> <li>Includes all specific mentions of happiness/feeling happy</li> <li>Describes the general happiness of an individual</li> <li>Includes positive mood and feeling good/well</li> </ul>	"It is most important that a person is feeling good."
6. Mood (negative)	- All mentions of a bad mood, negative feelings and (temporary) emotions	"For example, you feel depressed, or whatever at that moment"
7. Overthinking	<ul><li>Reoccurring, possibly intrusive thoughts</li><li>Rumination</li><li>Worrying</li></ul>	"So I have the feeling that I am mentally not so healthy if my thoughts are circling all the time"

Theme	Description	Example
8. Resilience	<ul> <li>An individual's ability to</li> <li>bounce back to a mental state of</li> <li>stability and well-being after</li> <li>setbacks of any kind</li> <li>Includes the resistance against</li> <li>negative life circumstances</li> <li>Includes confidence of being</li> <li>able to handle specific situations</li> </ul>	"And uhm, mental health, I think that you just are able to bounce back if you like, have a setback."
9. Self-reflection	- An individual's process of monitoring, evaluating and reflecting on their own behaviour, characteristics and mental states	"Mhh, I think the most important thing is that you can reflect on your own feelings and thoughts, that you somehow notice what is the reason why you're not feeling well"
10. Self-image	<ul> <li>The overall image an individual has about themselves</li> <li>Includes characteristics, personality, skills, physical features etc.</li> </ul>	"Mhh, I think somewhat, the perspective that you have on yourself"
11. Social environment	<ul> <li>An individual's network of people surrounding them (e.g. family, friends, co-workers, etc.)</li> <li>Includes all references and evaluations of the abovementioned persons</li> </ul>	"Something like a support system that you somehow have around you"

Theme	Description	Example
12. Stress	- Physical/mental discomfort caused by stress-related factors (e.g. work-life, personal-life, etc.)	"And uhm, yeah that also shows in her behaviour, she is agitated quickly"
13. Uncertainty	- General feelings of uncertainty (e.g. towards an individual's future regarding life goals and aspirations)	"I think that that, that doubt that is caused by that, that that is not very, uhm, yeah that you are not very stable mentally speaking."

**Table 2.**Description of all sub-themes.

Sub-theme	Description	Example
5.1. Lifegoals/ Direction	<ul> <li>General feelings of</li> <li>purpose/meaning in life displayed by</li> <li>an individual</li> <li>Also includes all mentions of</li> <li>possible life-aspirations and goals</li> </ul>	"no hobby or job, it doesn't have to be that this is what you mainly do or that your work is you completely fulfilled, but at least that you have something to look forward to"
5.2 Stability/ Balance	- Stability of an individual's life circumstances and external factors - Includes the balance of positive/negative aspects in an individual's life (e.g. the balance of days with high and low perceived well-being)	"I just think, uhm yeah, a sort of balance I guess between well, uhm, that you have a good balance between negative feelings and yeah, well, positive feelings."

Sub-theme	Description	Example
8.1. Acceptance	<ul> <li>The coping strategy of accepting situations and being at peace with given circumstances</li> <li>Acceptance of the self</li> <li>Adapting to specific situations/ circumstances</li> </ul>	"And uhm, that makes that you able to deal with it better and that you are just letting it be there."
8.2. Adaptiveness	- Altering one's attitude/behaviour as a coping mechanism	"So I think being open to other things, that makes you mentally healthy"
11.1. Communication	<ul> <li>Opening up about personal feelings,</li> <li>mental state or worries</li> <li>Meta-communication with regard to existing relationships and interpersonal connections</li> </ul>	"And I think that you are mentally healthy if you can help other people, and explain things to other people clearly, and let them see things from a different perspective."
11.2. Self- expression	<ul> <li>An individual freely</li> <li>communicating/showing their true</li> <li>inner life and feelings</li> <li>Sharing thoughts with their</li> <li>environment / other individuals</li> </ul>	"I think that might be another important thing, to be yourself."
11.3. Sociability	- The extent to which a person enjoys the company of other individuals and engages in social exchange with other individuals	"I know from my own situation that you don't get out of the house a lot"

Sub-theme	Description	Example
12.1. Anxiety	Possibly includes:  - Anxiety attacks/panic attacks  - Generalised anxiety  - Future-oriented fears	"Bad or negative self-image uhm, yes, anxiety attacks, or generally also partly negative thinking"
12.2. Pressure	<ul> <li>- Perceived pressure exerted by work-related factors / study-related factors / other external factors</li> <li>- Includes implications of pressure (such as: not being able to handle specific situations)</li> </ul>	"So now, for example, when you have too much to do or you are totally overwhelmed, you do not feel mentally healthy."

## **Mental Health Conceptualisations among Students**

In order to investigate the first research question "How do students conceptualise mental health?", the themes that have been developed need to be taken into consideration. As mentioned before, 13 main themes and 10 sub-themes came up in the coding process. The main themes will be presented in alphabetical order and each sub-theme will be presented after its according main theme.

Firstly, the theme of *autonomy* was identified. It describes the extent of being (in)dependent on other individuals and the extent to which a person is capable of managing situations on their own. Secondly, the theme of *functioning* was found. It concerns having a functioning daily life and being able to perform one's daily duties, as well as having some general structure in one's life. Thirdly, the *general attitude* has been identified as another theme in students' mental health conceptualisations. More specifically, this concerns fixed attitudes, for example viewing things from an optimistic or pessimistic perspective.

Followingly, *happiness and life satisfaction* appeared as another theme in students' mental health conceptualisations. This theme describes all positive and happy feelings, as well as the overall happiness and satisfaction in their life.

The theme of *happiness and life satisfaction* includes two sub-themes. The first sub-theme is *life-goals and direction*, which describes general feelings of purpose, meaningfulness and life-aspirations. The second sub-theme is *stability and balance*, concerning the equilibrium of negative and positive feelings, as well as the stability of external factors in an individual's life.

Furthermore, the next theme that has been identified is *disorder*, which concerns the presence of mental disorders, as well as symptoms thereof in an individual.

Another theme is *mood* (*negative*). It describes all temporary negative feelings.

Additionally, the theme of *overthinking* has been identified. This theme concerns ruminating and worrying about something.

The next theme that has been found is *resilience*, which describes the ability to bounce back from negative experiences. Moreover, *resilience* consists of two sub-themes. The first sub-theme is *acceptance*. This theme describes the ability to accept certain, possibly negative, circumstances and (slowly) bouncing back to a healthier state of mind. Thirdly, *adaptiveness* is the last sub-theme of resilience. *Adaptiveness* concerns accommodating one's behaviour according to external factors as a coping-mechanism.

Furthermore, the next main theme that has been identified is *self-reflection*, which concerns reflecting on one's actions and thoughts. Followingly, the theme of *self-image* has been found. It concerns the overall image an individual has about themselves, for example, what kind of characteristics a person has and the valence thereof.

The next theme that has been identified to be important in students' mental health conceptualisations is *social-environment*. This theme concerns meaningful relationships with one's family, friends or other individuals in general. Moreover, *social-environment* consists of three *sub-themes*. The first sub-theme is *self-expression*, which is closely related to the second sub-theme, namely *communication*. The third sub-theme is *sociability*. More specifically, *sociability* includes the tendency and willingness to engage with other individuals, as well as the enjoyment thereof.

Furthermore, the next main theme that has been found is *stress*, which consists of two sub-themes, *pressure* and *anxiety*. *Pressure* concerns any perceived pressure exerted through external factors, like, for instance, study-related performance pressure. The second sub-theme is *anxiety*, which includes specific fears and general feelings of anxiety. The last main theme is *uncertainty*.

It concerns general feelings of uncertainty with regard to one's living circumstances and one's future.

At last, the frequencies of all aforementioned theme occurrences among female participants, male participants and the total numbers of references are presented in Table 3.

**Table 3.**Theme frequencies among genders.

Themes	Frequency among female students	Frequency among male students	Total frequency
1. Autonomy	16	13	29
2. Disorder	17	22	39
3. Functioning	11	20	31
4. General attitude	10	6	16
5. Happiness/Life-satisfaction	53	38	91
5.1 Life goals/direction	4	8	12
6. Mood (negative)	17	15	32
7. Overthinking	9	1	10
8. Resilience	20	14	34
8.1 Acceptance	12	9	21
8.2 Adaptiveness	12	1	13

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Themes	Frequency among female students	Frequency among male students	Total frequency
9. Self-reflection	11	18	27
10. Self-image	10	13	23
11. Social environment	19	13	32
11.1. Communication	13	5	18
11.2. Self-expression	7	7	14
12. Stress	17	4	21
12.1. Anxiety	1	4	5
12.2. Pressure	4	3	7
13. Uncertainty	2	5	7

In order to identify the significance of the previously developed themes, their frequencies need to be taken into account. Nevertheless, frequency does not necessarily equal the importance of the theme in students' mental health conceptualisations. Rather, it indicates the salience of particular themes, as well as the participants' willingness to talk about them (Elliott, 2018).

Based on frequency, the theme *happiness/life-satisfaction*, which has been identified 91 times, appears to be the most salient component of mental health for students, as it was the theme mentioned the most out of all themes. One participant described it as: "*How satisfied you are with your whole situation, where you live for example, how you are doing with your studies..."*. Other participants, however, tended to highlight the *happiness* component of this theme: "*Um, first of all being happy for me, just ... that it's lasting and not somehow just for a short time, I would say, is the most important aspect.*".

The second most predominant theme was *stability & balance* with 61 occurrences. One participant, for instance, described the structure and stability of his daily life as an important contribution to his mental health: "*Uhm, I try to have a fairly decent work-life balance and I have structured my day in such a way that I take about an hour for workouts, be it home workouts or just going for a walk.*". Overall, happiness and life satisfaction, as well as balance and stability, can be regarded as rather positive aspects associated with mental health.

The third big theme related to mental health is *disorder*, which was identified 39 times. Mental disorders are strongly associated with mental health among students. More specifically, depression seems to be the most predominant and well-known disorder that functions as an indicator of mental health issues. "*Uhm, first of all, I think the negative things you associate with it, that is, depression and maybe burnout.*".

The theme *resilience* occurred 34 times. As one participant describes it: "*And uhm*, *mental health, I think that you just are able to bounce back if you like, have a setback.*". Similarly, the majority of participants who thematise *resilience* characterise it as the ability to go back to a normal state of mind after experiencing something negative or unpleasant.

However, *anxiety*, which came up 5 times lies on the other side of the frequency spectrum and hence appears to be less relevant to students' conceptualisation of mental health. Moreover, students mentioning the theme of *anxiety* mostly referred to specific fears rather than generalised anxiety, which can be illustrated by the following quote of a participant: "Of course, there are also many fears about the future or something...".

Furthermore, the middle ground of frequencies is represented by the themes of communication, which occurred 18 times, and stress and acceptance with 21 occurrences each. The latter three themes are thus of moderate importance concerning students' mental health conceptualisation. Stress is oftentimes described as related to the nature of being a university student. "I definitely think so, I think if you have any kind of stress at university or at work you are definitely more susceptible to it, but I also believe that some people have a disposition, maybe from childhood.". However, it is not regarded as a single cause for mental health problems and disorders, but rather a facilitator thereof.

## Gender-based Trends in Students' Conceptualisation of Mental Health

Moreover, the balance of themes between male participants and female participants needs to be investigated in order to answer the second research question, RQ2: "To what extent do gender differences in mental health conceptualisations among university students exist?". As presented in Table 3, there are five themes which were especially prominent among female participants. Firstly, the highest discrepancy between female and male participants can be found in stability & balance, since female participants mentioned the theme 46 times, while male participants only talked about 15 times. This suggests there is indeed a gender difference in the importance of this theme. Furthermore, the majority of participants mentioning the importance of stability & balance highlighted those negative and positive feelings are both to be accepted, however, they should be in balance. One participant, for example, explains it as follows: "Yes, I mean everyone has bad days ... but that doesn't mean that the whole week is gonna be completely bad.". Similarly, the theme happiness & life satisfaction has been found in female interviews 53 times and 38 times in male interviews. One female participant stated: "I don't know, so for me, it doesn't mean that you are [happy] every day, simply that you have some basic happiness and not that you have to work every day and run around happy, that's not what I mean by that."

Furthermore, the theme *stress* also appears to be more salient to female participants, since it has been administered 17 times in interviews conducted with women and only four times in interviews conducted with men. Moreover, another large gender difference can be found in the theme of *adaptiveness*. In interviews conducted with female participants, this theme has been found 12 times, whereas it only occurred in an interview given by a male participant one time. Most of the students who thematised *adaptiveness* described it in terms of being open to change: "Uhm, I think that uh, being open to change is, is what I think is the most important aspect [of mental health]." Similarly, overthinking was mentioned by female students nine times and once by a male student. Therefore, it is another factor that has nearly only been discussed by female students: "Yeah, exactly, so what I always had really bad was that I got worked up about something when I was stressed and then...or when I somehow had an argument, I thought about it so much..." Lastly, female participants mentioned the theme communication 13 times, whereas male participants did five times. Furthermore, the predominantly female participants who mentioned communication described it as playing an important role in staying mentally healthy and ameliorating psychological discomfort:

"But after she talks about it a little bit, and after a little while she is more herself again.".

On the contrary, there were three themes which were predominantly used in interviews that have been conducted with male participants. Firstly, male students mentioned the theme *sociability* 14 times, whereas female students mentioned it eight times. Furthermore, *functioning* was thematised by male participants 20 times and 11 times by female participants. *Functioning* is thus, according to male students, an especially important component of mental health. One male participant stated: "So, a complete picture of a human that is functioning one hundred percent correctly, but I think everybody has something that lacks." Moreover, self-reflection came up 18 times in interviews executed with male participants and 11 times in interviews executed with female participants. It is mostly characterised as listening to one's own emotions, as illustrated by the following quote of a female participant: "I think when it comes to mental health (...) I think it's good if you really listen to how you feel in the moment."

At last, despite the previously presented discrepancies, there is a range of themes which appear to be relatively balanced across genders and, thus, seem to be of similar importance to female and male university students. Firstly, *self-expression* was found seven times in interviews with female participants as well as with male participants. This, however, indicates that even though male students did not mention *communication* as often as female students did, they strive to express themselves. Followingly, the theme *pressure* occurred seven times in total with a distribution of four times in female participants and three times in male participants.

Furthermore, the theme *mood* (*negative*) came up 17 times in interviews conducted with female participants and 15 times in interviews conducted with male participants. Lastly, *self-image* also appears to be of similar importance to both genders; it was found 10 times in women's' transcripts and 13 times in men's' transcripts.

## **Discussion**

In the following section, the previously presented results will be discussed and interpreted in order to answer both research questions. In addition to that, possible strengths as well as limitations of this study will be taken into account. Lastly, implications for future research will be formulated and a general conclusion will be drawn.

Regarding the first research question, "How do students conceptualise mental health?", the greatest indicator of being mentally healthy seems to be happiness and life satisfaction. This is mostly described as feeling happy and having an underlying sense of satisfaction in one's life. However, multiple participants argued that those feelings of happiness are not expected to be omnipresent and an individual does not have to be continuously happy. This, in turn, is connected to the second most important factor of mental health that has been identified in this study, namely stability and balance. Followingly, it can be deduced that for most students, negative experiences and feelings do not automatically indicate mental health issues or even disorders. Rather, they are regarded as a normal and nonhazardous component of life, which is in line with the positive psychological perspective.

With regard to the existing professional perspectives on mental health, it can generally be said that students neither regard mental health from a purely pathological approach, nor from a positive psychological perspective. Their conceptualisation of mental health appears to be a rather differentiated framework including aspects from both approaches. However, the findings of this study suggest that the positive psychological approach dominates the field of student's mental health conceptualisation at this point in time. This contradicts the findings of existing studies stating that students' mental health conceptualisations primarily emphasise the clinical and pathological aspects of mental health (Landstedt et al., 2009). However, this discrepancy could simply stem from the inevitable societal change over time, in which positive psychology has become more prominent.

Moreover, the importance of mental disorders in mental health conceptualisations is in line with the traditional psychological approach, which regards the absence of mental illness as mental health (Maddux, 2002). Surprisingly, according to the findings of this study, *stress* is only a medium important factor associated with mental health, or more specifically, mental health issues. This directly contradicts the scientific literature provided in the introduction section, since it is argued that students experience stress levels significantly above the average (Blanco et al., 2008). One possible explanation for this discrepancy could be that students are not actively aware of their high stress-level, since they are continuously exposed to it and, thus, habituated to the stress. Furthermore, as mentioned in the results section, *stress* could also function as a facilitator for the emergence of mental health problems, rather than being a single cause for them.

More specifically, an individual experiencing high stress-levels is not automatically mentally unhealthy, but might be at a heightened risk to develop pathological symptoms or even mental disorders. This matter, however, should be investigated more in detail by future research.

Similarly to the moderate importance of *stress* in student's mental health conceptualisations, *anxiety* has only been mentioned few times, even though it is said to be one of the most common mental health issues among students (Blanco et al., 2000). Followingly, this could also be explained by students being used to relatively high anxiety levels, and, therefore, not being aware of them. Nevertheless, this inconsistency cannot be pinpointed to a particular reason and further research would be needed to gain more specific insights.

Regarding the second research question RQ2: "To what extent do gender differences in mental health conceptualisations among university students exist?", a range of similarities, as well as differences between female and male university students, were identified. This, however, partly contradicts the findings of existing studies. More specifically, as pointed out in the introduction, mental health conceptualisations across genders have been found to be largely consistent by previous research (MacLean et al., 2012). However, as the results of the study at hand established, the most substantial difference between genders can be found in the importance of stability and balance. More specifically, it was found that female students mentioned stability and balance over three times more frequently than their male fellow students did. This indicates a significant gender difference in this regard. Followingly, those findings suggest that mental health services should actively aim at supporting female students in developing a sense of stability and balance in their lives and their external surroundings, for example, their living space or their social environment.

Furthermore, another domain with a large gender difference is *happiness and life* satisfaction. Even though this factor is of relatively high importance for both genders, it was mentioned more often by female students, indicating that female students especially value *happiness and life satisfaction*. From those findings, it can be deduced that campus-based mental health resources should especially focus on fostering students' ability to generate positive feelings. This could, for instance, be combined with the positive psychological approach of practising gratitude, which has been found to improve individuals' mental well-being (Nelson, 2009).

Moreover, other topics that have been found to be more central in female students' conceptualizations than to their male fellow students, are *acceptance* and *adaptiveness*. More specifically, *acceptance* is only slightly higher in female students and also appears to be of moderate importance to male students. Therefore, it can be deduced that both genders regard the ability to accept and find peace in possibly difficult situations is an important skill in establishing and maintaining positive mental health. This is in line with the positive psychological approach discussed in the introduction, which aims at fostering skills as resources and buffers for negative experience (Seligman & Csikszentmihalyi, 2000). However, as opposed to female students, male students do not strongly associate adapting to certain external factors with positive mental health. This could be explained by means of societal factors and classical stereotypes of strong men who should not let themselves be mentally influenced by external factors (Vogel et al., 2014).

From the perspective of female students, another particularly important contributor to mental health is *communication*. This suggests that communication with other individuals as well as being open about one's feelings and thoughts is, according to female students, considered to be a relatively valuable component in mental health. Interestingly, both genders consider *self-expression*, which is closely related to *communication*, as equally important. This implies that for both genders, their ability to express themselves is a component of mental health. However, female students tend to prefer expressing their feelings by means of communication with other individuals. In contrast, male students strongly associate self-expression with mental health but do not consider communication a necessary requirement thereof. This implies that male students prefer to express themselves in ways different from direct communication. Hence, a useful implication for future campus-based mental health services is to actively incorporate alternative possibilities of self-expression, especially for male students. This could, for example, include writing a letter to themselves instead of directly communicating with a psychologist or counsellor and subsequently evaluating this process together.

As already presented in the results section, *overthinking* has been found to be a problem predominantly female students are struggling with. This is, to some extent, in line with the traditional image society associates with women, since the average female is thought to be rather sensitive and emotionally involved as compared to their male peers (Vogel et al., 2014).

Followingly, campus-based mental health services should consider supporting the development of functional coping strategies that can be utilized in cases in which (female) students are mentally strained by repeatedly overthinking certain factors or experiences they are confronted with. This would also be in line with the positive psychological approach aiming at equipping students with skills to compensate for possible negative external factors (like e.g. high perceived performance pressure (Seligman & Csikszentmihalyi, 2000).

Another finding consistent with the previously discussed literature is that male students mentioned *functioning* in one's daily life almost twice as often as female participants did. This is, again, supported by the argument that male individuals experiencing mental health issues suffer from being stigmatised to a greater extent than women (Vogel et al., 2014). Additionally, modern Western society oftentimes portrays ideal men as strong, highly functioning and not in touch with their emotional identity (Vogel et al., 2014). It thus can be deduced that the finding of higher importance of functioning among male students is a consequence of current stigmatising cultural ideals, which is also in line with the scientific literature discussed in the introduction (Vogel et al., 2014).

## **Strengths, Limitations and Future Implications**

The most valuable strength of the study at hand is its novelty. As opposed to the incomplete existing theoretical framework on students' mental health conceptualisations and the gender-specific differences thereof, this study is the first to provide a thorough investigation on this matter and to contribute practical implications for campus-based mental health services.

However, despite the range of useful findings, this study also faced a number of limitations. As already implied by the strengths of novelty regarding this study's domain, research in this field is scarce. Therefore, most of the scientific literature on students' mental health conceptualisation and gender differences therein, that has been cited, is not recent and thus less valid.

Secondly, this study has been conducted during a global pandemic influencing the daily lives of the (student) population. Especially, because a large part of the data collection took part in a lockdown, in which people were not allowed to meet other individuals and spent extraordinarily long periods isolated from their usual social environment.

This, in turn, can be described as psychologically highly challenging, which might lead to an alteration of the perspective students have on mental health.

Lastly, half of the participants were psychology students, which might have led to biases towards the positive psychological perspective of mental health. Their knowledge and proficiency in the field of mental health could have made them more aware of the positive psychological conceptualisation, and thus led them to base their mental health conceptualisations on an overly sophisticated knowledge base.

As a consequence of the previously discussed limitations, it can be said that it would be appropriate to consider some alterations for future research. Firstly, the (modified) study should be carried out again when the COVID-19 pandemic does not influence the daily lives of students anymore to a great extent. In addition to that, participants with professional knowledge in the field of psychology should be excluded in order to correct for possible biases stemming from their proficiency. Furthermore, the mental health conceptualisations of non-binary individuals should be taken into consideration for reasons of inclusiveness and the completeness of the theoretical framework, taking all genders into account.

In addition to these implications on future research, a substantial number of implications for mental health practitioners can be drawn. Firstly, the findings of this study suggest that campus-based mental health services should consider utilising the positive psychological approach to a greater extent. Furthermore, skills like resilience should be reinforced and supported in order to function as a 'shield' for possible negative experiences. Moreover, positive psychological practices such as, for instance, the reinforcement of gratitude should be incorporated in order to generate positive feelings and mental well-being, which have been found to be considered as important among university students. Furthermore, a general sensitivity towards gender-specific differences in mental health perception should be established. This could also include offering alternative ways of self-expression (e.g. writing letters or diary entries), especially for male students, who have been found do not feel comfortable directly communicating with a professional. Female students, on the other hand, should be reinforced in developing a sense of stability with regard to their emotional life and their external life circumstances, for example, their living situation.

## Conclusion

Taking everything into account, it can be said that students' mental health conceptualisations are mostly composed of positive psychological perspectives, but also include a significant amount of traditional psychological factors. Generally, students value happiness, feeling good and being satisfied with their lives the most. According to the participants, another crucial aspect of mental health is the stability and balance of their life circumstances, as well as their emotions.

However, even though the latter factors are rather in line with the positive psychological approach, psychological disorders are strongly associated with mental health among students. Furthermore, although there were various similarities in female and male students' mental health conceptions, this study also identified a range of significant differences between both genders. Firstly, female students consider happiness and life satisfaction as a more important component of mental health than their male counterparts do. In addition to that, the greatest difference between female and male students is the high importance of stability and balance among female students. They also emphasised the meaningfulness of stress, or the absence thereof, in mental health. Lastly, it was found that female students regard the acceptance of certain external circumstances as a crucial step in being mentally healthy and maintaining this state. Male students, on the other hand, value functioning in daily life higher than female students.

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## **Appendices**

### Appendix A.

### Interview Scheme – English Version.

## Lay perspectives on mental health across Europe

#### Introduction

### Dear interviewee,

Thank you for your interest in participating in my research project.

The topic of the study I'm working on is mental health. I am interested in people's opinions on this topic, how they see it personally. The interview questions are not about testing your knowledge, but about getting an idea about your own opinion.

The Interview will take about 10-35 minutes, your participation is voluntary and you are free to stop the interview at any time. If you don't feel comfortable with a question, you do not have to answer it.

Some questions may seem similar, nevertheless, I would ask you to answer all of them in order to get as much information as possible about your ideas and opinions on mental health. Of course, if you don't understand a question, please tell me and I'll explain it to you.

The whole interview is anonymous and confidential, so none of the information you will give me will appear in the context with your name.

If you don't mind, I will record the interview and take some notes in order to remember your answers correctly. After the end of the project, I will delete the recording. Is this okay with you?

As I already said, I am interested in your personal opinion, so please tell me everything that comes to your mind. There are no right or wrong answers, every answer you give me is equally important and will help me to get a better understanding of your perspective on mental health.

Do you have any questions?

If you don't have any further questions, could you please fill in the informed consent? (Fill in informed consent)

Okay, so if you are ready, we will start with the interview.

I am now starting the recording.

### **Interview Questions**

- 1. What comes to your mind when you think of mental health? (If interviewee needs help: whatever comes to your mind; say words, sentences, images, associations)
- 2. Going more into detail, what components of mental health can you think of?
- 3. Do you know anyone who is mentally healthy? What makes you think that? Can you explain? (If interviewee needs help: you don't have to name the person, just think of her or him)
  - a. (SUB-Q1: If interviewee cannot think about anybody in Q3) If no one comes to your mind, can you imagine a person who is mentally healthy? What makes you think that? Can you explain? (go on with Q5)
- 4. Can you think of another person who is mentally healthy? What makes you think that? Can you explain? (If interviewee needs help: another person that comes to your mind, this person does not have to be similar to the first one)
- 5. Do you know anyone who is not mentally healthy? What makes you think that? Can you explain? (If interviewee needs help: you don't have to name the person, just think of her or him)
  - a. (SUB-Q1: If interviewee cannot think about anybody in Q3) If no one comes to your mind, can you imagine a person who is not mentally healthy? What makes you think that? Can you explain? (go on with Q5)
- 6. Can you think of another person who is not mentally healthy? What makes you think that? Can you explain? (If interviewee needs help: another person that comes to your mind, this person does not have to be similar to the first one)
- 7. Among the aspects you mentioned (*Help the interviewee by summarizing her / his points:* To summarize what you just said, for you X, Y and Z are components that belong in your opinion to mental health), which ones do you think are more important and which ones are less important components of mental health? (*Interviewer should take notes of the earlier answers in order to help interviewee remember about the aspects they mentioned*)
- 8. What would other people associate with mental health, if they were asked like you? Would they mention different or similar components than you did?
  - a. Which components would be the most important for them?
- 9. Think aloud please while answering the following question. I am interested in your personal opinion and hearing everything that comes to your mind as well as the reasoning behind your answer. Overall, at this point in time, can you estimate what percentage of people, in general, are mentally healthy? (if interviewee needs help / asks, respond: just in general / worldwide)
- 10. Taking into account everything that we have talked about, how would you describe mental health?
- 11. How did you find the interview? Do you have any recommendations? Do you think these questions capture your understanding of mental health well enough or should we ask differently?

## Helping questions:

What do you mean? What do you mean by that? Can you give me an example, please?

Can you describe/explain that further?

**Demographic Questions** 

What kind of relationship it has with mental health? How would you relate what you just said to mental health?

Interviewer		_
Country		_
Gender	□ female	$\Box$ male
Age	years	
Subject of studies	$\Box$ psychology	□ natural science/engineering; name of studies:
Year of studies	years	
Lived abroad for	months	country:

## Appendix B.

#### Interview Scheme - German Version.

## Lay perspectives on mental health across Europe

## **Einleitung**

### Liebe\*r Teilnehmer\*in,

Danke für dein Interesse an meiner Studie teilzunehmen.

Das Thema der Studie, an der ich arbeite, ist mentale Gesundheit. Ich bin interessiert an der persönlichen Meinung meiner Teilnehmer. Die Interview Fragen sind nicht dazu da, dein Wissen zu testen, sondern um eine Idee von deiner Meinung zu bekommen.

Das Interview wird ungefähr 10-15min dauern. Deine Teilnahme ist freiwillig und du darfst das Interview zu jedem Zeitpunkt beenden. Falls du dich nicht wohlfühlst mit einer Frage, musst du diese nicht beantworten.

Manche Fragen können ähnlich erscheinen, aber ich würde dich bitten, alle Fragen zu beantworten, damit wir so viele Informationen wie möglich über deine Ideen und Meinungen bezüglich mentaler Gesundheit sammeln können. Wenn du eine Frage nicht verstehst, sag Bescheid, dann erkläre ich sie dir. Das ganze Interview ist anonym und vertraulich, es wird also keine Information, die du mir gibst in irgendeinem Kontext mit deinem Namen auftauchen.

Wenn es für dich in Ordnung ist, werde ich das Interview aufnehmen und mit gegebenenfalls ein paar Notizen machen. Nachdem die Studie beendet ist, werde ich die Aufnahmen löschen. Ist das okay für dich?

Wie vorhin bereits erwähnt, bin ich interessiert an deiner persönlichen Meinung, also sag mir bitte alles was dir in den Sinn kommt. Es gibt keine richtigen oder falschen Antworten, jede Antwort die du gibst ist gleich wichtig und wird mir helfen ein besseres Verständnis von deiner Perspektive auf mentale Gesundheit zu bekommen.

Hast du irgendwelche Fragen?

Falls du keine weiteren Fragen hast, könntest du bitte die Einverständnis-Erklärung ausfüllen?

Okay, wenn du fertig bist, fangen wir mit dem Interview an.

Ich werde jetzt die Sprachaufnahme starten.

#### **Interview**

- 1. Was kommt dir in den Sinn wenn du an mentale Gesundheit denkst? (Falls der Teilnehmer Hilfe braucht: was immer in deinen Kopf kommt, Worte, Sätze, Bilder, Assoziationen)
- 2. Welche Aspekte von mentaler Gesundheit fallen dir ein?
- 3. Kennst du jemanden der mental gesund ist? Warum denkst du das? Kannst du das erklären? (Falls der Teilnehmer Hilfe braucht: Du musst die Person nicht benennen, denk einfach an ihre/seine Eigenschaften)
  - a. (SUB-Q1: Wenn dem Teilnehmer bei Q3 keine Person einfällt) Wenn dir niemand einfällt, kannst du dir eine mental gesunde Person vorstellen? Warum denkst du das? Kannst du das erklären? (mit Q5 weitermachen)
- 4. Kennst du noch jemanden der mental gesund ist? Warum denkst du das? Kannst du das erklären? (Falls der Teilnehmer Hilfe braucht: Eine andere Person, die dir einfällt, diese Person muss der ersten Person nicht ähnlich sein.)
- 5. Kennst du jemanden, der mental nicht gesund ist? Warum denkst du das? Kannst du das erklären? (Falls der Teilnehmer Hilfe braucht: Du musst die Person nicht benennen, denk einfach an ihre/seine Eigenschaften)
  - a. (SUB-Q2: Wenn dem Teilnehmer bei Q5 keine Person einfällt) Wenn dir niemand einfällt, kannst du dir eine mental ungesunde Person vorstellen? Warum denkst du das? Kannst du das erklären? (mit Q7 weitermachen)
- 6. Kennst du noch jemanden der mental nicht gesund ist? Warum denkst du das? Kannst du das erklären? (Falls der Teilnehmer Hilfe braucht: Eine andere Person, die dir einfällt, diese Person muss der ersten Person nicht ähnlich sein.)
- 7. Unter den Aspekten mentaler Gesundheit, die du genannt hast (hilf dem Teilnehmer seine Worte zusammenzufassen: Du hast gerade gesagt für dich sind x, y und z Aspekte die zu mentaler Gesundheit gehören), welche findest du wichtige und welche weniger wichtige Aspekte mentaler Gesundheit? (Interviewer sollte Notizen machen von den früheren Antworten bezüglich mentaler Gesundheit)
- 8. Was würden andere Leute mit mentaler Gesundheit assoziieren, wenn sie wie du gefragt würden? Würden sie ähnliche oder andere Aspekte erwähnen?
  - a. Welche Aspekte wären für sie am wichtigsten?

- 9. Bitte sprich deine Gedanken laut aus während du diese Frage beantwortest. Ich bin interessiert an deiner persönlichen Meinung, allen Dingen die dir in den Sinn kommen und der Begründung für deine Antwort. Generell, zu diesem Zeitpunkt, kannst du einschätzen welche Prozentzahl and Menschen mental gesund sind? (Falls der Teilnehmer Hilfe braucht: weltweit/generell)
- 10. Wenn wir alles zusammenfassen, über das wir geredet haben, wie würdest du mentale Gesundheit beschreiben?
- 11. Wie fandest du das Interview? Hast du Empfehlungen? Denkst du dass meine Fragen dein Verständnis von mentaler Gesundheit gut erfassen oder hätte ich andere Fragen stellen sollen?

<u>Helf</u>	ende Fr	agei	n:
Was	meinst	du?	W

ie meinst du das?

Kannst du mir ein Beispiel geben?

Kannst du das erklären?

Was für einen Zusammenhang hat das zu mentaler Gesundheit? Wie würdest du deine Antwort auf mentale Gesundheit beziehen?

Demografische Fi Interviewer	ragen 	_
Geschlecht	$\Box$ weiblich	□ männlich
Alter	Jahre	
Studiengang	$\Box$ Psychologie	□ Natural science / engineering; name of studies:
Studienjahr	Jahre	

## Appendix C.

## **Informed Consent Form.**

#### **Informed Consent Form**

Thank you for agreeing to participate in this interview study, which is part of a research project conducted by Tamarah Fastenrath at the Twente University (The Netherlands). This form details the purpose of this study, a description of the involvement required and your rights as a participant.

## **Purpose of the Study**

This study intends to gain insights into what mental well-being means for the lay people themselves. The study's findings will be used to draw conclusions to assist in developing more valid theories/measurements, interventions and policies related to mental well-being.

## Subject's Understanding

- My participation involves being interviewed by a researcher from the University of Twente. The interview will last approximately 10-15 minutes. The researcher will take notes and audiotape the dialogue during the interview. If I do not want to be audiotaped, I will not be able to participate in the study.
- My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I choose to withdraw from the study, all information I provide (including the audio tapes) will be destroyed and omitted from the final report, and no one on my campus will be told.
- I understand that most participants will find the discussion interesting and thought-provoking and that there are no risks associated with participating in the study. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.
- I understand that although direct quotes from me may be used in the final report, the researcher will not identify me by name on the audiotape and any written reports. All of my information and interview responses will be kept confidential and secure. The researcher will not share my individual responses with anyone other than the researchers involved in this study.
- I understand that this research study has been reviewed and approved by the Institutional Review Board (IRB) for Studies Involving Human Subjects: Behavioral Sciences Committee at the University of Twente. For research problems or questions regarding participants, the Institutional Review Board may be contacted through [information of the contact person at the IRB office of the University of Twente].
- I acknowledge that the contact information of the researcher and her advisor has been made available to me along with a duplicate copy of this consent form.

By signing below, I agree that I have read and understood the above information, and would be interested in participating in this study.				
Participant's Full Name:		-		
Participant's Signature:		-		
Date Signed:		-		
Signature of the Researcher:		-		