

**“Teachers don’t exist without Students. And in a way (...) Students don’t exist without Teachers.”: Conceptualization and Interaction of Students’ and Teachers’ Well-Being**

Elena M. Hoppe

S3956377

Department of Psychology, University of Groningen

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Group number: 2122\_2a\_39

Supervisor: dr. Laura Ballato

Second evaluator: dr. Stacey M. Donofrio

In collaboration with: Nicolas Armbruster, Dustin Pelzl, and Sunny Schrage

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### **Abstract**

The literature body contains many studies that explored well-being in the academic setting. These studies indicated high levels of distress and increasing rates of pathologies among students and teachers. Even though, evidence suggests that students' and teachers' well-being is connected and influences each other there is little research that explores students and teachers simultaneously. This is why this study aims to fill in this gap by exploring how well-being is conceptualized by students and teachers and how their well-being interacts. Additionally, special emphasis is given to factors that influence teachers' well-being. To understand this a qualitative approach, using multistage coding, was applied and semi-structured interviews were conducted with university students and teachers. Our results indicated that well-being incorporates elements of mental, social, emotional, and hedonic well-being, as well as basic need satisfaction. This was in line with positive psychology, multifaceted, and basic need approaches to well-being. In regard to student-teacher interaction, mutual engagement, and communication were important well-being determinants. Self-awareness and regulation were outlined as internal factors to enhance teachers' well-being and coincided with the concept of resilience. Considering this further research should investigate these multifaceted components in more depth and implement the concept of resilience in the academic context.

*Keywords:* well-being, student-teacher interaction, teacher well-being, positive psychology, SDT, resilience, university, academia

**“Teachers don’t exist without Students. And in a way (...) Students don’t exist without Teachers.”: Conceptualization and Interaction of Students’ and Teachers’ Well-Being**

The university context can be inspiring and rewarding for students and teachers. It can be a place where they contribute to their personal development and can get deeply engaged with a field of their interest (Balloo et al., 2017). The possibilities for intellectual challenges and passion for the field of a study were identified as a source of motivation and fulfillment for teachers (Bexley et al., 2013). Among first-year undergraduate psychology students’ reasons such as broadening their knowledge, and enhancing their capacities were common motivational resources to pursue an academic education (Balloo et al., 2017). Even though the university context can represent a source of stimulation and fulfillment, it is also a place where high expectations and demands create pressure. Especially, for students, exam periods, grade competition, and self-regulating academic tasks can be challenging (Misra et al., 2000; Misra & Castillo, 2004). But also, teachers have to deal with the pressure created by workload or face periods of uncertainty due to a lack of job security (Lee et al., 2021). It is therefore not surprising that students and teachers are susceptible to mental health problems. Among students, high rates of anxiety-related disorders, depressive symptoms, or substance disorders are becoming increasingly prevalent (Auerbach et al., 2018). Equivalently, teachers report high levels of burnout and stress (Byrne, 1999; Winefiel et al., 2008). Even though students’ and teachers’ well-being are negatively affected, there is little research that explores both populations at the same time. This is remarkable because research in the academic context emphasizes that students’ and teachers’ well-being is strongly connected (McCallum & Price, 2010). Additionally, so far, well-being in academia has largely investigated negative aspects of students’ or teachers’ well-being instead of focusing on aspects that contribute to their well-being. Moreover, this study serves as a replication of Kiltz et al. (2020) study and focuses on the conceptualization and the interaction of student and teachers’ well-being to

understand which factors influence students' and teachers' well-being and whether important aspects have yet remained undiscovered. Whereas the original study has not particularly focused on factors that influence teachers' well-being, this study focuses on these especially. This is crucial considering the power difference between students and teachers. Compared to students, teachers have more authority which offers more opportunities to influence students' and teachers' well-being (Kyriacou, 2001). Considering this, the objective of this study was to comprehend how students and teachers conceptualize well-being in the university, and how student and teacher well-being interact. To investigate this, interviews with university students and teachers were conducted.

### *Theories of wellbeing*

Well-being is a concept that has been interpreted in various forms. For instance, it was defined as life satisfaction, positive affect, and happiness (Cheng et al., 2022). Until today there does not exist a clear definition of the concept of well-being. Different organizations and theories adopt their individual definition of the term. The World Health Organization (WHO), for instance, describes health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 2022, webpage). Incorporating several aspects such as physical, mental, and social well-being in this definition supports a multifaceted framework of well-being. According to this framework, well-being is best understood encompassing a wide range of aspects and contexts. Additionally, the WHO's definition of well-being does not only focus on ill-being or pathology and therefore coincides with the positive psychology framework. This framework is centered around the flourishing and optimal functioning of individuals, groups, and institutions and incorporates aspects of gratitude, inspiration, hope, and awe in our lives (Shelly & Haidt, 2005). Research shows that the incorporation of academic strength-trainings, that are aimed to promote positive emotions, relationships, and behaviors, significantly

increased satisfaction with life in Chinese university students (Duan et al., 2014). This suggests that school curriculums containing elements of positive psychology are beneficial for students. Another multifaceted approach to well-being is reflected in the Self-Determination Theory (SDT). This theory links well-being to the implementation of basic psychological needs: autonomy (perceiving self-agency), relatedness (feeling connected to others), and competence (perceiving one's innate ability) (Ryan & Deci, 2000). Studies that related these needs to the educational field showed that one's need to feel connected to others is reflected in close interactions between students and teachers. Both parties report close relationships to be beneficial (Rivera Munoy et al., 2020). Moreover, students found the process of receiving feedback from their teachers essential as it represents an opportunity for recognition of their competencies and personal strengths. Lastly, the need for autonomy is reflected in the student's desire to exert more influence on their tasks (Kiltz et al., 2020). Moreover, literature has shown that well-being is closely related to the concept of resilience. Resilience can be understood as an individual's capacity to use personal and contextual resources to overcome challenges and periods characterized by distress. It is considered a flexible characteristic (Britt et al., 2016; Lantieri et al., 2011; Mansfield et al., 2016). Considering the many stressors that exert influence on the individual in the academic context, raising awareness of the concept of resilience was identified as important. Also, the incorporation of mindfulness and self-care workshops were identified as useful implications to strengthen resilience (Wang, 2021). Taking this into account, it is evident that different theories adopt different interpretations of the concept of well-being. However, this is problematic for scientific research because it impedes the coherent interpretation of theories related to well-being. Additionally, there is no general definition of well-being within the academic context which can create an issue for the generation of practical implications. Based on such a definition, comprehension of factors that

positively influence students' and teachers' well-being would be facilitated and possibilities for practical application of this knowledge in academia would be introduced.

### ***Students Well-being***

For many students, the transition into the university is captured by demands and changes. It is therefore not surprising that either ending or beginning of school/college is characterized as one of the 43 events on the Holmes and Rahe (1967) stress scale. The estimated prevalence of mental health problems among undergraduate first-year college students is especially high for depression, anxiety-related disorders, and substance disorders (Auerbach et al., 2018). These problems do not seem to be restricted to first-year undergraduate college students. There are several studies indicating that college students in general show elevated levels of mental disorders and psychological problems (Auerbach et al., 2016; Larcomb et al., 2016; Vázquez et al., 2011). These findings are alarming in the sense of serious interference with academic performance and unhealthy avoidance strategies (Gustems-Carnicer, 2019; Sohail, 2013). Nonetheless, the academic context also contributes to students' well-being because students can feel motivated to broaden their knowledge in a specific field of interest or experience personal growth in response to successfully adapting to academic adversities (Balloo et al., 2017). Also, the experience of pleasant emotions, such as happiness, can positively influence students' achievements and their emotional well-being (Panger et al., 2014). Despite this evidence, factors that positively influence students' well-being have largely remained uninvestigated. To broaden this knowledge emphasizing aspects that positively influence students' well-being is vital.

### ***Teachers Well-being***

However, not only students appear to be suffering. Even though teachers appear to be content with their vocational activities (Kinman & Jones, 2008), high rates of nervous breakdowns and distress are common among teaching staff (Byrne, 1999; Winefield et al.,

2008). Burnout is linked to negative outcomes such as career dissatisfaction and impaired occupational functioning (Moore et al., 2019). Moreover, the educational relationship between students and teachers is characterized by power imbalance. Teachers have many responsibilities and make important decisions that affect their students. It can be difficult to maintain a healthy balance between authority figure and providing care and affection for their students (Donovan et al., 2006; Kyriacou, 2001; Sidorkin, 2002). In face of the many challenges, it has been shown that the incorporation of resilience approaches, such as mindfulness activities or self-reflection training, encouraged the development of a stress-hardy mindset which facilitated adaptation to academic obstacles and had a stress-buffering effect (Lantieri et al., 2011; Papazis et al., 2022). Moreover, the experience of contributing to students' acquisition of skills can be a meaningful and enriching experience for teachers (Kiltz et al., 2020). Even though the teaching profession can be a source of positive influences on teachers' well-being, they have largely remained disregarded. Especially teacher internal factors, which represent individual characteristics and strategies to cope with adversities in academia, have received little research attention (Hsu & Tung, 2010). Thus, focusing on factors that influence teachers' well-being positively represents a prosperous research avenue.

### ***Interaction***

Comprehending how students' and teachers' well-being is interconnected is vital in order to get a better understanding of factors that influence their well-being. McCallum and Price (2010) claim that well teachers foster well students. This becomes evident when considering the interconnectedness of students' and teachers' emotional well-being (Frenzel et al., 2009). In the context of education, the experience of pleasant emotions fosters problem-solving, protects health by promoting resiliency, and lays the base for attachment to others. Students that experience pleasant emotions, in the educational setting, experience learning-



related motivation, self-regulatory efforts, and activation of cognitive resources which facilitate performance. On the teacher's side experience of emotional well-being is related to effectiveness, engagement in lesson planning, and pursuit of teacher training programs which increases their quality of teaching. The emotional well-being of students and teachers is intertwined such that teacher enjoyment affects students' enjoyment. This exemplifies that the emotional well-being of teachers is crucial due to its powerful influence on students' emotional well-being (Frenzel et al., 2009). This influence is not only restricted to the emotional well-being of teachers and students. Evidence suggests that teachers' job satisfaction is positively related to students' performance (Baluyos et al., 2019). Thus, students' and teachers' well-being seem to be related in several aspects (Hagenauer & Volet, 2014). To understand this interaction, it is vital to adopt a systemic approach based on social constructivism (Burr, 2003). According to this perspective, social reality is developed through social interactions. This means that people within a system act and influence each other which implies that if one individual shows signs of behavioural, psychological, or emotional issues, the entire system will suffer (Gonzalez et al., 2020; Minuchin et al., 1978; von Schlippe and Schweitzer, 2015). Applied to the university context, this means that experienced distress from either students or teachers cannot be understood in isolation, and research in this domain needs to regard this interaction. Considering this systematic approach, another factor that has to be taken into account is the context in which the members are embedded. The academic context is characterized by frequent interpersonal contacts that exert influence on each other. Head teachers' leadership and communication style relate to teachers' performance (Baluyos et al., 2019). In general, a creative educational climate positively influences teachers' knowledge sharing, work engagement, and students' in-class engagement (Baluyos et al., 2019).

Considering the lack of a clear definition for well-being in academia, this study aims to conceptualize well-being in the university context from a positive perspective and gives attention to group differences and similarities in this conceptualization. The second research aim addresses the knowledge gap regarding students' and teachers' interaction. We expected students and teachers to mention that their well-being is interconnected. It seems important to understand this interaction better to generate practical applications for academia. Considering the yet poorly investigated teacher perspective, as well as the promising effects of introducing a resilience approach to academia, internal factors that enhance teachers' well-being are going to be investigated. Consequently, the following research questions were formulated:

RQ 1a. How do students and teachers conceptualize well-being at the university?

RQ 1b. How does the conceptualization of well-being differ for students and teachers?

RQ2a. How does student and teacher well-being interact?

RQ2b. What internal factors increase teachers' well-being?

To investigate these research questions this study adopted a qualitative method. This method was preferred because the literature still lacks a comprehensive definition of well-being. In this respect, qualitative methods are the most appropriate because their goal is to generate hypotheses and theories rather than testing hypotheses. Based on the findings from qualitative research new hypotheses can be generated and tested using quantitative methods (Henwood & Pidgeon, 1992).

## **Method**

### ***Participants***

In order to explore the view and the understanding of teachers' and students' well-being in the academic context, semi-structured interviews were conducted with a convenience sample of 12 participants. The choice of the amount of 12 participants is based on Guest et al.

(2006) paper which used the principle of data saturation to derive to the minimally required number of interview participants. Guest et al. (2006), concluded that after having conducted 12 interviews no additional data emerged (Guest et al., 2006). The sample was heterogeneous which ensured the inclusion of various experiences and views on the concept of well-being. It consisted of equal numbers of students and teachers (6 students and 6 teachers), among which 5 were female and 7 males. The teacher participants originated from 6 different countries (Germany, Netherlands, USA, Italy, Greece, and Spain) and included teachers with 4 to 30 years of experience. The ages of the teachers ranged from 29 to 62 years. Student participants included 3 different nationalities (Germany, Spain, and Italy) with ages ranging from 21 to 30 years. Most participants study or teach at the Behavioural and Social Sciences faculty of the University of Groningen, whereas one participant studied at the faculty of Economics and Business and one worked at the faculty of Philosophy (University Bonn).

### ***Procedures and materials***

Prior to starting the interviews, a strict ethical protocol was conducted to ensure the anonymity and safe storage of the data. The ethics committee gave permission to conduct the study and all participants were provided with informed consent and an information letter. Furthermore, the participants filled out a short demographic questionnaire (see appendix A) before the semi-structured interview was administered. The participants were interviewed by one interviewer that used a question scheme (see Appendix B) that contained questions and optional follow-up questions. Depending on whether a student or teacher was interviewed, the questions were slightly adjusted. The interview script consisted of two parts. The first addressed the conceptualization of well-being in general, participants were interviewed about their coping styles in a stressful period, as well as external factors that influence their well-being. Additionally, the first part focused on exploring well-being within the academic context. The second part focused on the investigation of student-teacher interaction. The

interviews lasted between 30 to 55 minutes. They were first recorded by mobile devices, transcribed, and stored in the y-folder. All participant data was pseudonymized. The participants received the transcripts and could report possible misunderstandings and decide to rescind from the study completely.

### ***Data Analysis***

To analyse the data, an open coding approach was used as described by Corbin and Strauss (2008). Open coding allows an analyst to examine the context of the data carefully before putting interpretive labels on it. The program ATLAS.ti Scientific Software Development GmbH (designed for qualitative research and data analysis) was used for the coding. The coding process consisted of three phases: First, each of the four coders independently coded half of an interview to gain insight into the general themes that were talked about during the interviews and to explore possible ways to code the data. Next, all coders collectively coded one interview with a student and one with a teacher, using the line-by-line coding method, so that no important concept is omitted (Corbin and Strauss, 2008). This phase of collectively coding interviews and discussing specific labels of codes resulted in a shared protocol of codes and it functioned as the basis for subsequent coding. During this process, code categories were established by observing differences and commonalities among codes. This was done in order to further organize and understand the content of the interviews as well as to create broader and more abstract codes, which were able to generalize across multiple interviews. Creating these code categories also served as a first step to divide the data according to the research questions. For instance, one code group called “Interaction” was created, which incorporated all codes regarding research question 2a. “How does student and teacher well-being interact?”. The established codes within their code groups were used to create a preliminary codebook. Subsequently, using the preliminary codebook as a basis, the previously coded interviews, as well as the remaining interviews, were coded by the four

coders independently. Afterwards, newly created codes and unclarity regarding initial codes were discussed between the coders, and the codebook was revised and enlarged until saturation, thus until no new themes were observed in the data (Guest & Johnson, 2006). In the process, clusters and overarching themes were jointly developed and discussed by looking at what codes and code groups most often co-occurred, as multiple codes could apply to one passage. These themes and clusters emerged through inductive (derive label of codes based on the interview sections) as well as deductive reasoning (using established theories e.g., SDT to code related patterns in the data) and concluded the final codebook. Lastly, each of the four coders re-coded three interviews using the final codebook to update the link of interview sections with the final codes. During the process, the coders were in constant contact, sharing the meaning of specific codes and further structuring them into the code groups. To complete the coding process and to have all quotes attached to the subsequent codes all re-coded interviews were merged into one final project in ATLAS ti.

## **Results**

In the following section, the results of this qualitative study are going to be presented. First, the results on students' and teachers' conceptualization of well-being within the university context will be reported. This is followed by a paragraph that indicates the differences and similarities of this conceptualization. Moreover, it is outlined how students' and teachers' well-being interact and in what manner they exert influence on each other's well-being. Lastly, internal factors that influence teachers' well-being are presented to address the existing research gap.

### ***RQ 1a: The conceptualization of well-being within the university context***

**General Well-being.** Our first research question addressed the conceptualization of well-being in general. Within this general conceptualization, participants mentioned the importance of physical and mental integrity. The code "Physical health" refers to "physically

being free of pain, being free of illness, being free of physical limitations that prevent you from accessing your education, your workplace” (teacher). In contrast to that, “Mental health” reflects itself in the ability to function socially as well as vocationally, and in the ability to cope with adversities of life. In this regard, the code “Emotional well-being” emerged. It refers to the ability to experience a broad range of emotions, negative as well as positive: “I feel like it is not like I strive to be happy all the time” (teacher). Another code that was specified was “Hedonic well-being”. It referred to the experience of satisfaction, pleasure, and “having some fun” (teacher) in one's life. Lastly, well-being was mentioned to be dependent on the satisfaction of basic needs such as a feeling of safety and financial security. The “Well-being awareness” code referred to the presence or absence of the ability to conceptualize well-being. Some participants found it “difficult to relate to the concept of well-being” (teacher) and others claimed that they are not “proactive at looking after well-being” (teacher) (see Table 1).

**Table 1**

*Conceptualization of General Well-Being*

Code	Description	Quote
Physical health	The physical state of the body ((no) pain, (no) suffering, functionality)	“Physically being free of pain, being free of illness, being free of physical limitations that prevent you from accessing your education, your workplace.” (teacher)
Mental health	Absence of mental illnesses that conflict with mental, emotional, psychological, and social functioning	“Not having anxiety, being free mentally to pursue your interests without any kind of obstruction without any kind of fear without any kind of limitation.” (teacher)

Code	Description	Quote
Emotional well-being	Ability to produce positive emotions, moods, thoughts, and feelings, such as experiencing negative emotions	“I feel like it is not like I strive to be happy all the time” (teacher)
Hedonic well-being	Focus on enjoyment, fun, and pleasure	“Having a sense of satisfaction (...), feeling free to do what you want to do or what you’d like to do (...) and enjoying what you are doing.” (teacher)
Basic needs <sup>a</sup>	Fulfillment of basic needs such as financial security, housing, safety, and sleep	“Having a place that allows to live, where it’s safe.” (teacher)
Well-being awareness	Ability to conceptualize well-being	“I find it difficult to relate to the word well-being.” (teacher)

*Note.* This Table represents the codes that are relevant for the general conceptualization of well-being.

<sup>a</sup>“Basic needs” reflects a code group that incorporates the codes: “Basic needs financial security”, “Basic needs housing”, “Basic needs safety”, and “Basic needs sleep” (for a detailed definition of the individual codes see Appendix C).

\*To represent the most meaningful quotes for each code, that were represented in this section of the paper, the quotes in Table 1 can deviate from the codebook quotes (see Appendix C).

**Well-being in the university.** Considering well-being in the university context, different codes were merged together to create four overall themes: the “Study/material”, the “System/structure”, the “Self”, and “Love/belonging” (see Table 2). In terms of the theme “Study/material” the codes: “Engagement students”, “Engagement teachers”, “Enjoyment studying”, “Enjoyment teaching”, and “Meaning” emerged. Students and teachers that felt to

enjoy the material they engaged with experienced intrinsic motivation, derived from curiosity and interest for challenges. Engagement for one's study was also identified as a source of energy, stimulation, and meaning which was claimed to justify working over hours on a specific subject. Similar students mentioned that deriving a sense of meaning, stimulation and pleasure is core to their well-being as a student said "when it is only about not gaining anything from it, then it affects your wellbeing." (student). Moreover, the lack of "gaining" (student) increased stressful periods of uncertainty where questions about their study choice like "whether I am doing the right thing? Should I switch or stop?" (student) arose. A second theme that emerged is the "System/ structure". It represents the structures and requirements that are determined by the university. These structures set the boundaries in which the other themes are embedded. For instance, students and teachers can only experience enjoyment and engagement with study material if stimulating courses are offered. In that regard, the code "University communication" captured comments made about the manner in which these requirements, tasks, and structures are communicated. Students and teachers mentioned the importance of clear and open communication about tasks and requirements. Also, open discussions and "not too many arbitrary top-down decisions" (teacher) were mentioned especially from the teacher's side. Most often mentioned by teachers and students was the code "Working conditions/workload" or "Study conditions/study load". It refers to the relation of university demands and the amount of time given to complete these. Teachers complained that the given time for a specific task was calculated too tightly, as time for extra tasks that come along with the demands is not considered. Moreover, teachers refer to problems with the time schedule that the university proposes: "It does not mean that I spend only four hours [teaching], but (...) afterwards you cannot directly switch tasks because you need a break in between." (teacher). The tight time schedule was said to not allow for brainstorming or moments of reflection about own work tasks and needs. On the students'



side, meeting specific requirements such as earning a certain amount of ECTS in the first year of their studies or finishing a deadline on time was said to create pressure. The stress due to study load is claimed to be strongest closest to the exam periods. In this context, high self-determined standards and expectations were mentioned to increase the perception of pressure during this time. This is why the individual's ability to reflect, self-regulate, and take responsibility for oneself was mentioned to be important. For instance, a teacher said that:

In these moments of stress, I try to have this reflection moment in the morning to see what, what can I handle today, and what do I want to accomplish today? And then in the evening also, how did it go? And what's my attention for tomorrow? (teacher).

These codes are incorporated in the theme "Self". The sense of autonomy was perceived to give the individual the ability to engage with meaningful material, and adjust one's schedule to individual energy level. However, a desire for external structure in form of clear guidelines or support was also mentioned. Especially new teachers reported being overwhelmed with the freedom they were given in structuring their work tasks and requested assistance and support from the university. Wishes like: "I think it would be important for management to just check in and say regularly what are you working on? (...) What do you need right now?" (teacher) were expressed. The last theme that was perceived to influence the individual's well-being within the university context was "Love/belonging". The university context represents a place of a variety of social interactions that were claimed to be important to derive meaning in life. Not only interactions between students and teachers but also exchanges among fellow students or colleagues were perceived to have a major influence on the individual's feeling of belonging. Social interaction is perceived to offer a place for competence recognition, support for difficult times, and the exploration of romantic relationships.

**Table 2***Conceptualization of Well-Being in the University Context*

Theme	Code	Description	Quote
Study/material	Enjoyment studying	Liking one's studies, finding it insightful and pleasurable	"I was more intrinsically motivated to study because I thought the subjects [were] interesting." (student)
	Enjoyment teaching	Linking one's teaching, finding it insightful and pleasurable	"If I have a course that I enjoy doing, and I like the challenge, like putting effort in[to], this is where I feel satisfied, where I get energy from." (teacher)
	Engagement students	Being committed to the studies and actively taking part in classes and homework	"If I have a course that I enjoy doing, and I like the challenge, like putting effort in it this is where I feel satisfied." (student)
	Engagement teachers	Being committed to the job and putting effort into classes and their preparation	"But since I am engaged with it and I find it interesting, I can work very hard on it" (teacher)
	Meaning	(Not) having a sense of purpose, personal relevance, and fulfilment; making an impact in a way that is important to oneself	"we're giving this course... [for students to] find relevance, (...) interest, (...) stimulat[ion]" (teacher)
System/structure	University	How the university	"The university gives them

Theme	Code	Description	Quote
	communication	communicates tasks, demands, plans, goals	clear directions or like how to act or what to do or what's required from them" (student)
	Working conditions/ workload	Time given for tasks at hand	"The majority of the problems come because we just don't have time" (teacher)
	Study conditions/ study load	Demand vs. time, the amount of tasks one has to do	"Not being overloaded. You know you should be challenged. there should be plenty of work, but not so much." (teacher)
	Study conditions/ assessment	Exams, competition between fellow students, fairness of assessment etc.	"Exam period is really stressful. (...) I do let go of my social life a bit." " (student)
Self	Self- expectations	Expectations of the self, perceived responsibility, taking charge	"If I am going to do a master, I will do it [well]." (student)
	Self-regulation	Ability to manage time efficiently, focus, setting priorities	"Also listening to your needs, listening to what your body tells you. So that if I realized, (...) I don't have the energy for something (...) that I know: Okay this is not what I need right now." (teacher)
	Self- responsibility	Awareness of being responsible for one's	"If I don't feel well, then I think (...) it's my

Theme	Code	Description	Quote
		state of well-being	responsibility to react.” (student)
	Autonomy	Negative: too much responsibility, too much freedom and no clear structure or task Positive: having freedom to create one’s own structure and choose the topic/task	“I use my autonomy that I have and think “Okay, what do I start with?”. And then I can flexibly go along.” (teacher)
Love/belonging	Interaction	Student and teacher interactions	“Teachers don’t exist without students. (...) students don’t exist without teachers.” (teacher)
	Social network	Belongingness to friends, family, peers, social groups or other individuals you interact with; relation with colleagues and teams, socializing...	“I think relationships are one of the strongest predictors of a sense of meaning in life.” (teacher)
	Competence recognition	Feeling recognized and valued for one’s work and achievements; the appreciation of the effort put into one’s	“You feel recognized, acknowledged by your colleagues.” (teacher)

Theme	Code	Description	Quote
		work	
	Social intimate relationships	deep, trustful connections and romantic relationships	“I think a real good friend cares about you. And then I think there can be energy going both ways.” (teacher)

*Note.* This Table represents the themes and codes that are relevant for the conceptualization of well-being in the university context.

\*To represent the most meaningful quotes for each code, that was represented in this section of the paper, the quotes in Table 2 can deviate from the codebook quotes (see Appendix C).

***RQ 1b: Differences and similarities in students’ and teachers’ conceptualization of well-being within the university context***

Based on the themes and subordinated codes that are relevant for the conceptualization of well-being in academia (see Table 2) this paragraph further outlines which of these themes and codes are specifically relevant for students’ and teachers’ conceptualization individually (see Table 3). To visualize this the four themes (“Study/material”, “Self”, “Love/belonging”, “System/structure”) and the most predominant subordinated codes for students and teachers are visualized in Table 3. For students’ conceptualization of well-being in academia, the theme “Love/belonging” was predominant. One student said that 60 % of his time is invested in his social life whereas 40 % are invested in studying. Social interactions with fellow students and peers were mentioned to be a very important contributor to a student’s life. But not only interactions with friends, also the exploration of intimate relationships was perceived to receive students’ attention. One student expressed his curiosity about “what is going on

with the girls right now, you know, um, love, live, everything” (student). In regard to students’ academic development, goals and self-expectations about specific study achievements, such as obtaining a particular grade, were perceived to influence student well-being. Moreover, enjoyment, engagement with their study, and the quality of teaching were mentioned to be important. Lack of pleasure and stimulation from one’s studies was identified to be a major source of stress and evoked questioning about one’s study choice. The individual’s ability to manage one’s social and study-related activities freely was valued by students. Whereas for students the theme “Study/material” and the enjoyment and engagement with it was very important, for teachers the theme “System/structure” was perceived to be very salient. One of the most mentioned issues among teachers was the experienced time pressure in relation to the tasks that they have to fulfil. All interviewed teachers claimed that many problems arise because the number of tasks and time for these tasks are out of balance. This often creates time pressure and experiences of stress which restricts teachers from reflecting critically and shifting one’s perception: “I mean, it’s also if your schedule is completely filled up you don’t really have lots of time for even contemplating and brainstorming about what you could do better, you know, what you might even need.” (teacher). Moreover, the code “Autonomy” was very predominant. Teachers mentioned enjoying the freedom they have in choosing the courses that they like to teach, managing their time schedule individually, and expressing themselves and their opinion freely. Contrary, if teachers are perceived to be restricted in their autonomy, when they are not involved in the decision processes of the university, for instance, it affects the individual’s well-being negatively. However, this was only highlighted by experienced teachers. New and yet inexperienced teachers appreciated structure and guidelines because they felt overwhelmed when too much freedom was given to them. Nonetheless, the perceived autonomy offers teachers opportunities to engage with material that is meaningful and

stimulating which increases their sense of enjoyment. Contrary, extra tasks, that did not contribute to their enjoyment, were described as conflicting with one's desire for meaning. A teacher's study or course was not identified as the only source of meaning. One teacher said that "relationships are one of the strongest predictors of a sense of meaning in life" (teacher). In that sense, teachers mentioned the importance of meaningful interactions with students and colleagues in which they gain a sense of recognition and acceptance.

**Table 1**

*Differences and Similarities in Students' and Teachers' Conceptualization of Well-Being*

	Students	Teachers
Theme	Code	Code
Study/material	Enjoyment students	
	Engagement students	
	Meaning	Meaning
System/structure		Working conditions workload
Self	Self-expectations	
	Autonomy	Autonomy
Love/belonging	Social network	Interaction
	Social intimate relationships	

*Note:* This Table visualizes the most relevant codes for students and teachers in regard to the conceptualization of well-being in the university context. The column "Students" lists the most predominant codes for students' conceptualization of well-being, whereas the column "Teachers" lists the codes that were most predominant for teacher well-being. Empty spaces on either side of the table indicate that this code was only predominant for students or teachers, whereas codes that are mentioned on both sides of the table, were relevant for both. For a detailed definition of the individual codes see Table 2.

***RQ 2a: The interaction between students' and teachers' well-being***

“Teachers don’t exist without students. And in a way (...) students don’t exist without teachers.” (teacher), this is how a teacher expresses the association that exists between students and teachers. Students, as well as teachers, agreed that their individual well-being does not exist in isolation. “I think the overlap is huge [and] (...) the struggles are almost identical.” (student). The subcode “Engagement” described the effort students and teachers put into studying or preparing the material. Students mentioned that teachers that are well are perceived to deliver “better teaching” which in itself was perceived to facilitate the student’s ability to understand the material (student). “Better teaching” was determined as designing interactive classes with possibilities for the student to engage and answer questions. Moreover, enthusiastic teachers were perceived to positively influence their teaching style. Their motivation and engagement were said to “swap over” to their students (student). Not only students reported appreciating the quality of well-prepared teaching but also teachers said to be enjoying giving a good lecture: “It sucks to give a bad lecture, it’s not good for the students (...) and it’s not good for you.” (teacher). Engagement on the student’s side was also important for teachers’ well-being: Teachers reported that students’ attitudes and behaviors had an impact on their mood. A switched off camera in online lectures, student’s unpreparedness, or lack of interest and engagement in class influenced the teacher’s mood in a negative manner. The subcode “Communication” refers to the exchange of information between students and teachers. Teachers, as well as students, expressed the need for clear and respectful communication. Students emphasized that teachers should be clear about the requirements and demands of a course, they should be kind, easily approachable, and supportive of the student’s needs. Teachers mentioned that understanding of their situation, respect, recognition, and appreciation for their good intentions was desired. In this context



feedback between students and teachers was perceived to be a source of positive as well as negative influence on an individual's well-being. Especially harsh feedback that criticizes teachers' teaching style or feedback in form of gradings for students, was perceived to be especially damaging for an individual's well-being. Another subcode that emerged was "Power disbalance". It refers to the disbalance in authority between the two parties. Students perceive their teachers as authority figures that are in a position to exert power over them. For instance, one student reported disliking it when a teacher called him out in class without raising his hand. Moreover, a student assumed that some teachers intentionally upload lecture slides that are only understandable, if the student participated in the lecture. On the teachers' side, the power disbalance was identified in terms of perceived responsibility for their students. Teachers mentioned that they feel responsible for their students whereas students do not feel this responsibility (see Table 4).

**Table 4**

*Relevant Factors for Student-Teacher Interaction*

Code	Subcode	Description	Quote
Interaction	Engagement	Interplay of engagement of students and teachers	"If teachers are really motivated about the topics that they are teaching (...) the motivation kind of swaps over." (student)
	Communication	Feedback, structure, clarity and amount of information given out	"So really giving the student the opportunity to talk to you and try to find a solution together." (student)
	Power disbalance	Role conflicts, not working as a team but against each other, seeing the other as inferior or superior	"I think teachers have a huge power. I think [the] (...) atmosphere a teacher establishes in a learning environment makes a very big difference in how the student [is]going to feel in their environment." (student)

*Note.* This Table represents the subcodes for the “Interaction” code that are relevant for the interaction of students’ and teachers’ well-being.

\*To represent the most meaningful quotes for each code, that was represented in this section of the paper, the quotes in Table 4 can deviate from the codebook quotes (see Appendix C).

### ***RQ 2b: Internal factors influencing teachers’ well-being***

Considering internal factors that influence teachers’ well-being different codes were merged together to create three themes: “Awareness”, “Regulation”, and “Person factors” (see Table 5). The theme “Awareness” consists of the code “Self-awareness”. It describes one’s ability to self-reflect, notice feelings, and have a sense of own needs and capacities. This moment of self-reflection was mentioned to ideally be followed by adjustment in behaviour. As teachers mentioned that being sensitive to their needs and adjusting their behaviour accordingly is beneficial for their well-being: “listening to your needs, listening to what your body tells you. So that if I realized, like I don’t have the energy for something (...) that I need to take some rest” (teacher). This ability to exert control over one’s behaviour refers to the code “Self-regulation” and was incorporated into the theme of “Regulation”. The capacity to regulate one’s behaviour was also mentioned in the context of work-life balance. It refers to a balanced relationship between professional requirements and private needs of a person such as spending time with family and friends or pursuing hobbies. Teachers described it as stressful when these two domains are conflicting or out of balance. Moreover, different coping strategies also emerged within the theme of “Regulation”. Making time for recreative activities such as reading a book, watching a movie, going out with friends, doing sports, or meditating was mentioned to contribute to an individual’s feeling of well-being. Also, cognitive restructuring and problem-focused coping were mentioned to be useful strategies in times of adversity. Reminding oneself that “my whole life does not depend on that” (teacher) or “looking, new at the meaning that I get from my job or doing practical things, such as

removing tasks from my, my plate” (teacher) were mentioned to reduce distress. The “Awareness” and “Regulation” themes are influenced by individual characteristics, such as the person’s level of resilience or self-expectations, and are reflected in the theme “Person factors”. The code “Resilience” referred to the individual’s ability to quickly recover in times of adversity. A teacher for instance mentioned that “I can still function quite well in my role as a teacher. Even though I just broke up with my boyfriend or I have some personal issues. I can still function in my role.” (teacher). In this context, the code “Competence flexibility” emerged. It referred to the ability to respond flexibly to changing situations and to adjust to new circumstances. Also, individual differences in “Self-expectations” were mentioned to influence a teacher’s well-being. This code refers to the teacher’s perception of responsibility for their students as well as their self-determined standards about personal and vocational achievements. Noticing that “I’m not going to have to take all that responsibility” (teacher) was expressed to reduce teachers’ perceived stress. Whereas high self-expectations such as being “as productive as possible” and “maximally functioning” can create pressure (teacher).

**Table 5**

*Internal Factors that influence Teachers’ Well-Being*

Theme	Code	Description	Quote
Awareness	Self-awareness	Ability to self-reflect, notice feelings and have a sense of own needs and capacities	“In these moments of stress, I try to have this reflection moment in the morning to see what, [what] can I handle today, and what [do] I want to accomplish today?” (teacher)
Regulation	Self-regulation	Ability to manage time efficiently, focus, setting priorities	“Also listening to your needs, listening to what your body tells you. So that if I realized, like I don’t have the energy for something ... this is not what I need right now. And that I need to take some rest.” (teacher)
	Balance work-life	Balance between time invested in work/studying on one	“Having some opportunity for relaxation for doing recreation, for doing this whole life balance.”

Theme	Code	Description	Quote
		side and recreation and family (social life) on the other	(teacher)
	Coping strategies <sup>a</sup>	Behaviors, thoughts, and emotions that are used to adjust to challenges that occur in your life	“I try to (...) deal with solving the problems.” (teacher)
Person factor	Resilience	The ability to bounce back after adversity	“Wellbeing is also feeling that you can cope with whatever is thrown at you.” (teacher)
	Competence flexibility	Ability to adjust to uncertain events	“I feel it’s not like I strive to be happy all the time. (...) It is more about being balanced and being flexible in how I respond to situations.” (teacher)
	Self-expectations	Expectations of the self, perceived responsibility, taking charge	“To give myself some slack, not take responsibility. Cause (...) in the first years of teaching, I took so much responsibility.” (teacher)

*Note.* This Table represents the themes and codes that are relevant for the internal factors of teacher well-being.

<sup>a</sup> This description of the code “Coping strategies” incorporates the subcodes “Avoidance”, “Problem-focused”, “Pushing-through”, and “Recreation” (see Appendix C for detailed definition of the individual subcodes).

\*The visualized quotes in the Table 4 can deviate from the quotes in the codebook (see Appendix C) to represent the most meaningful codes for the result section of this paper.

## Discussion

The purpose of this study was to shed light onto how students and teachers conceptualize well-being in the university context, as well as how their well-being interacts.

Considering, the small research body concerned with teacher well-being in academia, special importance was given to internal factors that affect teachers' well-being. In regard to our research questions, important elements could be drawn based on our collected data. To incorporate our findings into the theoretical basis, well-being was considered in the context of positive psychology, resilience, SDT, social constructivism, and a multifaceted approach. Having gathered information through interviews, it was possible for our participants to examine and elaborate on relevant aspects in detail. Another strength was that well-being in academia was addressed from a positive perspective and particular importance was given to teacher well-being.

### ***Conceptualization of well-being***

**General well-being.** First, it is notable that participants adopted a multifaceted perspective on general well-being and defined it largely in terms of the WHO definition of well-being, which characterizes well-being in terms of “physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 2022, webpage). However, participants also mentioned that the security of basic psychological needs such as financial safeguarding, having shelter, feeling safe, as well as getting enough sleep, are key requirements for an individual's sense of well-being. Nonetheless, these basic needs are not reflected in any of the theoretical approaches that we presented. This suggests that further theoretical groundwork is required for the basis of this discussion. In this regard, Maslow's pyramid of basic needs (Maslow, 1958) incorporated our basic needs as psychological and safety needs. Psychological needs are vital for survival such as food, water, or shelter. Safety needs include financial security or safety against accidents and injury. Their primary fulfilment is a precondition for the experience of the remaining higher-order needs such as belonging and love or personal growth-related needs (Maslow, 1958).

**Students' and teachers' conceptualization of well-being in academia.** One of the main objectives of this study was to determine the essential determinants for conceptualizing well-being in academia. It was notable that well-being in academia was largely influenced by the theme "Study/material" which refers to its engagement, enjoyment, and derived meaning. In other words, students and teachers expressed that they felt to enjoy the material they engage with when they experienced it as challenging and interesting. This was also identified as a source of stimulation and source of energy. This experience closely relates to the idea of flow theory which refers to the pleasurable experience of being fully absorbed by an activity that one is engaging in (Biasutti, 2011). Classroom settings that offer high levels of challenges, that are in line with an individual's ability, and opportunities for choice, as well as space for experiences of flow, represent circumstances under which flow experiences can emerge (Schmidt, 2010). This further highlights the importance of flexible university structures and guidelines which allow for experiences of flow in the academic setting. The participants underlined this notation when complaining about overwhelming workload or unrealistic demands that were mentioned to create distress. Thus, time pressure in regard to demands was mentioned to be one of the main strains experienced. The nature of this distress might be routed in the experience of dissonance between external expectations, such as university demands, and self-expectations, such as one's expectation to be productive and maximally functioning. This results in a discrepancy between one's actual self (unable to handle all the work tasks), and the ideal self (aspiration to be maximally functioning and productive). The literature emphasizes that subjective feelings of actual/ideal self-discrepancies relate to negative affective states (Shi et al., 2016). Further, the component of competence, which is reflected in the SDT, explains that feelings of successful mastery of a task are important for one's self-esteem (Ryan & Deci, 2000). Being confronted with overwhelming tasks can create the perception that one does not have the skills needed for

successful mastery of tasks which diminishes self-esteem. In this regard, students, as well as teachers, advocated for clear and open communication of tasks, demands, and structures in order to be able to freely structure one's activities within the given framework of university structures. This is reflected in the desire for autonomy and self-regulation and is in line with the component of autonomy captured in the SDT. According to this theory, people need to have a sense of control over their behaviour in order to feel self-determined. Relating that to the academic context means that individual task scheduling, time management, and opportunities for free choice of courses, were mentioned to be crucial for students' and teachers' well-being. Nonetheless, Schwartz (2000) emphasizes that excessive freedom and self-determination can backfire. Transferring this to the academic context means that excessive autonomy can result in feeling uncertain or lost. This was also mentioned by our participants and a certain degree of structure and guidelines were desired and claimed to be beneficial. Insight into the optimal ratio of freedom and structure within the academic context should be considered to guide further research. Another theme that emerged was "Love/belonging". The university context is a place that offers a variety of social interactions which were claimed to be a major source of meaning in one's life. Not only interactions between students and teachers but also among fellow students, colleagues, or significant others, influence a person's well-being. This coincides with the social constructivism framework which claims that constantly changing interactions between different systems can explain individual behaviour and development. For instance, changes in the university context or other social groups, influence a person on an individual level and vice versa. Moreover, these interactions were mentioned to provide a sense of belonging. This is reflected in the component relatedness of the SDT. It emphasizes that people need to experience a sense of belonging and attachment to other people in order to feel well. Moreover, social interactions can also be a source of social acceptance and competence recognition (Tajfel, 1978). Thus,

due to representing a powerful source of meaning, belonging, recognition of competence, and esteem, social interactions and networks were identified as one of the main contributors to students' and teachers' well-being.

### ***Similarities and differences in students' and teachers' conceptualization of well-being***

Even though students and teachers defined well-being in academia in very similar terms, differences in well-being contributors emerged. Whereas students emphasized the importance of enjoyment and engagement in classes and study material, teachers were predominantly concerned with gaining purpose and meaning from their work tasks. Students that did not enjoy their classes or the study material, questioned the choice of their study, whereas teachers seemed to be very certain about their preferences and did not consider resigning from their job. Considering that adolescence and young adulthood are characterized as periods of identity development, it is not surprising that exploration and questioning of one's preferences are more common among university students compared to teachers (Lannegrand-Willems & Bosma, 2006). On the teachers' side, the main source of distress was the perception of an overwhelming workload. Teachers mentioned that the amount of work was often challenging to manage within the prescribed time limit. This was no predominant conflict for students. The main factor that was important to them were their social networks as well as their exploration of romantic relationships. Also, research outlines that formation of romantic relationships and engagement in sexual behaviours are considered a salient developmental task for young adults (van de Bongardt, 2015). It is therefore not surprising that students mentioned being particularly investing in interactions with peers because these represent the ground for exploration and development. Teachers, on the other hand, that are predominantly involved in cohabiting relationships, mentioned that exploration of love and sexuality were no primary concerns for them and therefore highlighted other social interactions such as the interaction with their students. These interactions were claimed to



represent a source of meaning, stimulation, sharing of mutual enthusiasm, and an opportunity for competence recognition. In terms of self-derived standards and achievement goals, students, as well as teachers, expressed the damaging effect high self-expectations and achievement-related anxiety can have on their well-being. Nevertheless, students experienced this distress especially during exam periods whereas teachers' self-expectations referred to perceived responsibility for their students or high standards for their vocational achievements. Both students and teachers outlined the positive influence of experiencing autonomy in the university context. Individual time scheduling or activity planning was perceived to be very important for the individual's well-being. Despite that, both parties also mentioned that high levels of autonomy, such as when task instructions are not clear or they feel a lack of support, negatively influence their well-being.

#### ***Insights concerning the interaction between students and teachers' well-being***

Apart from examining the conceptualization of well-being within academia, this study also investigated how students and teachers influence each other's well-being. As expected, interactions between students' and teachers' well-being were identified on various levels which highlighted its multifaceted and multidirectional quality. Both parties expressed that moods and actions of the other affected students' and teachers' well-being. Teachers' enthusiasm and engagement were mentioned to promote interactive and stimulating class atmospheres. Which subsequently were identified to increase students' enthusiasm and motivation in class. This coincides with existing literature that emphasizes benefits, such as facilitation of performance or activation of cognitive resources, of an educational context that fosters experiences of pleasant emotions (Frenzel et al., 2009). Also, teachers experience pleasant emotions when students are motivated, engaged in their class, and acquire new skills (Baluyos et al., 2019). Students and teachers seem to exert influence on each other predominantly on the emotional level which emphasizes strong attention to emotional well-

being in the academic context. This becomes even clearer when considering the impact of feedback in the academic context. Students and teachers stressed the importance of clear and respectful communication as a key element of their well-being. Especially feedback between students and teachers was identified as a sensitive topic. Whereas positive feedback can boost one's self-esteem, increase motivation, and fosters pleasant emotions, negative or harsh feedback was identified to decrease feelings of self-worth and esteem. This resonates with the literature body that also identified performance feedback to be linked to the arousal of a variety of emotions and therefore, highlights the importance of knowing how to provide constructive feedback (Fong et al., 2014). Apart from the strong influence feedback has on emotional well-being it was also identified to affect motivation. Feedback is incorporated into the SDT within the aspect of competence. Whereas positive feedback can increase one's perception of being able to successfully manage a task, negative feedback can decrease these perceptions and weaken the motivation to pursue it (Mouratidis et al., 2010). This was also evident in our study. Participants mentioned that recognition of achievements, like receiving a good grade or positive course evaluations, increased motivation and engagement. Despite the mutual impact teachers and students have on their emotional well-being as well as their motivation, engagement, and self-esteem, it was also recognized that especially teachers seem to have a significant impact on student well-being. The powerful position teachers encounter themselves in becomes apparent in several aspects. Teachers, that are people in authority positions, are required to provide their students with evaluations and grades. They also have the control to choose the study relevant material or the manner in which they give an understanding of the topics. This highlights the existence of a power imbalance within the student-teacher relationship and coincides with available research in this domain. For instance, Donovan et al., 2006 underlined that teachers are able to influence the mental health of their students due to their position of authority (Donovan et al., 2006). Students in our

study mentioned that they are aware of this power disbalance and stated being negatively affected by it when teachers' evaluations were perceived as unfair or when they were perceived to abuse their power and authority position. A student named the example of receiving unfair grades or being called out in class when he did not raise his hand. However, not only students seem to suffer from the unequal division of authority and power. Also, teachers mentioned that feelings of strong responsibility for the well-being of their students were perceived as stressful. Considering, the power teachers have on their students' well-being, it is vital to appraise teacher factors in particular. Also, Kiltz et al. (2020) highlighted the powerful influence of teacher related factors as an important determinant for student well-being. However, rather than further discussing and deepening the understanding of aspects that underlie this power disbalance, Kiltz et al. (2020) highlighted the importance of giving equal emphasizes to student- and teacher factors when considering their well-being in the academic context (Kiltz et al., 2020). By disregarding further investigation of specifically teacher related factors, important implications that can be drawn from the perceived power disbalance are omitted. Not only, because Kiltz et al. (2020) gives little importance to this perceived power disbalance, but also because existing literature approaches well-being in academia mainly from the students' perspective further research should give attention, especially to teacher-factors.

### ***Internal factors influencing teachers' well-being***

The power disbalance in the student-teacher relationship is grounded in teachers' authority position in the academic setting. Because of this position, teachers can have a strong influence on their students. However, their power can also put them in the position of providing for their own well-being. This is why it is vital to specifically consider factors that influence teachers' well-being. Particularly, internal factors, which are defined as individual resources and approaches that the individual can take themselves to enhance their well-being,

are examined (Hsu & Tung, 2010). This study identified three overarching themes, “Awareness”, “Regulation”, and “Person factors” that were identified as crucial internal factors that affect teachers’ well-being. First, self-awareness of own behaviour, needs, and feelings was identified to be important. Teachers mentioned that taking the time to reflect on one’s needs and energy level was the first step necessary for further behavioural adjustments in favour of one’s well-being. Also, the literature identified the capacity for mindfulness and self-monitoring as important factors that contribute to resilience development and strengthening (Zwack & Schweitzer, 2013). The systematic self-reflection model of resilience strengthening also emphasizes the importance of self-awareness, self-insight, and self-reflection in times of challenges to strengthen one’s resilience. It was argued that self-reflection facilitates the application of task-orientated coping and problem-solving strategies (Crane et al., 2019). Our participants also reported that being self-reflective and aware of their responses to stressors offered them the possibility to adjust behaviour in order to decrease the experienced distress. Coping strategies such as problem-focused, emotion-focused or cognitive restructuring were mentioned as useful tools to address phases of distress. But not only in times of adversity regulatory strategies were identified as contributing to the ongoing process of maturation but also prior to the experience of stress, time for recreative activities like meditation, reading a book, keeping a work-life balance, and spending time with significant others were mentioned to build resilience. Especially recreative activities, that involve social interactions, can contribute to the strengthening of resilience. Pidgeon et al (2014) identified higher levels of resilience with higher perceptions of social support from family, friends, and significant others. Another element that is closely linked to the concept of resilience is the ability to remain flexible. Teachers identified that being able to flexibly respond to changing situations, reduces feelings of distress. Moreover, teachers that perceive high responsibility for their students’ achievements and well-being or hold high standards

about their work performance are in danger of experiencing distress. Research supports that by highlighting that, especially in younger teachers, anxiety and poor perception of their own competence create distress and low self-efficacy (Kamei & Haywood-Bird, 2021). Thus, it is vital that teachers adapt realistic self-expectations.

### **Limitations**

The study's contributions to the understanding of well-being in academia need to be regarded in the light of some limitations. First, a convenience sample of university students and teachers was used. Due to the lack of a random sample, our study runs the risk of bias. Considering that all participants are able to execute a profession or follow a study program, reflects some level of successful coping at the university and might disregard the influence of mental or physical disabilities. Additionally, the majority of our participants are either psychology students or teachers which reflects a high degree of familiarity with accumulating research and theories in the context of well-being. This might have inhibited intuitive responses to our research questions, and instead activated their knowledge base regarding the topic. Moreover, a minority of the conducted interviews were held online. The nature of this setting might have conflicted with the natural flow of the conversation. Our study runs the risk of methodological issues in regard to conducting semi-structured interviews which cannot exclude alterations in the interview questions asked. Another limitation lies on the fact that this research has been conducted after the covid pandemic, which might have increased the stress perception.

### **Implications and further research**

Considering that the prevalence of mental illnesses in the academic environment is becoming progressively prevalent, determining factors that promote well-being in academia is crucial. The main purpose of the study was to investigate well-being in academia to gain a better understanding of its definition and to understand how students' and teachers' well-

being interact. First, it became evident that especially students' and teachers' perception of autonomy and control over time management plays an important role. Nonetheless, excessive freedom evoked distress. Consequently, understanding the optimal degree of autonomy within the academic setting warrants further research attention. Both students and teachers referred to experiences of distress due to numerous responsibilities, demands, and high self-expectations. In this regard personal resources and the concept of resilience should be considered in further research. Adding to this, a relevant theoretical framework is the skills-based model of personal resilience. It outlines guidelines to establish emotional resilience, resilient thinking, and resilient behaviours (Baker et al., 2021) and can therefore lay the basis for practical implications of resilience training in academia. Development and strengthening of resilience might be especially important for teaching staff considering that our results highlighted the importance of self-awareness and regulation for teachers. Additionally, our research shows that the general conceptualization of well-being highlighted the importance of basic need satisfaction. However, basic needs, such as security or safety, were not reflected in any of the theoretical approaches that were considered in our study. In order to derive a comprehensive understanding of well-being, basic needs should be included in its definition. This should be tested using further quantitative research approaches. Despite the interplay of students' and teachers' well-being, there is far more literature that addresses students' well-being. For instance, in regard to goal setting in academia, there is extensive literature underlying the benefits of SMART goal setting for students (Day & Tosey, 2011). However, taking into account that not only students struggle with high self-expectations and achievement-orientated goals, further research should also consider introducing similar approaches to teaching staff.

## **Conclusion**

All in all, this study increases our understanding of students' and teachers' conceptualization of well-being in academia and shows how their well-being interplays. It also sheds light on internal factors through which teachers can exert influence on their well-being. Our results indicated that well-being incorporates aspects of mental, social, emotional, and hedonic well-being, as well as basic need satisfaction. This was in line with positive psychology, multifaceted, and basic need approaches to well-being. The systemic approach found resonance in the academic context as different systems interact with each other. In this regard, mutual engagement, and communication were key elements in the student-teacher interaction and had a strong influence on their emotional well-being. Self-awareness and regulation were important for teachers' well-being and coincided with the concept of resilience. Therefore, further research should investigate the multifaceted components in more depth. Especially, teacher-orientated research and the practical application of resilience approaches are recommended. Lastly, it is vital to quantitatively test the assumptions and hypotheses that this qualitative study draws, to update and generate theories that can lay the basis for practical applications in the academic setting.

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## Appendix A

### Demographic Questionnaire

**Interview Study**  
**“Well-Being in the University Context”**

Participant \_\_\_\_\_ (filled out by the researcher)

Before beginning with the interview, We need some short sociodemographic information about you as a participant. That will help us to put your answers into context.

1. I am  male  female  other
2. Age \_\_\_\_\_ years
3. Nationality \_\_\_\_\_
4. Concerning my studies
  - a. Faculty: \_\_\_\_\_
  - b. Department: \_\_\_\_\_
   
 Bachelor  Master
   
 1<sup>st</sup> year  2<sup>nd</sup> year  3<sup>rd</sup> year

Now, if you have any further questions concerning the interview study, do not hesitate to ask them.

Again, thank you very much for participating in our study and therefore helping us to get better insights into well-being at the university.



**Interview Study**  
**“Well-Being in the University Context”**

Participant \_\_\_\_\_ (filled out by the researcher)

Before beginning with the interview, we need some short sociodemographic information about you as a participant. That will help us to put your answers into context.

1. I am  male  female  other
2. Age \_\_\_\_\_ years
3. Nationality \_\_\_\_\_
4. Concerning my work
  - a. Faculty: \_\_\_\_\_
  - b. Department: \_\_\_\_\_
  - c. Title: \_\_\_\_\_
  - d. Since: \_\_\_\_\_ years
  - e. Total Years of Experience: \_\_\_\_\_ years

Now, if you have any further questions concerning the interview study, do not hesitate to ask them.

Again, thank you very much for participating in our study and therefore helping us to get better insights into well-being at the university.

## Appendix B

### Question scheme

#### Before the Interview:

- Introduce yourself and let the participant introduce him/herself
  - Informed consent and demographic questionnaire
  - Introduce our research
    - Bachelor Thesis
    - Qualitative research
    - Interested in the concept of well-being in the university context
      - student and teacher well-being and the reciprocal relationship between the two
  - Framework: ask around 10-12 questions, 30-45 minutes for the Interview
  - mention that we will record the interview
  - “Do you have any further questions for now?”
- 
- remember to take notes and paraphrase their responses (summarizing the meaning)
  - after getting an answer: repeat the question again and ask if they have something to add?
  - make use of silence

Questions for University Students	Questions for University Teachers
<b>Conceptualization of Well-Being</b>	
<i>I am really interested in how you experience your life at university, could you please tell me how you have experienced your studies so far?</i>	<i>I am really interested in how you experience your life at university, could you please tell me how you have experienced your time as a teacher so far?</i>
<i>In general, what does well-being mean to you?</i>	<i>In general, what does well-being mean to you?</i>
<i>(Considering your role as a university student)</i> Can you tell me what well-being in the university context means to you?	<i>(Considering your role as a university teacher)</i> Can you tell me what well-being in the university context means to you?
Think of a moment in the past where you experienced stress or pressure, how did you cope with it?	Think of a moment in the past where you experienced stress or pressure, how did you cope with it?
What can the university do to enhance student well-being?  → What is the university doing already?	What can the university do to enhance teacher well-being?  → What is the university doing already?
<b>Interaction Between Students and Teachers</b>	
Who is in your opinion responsible for student well-being?	Who is in your opinion responsible for teacher well-being?
How do you think external factors* influence student well-being?  *(other sources of influence, e.g. other people, the environment)  parents, roommates, teachers, partners,	How do you think external factors* influence teacher well-being?  *(other sources of influence, e.g. other people, the environment)  colleagues, partners, salary, office environment,

housing, finances, chronic conditions	chronic conditions
How do teachers influence student well-being?  <i>(make sure they talk about positive and negative aspects)</i>  → What can teachers do to prevent student distress?	How do students influence teacher well-being?  <i>(make sure they talk about positive and negative aspects)</i>  → What can students do to prevent teacher distress?
Please put yourself in the shoes of a teacher, what do you think would contribute to their well-being?  → What can the university do to enhance teacher well-being?	Please put yourself in the shoes of a student, what do you think would contribute to their well-being?  → What can the university do to enhance student well-being?
How do you think student and teacher well-being are connected?	How do you think student and teacher well-being are connected?
Do you think there is a question of interest that I did not ask?	Do you think there is a question of interest that I did not ask?
Is there anything you like to add?	Is there anything you like to add?

### Appendix C

## Codebook

Code Group	Code	Subcode	Definition	Quotes/Examples
Autonomy	Autonomy		Negative: too much responsibility, too much freedom and no clear structure or task Positive: having freedom to create one's own structure and choose the topic/task	"I realize we are given a lot of freedom, which is nice on the one hand, but on the other hand, I think it would be important for management to just check in and say regularly what are you working on? How's it going?"
		Time management	Having the possibility to manage the time individually and self-determined in accordance with your desired schedule	"I start in the morning and I use my autonomy that I have and think "Okay, what do I start with?". And then I can flexibly go along."
Balance	Balance	Optimal challenge	Getting the right amount of stimulation out of an activity, a challenge cannot be too hard nor too easy	"Not being too overloaded. You know you should be challenged, there should be plenty of work, but not so much, because it also needs to be some balance."
		Work-life	Balance between time invested in work/studying on one side and recreation and family (social life) on the other	"Classic tensions are, if you have really a family, you know, um, many of us are invited to conferences, then you're away from home for instance. [...] My wife would kill me if I say 'Ciao. I will spend now two months in another country, they invited me and it's good for my career.'"
Basic needs	Basic needs	Financial security	(Not) having a stable amount of money available to cover one's basics (food, shelter...)	"Financial security. How do we make a social backup or having food, a shelter and some sort of backup like that the basic needs are covered?"
		Housing	Housing situation and conditions	"Not having a place or like a house or accommodation. I think that also really comes in the way of their wellbeing"
		Safety	(Not) feeling safe and protected	"I'm kind of thinking about also, especially because of this moment of wars really [...] Maybe it sets the basis of that all to be in a place where you can be safe - Safety, I guess you call it."
		Sleep	(Not) being able to get enough sleep	"If I'm stressed in those aspects of my life and if I'm not sleeping well or whatever else there might be it impacts my work, certainly impacts my wellbeing at work."
Competence	Competence		(Not) feeling able to do the things one would like to do/ currently	"Then, the first say "Oh no, that's too hard." So, in the first year, we lose many students immediately."

Code Group	Code	Subcode	Definition	Quotes/Examples
			does	
		Flexibility	Ability to adjust to uncertain events	“And because of this suddenly my job; I had to adjust to these new circumstances.”
		Personal development	Ongoing development and growth of the self in professional and personal aspects, identity crises, gaining knowledge ...	“I think I really grew up, grew up and matured from the first year”
		Recognition	Feeling recognized and valued for one’s work and achievements; the appreciation of the effort put into one’s work	“Wellbeing depends on students who want to be really good students. Then you feel comfortable, you know, feel accepted, recognized, acknowledged”
Engagement	Engagement	Students	Being committed to the studies and actively taking part in classes and homework	“Disengagement, this is not good for the students.”
		Teachers	Being committed to the job and putting effort into classes and their preparation	“Having professors who are engaged with the material would be useful and give worth challenging or challenging in the way they teach.”
Government	Government		Labor laws and general university system controlled by the government	“I know that the labor laws and the labor structure here mean that if for some reason I’m out, I can feel secure that this will be cared for. In other places that I’ve been, this was not the case”
		Funding	Money the government provides to universities	“The government does not give enough money to universities that they can arrange work well for employees.”
		Number of students	Government decides how many students are taken in by the university	“The government says that universities have to take every student. There is no limit in that sense. So, there are lots of students. That’s not good for students.”
Interaction	Interaction		Student and teacher interactions	“I think students are not aware of how much they can influence a teacher. The teachers are also not aware of how much they can influence a student.”
		Care	Mutual understanding (of each other’s’ feelings and goals), showing interest and empathy for the other party	“I care about that they do well.”

Code Group	Code	Subcode	Definition	Quotes/Examples
		Communication	Feedback, structure, clarity and amount of information given out	“With students, I feel that it's much more directly rewarding when you noticed that they listen and they feel inspired by what you tell them. Yeah. And even, you get the more short-term positive feedback, but also longer-term positive feedback.”
		Conflict	Conflicts between students and teachers, mostly conflicts of interest	“I had a colleague who had a group that was very negative. They were very rebellious, taking advantage of her. I think she was a kind spirit and she came to me and said “I need another group because I [am] crying every session when it's done. I walk out sometimes or do a break because I really can't deal with their negativity””
		Engagement	Interplay of engagement of students and teachers	“And then when there is interactions and interest by the students. I find that deeply rewarding.”
		Power disbalance	Role conflicts, not working as a team but against each other, seeing the other as inferior or superior	“The thing is that a teacher is kind of responsible in a way for 20 students and the students are not really responsible for the teacher.”
		Respect	Showing general respect and respecting personal boundaries	“Well, it depends if they're friendly. There has to be certain respect.”
		Teaching content	Content of teaching and clarity and relevance thereof	“[...] can be clear with their subject. They can be clear with their teaching, um, or just not really care about how they give out information. [...] Then they can be available for like explanations or not, or clarifications or provide extra exercises depending on the subject.”
Meaning	Meaning		(Not) having a sense of purpose, personal relevance, and fulfillment; making an impact in a way that is important to oneself	“There's nothing more meaningful and validating than having good interactions with students. Interactions where you get the impression where you make an impact in people's life [...] and where you see that there's meaning in the work that you do.”
	Balance	Sacrifice for meaning	Choosing something that gives you meaning over other (pleasurable) things	“I could have done the course in a much, much simpler way that requires much less work on my part, much less challenge, much less complication. And that would, in some ways, increase my wellbeing. I would have more time for myself, more time for my family, more time for other work. But I consider the value of that work to be sufficiently

Code Group	Code	Subcode	Definition	Quotes/Examples
				high that it overcomes whatever challenges that I put on my plate because of this extra work.”
Resilience	Coping strategies	Avoidance	Ignoring problems and/or engaging in emotional/physical avoidance by e.g. using drugs	“I also noticed after a while, the alcohol consumption was a bit higher normally I think, because you just feel stressed and then inhibitions are sometimes hard to control when you're with friends and then you finally feel good.”
		Problem-focused	Cognitive restructuring (changing one's perspective on an issue at hand), acceptance, addressing the issue...	“Normally, [I am] trying to resolve anything that causes the stress.”
		Pushing through	Ignoring inner signals of distress and exhaustion and simply working through the workload (as long as possible)	“ I have the tendency to when I'm in a very stressful situation [...] I tend to focus on whatever it is, however long it's going to be, however difficult it's going to be. Going through it. And only then afterward sort of reflecting on it and seeing, noticing the difficulties, noticing the, the outcome of this or noticing the effect that it had on me, but when I'm in a highly stressful period, I just tend to work.”
		Recreation	Engaging in recreative activities and activities unrelated to the main task (studying e.g.) to alleviate stress	“I learned that it's during the busiest times that you need recovery most. At the time where it is hardest to find time for recovery, I think it's most important to do it, to take the time. [...] So I try to, for example, I almost never skip the lunch break. I think having a proper break, so sit down, eat calmly, talk with colleagues, or go outside and have a little walk or something like that.”
	Resilience		The ability to bounce back after adversity	“Wellbeing is also feeling that you can cope with whatever is thrown at you as such to say.”
	Social Support		Support from social surrounding when one is feeling down	“Well, I think just like having people around you that can help you. Or even if they don't help you directly with the task at hand, for example, that they are just there for you.”
	Stress prevention		Preventing stress to come up through e.g. time management strategies, preventive interventions...	“I'm very much like a person that tries to do everything well in advance, everything that you can do well in advance of the plan I try to.”
Self	Enjoyment	studying	Liking one's studies, finding it insightful and pleasurable	“It's about enjoying what you currently do, like being excited to do it. So if I have a course that I enjoy doing, and I like the challenge, like

Code Group	Code	Subcode	Definition	Quotes/Examples
				putting effort in is, um, this is where I feel satisfied, where I get energy from what I'm doing.”
		teaching	Linking one’s teaching, finding it insightful and pleasurable	“Just enjoying the interaction with the students. That's something where I get a lot of energy from. In most of the cases it is contact with students that affects me positively.”
	Recreation		Leisure time, sports, reading, meditation; doing recreative activities for enjoyment or balance	“To be able to do, my exercise that's important to do. So having time for that, so that’s it not too crunched. Having time with my family, having some time to relax with a book or a movie, or to go see friends.”
	Self	Awareness	Ability to self-reflect, notice feelings and have a sense of own needs and capacities	“I generally have a sense of what is needed and my capacities for doing what's needed.”
		Expectations	Expectations of the self, perceived responsibility, taking charge	“It's just these self-expectations that you have because if you study and for me, at least, if I decided to do a master and I could have worked before after my bachelor’s, but I wanted to do a masters. So, my self-expectation was “Okay, if -I am going to do a master, I will do it good.”
		Identity	Identifying with what one is doing (through social roles)	“I love my job as a teacher. I, identify as a teacher at the university.”
		Regulation	Ability to manage time efficiently, focus, setting priorities	“There are many tasks like teaching, for example. I mean, you can prepare a lecture and you can take two days to prepare the perfect lecture and you find the nicest pictures ever, and you have the best slides and you record maybe a lecture five times before you put it on the internet. But you can also just force yourself to do it in two hours.”
		Responsibility	Awareness of being responsible for one’s state of well-being	“In my case. I would say, if I'm not doing well, if I don't feel well, then I think in the first place it's my responsibility to react.”
Social	City atmosphere		The environment you live in, including bars, sport facilities, events etc.	“I guess that would also help. I guess living in a cool city. Because being a student is about social life as well. And if you live in a city where not a lot of students live”
	Cultural differences		Language barriers, different values, different educational background etc.	“Thinking about like an international environment context, also the degree to which you feel at home and integrated in a place



Code Group	Code	Subcode	Definition	Quotes/Examples
				where you live. I think, I see quite some students that are just really waiting to go home and that makes their whole university experience very difficult or just like a burden.”
	Social	Acceptance	Perception of (not) being accepted as one is by society (in the university context: in the role of a student/teacher)	“I feel like I'm so accepted by the society because I am doing something and I am moving forward.”
		Intimate relationships	deep, trustful connections and romantic relationships	“I think a real good friend cares about you. And then I think there can be energy going both ways.”
		Network	Belongingness to friends, family, peers, social groups or other individuals you interact with; relation with colleagues and teams, socializing...	“I think relationships are one of the strongest predictors of a sense of meaning in life. And so, if you have a relationship in which both are committed to. If you have some loyalty, care for each other. That's a very good start. If you also have an element of depth in your relationship. When people open up more that leads to a great sense of wellbeing.”
	Systemic network		Mutual influences, various factors and people influencing one another	“My personal wellbeing is just a bigger in the Venn diagram. My wellbeing as a teacher is just part of my general personal wellbeing, which is affected also by factors outside of my work, my personal life, my you know own personal health for which my employer isn't responsible necessarily, but should take into account.”
Stress	Covid		Any factors related to the pandemic	“Now in the last two years was a horror I'm absolutely sure. Now with zoom, there was no university life, really.”
	Social	Stress	Interpersonal conflict, ill-being of a loved one, peer pressure etc.	“If I have an exam and there's another thing that I have to deal with my family, it's additional stressors”
	Stress	Uncertainty	Not knowing how events and circumstances will turn out	“And then you're just left there waiting, and you don't know what's going to happen like down with this selection tests that they made. I hear it so much from people around me that they feel that they were future so unclear.”
Study conditions	Study conditions	Assessment	Exams, competition between fellow students, fairness of assessment etc.	“I think here for me. It's more having more time between finishing group assignments and exam period. Because in some courses, we had the deadline of our group

Code Group	Code	Subcode	Definition	Quotes/Examples
				assignments or individual assignments in this exact same week when we had our exams and that was annoying”
		Block system	Block system structure	“I think in terms of, for students and also for teaching, I would like when we would have semesters instead of blocks. Courses would also be a bit more stretched out that you have a little bit more time to ponder, to reflect, to make mistake, to correct these, to also learn, to get to know your teammates better when you do a course.”
		Class size	Class size	“Maybe we should engage in smaller classes, I feel like they would encourage it so much more.”
		Study Environment	At home: loud roommates, desk and quiet place at home, opportunities to study	“Whether you live alone, whether there are others, whether you have your private space too. And I know some people prefer studying alone or with others and that can be a big influential point. Especially if you have very loud house or uncomfortable roommates.”
		Study peers	Other people one studies with, study associations	“So maybe it's the most important resource for students. I would think to have study mates, even if it's only two, that's already fine, but at least have some people around you that support you and that you can count it on.”
		Study load	Demand vs. time, the amount of tasks one has to do	“Study pressure. [...] For me, that's the single most, uh, like variable that, um, about university that has an impact on my wellbeing. Right. Um, can I handle the workload?”
University	University		The university as an institution, equal chances for everyone, decision-making process, university structure	“I would first like to point out that the university is I think trying to set up structures to ensure with teacher wellbeing.”
		Communication	How the university communicates tasks, demands, plans, goals	“If the university gives them clear directions or like how to act or what to do or what's required from them, what their university asks from the lecturers definitely helps. It helps them do their job. So, the clear communication really helps them as well as the student.”
		Offers	Coaches, study advisors, mental health workshops, non-binding social activities etc.	“With the student service center, they have courses you can follow to like how to study better, how to not procrastinate, how to have less stress or like everything like that. I

Code Group	Code	Subcode	Definition	Quotes/Examples
				almost did all of them.”
Well-being conceptualization	Emotional well-being		Ability to produce positive emotions, moods, thoughts, and feelings, such as experiencing negative emotions	“I feel like it is not like I strive to be happy all the time”
	Mental health		Absence of mental illnesses that conflict with mental, emotional, psychological, and social functioning	“Not having anxiety, being free mentally to pursue your interests without any kind of obstruction without any kind of fear without any kind of limitation.”
	Hedonic well-being		Focus on enjoyment, fun, and pleasure	“I think well-being is, um, having a sense of life satisfaction [...] and feeling free to do what you want to do or what you'd like to do, within certain structures, of course you'd come through anything you'd like, and enjoying what you are doing, uh, or what you can do.”
	Physical health		The physical state of the body ((no) pain, (no) suffering, functionality)	“It relates to physical health, like um, being healthy, being mobile, being able to do the things you want to do, to functional ability.”
	Well-Being	Awareness	(No) awareness of the concept itself	“Speaking of generational and stuff, I don't, I find it difficult to relate to the concept of wellbeing and even less so with the other word, wellness.”
		Conceptualization	Abstract thoughts referring to the construct of well-being	“I think I perceive wellbeing in general as just being an absence of like major problems or major complications, major stressors, which is then accompanied also by feeling good about it. So it's not only there's nothing wrong, but it was so I feel good about this.”
Working Conditions	Working Conditions		General working conditions	“My employer should be the primary body that is responsible for my professional wellbeing, because they create the circumstances for my work to take place. If my work impacts my wellbeing, it's because of the conditions of it and my interactions with it. My employers should create infrastructures or create structures through which my personal wellbeing, as it interacts with my job are in good balance.”
		Staff	Assistants, colleagues, sharing tasks, professional connections	“Colleagues are a bit big support mechanism, I guess, for, for most part, but sometimes there's also conflict and then it's a big stressor and there's not a good well-being thing.”

Code Group	Code	Subcode	Definition	Quotes/Examples
		Workload	Time given for tasks at hand	“If your schedule is completely filled up you don't really have lots of time for even contemplating and brainstorming about what you could do better, you know, what you might even need.”