A Conceptualization of Well-Being in Academia and the Reciprocal Link between

Students and Teachers

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Abstract

The general concept of well-being has positive associations such as "wellness" which relates to what is intrinsically good for someone. In the realm of education there are identified risks (i.e., stress and high demands) that can negatively impact the well-being of both students and teachers. Yet, an all-encompassing theory that underscores well-being is not described in academia. The aim of the study was to enhance the understanding of well-being in the university setting that addresses the needs of both students and teachers. The investigation harnesses Positive psychology, which studies influences that promote optimal functioning of people, communities and organizations. In this lens, qualitative semi-structured interviews were conducted with six students and six teachers. Participants came from diverse cultural backgrounds and eleven of them studied or worked at the University of Groningen. To analyze the interview transcript an open coding approach was employed which was structured in multiple stages. Several factors were identified including, the concept of well-being in general, the well-being for teachers and students in academia, the interaction between students and teachers pertaining to the interrelated dynamic of well-being. The study found that the social constructivism and systemic approach was optimal to explore and describe a more comprehensive definition of well-being. The application of Self-Determination Theory and the concept of resilience was concluded into a more inclusive model of well-being for the university setting and suggests future research on the subject, as well as interventions.

Keywords: well-being, university, student-teacher interaction, resilience, SDT, systemic approach

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Theoretical Background of Well-Being

The term well-being is widely expressed by individuals, institutions and in society across diverse contexts. Despite the frequent usage of the word the public does not share an all-encompassing understanding of the concept. Similarly, in the realm of academia the scientific literature does not demonstrate a consensus on a universal definition of well-being (Dodge et al., 2012). Often used synonyms for well-being are "wellness", "welfare" or "personal good" which generally relate to what is intrinsically good for someone or has a positive influence on one's life (Hooker, 2015). To gain a more accurate picture on how this complex concept can be conceptualized within the university context and to provide an overview of potential factors for the well-being of students and teachers, various theories are reviewed.

Starting with a basic theory, Hedonism, which describes the equation of pleasure minus pain (Deci & Ryan, 2008). Pleasure is thereby defined by inherently positive experiences that make people intrinsically feel good, independent of what actions it precedes or follows (Hooker, 2015). A similar approach to well-being is taken by the Desire-Fulfillment Theory (Fletcher, 2013). As the name expresses it focuses on the fulfillment of one´s individual desires. Unlike the theory of hedonism, these personal desires take in consideration the past and future as well as its outcomes on well-being for the individual and challenges the mere seeking of pleasure and avoiding pain in the moment. The antithesis to the approaches of hedonism and desire fulfillment is Eudaimonia a term coined by the philosophy of Aristotle (Ryff & Singer, 2008). Eudaimonia is not primarily concerned with "effortless happiness" but rather stands for realizing one´s unique potential and becoming your true self (Banavathy & Choudry, 2014). The progression towards excellence through goal-directed action is closely related to having meaning or purpose in life (Ryff & Singer, 2008).

Hedonism, Desire-Fulfillment Theory, and Eudaimonia all conceptualize well-being as highly dependent on the person, which is either mediated by the individual potential for growth or what is perceived as pleasurable or desirable. In contrast to that, objective list theories try to be attitude-independent and strive towards a universal list of specific elements that are beneficial for all people's welfare (Fletcher, 2016). Aspects of well-being that realize your true potential, are pleasurable or desired can be part of the objective lists but are not limited by those aspects. The objective list perspective assumes that there are shared factors that are generally good or bad for people regardless of the context. Such factors that positively influence your well-being might include friendship or being knowledgeable. Exploring these universal elements of well-being is part of the positive psychology perspective this current research is based on. Positive psychology is a movement within the field of psychology which studies processes, factors and environmental influences that promote optimal functioning and flourishing of people, communities and organizations (Gable & Haidt, 2005). It provides an alternative research focus to the common clinical approach that mostly investigates ill-being, psychopathology, disorders and curing illnesses (Gable & Haidt, 2005). The positive psychology movement does not deny the importance or usefulness of the disease model but rather wants to fill the research gap of topics like prevention, personal growth, virtue, optimism or compassion (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). Along with the positive psychology perspective, the World Health Organization (WHO) defines health not as a mere absence of disease or infirmity but as "a state of complete physical, mental and social well-being" (World Health Organization [WHO], 2020). Moreover, the former perspective has shifted from defining individuals as passive beings who only respond to external stimuli to proactive decision makers that have control over their well-being and life outcomes (Seligman & Csikszentmihalyi, 2000). Habits of nurturing one's strengths, facilitating positive experiences or looking optimistically into the future could function as a buffer for mental as

well as physical illness (Seligman & Csikszentmihalyi, 2000). According to Seligman and Csikszentmihalyi (2000) positive emotions of trust, love or hope are fundamental to existence itself and should therefore be a substantial part of the scientific discussion.

While mentioning some of the diverse research topics in the field of positive psychology and well-being, the concept of resilience and the Self-Determination Theory (SDT) should not be overlooked. Resilience is the ability to bounce back to the prior state of functioning after having faced adversity (Scheffer et al., 2018). Highly resilient people are able utilize contextual and personal resources to adjust to situational demands (Mansfield et al., 2016). Furthermore, this dynamic process allows people to maintain their well-being through protective factors such as motivation, confidence, positive personality, focus and perceived social support (Fletcher & Sarkar, 2012). To further illustrate the multidimensionality of well-being the Self-Determination Theory defined three basic psychological needs: autonomy (the need to perceive control over one's behavior), competence (the need to perceive one´s capabilities as sufficient to achieve goals) and relatedness (the need to interact and connect with other people) (Deci & Ryan, 1985; Ryan & Deci, 2000). According to Ryan and Deci (2000) all three needs must be satisfied for an individual to sustain intrinsic motivation and to avoid compromised well-being, ill-being or even pathology.

Before concluding the review of various psychological theories of well-being it should be emphasized that the systemic approach from the social constructivism perspective lies at the core of the current research. Social constructivism assumes that the social reality is dependent on the persons perception and interaction with the social and physical environment (Adams, 2006). Therefore, one´s perspective on reality should be evaluated based on the complex multifactorial system the individual is living in (Adams, 2006).

To conclude, the review shows that there are various practical theories that aim at explaining and defining the concept of well-being. However, the literature still lacks a complete

and agreed upon definition of the concept, which is a necessity to design effective interventions for example for students and teachers in a university setting.

Student Well-Being

Students might benefit from interventions that aim at improving their well-being, because they belong to a social group which is especially vulnerable to suffer from mental health problems and compromised well-being (Lacrombe et al., 2015; Bewick et al., 2010; Cooke et al., 2006; Backhaus et al., 2020). A study conducted by Bewick et al. (2010) found that bachelor students experience heightened anxiety levels compared to the baseline measurement. Additionally, these anxiety levels fluctuate across the semesters but never return to preregistration levels. (Bewick et al., 2010, Cooke et al., 2006). Another study investigated differences between diverse fields of studies and found that around one in five students report at least one symptom of severe to extremely severe distress regardless of the program they are enrolled in (Lacrombe et al., 2015). Moreover, a self-report study concluded that across 12 countries nearly half of all students experienced clinically relevant depressive symptoms (Backhaus et al., 2020). Overall, university students are at a high risk to experience elevated levels of distress compared to the general population (Stallman, 2010).

These various studies show that students suffer substantially from compromised well-being. In order to tackle the issue, it is relevant to first identify factors that influence these health outcomes. Research has shown that students' have a demanding workload, through the volume of learning material students are required to study or through the obligation to simultaneously handle different course requirements with other commitments (Lacrombe et al., 2015). Other possible factors could be a competitive academic environment with a primary focus on achieving a high GPA (Grade Point Average) (Lacrombe et al., 2015; Othman et al., 2019). Such pressures are even raised through limited places in master programs as well as the declining job market which offers are partly determined by the level of performance during

university. Moreover, an added layer of stress can be financial difficulties of paying the tuition fees and the running living costs if students are not in the privileged position of having financial support (Cooke et al., 2006). Other structural reasons might be the increase of enrollments at universities and therefore an increase in class size which makes it more difficult for students to feel that they belong and to create meaningful relationships with their peers or professors (Cooke et al., 2006). Furthermore, dealing with high academic expectations either from parents, the university or oneself, might play a role in the psychological strain students experience (Lacrombe et al., 2015; Othman et al., 2019). Finally, the age or the level of maturity could be another influential factor. Young adults are still exploring their identity and might experience higher uncertainties concerning their study choice or future occupation (Othman et al., 2019). Despite there being an established literature concerning the ill-being of students, research that take the positive psychology perspective and investigates factors that preserve or enhance the well-being of student is still limited.

Teacher Well-Being

Teachers also relatively suffer from similar pressures that compromise the well-being of students, specifically the impact of high levels of stress, which can lead to symptoms of burnout (Fontinha & Van Laar, 2019; Gillespie et al., 2001; Lakritz, 2004). The study by Lakritz (2004) estimated that 20% of the academic staff experience the highest level of burnout. The symptoms directly correlated with the teaching workload and with the number of taught students (Lakritz, 2004). Moreover, teachers reported high levels of occupational stress that significantly impacted their ability to fulfill their roles and responsibilities at the university as well as disrupting their personal lives (Fontinha & Van Laar, 2019; Gillespie et al., 2001). The demands of teachers are steadily increasing through funding cuts by the government, which at same time require fewer academic staff to carry the workload while the number of students increases (Gillespie et al., 2001). Consequently, teachers are required to work overtime hours,

experience fatigue and chronic stress (Fontinha & Van Laar, 2019; Gillespie et al., 2001; Kinman & Johnson, 2019). As reported by Gillespie et al. (2001), the management of universities makes decisions favoring the financial efficiency rather than prioritizing the quality of education and their employers needs and interests. In turn, not taking into account teachers' needs, lowers the perceived control over working conditions which ultimately reduces their commitment (Fontinha & Van Laar, 2019; Kinman & Johnson, 2019). This data is alarming because according to Day (2008) teacher commitment has a crucial impact on teaching performance and the quality of education. Despite all the challenges teachers face, they still rate their job satisfaction moderate to high (Gillespie et al., 2001). Research has shown that to maintain the level of job satisfaction without being overshadowed by burnout symptoms teachers need to be resilient (Mansfield et al., 2016). The key protective factors for teacher resilience established by Beltman et al. (2010) were high intrinsic motivation and a sense of self-efficacy. In addition, external resources of having strong relationships and social support from colleagues, students and leaders are essential for enhancing and retaining resilience (Mansfield et al., 2016). Those who cope effectively with their workload through problem solving, goal setting, a sustainable work-life balance and collaborating with colleagues have a buffer against stress and are able to preserve their well-being (Mansfield et al., 2016). The majority of discussed research already takes on the positive psychology approach and aims at exploring effective interventions, however most of the studies are conducted within the primary and secondary school context and further investigation within the university context is needed.

Student and Teacher Interaction

In line with the research conducted by Kiltz et al. (2020), the current study investigates the interaction of student and teacher well-being. One of the main pathways for knowledge transmission to university students is through the lecture format in which most commonly one professor speaks to several students. Therefore, a relevant part of the study experience is

determined by the nature of contact with their teachers (Baik et al., 2019; Rivera Munoz et al., 2020). This result was also shown by Rivera Munoz et al. (2020)'s research which highlights that teacher´s care, support and facilitation of personal learning opportunities for student´s had a positive impact on their motivation and engagement. On the other hand, if teachers were unable to have frequent close contact with students, did not provide support and lacked understanding of their needs, it influenced students sense of belonging and their intention to continue with their studies (Rivera Munoz et al., 2020). Consistent with these research findings, it was found that better teacher well-being positively correlated with improved student well-being and a reduction of psychological struggles (Harding et al., 2019). However, that interconnection should not only be perceived unidirectional from teachers to students but also from students to teachers (Kiltz et al., 2020). The reciprocal relationship seems to be multidirectional and can work both in a positive as well as in a negative way. Therefore, one's state of well-being could benefit or harm the other and should always be seen in connection (Kiltz et al., 2020) Once again, the concept of well-being needs to be seen within a context and with multiple influencing factors involved. Therefore, based on the frequent interaction between both parties it seems that they are reasonably dependent on each other when it comes to their work and study experience. However, further investigation of the mechanisms of the interaction and verification of the results found by Kiltz et al. (2020) is needed to shed more light on the meaningful interaction between students and teachers.

To create a comprehensive understating of well-being and further investigate the previous theories, we conducted a qualitative study with three main guiding questions. At first, we try to resolve the uncertainty around the conceptualization of well-being within the university context and identify important factors (RQ1a.). Secondly, possible differences between teacher and student conceptualizations of well-being are reviewed (RQ1b.). Finally,

we will examine mechanisms and elements of the interaction between student and teacher well-being (RQ2.).

> **RQ1a.** How do students and teachers conceptualize well-being at the university?

> **RQ1b.** How do students and teachers differ in these conceptualizations?

> **RQ2.** How does student and teacher well-being interact?

We decided to use a qualitative approach based on the research gap in the literature concerning a complete definition of well-being and to establish a thorough foundation of data for further develop theories as well as generating new hypothesis within the research field.

Method

Participants

To conduct the research, semi-structured interviews were used with a convenience sample of 12 participants. The choice of selecting 12 participants is based on research by Guest et at. (2006) which observed that the data saturation for most of the codes occurred within the analysis of the first 12 interviews. 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 were male (see Table 1). The teacher participants originated from 6 different countries (Germany, Netherlands, USA, Italy, Greece, and Spain) and included teachers with 4 to 30 years of professional experience. The ages of the teachers ranged from 29 to 62 years. Student participants included three 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).

Table 1

Demographic Characteristics of Participants

Participants	Distribution	
	n	%
Gender		
Female	5	42
Male	7	58
Occupation		
Teacher	6	50
Student	6	50
University		
University of Groningen (NL)	11	92
University of Bonn (GER)	1	8
Nationality		
German	6	50
Greece	1	8
Italy	1	8
Spain	1	8
United States of America	1	8
Dutch	2	17

Procedure 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 an 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 interviews were conducted by one interviewer in a conversational style. Each interviewer followed a question scheme (see Appendix B) that contained questions and provided 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 exploring the interaction between students and teachers' well-being. The interviews lasted between 30 to 55 minutes. They were first recorded by mobile devices, transcribed, and stored in a secure folder

from the university. All personally identifiable information was pseudonymized. The transcript was sent back to the participant to report possible misunderstandings, provide the option to cancel certain parts or to decide to withdraw 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 coding was conducted using the program ATLAS.ti Scientific Software Development GmbH (designed for qualitative research and data analysis). 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 was 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 Student Teacher" was created, which incorporated all codes regarding research question RQ2. "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 et al., 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 (see Appendix C).

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.

<div align="center">**Results**</div>

RQ1a. Conceptualization of Well-Being

Mental, Physical & Emotional Well-Being

> *"For me, wellbeing is having the necessary physical, mental, emotional means and stability in order to be free to pursue your goals." (Teacher)*

To begin with, participants generally conceptualized well-being as having physical and mental health. Most of the time mental or psychological health incorporated also emotional well-being while it was only occasionally mentioned separately. Overall, mental health was defined by a low number of major problems, not too much stress and an absence of mental disorders. In addition, well-being was not only expressed by the absence of stressors but also by the presence of peace, having fun and feeling energetic where mental and emotional well-being seems more interconnected. Despite the context in which certain

attributes were mentioned, the necessary reported feelings for emotional well-being included: enjoyment, engagement, excitement, satisfaction, relaxation and comfort with an absence of fear and anxiety.

> *"Psychological again being, 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)*

The aspect of physical well-being included an absence of pain, illness and physical limitations. Frequently, students and teachers mentioned their health in the context of being able to pursue their goals or interests, the ability to perform their job and to access their education. In this perspective, well-being was conceptualized in a functional way, of not being limited to achieve a certain outcome. Irrespective of natural proclivities to avoid pain, teachers and students both conceptualized well-being not as striving for pure hedonism but rather desiring that the positive outweighs or persists longer than the negative states. Influential factors in achieving such an outcome were lifestyle decisions such as the quality of food you consume, the choice to participate in sports, and the decision to drink alcohol or smoke. Some participants reported such an equilibrium as a balance, that does not solely strive towards an absence of negative states in favor of positive ones.

> *"I think about balance also because I feel it's not like I strive to be happy all the time. But it's more about being balanced and being flexible in how I respond to situations." (Teacher)*

In such conception participants were able to engage prolonged periods of challenge or difficulty when the outcome was sufficiently meaningful for the person. In other words, short term discomfort was sacrificed for long-term satisfaction. The participants' considerations of meaningful challenges and their worthwhile outcomes were coded as Meaning and included personal development, pursuing your interests or the impact teachers have on the development

of students. While pursuing such meaningful challenges students and teachers reported more willingness to invest their efforts and characterized such activities as providing energy instead of being energy draining.

> *"I just finished writing a grant application, so that was something I chose to do. And I put in a ton of hours, I worked a lot, way more than 80-hour weeks for a few weeks. And that was okay because I really find that engaging and meaningful." (Teacher)*

Basic Needs

Closely connected to the mental, physical and emotional well-being of teachers and students is the fulfillment of basic needs. Two codes of Financial Security and Housing were frequently mentioned. Having a proper accommodation or house in which you feel safe, you have your privacy, and which is in a decent neighborhood was considered as indispensable for one's well-being. Especially, for students who are more likely to move based on studying abroad or taking a gap year are faced with the stress of searching for a new accommodation. Those situations of uncertainty and dealing with landlords are particularly described as stressful.

> *"I think that also comes in the way for a lot of students, stuff like not having a place or like a house or accommodation. I think that also really comes in the way of their wellbeing." (Student)*

Equally fundamental to having a secure place to live is financial security. Students who are not financially supported and therefore are required to work at a side job have an additional layer of stress. Similarly, teachers talked about their financial stability in connection with their job security. Having a secure employment even in face of illness or injuries creates an important psychological safety net for teachers. However, many employed academic staff at the university have temporary contracts and might not experience this psychological safety net.

"I think, the first thing that came to my mind [...] would be financial problems, for example. So when you have like a lot of financial stress, I think that really comes in the way of your wellbeing because you need to provide for yourself in order to be able to do anything else. I think I've seen this very closely with a student [...] who failed a course because of financial issues. And that was a really difficult situation to handle because [...] I could understand this person does not have the time, energy or the means to do their hundred percent. [...] So I think I really saw what a financial struggle can do to a student. That was very tough." (Student)

Systemic Network

As discussed in the introduction, well-being is a multifactorial concept. Therefore, one´s perception of well-being cannot be seen in an isolated manner. In this framework, the well-being of family or friends, especially in case of interpersonal conflicts, were found to be impactful. Participants described it as a network of influences within a person's environment which concluded in the code Systemic Network. But also factors that are not in the direct environment of the individual were mentioned, as for example the war in Ukraine. Teachers as well as students described that their personal well-being e.g., relationships with family or good quality sleep cannot be differentiated from their well-being at work for teachers or while studying for students. Positive as well as negative experiences are carried over from the personal setting to the work or study contexts and vice versa.

"I'm a human being, as I said, and I am a human being when I'm a teacher too. I can't switch off the rest of my life when I'm preparing my teaching or delivering my teaching. It has an impact on me." (Teacher)

Table 2

Conceptualization of General Well-Being

Code	Subcode	Definition	Quotes
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."
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"
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."
Meaning		(Not) having a sense of purpose, personal relevance, and fulfilment; 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."
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 back up 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"
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."

Self-Determination Theory

As mentioned in the theoretical introduction, the Self-Determination Theory is considered practical for the conceptualization of well-being. During the coding procedure we recognized many similarities between the concepts of autonomy, competence and relatedness with the statements reported by the participants. Therefore, we adopted the theoretical framework within our codebook and established codes according to the three components.

Autonomy. Our results clearly show that the level of autonomy has a great effect on our participants well-being. However, teachers and students differ in the ability to balance the right amount of freedom versus autonomy. But both students and teachers expressed the need to plan their time freely, to follow their interests and to be able to be themselves through voicing their emotions or thoughts. There is a difference to be found in the preferred level of provided autonomy by the university. Some students described that they are relative free in

their time management while others were complaining about the lack of guidance and structure. For teachers, freedom is linked to the ability to shape their work environment, choose their discipline and select their teaching material. However, dissatisfaction by teachers were voiced about managing resources, top-down decisions by the university or the mandatory time slots for teaching. All in all, if participants perceived to have sufficient autonomy it increased their level of motivation.

> *"That if there isn't a sense of autonomy and ability in resources for doing meaningful activities, the teacher may become resentful and bitter, and that's not good for anybody." (Teacher)*

Competence. Due to the high workload students and teachers need to work or learn productively in an efficient manner to feel competent and not overwhelmed. Moreover, feeling competent is dependent on the appreciation, recognition and acknowledgement from the university, colleagues, peers as well as within the student-teacher relationship. In addition, teachers experience a certain amount of satisfaction through having expertise in their specific research field and being able to provide high quality lectures. Students on the other hand feel assured when they receive good grades in accordance with their study effort. In summary, teachers and students have the need to perceive that they are developing personally and that they move towards achieving their goals.

> *"Can I handle the workload? And […] if I can manage it I obviously, I feel confident. I feel prepared for my exam. […] In my later years of studying, I got quite ambitious to get the higher grades. So, [if] I get good grades or what I expected […] from the work I put in, I feel good." (Student)*

Relatedness. Forming connections, interacting with others and maintaining relationships were some of the most mentioned themes across the interviews. Teachers and students elaborated in various ways on the importance of good social connections in and

outside of the university environment. Outside of the university, these needs were related to the connection with family, friends or other intimate relationships. Both teachers and students reported the need for belonging or community at the university. For teachers the connections with students, colleagues and their leaders were found to be important. Likewise, students valued the interaction with their peers, teachers and other university workers. These essential social connections for well-being were characterized as strong, caring and reliable. The social connections fulfilled various needs from providing social support in difficult times, exchange of practical knowledge or spending leisure time together. Such aspects are identified as mostly lacking and became particularly noticeable during the past COVID-19 pandemic. At that time, maintaining social connections were more challenging and resulted in a detrimental decline in the reported well-being of teachers and students. Regardless of the pandemic some participants described the university environment as impersonal or even inhumane. The characterization of the university being inhumane was mentioned by a teacher participant in regard to the support provided by the university. In summary, social connections in and outside of the university were found to be a fundamental factor for the well-being of teachers and students.

> *"I think for me, that was very important. Like when I started doing things with other people, more like a group, and that really there's a social component that becomes part of the university life and the university activities, which then makes university related things more appealing to me. Because that's where my friends are, that's where the people that I want to spend time with are, that's where, like the interesting things also happen. [...] I really need that a lot for me." (Student)*

Resilience

> *Wellbeing is also feeling that you can cope with whatever is thrown at you [...].*
> *(Teacher)*

In line with the abovementioned quote, teachers and students perceive that having sufficient resources or means to deal with problems and challenges is necessary to maintain their well-being. In the following section we will discuss which factors aid or hinder remaining functional in face of stressors or adversity.

Coping Strategies. Our results highlighted that students and teachers apply several different coping strategies in order to feel resilient. The code Coping Strategies included these different approaches to deal with stress and those were organized in more specific subcodes. One of these subcodes were labeled Problem-Focused and included a student strategy to accept the situation as it is especially concerning stressors that are outside one's control. For one teacher it helped to focus on the moment and to ask what can be done right now. Conversely, a y strategy that was deemed as ineffective for the long term was to avoid work through distracting yourself, which was coded as Avoidance. But the most frequent mentioned code by teachers as well as students was Pushing Through which encompassed working hard to resolve the tasks while ignoring or accepting that other areas of life will suffer. A teacher described it as being "maximally functional and efficient for a few days or weeks".

> *But when I'm in a highly stressful period, I just tend to work. I just tend to, you know, throw resources at it and just tend to work a lot until the problem is solved."*
> *(Teacher)*

Social Support. As mentioned in the code of relatedness, social support seems to be similarly important for the resilience of teachers and students. When faced with high workloads or other life adversities both teachers and students found it beneficial to have a colleague or peer to talk with about their hardship and was disclosed as an effective way to handle and relief stress.

"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. So someone you can turn to, if you're feeling very stressed out, or if you are going through a hard time, but also someone who is just there when you're like, okay, I need to relax now, can we do something together? I need to get my mind off things. So just generally knowing that there's someone there for you makes me feel more secure and therefore experience anything else in life just better because I know that I have support around." (Student)

Recreation. Although pushing through difficult times was often mentioned, spending leisure time to zoom out or to clear the mind seems to be equally important for teacher and student resilience. The code Work-Life Balance revealed that there is a balance to be held between time and energy spent on work or study related tasks and recreational time. Important recreational activities for mental and physical health were participation in sports, stretching exercises, meditation or going for a walk. Furthermore, having time for yourself, reading a book or watching a movie was reported as important time for relaxation. Moreover, meeting up with friends and family for leisure time activities was reported as valuable.

"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. That's always the big danger if we are very busy and we don't take any breaks and don't take any rest, then in the long term, it will have serious consequences. So, I try to [..] 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. That's very important. So this is something that's kind of holy to me to have that moment." (Teacher)

Enjoyment. Statements of "I love my job as a teacher" or "I enjoy studying" seem to carry a lot of value for teachers and students. There was an expressed need to be excited or stimulated by the tasks they perform. Such tasks can be solving complicated problems or working together with other people on a team. Having a personal interest in the task provided the necessary energy and intrinsic motivation for teachers and students to focus even in face of interferences. On the other hand, if university work felt like a burden or went to the extreme of being hated, the resolve in such tasks became increasingly difficult and ultimately diminished their well-being.

> *"So I think, 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, I like putting effort in […] this is where I feel satisfied, where I get energy from what I'm doing. And if I'm really not excited about what I'm doing, it´s draining my energy. And I think […] the outcome is also not very important if I really had fun in the process." (Student)*

The emerged codes and interview sections connected to the concept of resilience made clear that the ability to withstand adversities is dependent on several factors. In the present research factors of social support, spending time for recreation, having functional coping strategies and a genuine enjoying in your activities aid one's ability to be resilient.

Self

The code group of Self embodied a multitude of influential elements linked to the individual's abilities and perceptions. Based on inductive reasoning, various codes emerged including Self-Awareness, -Responsibility, -Expectations and -Regulation. Those elements have in common that they can be influenced by external factors but are mainly dependent on the individual.

Self-Awareness. For sustaining one´s well-being students and teachers reported the need to keep track of their energy levels and capacities to adapt to the demands at hand. To be

able to adjust one´s self expectations and to plan a realistic workload, it requires honest reflection and a certain degree of self-compassion. Despite that, more participants reported that they do not reflect regularly on their state of well-being.

"I'm not a very good person to talk about wellbeing. I'm not very proactive at looking after my wellbeing, I suppose. I think I just keep giving myself feedback as to whether any of these things are preventing me from doing my job." (Teacher)

Self-Responsibility. As a response to the question "Who is responsible for your well-being?" teachers and students most frequent answered that in the first place it is their responsibility to keep care of their well-being.

"I think in the first place you, the person themselves. In my case, I would say me. 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" (Student)

Still, a significant part is influenced by the individuals they interact with, the work and study conditions as well as the university as an institution. A few participants voiced that the university lacks guidance and does not clearly communicate which personnel is responsible for which tasks.

Self-Expectations. A clear pattern became evident that students as well as teachers hold themselves to high standards that would require them to work in the evenings or weekends. Students communicated that they made the choice to study, therefore they also wanted to do their best. Moreover, their expectations might be raised by the pressure to perform well as to meet the standards of a competitive job market. The high stakes of a competitive environment can induce pressure on some students that sometimes result in unrealistic self-expectations. A similar picture can be found on the teacher's side where some perceive pressure to perform because their job security is not guaranteed with their temporary job contract.

"So, I figured that out throughout the studies actually that I caused myself stress coming into the studies already. So much stress and expectation ahead. And sometimes I can´t even tell if the stress comes from what I'm studying or if it just come[s] from [the] inside of me, and from the expectations I have. (Student)

Self-Regulation. Next, self-regulation seems to be a challenge both for teachers and students when it comes to procrastination. Some disclosed their tendency to postpone some responsibilities until the last moment. It seems to be difficult to avoid based on the number of tasks they are required to do and to regulate how much time they should spend on each of those tasks. While in practice it seems to be difficult to implement, in theory teachers and students were able to present few suggestions for improvement. Setting goals, splitting big projects into smaller manageable tasks and advanced planning to prevent things from adding up were mentioned.

"I know that as soon as I realize myself typing three mails at the same time […]. I'm just realizing, okay, this is just not working out. What am I doing? And then I think it's a moment to just sit back and write down what are the tasks that I have to do? What deserves priority at this point, how is also my energy level?" (Teacher)

In conclusion, each individual has to a certain extent the responsibility to reflect on their state of well-being, to adjust their self-expectations and to regulate their behavior in order to sustain a high level of well-being.

Table 3

Conceptualization of Well-Being in Academia

Code	Subcode	Definition	Quotes
Autonomy		Negative: too much responsibility, too much freedom and no clear structure or 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 is it going?"
		Positive: having freedom to create one's own structure and choose the topic/task	

Code	Subcode	Definition	Quotes
Competence		(Not) feeling able to do the things one would like to do/ currently does	"Then, the first say "Oh no, that's too hard." So, in the first year, we lose many students immediately."
Relatedness		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."
Coping Strategies	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."
	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."
	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."
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."
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."
	Work-Life Balance	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.`"
Enjoyment		Liking one's studies/teaching, 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 putting effort in is, um, this is where I feel satisfied, where I get energy from what I'm doing."
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."
	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."
	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."
	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

Code	Subcode	Definition	Quotes
			lecture five times before you put it on the internet. But you can also just force yourself to do it in two hours."

Note. Self-Determination Theory: Autonomy, Competence and Relatedness
Resilience: Coping Strategies, Social Support, Recreation and Enjoyment

RQ1b. Difference in Conceptualization between Students and Teachers

Reviewing the results from RQ1a. it becomes evident that students and teachers experience similar struggles and share most of the factors that augment their well-being. However, it should not be overlooked that the general framework of students and teachers still differs in some fundamental sense. Therefore, some factors are more impactful for teachers than students and vice versa, while certain factors might only be present in teachers or students. In the following section we will explore how the conceptualization of well-being is different between students and teachers.

Teachers Working Conditions

"So it feels like time is the most stressing and most needed." (Teacher)

Workload. The main two tasks a teacher is required to do is practicing research and teaching courses to university students. The university assigns a specific amount of time to each of those tasks including all the responsibilities and organization that come along with them. Nearly, all teachers disclosed that the workload in comparison to the time teachers have for executing these tasks is unrealistic and unreasonable. It was reported that teachers experience high time pressures based on an increase of demands such as more bureaucracy and administrative tasks, less resources at their disposal or a rise in number of students in their courses. The single most significant factor which presumably lies at the route is the underfunding of the university by the government. Universities are required by the government to accept an increasing number of students while the funding per student decreases. Consequently, teachers have an increase of responsibilities to handle the large number of students within their courses. To manage the organizational load and the numerous incoming emails by students, teachers organize support systems through teaching assistants.

However, to incorporate the teaching assistants in the structure of the course also requires a time investment. In addition, teachers stated that they are motivated to constantly improve their quality of education. However, considering the limited time available a teacher reported that she/he does not have the time for brainstorming and innovation. Another observation was that teachers are unable to enjoy their teaching because their schedule forces them to jump from one appointment to the next one. Such tight schedules are experienced as unrealistic and stressful because after a demanding task for example lecturing, teachers need a break before being able to perform the next intellectually demanding obligation. Furthermore, teachers are often enthusiastic about certain innovative ideas, or they take a lot of responsibilities which are not necessarily their duty which constrains their time further and adds another layer of stress. The teachers disclosed that the amount of workload in connection with the high expectations from them and the university cause many teachers to work overtime. To be able to change the situation a teacher asks for more resources at their disposal, which can be a colleague to share the workload with or initially spreading the work across more people. Currently, asking another colleague for support was reported to be difficult because they are all in a similar situation of being overworked. Besides, the number of responsibilities of teaching, academic staff should acquire grants for research and publicize successfully. Teachers expressed that if they are unable to handle the workload, they perceive it as their fault instead of considering the multiple factors that are involved. Moreover, it was emphasized that the university as an institution could take more responsibility for their employee's well-being. The university was characterized as sometimes inflexible which makes often top-down decisions without involving the teachers in the decision-making process or a clear communication why certain conclusions were reached.

All these pressures and stressors from the university and the government result in compromised well-being of teachers and even cause burnouts in some of them.

"I'm asking for more resources to be available to the university so that we can handle whatever problems, whatever tasks we have effectively. So when I say the university should have more money, [...] so that I can have another colleague with whom I can do my work. It's so that we can have enough auditorium so that I don't have to teach at six o'clock in the afternoon. It so that we have enough resources that we don't have to do multiple choice exams all the time and have to go into these stupid conversations of, are they good exams? Are they bad exams? The only reason we do this, is because we don't have money. It's not very complicated." (Teacher)

Work-Life-Balance. Fulfilling the role of an academic educator is an intricate and demanding job, and likewise having a family also creates a separate but equally challenging responsibility that requires a balance. For example, some PhD students may be asked to be flexible, to move to different places or to attend conferences abroad which can conflict with one´s family obligations. Another scenario pertains to the practical demands that are often required for professional progression, as explained by a teacher participant as follows.

"Especially when you are young and then you become an assistant professor. This requires that you're really flexible, that you can change from town to town, maybe even go abroad, so that you are not fixed on one place. And to combine the job, your wife, your children, there's a problem." (Teacher)

Furthermore, interpersonal conflicts at work or at home can potentially be carried over to the other context (as explained in the section of Systemic Network).

Colleagues. Having a functional, positive and respectful community of colleagues around was described as an important support system. Regular teacher meetings, having a good relationship with their office mates and generally a nice work environment seems to be vital to cope with stress. At the same time having conflicts between colleagues can be a major stressor at work.

"I think feeling you can't cope with all these things that your environment gives you, colleagues are a big support mechanism […]. But sometimes there's also conflict and then it's a big stressor […]." (Teacher)

Students Study Conditions

"Intense days of studying, writing and questioning my life. And then I pass and then I´m happy again." (Student)

Study Load. Reviewing the answers provided by students it became evident that the university experience depends to large extend on the ability to handle the study pressure. Especially during the exam period students experience heightened levels of anxiety, stress and the feeling of being overwhelmed. Students described how they sacrifice their social life in order to perform well on the exams. Which goes hand in hand with the self-expectations students have for themselves to pass all exams in the first try or to achieve a high grade to feel good about their achievements. Additionally, students reported that individual or group assignment deadlines fall within the exam period which further increases their stress. Students disclosed that during the first year they often experience a very rough start coming into university because they are also required to pass a certain number of courses to be allowed to study the following year which is known as Binding Study Advice (BSA). Suggestions for improving the situation for student well-being were to spread the study load throughout the semester blocks, so that they are required to do a smaller amount of work every one or two weeks. Despite that, students preferred the seven-week-block-system over the semester format. At the same time, some of our student participants complained that the university does not provide enough freedom of choice to organize their studies. Generally, students disclosed that they need to adhere to many rules, regulations and deadlines which result for some students in demotivation or frustration. The curriculum by the university is very tightly

structured which means there is only a small room for mistakes and getting back on track after a study delay was described as difficult.

> *"And the university in a sense, I think takes lots of pride in being a difficult university of the top 100. And they think that […] it needs to be rough, it needs to be tough, you need to put in the work. But I think, yeah, that's just what breaks people down eventually." (Student)*

Structure. Frequently students mentioned that the university lacks adequate support and a clear communication. To reduce the stress particularly for first year students the university could provide more information about what is expected of students as well as practical matters of where to go, what to do and how to do it. In presence of the corona pandemic the insufficient and unreliable communication was further magnified. Despite the lack of information the university has several support mechanisms in place. There is the student service center with specific workshops, the coaching platform, the buddies project, the ability to contact study advisors and methodology shops to support students in various ways. Students requested more of such non-mandatory workshops to exchange knowledge and to get additional support. A challenge is that not all students were aware of the extent of the established student services and subsequently did not take advantage of these offers.

> *"I think just generally being mindful of students, which I think sometimes it's a bit lacking. Like considering for example, that students are like anxious people, right. And we are very stressed out and sometimes the university is so inconsistent with communication. 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 their future is so unclear and that they just would need more feedback from the university, more guidance, more understanding. So I think, I also feel that […] the university is sometimes a bit far to reach." (Student)*

Through these findings, it is suggested that the university as an institution could review its current framework of communication with students, with the aim of establishing assistance based on the needs and nuanced factors of student well-being.

Peers. Students explained that the increasing number of fellow students at the university, especially in the beginning of the programs result in an impersonal environment in which it is difficult to bond with others. For that reason, smaller group practicals or places such as the library or the cafeteria are essential for students to get to know their peers. Students disclosed that those smaller classes with a mentor increase the engagement with the material and motivation. On the other hand, self-organized study groups provide support through sharing the workload or to exchange information. Besides those opportunities for connection students can broaden their social network through student associations with peers who share the same interest. However, international students have a harder time to integrate themselves in certain study associations based on the language barrier. Overall, experiencing a sense of community with caring people you can count on is central to the well-being of students.

"[…] you can share workload, or you can share ideas. So sometimes […] if you're by yourself, spend a lot of time trying to find some information, but maybe when you're with someone else, they already know that. And then you can just like merge your knowledge and continue and like move forward in a more efficient and effective way. So yeah, I think just generally working closely with other people. It's just, yeah, so much nicer. It makes the situation more enjoyable, which then also makes me feel better overall." (Student)

To conclude, teachers and students face different challenges based on their roles and responsibilities within the university. The results demonstrate that teachers' well-being is significantly influenced by the increasing obligations they are required to fulfill, the difficulty

to handle their career with their family and the support they receive from their colleagues.

Students on the other hand, are required to learn a substantial amount of study materials, need

to adhere to the university structures and are affected by their ability to bond with their peers.

Despite these differences the university as an institution and to a certain extent the

government have a sizable influence and responsibility in establishing the working and study

conditions that impact the well-being of teachers and students.

Table 4

Difference in Conceptualization between Teachers and Students

Code	Subcode	Definition	Quotes
Teachers Working Conditions	Workload	Time given for tasks at hand, number of responsibilities	"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."
	Work-Life Balance	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.`'"
	Colleagues	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."
Students Study Conditions	Study Load	Demand vs. time, the number of tasks one must 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?"
	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 assignments or individual assignments in this exact same week when we had our exams and that was annoying"
	Block System	Semester 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.
	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."
University		The university as an institution, equal chances for everyone, decision-making process, university structure	"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."

Code	Subcode	Definition	Quotes
	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 almost did all of them."
Government		Labor laws and general university system controlled by the government	"I know that the labour laws and the labour 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"

RQ2. Interaction between Student and Teacher Well-Being

"Your job is to develop skills and develop knowledge. And my job is to help you do that. [...] My job is basically to help you do your job." (Teacher)

Reviewing the codes concerning the interaction between the well-being of teachers and students it became evident that the interaction is multifactorial and complex. To provide a general framework for the following in-depth review, we will first explore the conceptualization of the interaction.

Interaction Student Teacher

Within the code Interaction Student Teacher, participants emphasized that teachers and students should not be seen as two different entities which are in conflict but rather see them on the same side with both serving the same purpose. They are closely connected and either lift each other up or push each other down. Similar to the interconnection of influences included in the code Systemic Network, external factors that interfere with the well-being of either students or teachers will be reflected to the other. Teachers and students conceptualized it as a two-way street with feedback loops or as a circle. For example, if students experience a lot of stress based on the upcoming exam period, that can influence their engagement in class which can impact the well-being of the teacher, which can reflect back to the students through a less enthusiastic teacher.

"Well, I think a student who's in distress creates distress in the teacher and a student or a teacher who are positive, engaged, connected, like open to connection. I think that really gets passed on to the students and from student to teacher. So I think it's

more like I see them more as like a constant cycle. Yeah. So the teachers establishes

part of the atmosphere in the class, but the students also have to do that. So, I think the

wellbeing of one can also positively influence the well-being of the other. So that's why

I also think for them to be connected and not to just be these two separate entities in

the same room, that makes a difference because that allows them to work and take

advantage of the cycle." (Student)

Teacher-Student Relationship

Various influences were mentioned in establishing a good functioning relationship between teachers and students. At first, basic behaviors of being polite, friendly and respectful build the base for productive interaction. Students valued having a class atmosphere that allows for honest communication for both teachers and students, which is the route of the seemingly most important factor of mutual understanding for each other's well-being. Mutual understanding can be defined by being mindful of the other person and considering their situation in an empathetic way. Through that, students perceive that they are heard and recognized while teachers might experience more appreciation towards their work which ultimately enhances their well-being. Moreover, teachers explained that they have the need to know the well-being of the students to adapt e.g. the demands of the course. Teachers can also try to be attentive toward their students and check on them if students seem to be less engaged or distressed. That provides the opportunity for the teacher to explore solutions for underlying problems.

Generally, participants reported that there can be an increase in awareness concerning the ability to positively as well as negatively influence each other. For teachers to acknowledge students' distress, to be supportive and listen to them can have a huge influence on the well-being of the students. Likewise, if students come prepared to the class and engage during discussions teachers feel appreciated and pleased by seeing students develop. Those

attentive behaviors from both sides can result in a positive feedback loop which can make the lecture or course an enjoyable experience for both. On the other hand, if teachers are not mindful about their communication, they might force students to engage in coursework or assume that they are lazy because they did not prepare sufficiently, which can result in a counterproductive response. Similarly, if students are not attentive during a lecture, complain a lot about the course or take advantage of the teacher's leniency it can immensely negatively impact the teacher's well-being. Overall, the goal should be to establish a connection between students and teachers that they perceive themselves as working together instead of against each other.

> *"[…] teachers don't exist without students. And in a way, although that's less true students don't exist without teachers. We're all one bundle of people. We do the same thing. We just do it from different sides. Your learning is my teaching. Your wellbeing is very important to me because no matter how interested I am in teaching you […] if you, as an individual have circumstances in your life that make you unreceptive to the content, my job is meaningless. So I'm very convinced that our individual, our mutual wellbeing is critical in doing the job that we do together, because it is the same job." (Teacher)*

Engagement

Both teachers and students have a responsibility to contribute to the quality of education. Students should be engaged with the material, try to acquire new skills and show their curiosity through asking critical questions. When students fulfil their responsibilities, teachers disclosed that they enjoy their work, gain energy from it and feel deeply rewarded. Teachers on the other hand, can improve their way of teaching or try out new things to make it stimulating and relevant for the students. However, teachers reported that it is a challenge by itself to design a course that is exciting for a few hundred individuals with different

interests and needs. At the same time it needs to be mentioned that the workload of teachers interferes with their ability to innovate and redesign their courses every year. Despite that, during the interview's teachers expressed high motivation to provide a good teaching experience for students. That includes making the content personally relevant, including the latest research and illustrate how the theory could be applied in practice. Students appreciated, well-structured slides as well as knowing what they are required to learn for the exam. Having a clear idea of what to expect in the exam, significantly reduces the distress experienced by students. In addition, receiving elaborative feedback on assignments can be rewarding and encourage students to further develop their skillset. Importantly, teachers should emphasize the purpose behind the teaching content and prioritize the learning process of students instead of the mere delivery of information. If students and teachers are aware of their mutual influence, consider the needs of the other person and act accordingly both can benefit from each other's well-being.

> *"Having an idea of the experience of the students in order to see whether that work is good, whether it has impact. And there's nothing more meaningful and validating than having good interactions with students. Interactions where you get the impression […] you make an impact in people's life, a positive impact in people's life's where your values are either shared or interacted with these individuals and where you see that there's meaning in the work that you do." (Teacher)*

The results indicate that the way teachers and students interact and communicate has the potential to improve or undermine the well-being for both. Important aspects for their well-being were awareness for the other, mutual understanding and expressing your care. If such perspectives and behaviour are employed by teachers as well as students, they might be able take advantage of a positive feedback loop.

Table 5

Interaction between Student and Teacher Well-Being

Code	Subcode	Definition	Quotes
Interaction Student Teacher		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."
	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."
	Respect	Showing general respect and respecting personal boundaries	"Well, it depends if they're friendly. There has to be certain respect."
	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."
	Teaching Content	Content of teaching, 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."

Discussion

The main goal of the research was to gain insights into the conceptualization of well-being within the university context for teachers and students based on the research gap in the literature and the lack of a universal definition of well-being. Communalities as well as differences between the factors that influence the well-being of teachers and students were explored. Furthermore, we examined how the well-being of students and teachers interacts. The presented results are partly the product of deductive reasoning and relevant theories were the positive psychology perspective, Self-Determination Theory, concept of resilience and the social constructivism approach. In the following section we will reflect on the results of the research, how they relate to the discussed theory, propose a model of well-being, possible implications, limitations of the study and provide an outlook for further research.

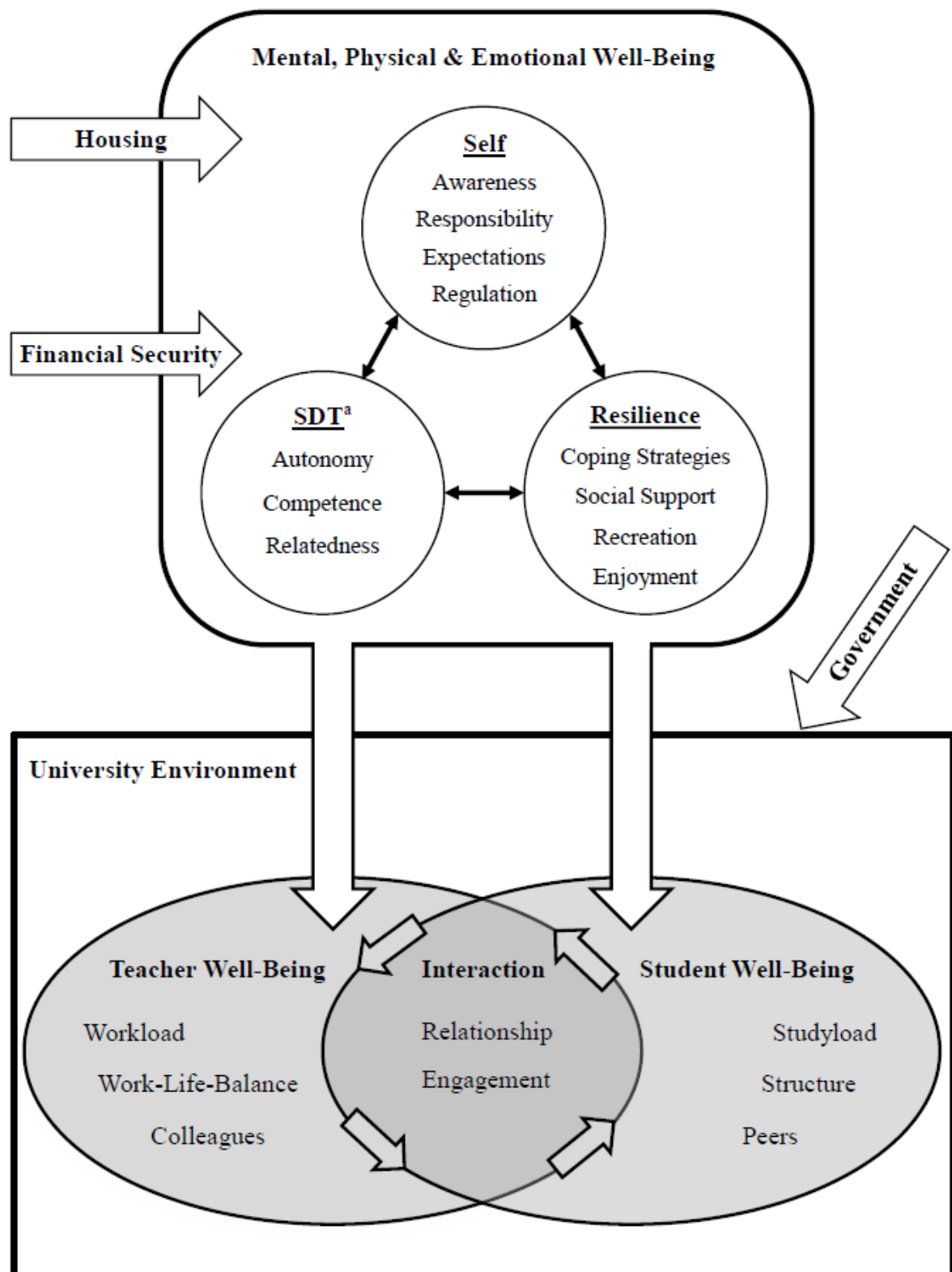**Insights Concerning the Conceptualization of Well-being**

The results of the research verify most of the literature reviewed in the theoretical background of well-being. On the basic level well-being was conceptualized by our participants by having the mental, physical and emotional means to follow one's interests which mostly overlap with the definition by the World Health Organization (2020). The organization defined well-being similar to our results not by the mere absence of illness but by the presence of physical and mental well-being. In addition, the WHO included the factor of social well-being in their definition, which emerged in our results in several codes such as Relatedness, Social Support, Colleagues or Peers. In addition, the Self-Determination Theory and the concept of resilience were validated by our results to provide a practical framework to conceptualize well-being. However, unlike the research by Fletcher and Sarkar (2012) we identified different protective factors for resilience besides social support which also emerged in our data. The most frequent mentioned elements were effective coping strategies, spending time for recreation and experiencing enjoyment during activities. Therefore, future research could investigate in which way our identified factors aid the ability to be resilient in other contexts.

Moreover, neither the Self-Determination Theory nor the concept of resilience included factors related to the self and basic needs such as financial security or proper accommodation within their model and therefore lack completeness in that regard to explain well-being within academia. In addition, throughout the research it became clear that the social constructivism perspective and the systemic approach is central to the concept of well-being. The results demonstrated across all themes that well-being of students and teachers is influenced by multiple factors and needs to be seen within a network which also validates the research findings by Kiltz et al. (2020). Based on the lack of completeness of the theories and concepts in isolation our results suggest an all-encompassing model (see Figure 1) which

connects the discussed theories with the factors related to the self and the basic needs in a

complex systematic network.

Figure 1

Model of Well-Being in Academia

Mental, Physical & Emotional Well-Being

Housing

Financial Security

Government

Self
Awareness
Responsibility
Expectations
Regulation

SDT[a]
Autonomy
Competence
Relatedness

Resilience
Coping Strategies
Social Support
Recreation
Enjoyment

University Environment

Teacher Well-Being
Workload
Work-Life-Balance
Colleagues

Interaction
Relationship
Engagement

Student Well-Being
Studyload
Structure
Peers

[a]SDT stands for Self-Determination Theory

To grasp the multifaceted concept of well-being it requires the consideration of various internal and external factors involved. The model (Figure 1) might function as a starting point for understanding the complex interaction between the identified factors that result in a positive or negative perception of one's well-being. Nevertheless, to test the newly suggested model and to further investigate the underlying mechanisms behind the factors remains to be examined by future research. Based on the systematic approach of the model further research could explore how the lack of financial security influences students' self-expectations towards their studies or their ability to cope effectively with stress.

Insights Concerning the Differences Between Teacher and Student Well-Being

Our results indicate that the teacher's well-being is influenced by the amount of workload they need to handle, their ability to manage their career with their family obligations and the quality of relationships with their colleagues. Concerning the high workload of teachers the results are in agreement with the research by Fontinha and Van Laar (2019) that the occupational stress and demand on teachers hinder their ability to fulfil their responsibilities at the university. Furthermore, similar to the meta-analysis findings by Mansfield et al., (2016) we concluded that a sustainable work-life balance as well as social support and collaboration between colleagues augment their ability to handle distress and to retain their resilience. Based on our results future research could investigate in a longitudinal study if the teacher's years of experience moderate their ability to manage the high workload at university.

Likewise, to the stress of teachers, students disclosed that they often experience intense phases of stress and anxiety in face of high study loads during the exam periods. Those results are in line with the reviewed research by Lacrombe et al. (2015) and Bewick et al. (2010) which identified students as a vulnerable social group to suffer from compromised well-being. One of the most frequent mentioned factors to protect and enhance student well-

being, which were also reported by Cooke et al. (2006) was the ability to create meaningful relationships with their peers and experiencing a sense of community. To improve the bonding between fellow students our results indicate that the universities should incorporate more small-group practicals in their programs.

Generally, our results demonstrate that the university should be aware of their role in influencing the well-being of students and teachers through the allocation of resources, the demands put on the teachers and the lack of clear communication. However, it needs to be mentioned that even the university is under the authority of the government which decreased the funding per student and increased the number of students the university needs to accept (Gillespie et al., 2001).

Despite the influence of external factors on teacher and student well-being at the university, our results indicate that to entirely comprehend their well-being it is equally necessary to investigate the factors that determine their personal well-being outside the university. Based on the systemic approach to the concept of well-being (see Figure 1) future research should examine e.g., mental health, physical health, financial security of students and teachers, how autonomous teachers and students feel, what they expect from themselves and if they enjoy being a teacher or a student.

Insights Concerning the Interaction Between Teacher and Student Well-Being

While the social constructivism perspective and the systemic approach is important for factors within the individual, the same applies to the student and teacher interaction. It is integral to understand the well-being of students within the context of the university and how it is affected by the well-being of the teacher which is congruent with the research by Harding et al. (2019) which established that a teacher's positive state improves the well-being of the students. However, our results add to the research by Kiltz et al. (2020) in emphasizing the influence students can have on the well-being of teachers. We conclude that the connection

and the ability to affect the other should not be underestimated and suggest raising awareness of the importance of a good student-teacher relationship. In this lens, both parties bear responsibility in performing attentive behaviors of mutual understanding, active engagement and honest communication. Workshops that educate students and teachers about the nature of interaction and allow for an exchange of perspectives could bridge the gap between them and consequently might improve the well-being of teachers and students along the way.

Limitations

To begin with, one of the biggest limitations is that the research was mostly designed and performed by undergraduate students who did not receive specific training in qualitative research methods. Moreover, the participant recruitment was performed within the personal network of the students which resulted in a convenience sample with 11 of the 12 participants studying or working at the University of Groningen. While all the students who conducted the interviews successfully passed university courses concerning professional interviewing skills, the students did not receive professional training in conducting semi-structured interviews suitable for gathering research data. Furthermore, a personal bias by the interviewers might have interfered with the ability to remain non-judgmental within the interviews which could have influenced the participants in several ways. Furthermore, the question scheme leaves a lot of autonomy for asking unscripted follow-up questions which could have further biased the interview. In addition, the procedure that each student conducted their interviews alone could interfered with standardization across the 12 interviews. While the initial codebook was reached in a joint effort the last coding phase was completed by each student coding their conducted interviews without a second coder validating the interrater reliability. Even though these limitations should be taken seriously, the students involved in the research intensively exchanged perspectives and discussed ideas throughout the research to increase the shared understanding of the data and to decrease the potential personal bias.

Conclusion

The range of theories of well-being and its potential social implications (i.e., anxiety or stress) underscored the need to qualitatively investigate the complexity of well-being, as to better understand the implications of its social dynamics. This study explored the context of well-being in a university setting, as to identify different variables that promote a positive well-being in both students and teachers. The findings of this research conclusively confirms that the concept of well-being is multifactorial, complex and dynamic. Hence, the research suggests that the well-being of students and teachers at the university may be benefited by a more holistic approach by considering the factors displayed in the Model of Well-Being in Academia (Figure 1). Additional research can further examine the importance of single factors of well-being, as well as the more holistic and practical value of the proposed model. A continued exploration and awareness of the well-being of teachers and students can potentially improve the current situation and inform future innovations.

References

Adams, P. (2006). Exploring social constructivism: Theories and practicalities. Education 3-13, 34(3), 243–257. https://doi-org.proxy-ub.rug.nl/10.1080/03004270600898893

Backhaus, I., Varela, A. R., Khoo, S., Siefken, K., Crozier, A., Begotaraj, E., Fischer, F., Wiehn, J., Lanning, B. A., Lin, P.-H., Jang, S.-N., Monteiro, L. Z., Al-Shamli, A., La Torre, G., & Kawachi, I. (2020). Associations between social capital and depressive symptoms among college students in 12 countries: results of a cross-national study. *Frontiers in Psychology*, *11*, 644–644. https://doi.org/10.3389/fpsyg.2020.00644 **Error! Hyperlink reference not valid.**

Baik, C., Larcombe W., & Brooker A. (2019) How universities can enhance student mental wellbeing: the student perspective, *Higher Education Research & Development, 38*(4), 674-687, https://doi.org/10.1080/07294360.2019.1576596

Banavathy, V. K., & Choudry, A. (2014). Understanding happiness: a vedantic perspective. *Psychological Studies*, *59*(2), 141–152. https://doi.org/10.1007/s12646-013-0230-x

Beltman, S., Mansfield, C., & Price, A. (2011). Thriving not just surviving: a review of research on teacher resilience. *Educational Research Review*, *6*(3), 185–207.

Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education*, *35*(6), 633–645. https://doi-org.proxy-ub.rug.nl/10.1080/03075070903216643

Cooke, R., Bewick, B. M., Barkham, M., Bradley, M., & Audin, K. (2006). Measuring, monitoring and managing the psychological well-being of first year university students. *British Journal of Guidance & Counselling*, *34*(4), 505–517.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research (3rd ed.): Techniques and procedures for developing grounded theory*. SAGE Publications, Inc, 159-194, https://dx.doi.org/10.4135/9781452230153

Day, C. (2008). Committed for life? variations in teachers' work, lives and effectiveness. *Journal of Educational Change*, *9*(3), 243–260.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Berlin: Springer Science+Business Media.

Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of happiness studies, 9*(1), 1-11.

Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International journal of wellbeing*, *2*(3).

Fletcher, G. (2013). A fresh start for the objective-list theory of well-being. *Utilitas*, *25*(2), 206–220. https://doi.org/10.1017/S0953820812000453

Fletcher, G. (2016). The philosophy of well-being: An introduction. *The Routledge Handbook of Philosophy of Well-Being*. 148-160.

Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise, 13*(5), 669–678. https://doi.org/10.1016/j.psychsport.2012.04.007

Fontinha, R., Easton, S., & Van Laar, D. (2019). Overtime and quality of working life in academics and nonacademics: The role of perceived work-life balance. *International Journal of Stress Management*, *26*(2), 173–183. https://doi-org.proxy-ub.rug.nl/10.1037/str0000067

Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology?*Review of General Psychology*, *9*(2), 103–110. https://doi.org/10.1037/1089-2680.9.2.103

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress*, *15*(1), 53–72. https://doi-org.proxy-ub.rug.nl/10.1080/02678370110062449

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82. https://doi.org/10.1177/1525822X05279903

Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., Evans, R., Bell, S., Grey, J., Brockman, R., Campbell, R., Araya, R., Murphy, S., & Kidger, J. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders*, *242*, 180–187. https://doi.org/10.1016/j.jad.2018.08.080

Hooker, B. (2015). The elements of well-being. *Journal of Practical Ethics*, *3*(1), 15-35.

Kiltz, L., Rinas, R., Daumiller, M., Fokkens-Bruinsma, M., & Jansen, E. (2020). 'when they struggle, i cannot sleep well either': perceptions and interactions surrounding university student and teacher well-being. *Frontiers in Psychology*, *11*.

Kinman, G., & Johnson, S. (2019). Special section on well-being in academic employees. *International Journal of Stress Management*, *26*(2), 159–161. https://doi.org/10.1037/str0000131

Lackritz, J. R. (2004). Exploring burnout among university faculty: Incidence, performance, and demographic issues. *Teaching and Teacher Education*, *20*(7), 713–729. https://doi-org.proxy-ub.rug.nl/10.1016/j.tate.2004.07.002

Larcombe, W., Finch, S., & Sore, R. (2015). Who's distressed? Not only law students: psychological distress levels in university students across diverse fields of study. *Sydney Law Review, The*, *37*(2), 243–273.

Mansfield, C. F., Beltman, S., Broadley, T., & Weatherby-Fell, N. (2016). Building resilience in teacher education: an evidenced informed framework. *Teaching and Teacher Education*, *54*, 77–87. https://doi.org/10.1016/j.tate.2015.11.016

Othman, N., Ahmad, F., El Morr, C., & Ritvo, P. (2019). Perceived impact of contextual determinants on depression, anxiety and stress: A survey with university students. *International Journal of Mental Health Systems*, *13*. https://doi-org.proxy-ub.rug.nl/10.1186/s13033-019-0275-x

Rivera Munoz, C. A., Baik, C., & Lodge, J. M. (2020). Teacher and student interactions in the first year of university. *Journal of Further and Higher Education*, *44*(8), 1130–1142. https://doi.org/10.1080/0309877X.2019.1664731

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. https://doi-org.proxy-ub.rug.nl/10.1037/0003-066X.55.1.68

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: a eudaimonic approach to psychological well-being. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, *9*(1), 13–39. https://doi.org/10.1007/s10902-006-9019-0

Scheffer, M., Bolhuis, J. E., Borsboom, D., Buchman, T. G., Gijzel, S. M. W., Goulson, D., Kammenga, J. E., Kemp, B., van de Leemput, I. A., Levin, S., Martin, C. M., Melis, R. J. F., van Nes, E. H., Romero, L. M., & Rikkert, M. G. M. O. (2018). Quantifying resilience of humans and other animals. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, *115*(47), 11883–11890. https://doi-org.proxy-ub.rug.nl/10.1073/pnas.1810630115

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American Psychologist*, *55*(1), 5–14. https://doi.org/10.1037/0003-066X.55.1.5

Stallman, H. M. (2010). Psychological distress in university students: a comparison with general population data. *Australian Psychologist*, *45*(4), 249–257.

World Health Organization [WHO] (2020). Constitution. Geneva: WHO.

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

      ☐   1st year   ☐   2nd year   ☐   3rd 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

Questions for University Students	Questions for University Teachers
Conceptualization of Well-Being	
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 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?
In general what does well-being mean to you?	*In general* what does well-being mean to you?
(Considering your role as a university student) Can you tell me what well-being in the university context means to you?	*(Considering your role as a university teacher)* 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?
Interaction Between Students and Teachers	
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, housing, finances, chronic conditions	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, chronic conditions
How do teachers influence student well-being? *(make sure they talk about positive and negative aspects)* → What can teachers do to prevent student distress?	How do students influence teacher well-being? *(make sure they talk about positive and negative aspects)* → 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
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 to 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 back up 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 does	"Then, the first say "Oh no, that's too hard." So, in the first year, we lose many students immediately."
		Flexibility	Ability to adjust to uncertain events	"And because of this suddenly my job; I had to adjust to these new circumstances."

Code Group	Code	Subcode	Definition	Quotes
		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 Student Teacher	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."
		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

Code Group	Code	Subcode	Definition	Quotes
				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 high that it overcomes whatever challenges that I put on my plate because of this extra work."
Relatedness	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 where you live. I think, I see quite some students that are just really waiting to go home and that makes

Code Group	Code	Subcode	Definition	Quotes
				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."
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."

Code Group	Code	Subcode	Definition	Quotes
		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 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."

Code Group	Code	Subcode	Definition	Quotes
		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."
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 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	"Whether you live alone, whether there are others, whether you have your private space too. And I know some people prefer studying alone"

Code Group	Code	Subcode	Definition	Quotes
			quiet place at home, opportunities to study	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 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

Code Group	Code	Subcode	Definition	Quotes
				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."
		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."