

Understanding Well-being in Academia through Self-Determination Theory

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Abstract

Recent research has emphasized significantly diminished well-being among the student population, pointing out the need for an intervention. Our study explores the application of Self-Determination Theory (SDT) (Ryan & Deci, 2000) to understand student well-being, focusing on the fulfillment of the three basic psychological needs (BPNs): autonomy, competence and relatedness. Through qualitative analysis, students conceptualization of well-being, experiences of the three BPNs in academia and the ways in which both students and the educational institution facilitate student well-being were investigated. Semi-structured interviews were conducted with 12 university students and subsequently coded utilizing the thematic analysis approach. Findings point to a seven-factor classification of well-being, categorized into three subgroups of life satisfaction, basic psychological needs and health. Fostering of the three BPNs was found to positively influence student well-being. Lastly, the results suggest that to foster well-being effectively, shared responsibility between students and the university is essential. Alongside the three BPNs, self-compassion emerged as a new variable of interest in potentially enhancing well-being in academia. The depth of a qualitative analysis comes with its limitations, our findings therefore need to be considered within their context. Further empirical research to establish the role of responsibility and self-compassion in connection to SDT could be of interest in the future.

Keywords: well-being, academia, self-determination theory, autonomy, relatedness, competence, self-compassion, responsibility

Understanding Well-being in Academia through Self-Determination Theory

To be a university student is to have the privilege of direct access to knowledge. For many, such status represents a volume of opportunities, independence, exposure to diverse cultures and perspectives, but also comes hand in hand with its hardships. The environment of a university presents a challenge specific to a high level educational institution, which has impacted a lot of students in a negative way.

In recent decades, the topic of well-being in educational settings has been debated with acceleration. The factor that sparked this discussion was largely the detection of mental health issues and deteriorating well-being across the student population in secondary education (Emmerton et al., 2024; Stallman, 2011). Experiences of university students seem to encompass psychological distress, feelings of isolation, poor physical health, or financial strain, all of which significantly impact one's daily functioning (Baik et al., 2017, pp. 1-5). Udhayakumar and Illango (2018) put forward a finding pointing out that a majority of students experience depressed mood and anxiety throughout their studies. In a research study investigating student mental health a few years later, Emmerton et al. (2024) propose that a substantial fraction of students experiences severe to extremely severe levels of depression, stress, and anxiety, relative to previous years. Among the major stressors, the research reports pressure to academically succeed and low self-esteem. As mental health issues have been predominantly prevalent during the years of adolescence, Stallman (2011) centered her research around investigating the differences between student population and general population of people of the same age to observe whether they differ from one another. The findings suggest that rates of mental health issues were substantially higher in students, contributing to growing severity of the situation of well-being in academia.

These recognitions appear to point in one direction, that is the vulnerability of students and their proneness to experience significantly higher levels of distress than the rest of the population. What calls for attention is the magnitude of such findings, as it becomes evident that the population of university students seems to be facing a gradual shift towards diminished well-being (Emmerton et al., 2024; Stallman, 2011, Udhayakumar & Illango, 2018).

In the past decades, a body of evidence in support of the Self-Determination Theory (SDT) acting as an agent in understanding and potentially enhancing well-being in academia has expanded and gained relevance (Ryan & Deci, 2000). In light of the empirical evidence, our aim is to look at the relationship between SDT and student well-being more comprehensively.

Defining Well-Being

Before delving into the factors affecting or contributing to wellbeing in students, we will first remark on some clarification in the area of definitions of this concept. The research encompassing the concept of wellbeing is spread across multiple domains and has been discussed extensively. Nevertheless, a consensus on a final definition has not been established.

Earlier attempts in establishing a definition of well-being, described then as a state of optimal functioning (Ryan & Deci, 2000), introduced two approaches to this concept, the hedonic and eudaimonic perspective (Ryan & Deci, 2001). The hedonic view of well-being emphasizes the attainment of pleasure and avoidance of pain, whereas the eudaimonic view focuses on living according to one's true values, self-realization and meaning. Keyes (2002) proposed that in order to achieve and maintain overall well-being, requirements of high emotional, social and psychological well-being need to be present. Dodge et al. (2012) suggested a model of well-being containing three elements: resources, challenges and the inevitability of equilibrium. In order to achieve equilibrium, the resources and challenges available to the

individual need to be balanced, thus facilitating a state of well-being. In 2011, Seligman proposed a parsimonious classification of well-being consisting of five factors, i.e. Positive Emotion, Engagement, Relationships, Meaning, Accomplishment (PERMA). In most cases, well-being comes down to definitions proposing not only the absence of the negative (e.g. illness, loneliness, depression), but also the presence of the positive (e.g. social connection, health, meaning) (Butler & Kern, 2016).

The PERMA classification (Seligman, 2011) was recently used to explore whether the five factors also apply to a population of undergraduate students (Kovich et al., 2022). The challenges that concern students in an academic setting often encompass social isolation, under-preparedness, or pressure to succeed, therefore the challenge of defining well-being might differ from the general population. The factors of PERMA were found to be significant for student well-being, with accomplishment having the highest factor loading (0.76), and meaning the lowest factor loading (0.25) (Kovich et al., 2022). The results provide valuable insight into what comprises the well-being of students, however come with the limitation of a confirmatory factor analysis, as the research works with predefined categories. In the current study, we aim to explore the well-being of students more broadly, not limiting the results to the predefined categories of SDT.

Self-Determination Theory (SDT)

The Self-Determination Theory appears to play a key role in the facilitation of well-being (Ryan & Deci, 2000). The theory is based on the assumption that most humans possess the inherent tendency to grow, and that self-motivation stems from innate psychological needs. The SDT identifies three such needs– autonomy, competence and relatedness. When these three basic

psychological needs (BPNs) are satisfied, they promote intrinsic motivation, which leads to greater creativity, engagement, and overall well-being (Ryan & Deci, 2000).

Basic psychological needs

A basic psychological need, according to Ryan and Deci (2000), is a state that, when fulfilled, promotes health and well-being. First out of the three needs, autonomy, refers to the feeling of being in control of one's own actions and goals, i.e. being a self-governing agent. Secondly, competence is the perception of being able to achieve desired outcomes, have opportunities to express one's abilities, and master challenges in one's environment. Lastly, relatedness refers to the need to feel connected to others, experience mutual care and support, and to have a sense of belonging. Vansteenkiste and Ryan (2013) noted that as need satisfaction can indeed foster well-being and empower inner resources, inability to satisfy the need can in turn result in ill-being and increased vulnerability for psychopathology.

Self-Determination Theory and Well-Being in Academia

The application of the model of Self-Determination Theory in academia has so far yielded interesting results. Prior research has shown that adjustment to a university environment poses a challenge to students that is likely to influence their experience of well-being (Brooker & Vu, 2020; Emmerton et al., 2024; Stallman, 2011; Udhayakumar & Illango, 2018). Hagenauer et al. (2017) investigated whether an educational environment that provides sufficient conditions for students to satisfy their basic psychological needs leads to more positive emotional experience. The results indicated that the environment was of significant influence. The strongest predictors of students' experience were perceived relevance of the study material; and positive relationships with peers, both of which related to autonomy and relatedness, respectively. Concluding the findings, Hagenauer et al. (2017) emphasize that to ensure optimal well-being of

students, facilitation of these needs is crucial. Knoesen and Naudé (2018) further propose that university students experience languishing or flourishing during their studies. Although they tend to experience both, first years are especially vulnerable to languishing, mainly due to experiencing practical difficulties, social isolation, and overwhelmedness. Flourishing, used interchangeably with well-being, was found to be associated with academic mastery, independence, and a secure social support system, thus emphasizing the importance of competence, autonomy and relatedness. This finding supports the hypothesis that the model of SDT plays a role in facilitation of well-being in academia. Jenó et al. (2020) focused on academic functioning of students, an umbrella term including both negative and positive indicators of students' university experience. Using the Self-Determination Theory, the main aim of this study was to explore factors contributing to motivation of students, subsequently leading to increased academic functioning. Results suggest that the most influential on motivation were perceptions of autonomy and competence, both of which positively predict academic well-being and are negatively associated with drop-out rates. Wang et al. (2021) added to the body of research of SDT in academia, investigating the relationship between need-supportive teaching and student well-being. Results suggest that fulfillment of basic psychological needs is significantly associated with well-being and optimal functioning across eight cultural groups, providing robust evidence.

Prior Limitations and Research Questions

The body of research investigating the role of Self-Determination Theory (Ryan & Deci, 2000) on student well-being is arguably sizable (Hagenauer et al. 2017; Jenó et al., 2020; Knoesen & Naudé, 2018). Studies have produced ample evidence pointing towards students' vulnerability to diminished well-being, with researchers stressing the urgent need of appropriate

interventions in the matter. Moreover, research has shown the convenience of adapting the model of SDT for such interventions to facilitate well-being through autonomy, competence and relatedness (Knoesen & Naudé, 2018). Relevance of study material, fostering social connections, support systems, or need-supportive teaching were, among others, strongly recommended to be facilitated in practice. What represents a gap in the current literature on student well-being and SDT, firstly, is the lack of detail in how students themselves perceive the fulfillment of the three basic needs, i.e. autonomy, competence and relatedness. The literature so far presented a few such findings, but to grasp the nature of the needs from the perspective of a student, thus more information is required. Secondly, the literature lacks focus on student responsibility in the matter. Majority of the findings present suggested interventions either from the side of the educational institution, or merely state that the three needs can positively affect well-being. How that can be done effectively, however, is rarely discussed. Lastly, the interaction between the responsibility of both the university and the students in facilitating well-being is yet to be explored.

The current study aims to shed light on what prior research has not focused on, in order to understand well-being in academia through Self-Determination Theory (Ryan & Deci, 2000), and with that information potentially propose constructive suggestions to the growing problem.

The investigated research questions are the following:

RQ1: How do students conceptualize well-being?

RQ2: How do students' experiences of autonomy, competence and relatedness influence their well-being?

RQ3: How can students facilitate their well-being in academia through the lens of SDT?

RQ4: How can universities facilitate student well-being through the lens of SDT?

Method

Participants

For our study, we collected a sample of 12 students who are currently enrolled in the BSc. of Psychology at the University of Groningen. The sample was convenient, each participant was personally recruited by our research group. The decision to recruit 12 participants was grounded in the seminal work of Guest and colleagues (2006), which demonstrated that saturation, the point at which no new information (codes or themes) emerge, is frequently reached within the initial 12 interviews. Our participants (Table 1) consisted of six males, five females, and one participant that identified differently. Our twelve participants ranged in age from 20 to 28 years old, representing diverse nationalities, including seven from Germany, three from Romania, one from the Netherlands and one from Luxembourg. Ensuring a comprehensive representation of experiences across various stages of the academic curriculum, we included five participants who were enrolled in the second year, three in the third year, and four participants who were in their fourth year of the three-year bachelor's program.

Table 1

Demographic Characteristics of Participants

	Participants	Distribution	
		<i>n</i>	%
Gender	Male	6	50
	Female	5	42
	Other	1	8
Nationality	Dutch	1	8
	German	7	58
	Luxembourgish	1	8

	Romanian	3	25
Age	20	2	17
	21	4	33
	22	3	25
	23	2	17
	28	1	8
Currently enrolled in	Year 2	5	42
	Year 3	3	25
	Year 4	4	33

Procedure and Materials

Prior to starting data collection, the Ethics Committee from the Psychology Department approved the planned methods of the research PSY-2324-S-0302, as well as the suggested ways of ensuring anonymity and confidentiality of the participants. Each team member recruited two participants, ensuring that neither the interviewer nor the participant knew of each other before conducting the interviews. This step was important to ensure confidentiality of the participants. After the recruitment, participants received information about the research, demographics questionnaire (see Appendix A), and the informed consent form (see Appendix B). Each participant was then assigned a number to prevent being identifiable by their personal information to others. Finally, each participant was randomly assigned to one of the interviewers.

The qualitative research entailed conducting semi-structured interviews of 45 to 60 minutes that followed the structure of the script (see Appendix C). Preceding the data collection, the research team conducted pilot interviews. This measure was crucial to ensure that the interviewers had sufficient skills to conduct the interviews and that each member had practice

with the script. The script (see Appendix C) was tailored to the pre-defined research questions of each researcher. It consisted of 15 questions with sub-questions that participants answered during the interviews. Self-Determination Theory (Ryan & Deci, 2000) served as a framework for building the script used to interview the subjects on their subjective experiences. The experiences of interest were students' conceptualization of well-being in academia and factors contributing to it. All identifiable personal information was anonymized. Once the interviews were recorded and transcribed, the recordings were deleted. Each participant then received the transcript of their interview to confirm the use of their input, with a possibility to exclude parts of the interview or to withdraw from the study completely.

Data Analysis

Our data analysis adhered to the thematic analysis approach, where the main focus lies in generating initial codes, followed by searching for themes and patterns (Braun & Clarke, 2006). To understand the role SDT has in well-being in academia, together with the underlying values and beliefs of the interviewed subjects, we have further utilized the value-coding approach (Miles et al., 2013). The coding process was conducted utilizing the digital software designed for the analysis of qualitative data "Atlas.ti Scientific Software Development GmbH". Our analysis was both deductive and inductive, as the aim was to identify and generate new patterns and themes to understand student's conceptualization of well-being, utilizing the lens of SDT.

Coding procedure

Initially, all team members individually transcribed two interviews and subsequently coded half of a transcript independently using open coding. As described by Williams and Moser (2019), the multi-stage coding approach helps researchers first identify distinct concepts and themes that can be categorized before attaching concrete interpretive labels. This first step was

designed to improve the researchers' grasp of the topic and procedure and to uncover initial interesting findings.

In a second step, two interviews were collaboratively coded and used to create a preliminary codebook. Each segment of the transcript was discussed with the group and interpretations were compared to work towards a consensus on the most suitable codes and categories later used by each researcher in their independent analysis (Braun & Clarke, 2006). Thirdly, researchers paired up and coded two transcripts per pair according to the previously established codebook. During this process each member coded both assigned documents individually before finalizing the codes in a collaborative session with their partner. After coding the first six interviews through the aforementioned process, the team got together to review the codes and adjust the codebook accordingly. To ensure inter-coder reliability and establish a final codebook (see Appendix D) each member proceeded to analyze a further two interviews with the established codes. In a final step the members gathered in a joint session to discuss and agree on any last adjustments.

Results

The results clarifying the pre-stated research questions are presented in the following part of the paper. The structure follows four sections, each discussing the relevant findings supported by tables and visualizations.

RQ1: How do Students Conceptualize Well-Being?

To create a foundation for understanding the well-being of students in academia, we first needed to look at the way students think about this concept. Our findings have been coded and grouped into seven categories (see Table 1), which can subsequently be arranged within three clusters, namely: life satisfaction, health and basic psychological needs.

Life Satisfaction: Balance, Content, Positive Experiences

Among the seven ways well-being was conceptualized, participants frequently referred to feelings of balance, content, and having positive experiences. Generally, the sense of balance involved having a form of equilibrium between multiple domains of life, such as “things that bring [one] forward in life, and also things that are fun” (Participant 8). Moreover, balance between mental and physical health was brought up, emphasizing the importance of the tie between the two as essential for well-being: “There is well-being for my body, but also well-being for my mind” (Participant 8). Regarding content, a salient factor was “being okay with where [one] is in life right now, having the feeling [one] can do okay in the future, rather than necessarily excel” (Participant 7). Sense of peace and acceptance were alluded to as factors having an influence on one's well-being. Lastly, having positive experiences emphasized the actions taken to promote “happiness” as vital to the conceptualization.

Health: Mental and Physical

Participants further conceptualized well-being as having optimal physical and mental health. Mental health was defined by the absence of psychological issues, such as psychopathology and stress. Physical health was often referred to alongside mental health: “being at ease, being relaxed, functioning well and not having major [health] complaints” were mentioned as vital for the well-being of an individual. In regards to both physical and mental health, exercise and “doing sports” were emphasized as well.

Basic Needs: Competence and Relatedness

Closely connected to life satisfaction and health, fulfillment of the psychological needs of competence and relatedness was mentioned by the participants. Aspects falling under competence included “academic validation and achievement” and “knowledge” . Relatedness

was too mentioned as vital for well-being, primarily as “having a support system” and “friends”. According to participant 9, most important is to be “surrounded by people who support you and you feel loved by”. Notably, autonomy, the third of the components in SDT, was not touched upon by none of the participants.

In summary, most participants defined well-being as the interaction of the seven components. As seen in the greatest majority of the participants, all factors under life satisfaction, health and basic psychological needs interacted with each other (see Table 1.).

Table 1.

Students conceptualization of Well-Being:

Conceptualization	Definition	Example
Balance	Experiencing a balance between several aspects of their lives, including mental and physical health, and work-life balance among others.	“Well-being for me means that I have a good balance between multiple different things.”
Content	Feeling content, being at ease, feeling comfortable.	"I guess just being content with where you are in your life right now. Having the feeling like you can do, okay, in the future, like you don't have to excel necessarily, but just the feeling of being fine for the future."
Positive Experiences	Having positive experiences and pursuing happiness.	“Being content with what I do, and then having positive experiences, I would say.”
Mental Health	Being free from mental disorders that hinder mental, emotional, psychological, and social well-being and functioning.	“There are two broad components to it, I would say, like a physical and a mental one [...] being at ease, being kind of relaxed, and a low stress level.”

Physical Health	Being physically healthy and functioning.	“There are two broad components to it, I would say, like a physical and a mental one [...] functioning well, and yeah, just not having any major complaints.”
Competence	Being able to do the things one would like to do and/or have academic achievements.	"I do think a sense of achievement is very important. I'd like to also be knowledgeable, which, to me, is honestly more important than, for example, a grade."
Relatedness	Interacting with other people, having friends and feeling supported.	"And you're surrounded by people who support you and you feel loved. It's also really important."

Note. The table illustrates seven components that emerged in conceptualization of well-being in students, each supported by a definition, and a quote from a participant.

RQ2: How do Students' Experiences of Autonomy, Competence and Relatedness in Academia Influence Their Well-Being?

As proposed by the Self-Determination Theory, the three basic needs of autonomy, competence and relatedness play a vital role in promoting well-being (Ryan & Deci, 2000). In line with the idea, Hagenauer et al. (2017) suggests that to ensure optimal well-being of university students, the facilitation of these needs is essential. To explore this theme in our research, we investigated how university students perceive their experiences of competence, autonomy and relatedness in relation to their well-being in academia.

Autonomy

In the exploration of the need for autonomy, the data could be grouped into four factors (being in control; decision-making; freedom; independence) (see Figure 1.). Autonomy was reported as a variety of experiences. Participant 10 noted that for them, “having control over the courses [they] choose and decisions [they] make is a big part of [their] autonomy”,

decision-making was mainly characterized by having options to choose from, especially by having the possibility of individual course selection during the Bachelors program: “I guess it's that the student [...] can choose, I don't know, what you study. For example, [...] it would also be like the elective courses that you choose, which kind of course you do” (Participant 5). “Freedom to choose [ones] next step” and “having your own place instead of living at home” were most representative for freedom and independence.

Regarding the impact on academic well-being, the students consider autonomy to be fundamental. The perceived importance varies per participant, nevertheless the general consensus concludes that as autonomy fluctuates, well-being does so simultaneously. Participants experienced the following: “I felt very trapped, [...] and I only realized that when I started spreading out my third year, and I felt like I could finally breathe. I felt very relieved, less pressure, and I could finally kind of stand still” (Participant 2). “I think that a lot of times you have stress when you don't have enough autonomy anymore. I think that's probably in some way correlated- autonomy goes down, stress goes up.” (Participant 1).

Competence

Our findings regarding how students perceive the sense of competence in academia resulted in the final 12 factors (see Figure 1.). Among others, the most often referred to were: deeper understanding, effort and grades.

To feel competent, some students reported a need for a deeper understanding of not only study content, but of the general university environment as well. For Participant 2, “standing in front of a group [of first year students] and being like, I'm an older student, and I can help you guys out” served as an internal measure of competence. Effort, too, has been of significance throughout the data collection, e.g. “If I put in effort, I can be a good student.” (Participant 7),

together with good grades, which were referred to the most during the data collection. Students appear to assess their competence based on their academic achievement. Low grades (i.e. six and less) served as a pre-determinant of a lower sense of competence, high grades as a pre-determinant of a higher sense of competence.

In terms of the impact of competence on the academic well-being of students, the results suggest the following pattern: “The feeling of competence [...] definitely makes me feel happy and content” (Participant 12). “If I don't feel competent in my studies, I start spiraling” (Participant 7). Additionally, competence was reported as an important factor in maintaining self-confidence, ability to do things that are meaningful, and managing stress levels. Overall, competence appears to be of substantial importance in facilitating and maintaining student well-being.

Relatedness

The exploration of the perceptions of a sense of relatedness in academia resulted in a classification containing 11 factors (see Figure 1.). The most emphasis was placed on: connecting with fellow students, having things in common, and having friends.

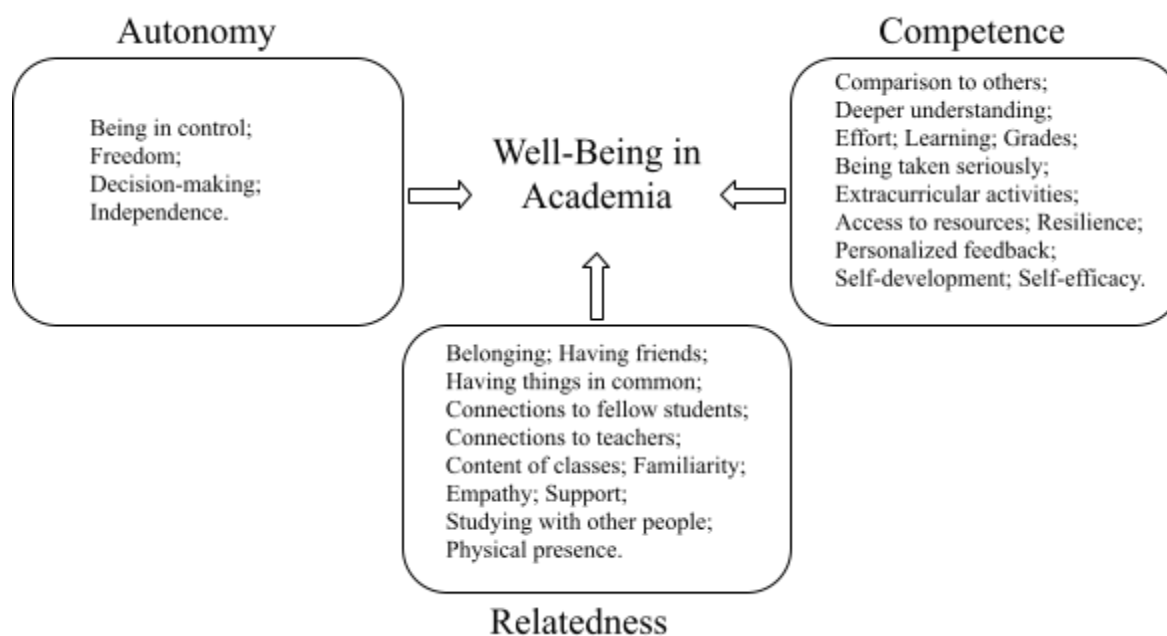
Results suggest that having means to connect with other students who share one's experiences serves as a significant factor in feeling relatedness: “I always enjoy [these courses], because you are more closely working with other people rather than in a lecture, where you are just sitting there, listening” (Participant 4). Having friends also shows to be a factor: “Relatedness for me means having friends, having people that understand me, that go through the same things I am going through right now” (Participant 1).

In terms of the influence of relatedness on the well-being of students in academia, the results fall under the following pattern: “It's really important to feel like you're not alone. I think if I felt very lonely, I don't know if I could have made it through this degree.” (Participant 2)

Sense of relatedness appears to buffer a lot of stress from academia. Access to a support system in the form of interpersonal connections has been mentioned multiple times as the most important component of the SDT. Results suggest that relatedness is strongly associated with the quality of academic experience.

Figure 1.

Autonomy, Competence and Relatedness as Foundational Components of Well-Being in Academia



Note. The figure summarizes the ways in which students conceptualize the three basic psychological needs in relation to their well-being in academia.

RQ3: How Can Students Facilitate Their Well-being in Academia Through the Lens of SDT?

To answer this research question, it was important to explore how students perceive the responsibility for their well-being in academia. Majority of students feel that responsibility for student well-being is “shared” with the institution, though opinions on this matter are varied. Participant 7 noted that “[one] should not rely on others to make them happy”, but to get that support is a “nice advantage”. To the question of who bears the responsibility, most students answered in line with the following:

“I think it is 50-50. The students themselves, and the system they are in, like university. It's not a thing where one person is responsible, it's important to recognize your own responsibility too, and take care of your own well-being. [...] but I also think it's important to acknowledge that the university can impact well-being a lot by the choices they make, [...] and ensure well-being for everyone who is eligible to be a part of the program.” (Participant 12)

To understand what it takes to enhance well-being, we inquired about the students specific actions taken to do so, and categorized them as seen in Table 2. In line with the SDT, students mentioned behaving in ways that are aimed at fulfilling their basic psychological needs, i.e. autonomy, competence and relatedness. In our sample, autonomy was achieved via opportunities to select courses, participation in extracurricular activities, speaking up to injustice, voluntary study delay, and being a teaching assistant. Competence was fostered through intentional aiming for resit exams, self-confidence, being employed by the university and making use of the resources that the university offers. The need for relatedness was fulfilled through going to lectures in person, being friendly, actively reaching out to fellow students, sharing

self-made study materials, being a member of a study association, studying at one's faculty building, and studying together with friends.

Alongside the three components of SDT, participants referred to treating themselves with kindness and understanding (i.e. self-compassion), taking moments to assess their current mental, physical and emotional state (i.e. checking in on themselves), undergoing professional therapy, and acknowledging their share of responsibility in the matter. These actions were, together with fostering the needs of SDT, considered as fundamental to ensure one's well-being in academia.

Table 2.

Actions Taken by Students to Facilitate Well-Being in Academia

	Action	Example
Competence	Aim for the resit; Self-confidence; University job; Use of university resources.	"I feel achieved or feel competent when I [...] present myself in meetings in a professional way, or the sessions [that I am teaching] go well."
Autonomy	Course selection; Extracurricular activities; Speaking up; Voluntary study delay; Teaching.	"I kind of feel like I made a decision in my third year. I started in other studies, and I spread out my third year a little bit because I'm doing my thesis in my fourth year, which gave me even more autonomy and time to decide."
Relatedness	Being friendly; Going to lectures; Sharing study materials; Reaching out to fellow students; Study association; Study at the faculty; Studying with friends.	"If I see somebody in a lecture and I think, oh, they seem cool, I actively try to talk to them."

Other	Self-compassion	"Over the years, I've grown to accept the fact that bad things can happen. I have bad reactions to bad things. But that is just human."
	Checking in on yourself	"I think I'm good at detecting when I'm not doing so well, like just from a well-being perspective. Um, and then usually also realize, okay, I need to find a solution for this. I need to calm down and to prioritize my well-being."
	Taking responsibility	"I'm like, okay, I need to change something. I want to change something. This can't continue like this. Like, I'm having a down phase. I can't get up to study. Okay, what do I need to change?"
	Therapy	"I did go to therapy at some point. So I did get a package of knowledge that I can use. And I know that somehow I have to do those things to be okay."

Note. The table displays actions taken by the students themselves to foster their well-being through fulfillment of the basic psychological needs (i.e. competence, autonomy, relatedness) or by other means, supported by quotes from the participants.

Furthermore, actions that the students were yet to take were also mentioned. In order to feel autonomous, students wished to put more effort into activities outside of academia, getting back to their hobbies and spending time exploring the country, "traveling to other cities" (Participant 1). Desire for more structure was also expressed: "Better time management, the classic. I feel like that could be a really big thing that could enhance my well-being. But I have never really managed a consistent, good schedule" (Participant 12). To feel competent, students mentioned wanting to engage more with the study material to make studying more enjoyable,

look into finding a tutor in case of struggling with the content, and reduce comparison with other people's perceived achievement. To fulfill the sense of relatedness, students want to put more effort into finding a group of people to study with.

In addition to the SDT, students also express the desire to be more accepting and compassionate towards themselves in the future, and put more effort into finding balance between responsibilities and time to relax (see Table 3.).

Table 3.

Actions Students Wish to Take in the Future to Foster Their Well-Being

	Action	Example
Autonomy	Activities outside of academia; Having structure.	“I want to get back in touch with my hobbies, just to stay anchored in my identity and develop it a bit more. I also need to put effort into something else [than school].”
Competence	More engagement with study material; Finding a tutor; Reducing comparison with others.	“I would just like to stop the comparison, because I am my own person. And my success is independent of how well [my friends] do. Even if they do better, I still do good.”
Relatedness	Find a study group.	“Finding a study group would be something that I want to do.”
Other	Self-compassion.	“I feel like there is still room for more acceptance towards my grades.”
	Work/Life balance.	“I am always saying that I want to have weekends off, I think that is a big thing.”

Note. The table displays actions the students wish to take in the future to foster their well-being through fulfillment of the basic psychological needs (i.e. competence, autonomy, relatedness) or by other means, supported by quotes from the subject interviews.

RQ4: How Can Universities Facilitate Student Well-Being Through the Lens of SDT?

To explore the ways in which universities can contribute to the well-being of their students, we inquired about the students' perceptions of the responsibility the institution has in the subject. Great majority of the participants sees the responsibility as equally divided, with the opinions only slightly fluctuating, e.g. Participant 10 believes that the burden of responsibility for student well-being is strictly on the institution: “It should be the university. [...] I think we are made to believe that we have more power over [our well-being] than we actually do.” The rest of the participants believe that the university should be there to “make sure that everybody can feel safe and good, in a bit of a broader sense in terms of diversity, being sensitive towards [...] cultures, individual stories” (Participant 8).

To shed more light on the role of university in fostering well-being, we have taken on an approach of both inductive and deductive inquiry, i.e. the questions were pertaining to the SDT and the three basic psychological needs, but new themes were allowed to emerge simultaneously. We first asked about the actions that the institution has already taken (see Table 4.). According to the students, their feelings of competence are promoted through discussions with study advisors offered by the university. Regarding autonomy, students reported courses offering flexibility in their grading, and options to elect desired courses as important. In fostering relatedness, small scale classes with more interpersonal contact and communication were appreciated. For the most part, participants mentioned that the university was offering means to fulfill their well-being, though they often had trouble naming specifics, hence the smaller scale of the Table 4.

Table 4.

Actions Undertaken by the University to Foster Student Well-Being

Action	Example
--------	---------

Competence	Study advisors.	“I really like the fact they have study advisors. [...] I really appreciated having somebody who could help me figure out what steps to take next, [...] it helped me with competence [...], they were supportive.”
Autonomy	Flexible grading; Elective courses.	“We had some courses where we were able to choose what grade we wanted. When I did [certain things], I [could] get a 7, 8, 9 or 10. There I felt more autonomy.”
Relatedness	Small scale classes.	“For a sense of belonging, stuff like practicals really fosters that.”

Note. The table displays actions taken by the university to foster student well-being through fulfillment of the basic psychological needs (i.e. competence, autonomy, relatedness), supported by quotes from the participants.

Furthermore, measures that the students wished the university would either strengthen, or implement in the future were explored (see Table 5.). To foster student competence, students expressed a need for reduction in academic pressure, specifically in terms of workload. Additionally, structuring exams in the form of open instead of multiple-choice questions, implementing content perceived as more interesting, providing personalized feedback, and generally less emphasis on achievement in the form of numerical grades, were mentioned as potentially valuable. Regarding student autonomy, participants expressed the lack of freedom within the course structure and the way of approaching the curriculum. To foster relatedness, students would appreciate more opportunities for connecting with peers and space for more personal contact with teachers.

Additionally, participants mentioned the need for more appropriate well-being resources, especially in a form of psychological help, which they felt is currently inadequate. Next, more

emphasis on incorporating students' feedback into what measures are to be taken in the future, and compassion from teachers were perceived as vital in the most effective approach in facilitating well-being in academia.

Table 5.

Actions Students Wish the University Would Take in the Future to Foster Student Well-Being

	Action	Example
Competence	Reducing academic pressure; Structure exams in form of open questions; More interesting content; Personalized feedback; Less emphasis on achievement.	“Getting feedback is very important. Personalized feedback, which I don't get much chance to get. If you have smaller classes, and you get feedback, that's actually really good. Then you can see, okay, I can improve here, I'm already doing good here, but I can improve there.”
Autonomy	More freedom within the structure of courses and curriculum;	“That's just the tendency of the teachers, if they feel like they should overrule, [...] or control how students approach the course, that takes away a lot of autonomy.”
Relatedness	Encouraging connections between students; Personal contact with teachers.	“I am missing the personal contact with the lecture professors. That I think is something the university could improve.”
Other	More appropriate well-being resources.	“I know there is a psychologist you can go to. But they don't really know how to react [to a serious issue], it's very demotivating to have that opportunity [but at the same time] be dismissed because it's not proper help.”

Incorporating student feedback.	“I do get angry a lot of the times when I bring up issues to teachers, but they don't change anything, just because they think it's not important.”
Teacher compassion.	“I feel like one thing that the university could do better is [reconsider] what is a force majeure. Because if you are not in a hospital [but still cannot go to an exam for other reasons], that sucks for you. [...] A bit more support would be nice.”

Note. The table displays actions students wish the university would take in the future to foster student well-being through fulfillment of the basic psychological needs (i.e. competence, autonomy, relatedness) or by other means, supported by quotes from the subject interviews.

Interviewing the participants provided us with an insight into all of our research questions, i.e. the conceptualization of well-being, perception of the three BPNs in connection with academia, and the actions of both the students and the university that foster, or have the potential to foster, student well-being. The findings in connection to the actions taken by students and the university were in line with the predefined categories of SDT (Ryan & Deci, 2000), although new categories have emerged as well. This offers a potential new perspective on looking at the student well-being in academia through the lens of SDT.

Discussion

The aim of our study was to explore the well-being of students in academia through the lens of Self-Determination Theory (Ryan & Deci, 2000), focusing on the way students conceptualize well-being, and on how their experiences of autonomy, competence of relatedness influence their overall well-being in academia. Moreover, with a regard for a sense of

responsibility in the matter, the actions taken by students themselves to enhance their well-being, together with the role of the educational institution were investigated.

Students conceptualization of well-being yielded seven factors, namely: balance; content; positive experiences; physical health; mental health; competence; and relatedness. Life satisfaction (i.e. balance; content; positive experiences) was defined by achieving equilibrium between several life domains, being content with current life status and pursuing happiness. Health (i.e. physical; mental) encompassed the absence of psychopathology and optimal physical functioning. The fulfillment of basic psychological needs (i.e. competence; relatedness) referred to a sense of achievement and knowledge, together with meaningful interpersonal connections. What emerged after our exploration of the well-being of university students, taking into consideration the scale of our research, aligns interestingly with the prior literature on the topic. The theme of optimal functioning in defining the concept of well-being, originally proposed by Ryan & Deci (2000), has been relevant for the majority of students when formulating their own conceptualizations. Similarly, emotional, social and psychological well-being as vital for maintaining overall well-being (Keyes, 2002) also corresponds to the experiences of our participants. Our study also yielded results similar to the PERMA classification of well-being (Seligman, 2018). In the research study conducted by Kovich et al. (2022), exploring student well-being through the lens of the PERMA classification, the factor of “accomplishment” yielded the highest loading. This could correspond to the emphasis on “competence” in our findings. “Meaning”, a component that was not included in our classification, had the lowest factor loading amongst the student sample. The alignment of our findings with the prior conceptualizations reinforces the relevance of competence and relatedness as core components of well-being, together with the rest of the discovered components.

Fulfillment of the three basic psychological needs of the SDT (Ryan & Deci, 2000), autonomy, competence and relatedness, were found to positively impact the well-being of students in academia (see Figure 1.). Among others, experiences of autonomy were attained via the sense of being in control of one's own decisions and sense of freedom, competence through deeper understanding of both the study material and the university environment, and relatedness was achieved through friendships, connection to teachers, or physical presence in the lecture halls. Our findings strongly support the notion that the SDT plays a vital role in fostering the well-being of university students, aligning with the prior research conducted on the topic. As Emmerton et al. (2024) suggested, students face significant challenges upon entering the university environment, likely to diminish their experience of well-being. Fostering the three basic needs of SDT is therefore crucial (Hagenauer et al., 2017). These findings broaden the prior knowledge on the matter, providing detailed means to fulfill these needs in practice.

Furthermore, the results suggest that the perceived responsibility for students well-being in academia is divided between the students themselves and the institution. To enhance their well-being, students took several actions to fulfill their needs of autonomy, competence and relatedness, together with active taking of responsibility for their own prosperity, practicing self-compassion, checking in on themselves and undergoing therapy (see Table 2.). Students also mentioned several actions they feel would positively impact their well-being, but are yet to be utilized in the future. Besides the wish to take actions to fulfill the three basic needs in the future, self-compassion and creating work/life balance were also present (see Table 3.).

Additionally, the students pointed out the responsibility the educational institution bears, such as offering a basis for social safety, together with promoting autonomy, competence and relatedness for students. Among others, the sense of competence was achieved through

consulting study advisors, autonomy through flexible grading and option to elect courses, and relatedness via offering small scale classes with more space for closer interpersonal relationships (see Table 4.). The participants also reported measures the university has not taken so far, but ones which could be helpful to facilitate an optimal environment in the future (see Table 5.). Besides measures fostering competence, autonomy and relatedness, students were also missing access to more appropriate well-being resources or emphasis on personalized feedback.

The information we acquired is consistent with previous research on the topic of well-being in academic settings. Most literature as of today is centered around the role of the educational institution in providing optimal conditions for students. Baik et al. (2018) propose seven ways in which the university influences the well-being of students, for instance student services and support, teaching practices, or course design. The study suggests that interventions in such a manner can effectively support student well-being and prevent psychological distress, together with facilitating a sense of inclusion and empowerment. In terms of the actions of students themselves, Graham et al. (2016) reported that strong interpersonal connections in academic communities are most effective in fostering well-being. In line with our finding of the importance of self-compassion, Stallman et al. (2017) propose self-kindness, or the “attitude of understanding and benevolence in times of adversity and failure”, as a factor able to foster and maintain the well-being and lower distress in academic settings (Fong & Loi, 2016; Neely et al., 2009). Furthermore, Zessin et al. (2015) suggest that individuals who practice self-compassion tend to experience higher levels of individual overall well-being.

The results point to an interesting pattern in the actions taken to facilitate student well-being. The majority of reported actions referred to the ones the students themselves were already practicing, followed by the ones they wished the university would implement in the

future, indicating high involvement and notable awareness of students into well-being facilitation. Actions the university has already taken to enhance student well-being were reported most scarcely, suggesting a lack of sufficient involvement in the situation. Alongside the emphasis on the three basic psychological needs, self-compassion emerged most frequently as a significant factor in facilitating and maintaining well-being for students.

Our findings imply the importance of considering the following variables when discussing ways to understand and effectively facilitate student well-being in academia: interaction between student and institutional responsibility, facilitation of the three basic psychological needs of the Self-Determination Theory (Ryan & Deci, 2000), and self-compassion.

Well-being, as seen by our conceptualization, is a complex phenomenon experienced in a multitude of individual ways. In order to enable effective measures, it is important to acknowledge that there are two actors in the problem of well-being in academia: the student and the institution, both of which hold a certain amount of responsibility and power to make a change. I suggest that to truly help students in their challenging situation, the university needs to find means to more effectively fulfill the needs of students regarding feeling autonomous, competent and related, and thus facilitate their wellness. Facilitating self-compassion in students is of relevance as another step. This practice has recently become more common (Smeets et al., 2014), though has often been limited to interventions for merely small samples of students. I believe that in order to effectively utilize the effects of self-kindness on well-being, large-scale interventions involving more students need to be implemented in the future. As for the role of students themselves, it is important to keep in mind that taking their own action to facilitate one's well-being makes a significant difference. Fostering a sense of control and responsibility is

therefore crucial. Feelings of responsibility can be accompanied by increased pressure and expectations, causing students to feel distress. Facilitating self-compassion as both a buffer to distress and promoter of well-being is therefore relevant Fong & Loi, 2016; Neely et al., 2009.

The qualitative nature of our research allowed us to dive deep into the topic, capture individual differences and uncover underlying values, beliefs and thought processes of the participants. The interviews were not limited to our predefined themes, and new topics were given space to emerge as well, broadening our perspective of the theme of interest. It is however important to acknowledge that the design of our study comes too with its limitations. The script was developed by six Bachelor students who further conducted the interviews. Each interviewer was to follow the script, however the option to ask follow up questions could have made the interviews more individualized, and possibly biased. Participants themselves were not prepared for the interview beforehand and would only recall memories and experiences in the immediate moment, which could lead to incomplete or inaccurate statements. The sample of chosen students was convenient, therefore lacking the strengths of random sampling, as well as limited to 12 students. These features significantly impact the generalizability of our results.

Building on our findings, future research is therefore essential to fully understand student well-being and the role of SDT (Ryan & Deci, 2000) in its enhancement. The qualitative approach of our research allowed us to dive deeper into the topic and explore it on an individual basis. While we have identified ways in which the three BPNs can be facilitated, it is crucial to further explore these findings empirically. We have also identified numerous ways of enhancing student well-being pertaining not only to SDT. This could serve as a foundation for further research on well-being in academia, specifically in exploring the role of responsibility and self-compassion as potentially relevant additions to the model of SDT.

Conclusion

The issue of deteriorating well-being of students is substantial and growing (Emmerton et al., 2024; Stallman, 2011). With the scientific community having yet to arrive at a consensus on how to define the state of well-being, the current study aims to fill in this gap and add to the body of knowledge about effects of the Self-Determination Theory (Ryan & Deci, 2000) on student well-being. Our findings support the prior research suggesting that SDT is strongly linked to individual well-being (Ryan & Deci, 2000), and while this concept can be applied broadly, its utilization in academia is worthwhile (Koesen & Naudé, 2018). Through acknowledging the shared responsibility of both the student and the institution, fostering autonomy, competence and relatedness in students positively affects their well-being. Students show a lot of initiative in taking care of their own wellness and prosperity, and express a remarkable level of awareness in how to do so effectively. It is therefore vital for the institution to put equal effort into the matter, and with the help of SDT and measures fostering self-compassion in students create an environment optimal for the flourishing of the young generation.

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Appendix A

Demographics Questionnaire

Demographic Questionnaire Study: Understanding Well-being in Academia through Self-Determination Theory (SDT)

Participant _____ (filled out by the researcher)

We kindly request some brief socio-demographic information from you as a participant. This information will assist us in understanding your responses within context

1. I am male female other prefer not to say

2. Age _____ years

3. Nationality _____

4. Concerning my studies

a. I'm currently enrolled in the

Bachelor Master

b. I am in my

1st year 2nd year 3rd year 4th year

If you have any further questions concerning the interview study, do not hesitate to ask. Again, thank you very much for participating in our study and helping us get better insights into well-being at the university.

Contact: L.Ballato@rug.nl

Bachelor Thesis Project

University of Groningen

Well-being in Academia

Appendix B

Informed Consent

Informed Consent for Interview Study within the Project: Understanding Well-being in Academia through Self-Determination Theory (SDT)

April 2024

I, [Participant's Name], hereby consent to participate in the current research conducted by [Researcher's Name], a student at the University of Groningen. Contact: [Researcher's Contact Information]

I have agreed to participate in the study "Understanding Well-being in Academia through Self-Determination Theory (SDT)," understanding that my participation is entirely voluntary. I acknowledge that my data will be kept confidential. I reserve the right to withdraw from this study at any time without penalty and to request that my responses not be used. The researcher is responsible for the secure storage of the data.

I will have the opportunity to review a summary of my interview and indicate whether I wish particular parts not to be considered in the analysis. The data will be only used for educational purposes and will not be published.

I read and understood the information form, which provides more detailed information about the research.

Date: [Participant's Date]

Signature Participant:

Date: [Researcher's Date]

Signature Researcher:

Contact: Dr Laura Ballato

l.ballato@rug.nl

University of Groningen

Appendix C

Script

Q nr.	Conceptualization of Well-Being
1	<p>In general, what does well-being mean to you?</p> <p>(When you hear “well-being” – what comes to mind?)</p>
Self-Determination-Theory	
	<p>Now let’s move on to Self-determination-theory.</p> <p>Self-Determination Theory, or SDT, is a psychological theory of motivation that explains how people strive for growth, connection, and well-being. At its core, SDT suggests that everyone has three basic, innate needs: autonomy, competence, and relatedness.</p> <ul style="list-style-type: none"> ● Autonomy is about feeling in control of your own actions and decisions. ● Competence involves feeling skilled and capable in what you do. ● And relatedness is about having meaningful connections with others. <p>According to SDT, fulfilling these three needs is essential for psychological health, motivation, and happiness.</p> <p>For the questions that follow, please try your best to stay within the framework of academia and the three psychological needs of SDT competence, relatedness and autonomy.</p> <p>Do you have any questions about SDT?</p>
2	<p>What is autonomy within academia for you?</p>
	<p>When you look back at your studies, were there certain periods during which you felt more or less autonomous?</p> <ul style="list-style-type: none"> ● How was this need (not)met in your first year compared to now?
	<p>What importance did autonomy play over the course of your studies?</p>
3	<p>What makes you feel competent within academia?</p>

	<p>When you look back at your studies, were there certain periods during which you felt more or less competent?</p> <ul style="list-style-type: none"> • How was this need (not)met in your first year compared to now? • How do exam periods impact your feelings of competence? • How do you feel your personal level of resilience, your ability to bounce back, influences your feelings of competence?
	<p>What importance did competence play over the course of your studies?</p>
4	<p>What is relatedness within academia for you?</p>
	<p>When you look back at your studies, were there certain periods during which you felt more or less relatedness?</p> <ul style="list-style-type: none"> • How was this need (not)met in your first year compared to now? <p>How has your relationships influenced your persistence in academia?</p> <ul style="list-style-type: none"> • Can you describe a time when you felt a sense of belonging in academia? • Have there been any experiences where your relationships posed difficulties or distractions during your studies? (<i>In case they have answered this earlier can be omitted</i>)
	<p>What importance did relatedness play over the course of your studies?</p>
<p>Values and Identity</p>	
5	<p>What does an important decision look like to you?</p>
	<p>What do you prioritize when making important decisions during your study years?</p> <ul style="list-style-type: none"> • Did it change through the years of study? If so, how?
6	<p>What motivates you within academia?</p> <ul style="list-style-type: none"> • Why?
7	<p>How did you choose your third-year courses? (<i>For first and second year students: how will you choose...? </i>)</p>
8	<p>What does it mean for you to be a student?</p>

9	<p>In what ways do you think your student identity influences your overall well-being in academia? <i>(If the student is unsure what is meant with student identity, refer them to their answer to the previous question, as this captures their student identity.)</i></p> <p>(Identity: How you see and express yourself)</p>
10	<p>How easily do you bounce back from a stressor such as not passing an exam within your academic life?</p> <ul style="list-style-type: none"> ● How do you feel this has impacted your sense of well-being within academia?
Influencing well-being	
11	<p>Think of a moment where you had the feeling your well-being was fulfilled.</p> <ul style="list-style-type: none"> ● How did your perception of being a student contribute to feeling well-being in that very moment? ● Were there some other <u>internal</u> factors that contributed to that feeling of fulfilled well-being?
Who is responsible for student well-being	
12	<p>Who do you think is responsible for student well-being?</p> <p><i>(Ask this open question first, before asking specifically about themselves or university. If they already talk more about one or the other, let them, don't redirect them into talking about one thing first.)</i></p>
13	<p>To what extent are you responsible for your own well-being in academia?</p>
	<p>What are the actions you have taken to enhance your experience of well-being? <i>(If the student does not really know what to say, remind them of the three needs.)</i></p> <ul style="list-style-type: none"> ● What motivated you to take this initiative?
	<p>Are there any behaviors that you wanted to implement, but have not done so so far?</p> <ul style="list-style-type: none"> ● Why?
14	<p>To what extent is university responsible for student well-being?</p>
	<p>What is the university doing right now to foster student's basic psychological needs?</p> <p><i>(If the student does not really know what to say, remind them of the three needs)</i></p>

	What do you think the university can do to further enhance student's basic psychological needs? <i>(If the student does not really know what to say, remind them of the three needs)</i>
	What were you missing from the university with regards to fostering the three needs in your first year?
15	Is there anything else that we haven't talked about yet that you think influences your well-being?
	Is there anything else you would like to add?

Appendix D

Codebook

Conceptualization Well-Being

Category	Code	Description	Example
Well-Being	CONC WB: Balance	Experiencing a balance between several aspects of their lives, including mental and physical health, and work-life balance among others.	"So general well being includes, like, many different well beings that are, in a way, more stable, like, the balance is quite stable"
	CONC WB: Competence	Being able to do the things one would like to do and/or have academic achievements	"Well, I do think a sense of achievement is very important. For me. It's yeah, it's, I like to feel like I've achieved something I'd like to also be knowledgeable about that, which, to me is honestly more important than, for example, a grade."
	CONC WB: Content	Feeling content, being at ease, feeling comfortable	"I guess just being content with where you are in your life right now. And like having the feeling like you can do, okay, in the future, like you don't have to excel necessarily, but just the feeling of being fine for the future."
	CONC WB: Mental health	Being free from mental disorders that hinder mental, emotional, psychological, and social well-being and functioning	"I guess physical and mental health kind of? Yeah, are like the two main things that are necessary for wellbeing for me. Yeah."
	CONC WB: Physical health	Being physically healthy and functioning	"Okay, so there are two broad components to it, I would say, like a physical and a mental one. Physiological and psychological component."
	CONC WB: Positive experiences	Having positive experiences and pursuing happiness	"Overall, I think, for me, it's always a state of balance, where I feel like I kind of am on top of everything that I want to do. just like being content with what I do, and then having positive experiences, I would say. "
	CONC WB: Relatedness	Interacting with other people, having friends and feeling supported.	"And you're surrounded by people who support you and you feel loved by it's also really important."
Autonomy	CONC AUTO: Being in control	Being in control of your own actions and choices	"I feel like it is quite important because you want to feel like you have control of your studies, right? You want to feel like this is what you want to do and what you chose to do"

Category	Code	Description	Example
	CONC AUTO: Decision-making	Making decisions how to study, prepare for an exam, or how to engage with the material.	"And like, the less I can choose which materials to use, the less autonomy I feel like I have, somehow"
	CONC AUTO: Freedom	Having the freedom to do what you would like in your studies, like participating in extracurricular activities etc.	"You choose your own path, and you feel the freedom"
	CONC AUTO: Independence	Feeling like you can do something by yourself, without needing support from others	"Yeah, and do not need, like to rely on someone else. Like of course, you need the professor to like in the lecture and everything, like provide you with the materials and then that you don't need additional or great additional amounts of help like a tutor outside of that you can with the help from the professor and like the normal materials, develop your own grasp material without additional offset."
Competence	CONC COMP: Comparison to others	Comparing one's own achievements, skills, grades, etc. to those of other people.	"I would compare myself maybe to glimpses of what I would see, how other people would deal with the situation"
	CONC COMP: Deeper understanding	Being able to go beyond the passive receiving of information from courses, to being able to have deeper discussions about the material.	"Seeing what you think about things and just being like very engaged in the academic world"
	CONC COMP: Effort	Putting genuine effort into your studies and trying to complete courses successfully.	"I think a competence that I have is I know how much I can do and what is enough. And I can really just put enough effort into it. So there's something that is satisfying for me."
	CONC COMP: Extracurricular activities	Participating in activities (academic and not) outside of the normal curriculum..	"I think that grades are probably the biggest source of feeling of competence and from academia. But like for me, probably also being in the Honors College just because obviously, you need to have certain grades to get in and you obviously also need to apply and then get accepted and do more things next to all the other things you already have to do."
	CONC COMP: Grades	Understanding competence in connection to grades	"Yeah, I guess I mean, the framework of grades, for example, and it's already contributing to feeling competent... "
	CONC COMP: Having the resources	Having resources available that allow the student to live up to their full potential.	"It helps me when there's a thorough proper syllabus, and when the, when the people around me like my mentor, my teacher, as well is willing to put in the effort to help me and to give me like the space and the time and the effort that to make the sessions well."

Category	Code	Description	Example
	CONC COMP: Learning	Being able to successfully study and retain the information gained during one's studies.	"I felt like non competent, like, so bad, because I did nothing like nothing. That showed off, you know, I only mean, if I, for example, read a book, but don't talk about this book. And I don't feel I learned something."
	CONC COMP: Personalized feedback	Receiving personalised feedback from a professor or teaching assistant.	"If you have like smaller courses, and then you get feedback, that's actually really good. And then you see, okay, I can improve here. I'm already doing good here, but maybe I can improve."
	CONC COMP: Resilience	Being able to bounce back from setbacks such as bad grades.	"If I would feel less resilient, I would feel less competent. Um, Yeah, I guess it made me it made my feeling of competence more stable."
	CONC COMP: Self-development	Enhancing one's academic and personal skills.	"I definitely also had a learning curve on how to approach them and how to interpret certain things. So kind of as a scientist. I think I've definitely gained some skills that helped me navigate in the academic sphere."
	CONC COMP: Self-efficacy	Knowing what one is capable of doing and believing that one is able to live up to that level of skill.	"I think a competence that I have is I know how much I can do and what is enough. And I can really just put enough effort into it. So there's something that is satisfying for me."
Relatedness	CONC RELA: Belonging	A sense of connection with and feeling that one fits in the group.	"Relatedness is for me, once feeling related with my fellow students, feeling of belonging, maybe also developing the identity of being a psychology student."
	CONC RELA: Having things in common	Sharing common fate, similar interests, opinions, and having similar worldviews.	"And so I would say that that's part of relatedness that you like are working together with others. But I also think in lectures for example, it can be when you because oftentimes lectures, a bit more interactive that you can see that other people share your point of views or have similar ideas and thoughts about things as you do."
	CONC RELA: Connections fellow students	Having peers to exchange ideas with, learn from, and study with. these peers also be friends who support each other.	"...Ask my friends if they understood something that I might not have understood. Exchange notes, like things that people will use to study for exams and everything like that. So it helped with having a support system, but also to help with the studies because you have someone there going through the same exact thing. "
	CONC RELA: Connections teachers	Being able to approach, talk to the teachers, asking them questions about the content.	"...and then probably also having connections to researchers having connections to, to lectures having, feeling like I can approach them and ask questions. Just probably the opposite of just feeling alone and feeling ostracized."
	CONC RELA: Content of classes	Having a sense that the content of the class is interesting and meaningful. Sparking a curiosity to learn more about the subject.	"The content, actually, the content, because when I read the content, meaning also, it's really interesting, and I liked it a lot. But the negative part of it is sometimes the extrinsic motivation, I would love to engage way more"

Category	Code	Description	Example
	CONC RELA: Having friends	Fostering meaningful connections with friends within and outside academia that one could relate to and connect over positive and negative experiences.	"I think for me, mainly, this means having, having friends, having people that understand me that go through the same things I'm going through right now. And being able to connect to them, talk to them."
	CONC RELA: Familiarity	Being acquainted with people in the lectures, faculty and having the comfort of recognizing the place.	"I also think lectures help if there are people, a lot of people showing up. It's nice to be in this big group and then have your own little group that you always sit with, but you recognize all the faces and it's comfortable."
	CONC RELA: Empathy	Ability to understand and share the feelings, thoughts and experiences of another person.	"I'm in the Red Cross, in a committee, and we wanted to do like a party thing and we wanted to like the donations to go to mental health (...) I think we already like, quite like a bunch of like just more human people, if that makes sense."
	CONC RELA: Physical presence	Attending university in person, having face-to-face interactions as opposed to online education and communication.	"Like at this point, I'm in Heyman's like every day and I'm meeting my friends here and I'm having meetings and I'm kind of connected to a lot of people because of the activities I'm doing within academia. So then I think both on a like very kind of physical hands on way that really, really, really helps with my sense of belonging for compared to the beginning where I was just at home, but never really at uni."
	CONC RELA: Studying with other people	Having people one could study with to stay connected and motivated.	"Having friends in your, that you can study with, um, or just chill with think, um, it really helps me. It really, like I need social pressure to study as well."
	CONC RELA: Support	Having supportive others within and outside of academia to help deal with setbacks, persevere; engaging in the mutual aid with others in the pursuit of current goals.	"Ask my friends if they understood something that I might not have understood. Exchange notes, like things that people will use to study for exams and everything like that. So it helped with having a support system, but also to help with the studies because you have someone there going through the same exact thing."

Influencing Factors Well-Being

Category	Code	Description	Example
Internal factors		Things about the participant more internally that affects	

Category	Code	Description	Example
		their well-being (in academia)	
	INT F: Achievement oriented	Being hardworking, goal-oriented and/or aiming for high grades	"It's really important, like I don't know this is like a belief that has been instilled in me by my parents for so long. It's just like okay, work is the most important thing. You need to work you need to earn you need to like just be a hardworking person. "
	INT F: Attitude / mindset	Participant's perception that mindset one adopts can shape one's perceptions, attitudes, and reactions to life events, and thus affects one's overall well-being	"I'm a bit of an over thinker, and then I'm having sometimes those kind of downward spirals, where I think, just because this doesn't work well right now, or I'm so stressed, how will I ever get out of this acute phase of stress? And then I'm also kind of thinking five steps ahead and then like in a negative direction. "
	INT F: Comparing self to others	Participant's tendency to compare themselves to other people	"Yeah, because I thought that everybody else had already their groups and their people and stuff, and then I was a bit like, I don't know, like, not the odd one out, but like, like, I did know some people, but I wasn't so close friends with them that I thought, okay, or I thought, okay, they're in person friends already, and I kind of need to join in and stuff, and in the end it worked. But also, like, at first I remember that was very intimidating as well."
	INT F: Confidence / self-efficacy	Participant's general sense of confidence and self-efficacy, their perception of their ability to succeed in a given situation	"But there was definitely a moment where I trusted myself and had self-confidence that I can actually do it. And that felt really good. And trusting then I had a lot of motivation for the next block and kind of carried that momentum. to actually staying on top this time and not pushing it to the end again."
	INT F: Mental health	Mental health (problems) including e.g., depression, ADHD.	I think, so, my ADHD diagnosis is something that made me insecure through, and still does, makes me insecure throughout life, because you kind of get a stamp, like, you're less capable than the rest of the people. So that really bothered me in the beginning, because you start a new thing, you start new studies, you start new things every year, even though it's one bachelor's. And then you're like, okay, so this is different for me than for other people, but what does that mean for me? Does that mean that I cannot do this, maybe? But I really got over that now, I think. I think that will start again when I do a master's.
	INT F: Openness to experience	Participant's openness to experience, learning and sense of curiosity	"Openness for experiences. Yeah, those experiences then contributed to the well-being. And yeah, being curious also. It's

Category	Code	Description	Example
External factors		External factors affecting well-being in academia	kind of the same, they both play into that, like having new experiences"
	EXT F: Online education	Participants perception that online education had a critical role in their well-being in academia	"And I think when I felt at least competent was my first year COVID, everything's online. You just feel like you're not even doing the study. So when you get a grade, you don't care because, um, it kind of feels like you don't deserve that grade."
	EXT F: Parents	Participants perception that parents had a critical role in their well-being in academia	"I just saved myself the money of renting and stayed at home which was the right decision in my opinion for me"
	EXT F: Weather	Participants' perception that weather influences their well-being in academia	"the weather that's definitely, also a very important factor, obviously"
	EXT F: Workload Outside Degree	Participants perception that a workload outside their psychology degree had a critical role in their well-being in academia	"Because I, for me, I'm working right now. Quite a lot, probably more than I should. But then doing Honours College, everything, that's not really possible."

BPN Fulfillment

Category	Code	Description	Example
Autonomy	BPN: AUTO: Fulfilled	Expression of an experience/situation within their studies in which their need for autonomy was met.	"Yeah, I think that especially now, like in my third and fourth year, where I could actually choose subjects and so on, that also played a big role because, um, I could do what I was interested in and I could also try out different subjects and so on. So I think I really enjoyed that. So then I think that was good."
	BPN: AUTO: Not fulfilled	Expression of an experience/situation within their studies in which their need for autonomy was not met, either being too low or too high.	"But I would have still preferred if I didn't have to repeat statistics this many times. And this whole thing caused like a study delay, and then it affected like the whole rest of my studies, and it made it quite chaotic. So I, yeah, I really didn't like that part. I would have liked to choose to study that life on myself if I really wanted it, right."

Category	Code	Description	Example
Competence	BPN: COMP: Fulfilled	Expression of an experience/situation within their studies in which their need for competence was met.	"My feeling of competence was quite high during the whole first year. And that was definitely getting more in the first weeks. Like when I started, I thought, okay, well, I'm not sure if I'm going to pass all these courses, and it's going to be so hard. And then, after the first exams, I thought, okay, well, I'm fine. Alright."
	BPN: COMP: Not fulfilled	Expression of an experience/situation within their studies in which their need for competence was not met.	"When you study for something, and then you feel okay, it was alright. But then you get the results back and it was just not right at all. So I think that was definitely one of my low points in terms of competence."
Relatedness	BPN: RELA: Fulfilled	Expression of an experience/situation within their studies in which their need for relatedness was met.	"I think it's not hard for me to fit in or to at least have the feeling that I belong, and I think that also makes me feel very safe and secure "
	BPN: RELA: Not Fulfilled	Expression of an experience/situation within their studies in which their need for relatedness was not met.	"I didn't have any bond within my academic skills mentor group in the first year, like none. I wouldn't even recognize over half of the people that were in there. Uh, even though it's really meant to be a learning community, right? Like you're meant to be kind of like a friend group, support each other. So it was really lonely."

Importance of BPN

Code	Description	Example
Importance autonomy	Personal evaluation of the need for autonomy in academia to be of high or low importance	"I would say it's quite important for me, just because that, again, makes it way more interesting for me if I have autonomy, that makes sense, if I don't have autonomy, I feel like a lot of times it feels forced and then I get bored by the tasks."
Importance competence	Personal evaluation of the need for competence in academia to be of high or low importance	"Relatedness I think, from a social aspect is very important to me, but from an academic life perspective, not so important, I don't really link it to the concept of my academic self."
Importance relatedness	Personal evaluation of the need for relatedness in academia to be of high or low importance	"It's something I think about a lot, because I compare myself a lot to other people and friends. And if I don't feel competent in my studies, I start spiraling."

Aspects Linked to Students' Identities

Code	Description	Example
IDENTIY	Aspects that are linked to students' identities	
ID: COMM HIGH	Showing a high commitment to plans and decisions	"Yeah. I mean, I would like to do therapy. So I would choose my courses according to that."
ID: COMM LOW	Showing a low commitment to plans and decisions or not having concrete plans	"But overall, I think I just chose it based on what sounds interesting in a moment. One course I chose just for the vibes because all of my friends took it"
ID: EXPL HIGH	Demonstrating a high level of curiosity and a strong tendency to explore in one's decisions and actions.	"I'm just here to kind of maximize the whole experience but also really, like, I took my time going to university (...) I'm here because I want to learn stuff here because I want to see what's out there and I think there's kind of motivation"
ID: EXPL LOW	Demonstrating a low level of curiosity and a weak tendency to explore in one's decisions and actions.	"Then I did forensics, sexology, CBT, also just because I wanted to really dive into it. And yeah, so I didn't even look at the other courses."
ID: Student	Identifying as a student and acknowledging that this conceptualization influences other aspects of their lives	"I have like a positive image of being a student. Like, it's not like I think being a student is a burden or something. So like, overall, I think it's cool learning experience. I think that does, like positively influence my academic well being."
ID: Belonging	feeling accepted, valued, and connected to a group or community	"And then like, giving the presentation about it felt like really good. And everyone was like, That was so good. And then I felt like okay, maybe this is something that I that I do like belong to also."
ID: Being student relates to WB	Explicitly mentioning how being a student influences well-being	"Being a student gives me a good feeling, a good place in life right now."
ID: Development	Expressing that one developed mentally	"hink coming from where I came from, anxious little first year girl, I'm just really proud of myself for everything that I've done."

Aspects Linked to Students' Values

Code	Description	Example
VALUE: Achievement	Valuing ambition and personal success by striving for competence and social recognition	"I feel like it's also a lot about proving people you're competent, which is a shame. Yeah, but it's qualities you need. In order to get this bachelor, masters to go do a PhD. It's really important."
VALUE: Hedonism	Prioritising enjoyment and instant gratification; demonstrating a tendency towards pleasure-seeking	"I would never say no to a social gathering, and also the first two years were hedonistic, so always like seeking fun and immediate pleasure over the future orientation and maybe like reaching a long term goal."
VALUE: Knowledge	Perceiving knowledge, learning, and acquiring skills as intrinsically motivating	"I love learning new things. I love, it's really exciting to me to come as close to a truth as possible, even though that also doesn't exist, you know? Being so close to the newest developments really excites me and motivates me. I like knowledge."
VALUE: Relationships	Perceiving belongingness, connections as important; being mindful of others' needs and personal impact on others	"I focus a lot on my boyfriend, because we plan to have a future together. So I try to, like consider how what I choose might affect him. Because if we plan on actually living together later, I don't know what but if we want to keep this relationship going, I can't be selfish in my decisions because somebody else also is going to be affected by it."
VALUE: Security	Inclination towards safer and more familiar options and/ or predetermined path and structure	"But like freedom is good in theory, but for me, I feel like it gives me too many options and it's so scary."
VALUE: Self-Direction	Placing a high importance on freedom, exploration, independent choices and actions	"I really don't like when I don't have the feeling that I can do what I want to do. I don't know, I really feel like I want to work to be able to do what I feel like, in a way that makes sense. Like, I want to have the freedom to choose my next step."
VALUE: Self-Transcendence	Striving for a positive change for something larger than just oneself, contributing to the enhancement of others' welfare	"I really need to like feel like just find something meaningful to my life that I can use. I dedicate myself to and will help people and help myself."
VALUE: Stimulation	Preference for novelty, challenge, as well as displaying openness to experience	"Openness for experiences. Yeah, those experiences then contributed to the well-being. And yeah, being curious also. It's kind of the same, they both play into that, like having new experiences and also the, I don't know how to call it, the need for change. It's something that's not going good. I'm like, okay, I need to change something. I want to change something."

Aspects Linked to Students' Resilience

Code	Description	Example
Motivational strategies	Students use bad grades as a motivator to do better	"When I get a bad grade, that's a big motivator for me...it's like a rush, almost like a dopamine rush"
Active problem solving	Students act on their willingness to change	"I think generally, um, when something bad happens, um, after like a moment of shock and of letting it out and so on, I'm also usually always already thinking, okay, what to do after that situation"
Emotional regulation	Students are not overly emotional about setbacks and remain calm	"Just having the faith that is going to be fine because it will be if you just keep working on it"

Factors Influencing Relatedness in Academia

Category	Code	Description	Example
RELA HIGH		Positively affecting relatedness.	
	RELA HIGH: Connection to others	Feeling connected to other people.	"I think it's really important to feel like you're not alone. I think if I felt very lonely, I don't know if I could have made it through this degree, because I think it's so important to have friends that you can just complain to, um, and that are going through the same thing as you."
	RELA HIGH Institution	This can be interpreted as the university, faculty or current year of study(i.e first, second year etc.)	"Like first, I just had the student assistant job for like a year and then beginning of last year I started the teaching job...but like I'm creating, creating and changing education like on a kind of daily basis with my jobs and I think that also really really helped me helped with my sense of belonging and also kind of forming that identity"
	RELA HIGH:Support network	Having a support network, such as family, friends, and/or a partner	"Well, I think it's important I think the support I received like that was important. And I do think that definitely, being here being like present physically at the university at the student life like going to the lectures in person, that's also in a sense, part of connectedness."
RELA LESS		Negatively affecting relatedness.	
	RELA LESS: (Lack of) Connection to others	Feel disconnected from other people.	"I think it's like almost impossible to do it without having people around you. And of course it's about psychology, but I want to compare

Category	Code	Description	Example
	RELA LESS: Exam period	The exam season	to [Censored second Bachelor study] because like, I feel a lot less related to the people there, they're younger." "When it's exam phase? Less, because I'm in the library a lot. And I know other students, they sometimes learn in groups, but I haven't found a good one yet. So I was always like studying for myself. Yeah, so on that period, I feel less."
	RELA LESS: Practical groups	Assigned groups in the practical courses for the bachelors	"...Everything when we had to, like contribute something ourselves, we pretty much had to do it individually. So there wasn't really a lot of relatedness. And it was just me and this paper that I had to write for my academic skills or something."
	RELA LESS: Unsure about future	Uncertainty about the future	"...Sometimes I felt like everyone was so sure of like, what they're doing in their study. And, like, already, like, a lot of people have plans, what they're going to do in their masters. And even after in this, like, very clear vision of what they want to do with the bachelor. And for me, I was always like, yeah, I don't really know."

Types of Connections in Academia Described by Participants

Connections	Description	Quote
Fellow students	Having peers to exchange ideas with, learn from, and study with. These peers can also be friends who support each other.	"It helped with having a support system, but also to help with the studies because you have someone there going through the same exact thing."
Teachers	Being able to approach, talk to the teachers, asking them questions about the content of courses.	"Also having connections to researchers, having connections to lecturers, feeling like I can approach them and ask questions."
Content of classes	Having a sense that the content of the class is interesting and meaningful, sparking a curiosity to learn more about the subject.	"The content, because when I read the content, meaning also, it's really interesting, and I liked it a lot.
University/faculty	Feeling like one belongs with the university, within the faculty and the university buildings.	"I am having the sense of belonging to my uni and having the sense of belonging to my faculty"

Influence of Relationships on Well-Being

Code	Description	Example
RELATIONSHIPS affect negatively	Relationships had a negative impact on their wellbeing	"I don't think anything crazy like even now, um, three weeks ago, actually, I broke up with my boyfriend, who I had, like, for a very longtime. So throughout my entire study period, so that kind of, you know, I feel like at the moment changes a lot all of the sudden. Um, but and that of course like I see that it puts a lot of stress on my body and my ability to focus and so on."
RELATIONSHIPS affect positively	Relationships had a positive impact on their wellbeing	"...I also have friends that are like, very determined, and I think that can also, like has definitely also motivated me to do more and like seeing how passionate they are about the stuff also made me like a bit more excited, I guess about the study. So yeah, I think it has helped me."
RELATIONSHIPS no affect	Relationships had no impact on their wellbeing	"Yeah. Not really, like it's all stable."

Responsibility of, Acts by, and Wishes for University Observed by Participants to Foster Student Well-Being

Category	Code	Description	Example
RESP UNI:		What is the university responsible for regarding student well-being?	
	RESP UNI: Basis of social safety	Providing an environment that prioritized social safety, limits discrimination and takes student well-being into account.	"I think a big factor is overall the university plays a big part in how they design a programme, how they, the professor's they hire the environment that you created. Is it more of a hostile environment? is it caring environment?"
	RESP UNI: Good quality of education	Providing good quality of education, including organization of courses as well as hiring capable teachers.	"The education needs to be good by capable people. I think that's sometimes difficult because not everybody within academia wants to teach. But I think good education gives students feel the competence, give students the motivation because they see a competent person, it's inspiring"
	RESP UNI: WB Resources	Providing well-being resources, including study advisors, student psychologists, and accommodations for disabilities.	"There should be student doctors, student psychologists, very important, mentors, very important, study advisors, those are base things that the university has to provide"

Category	Code	Description	Example
ACT UNI:		Acts by, or features of the university observed by participant to foster student well-being	
	ACT UNI: Autonomy	Fostering student autonomy	"So I think that is like the academic autonomy that the university does give, of course, more or less by default, by the way it's structured."
	ACT UNI: Competence	Fostering student competence	"With the competence, I mean, there's a lot of programs on like, external facility, study associations, all of that, that you can be a part of, and I think that can increase your competency. So I think there's a lot of university or more like slightly external organizations that are provided"
	ACT UNI: Relatedness	Fostering student relatedness	"I really do think that there is usually an attempt of the university to foster some more relatedness even within courses by encouraging course, group work. I like to create group projects within certain courses that people work together. It doesn't always work out to a very like to like the extent that many people want it to and not liking having to do all of the coursework, but I do think it's the attempt in this case, like on this sense that counts like and it is this an opportunity to meet new people like to get to know like other people, of course, that you maybe haven't known if you were like randomly assigned to like some small group project with Yeah, I think that's so think they're doing a lot."
	ACT UNI: Structure courses	Features of the structure or content of specific courses	"Because we did have like a lot of like, we did have some mentors that throughout the year, I think the first year was a lot of mentors, like for academic skills for the research part, for statistics"
	ACT UNI: Structure curriculum (large scale)	Features of the curriculum at a larger scale, degree wide	"Well, the fact that you get to choose first of all your degree that you've gone for, and then that you have some, ok here in the first two years less but in the third year more choice of subjects, electives. And that kind of stuff."
	ACT UNI: WB resources	Well-being resources that the university provides, including study advisors and student psychologists among others	"I mean, like I just said, they have therapists. I really liked the fact that they offer study advisors. Yeah. Cuz with the whole study delay thing I really appreciated having somebody to go to who could help me figure out what steps I have to take next, for me to actually be able to do what I want to do"
WISH UNI:		Aspects the participant thinks the university could improve on to foster student well-being	

Category	Code	Description	Example
	WISH UNI: Autonomy	Changes that would improve student autonomy	"Giving more freedom with like, projects and choosing courses earlier, or just, yeah, project stuff. I think that would help me a lot to feel happier in the studies."
	WISH UNI: Communication	Changes regarding the communication with / from the university to students	"but they should have had clear rules for every course, the same thing, because this was just confusing. And it was almost like, they didn't even explain why things change sometimes."
	WISH UNI: Competence	Changes that would improve student competence	"I remember within statistics three, they were like, if you failed two, you cannot pass, which is bullshit, I think, because there are so many reasons why students fail courses, which is, I think, almost most of the time, not related to if they were capable to do the course. I kind of believe if you get in university, you're capable. Maybe that's naive, I don't know. But I think saying that takes away a lot of feeling of competence of a student"
	WISH UNI: Assessment and grading	Changes regarding the mode of assessment, types of exams, grading and feedback on assignments.	"I don't think realistically, but just in some utopian thing, like, get rid of the multiple choice tests, just do essays, or open questions."
	WISH UNI: Financial	Changes that addressed students' financial situations.	"Increasing the number of student jobs because a lot of students need jobs, and a lot of students will be fit to do the job."
	WISH UNI: Pressure	Changes regarding the pressure on students, including workload and course prerequisites among others	"When I compare what my friends say, and what younger students say, there are a few classes that repeatedly share the same sentiment of this was way too much. It's too much reading and too many lectures. And I just don't understand but you don't get any extra help."
	WISH UNI: Relatedness	Changes that would improve student relatedness to each other and from teacher to student	"I would prefer if there was a bit more personal interaction, at least possible with not just the other students because that is possible but also to like the staff"
	WISH UNI: Structure courses	Changes regarding the structure of or setup within courses.	"I would say that some of the courses can probably be restructured. But I don't know if that will directly influence student wellbeing. In terms of being a bit less stressful, less workload, but still teaching somewhat of the same amount of material. I think there are probably ways to do that, which is obviously hard but not undoable."
	WISH UNI: Structure curriculum	Changes regarding the curriculum on a larger scale, including the length of study blocks among others.	"to do it like in the biology bachelor where you're like, have a course for a few weeks and then have an exam for that one course. That you're doing it one at a time because that would help me a lot personally, so so much to just focus on one thing at a time and I

Category	Code	Description	Example
	WISH UNI: Understanding	Changes regarding the university's (and teacher's) understanding and empathy towards students, including force majeure circumstances, mental health, and feedback on courses.	would have like, it's so straightforward, and it makes so much more sense that I didn't just have the exam and move on" "They don't care about the people with chronic illness, who can't show up to class, there's courses who require your mandatory participation, and just like one time, you can miss it, and they see like, Okay, if someone died, or if you're ill, but like, they, again, don't care about people, with chronic illness, no matter if it's mental or physical."
	WISH UNI: WB resources	Changes regarding the well-being resources that our university offers, including extra resources and the availability of those resources	"But I think, for example, it takes a while to get into the study advisors here. I think that's terrible. I think you should be able to make an appointment very quickly because it's already very anxiety-provoking to go there and that you have to wait for weeks."

Responsibility of, Acts by, and Wishes for the University Observed by Participants to Foster Student Well-Being

Category	Code	Description	Example
ACT OWN		Acts taken by the participant themselves to foster their student well-being.	
	ACT OWN AUTO	Fostering own autonomy.	"I kind of feel like I made a decision in my third year. I started in other studies, and I spread out my third year a little bit because I'm doing my thesis in my fourth year, which gave me even more autonomy and time to decide."
	ACT OWN COMP	Fostering own competence.	"I feel achieved or feel competent when I [...] present myself in meetings in a professional way, or the sessions [that I am teaching] go well."

Category	Code	Description	Example
	ACT OWN RELA	Fostering own relatedness.	"If I see somebody in a lecture and I think, oh, they seem cool, I actively try to talk to them."
	ACT OWN: Self-compassion	Treating yourself with kindness, understanding and support.	"Over the years, I've grown to accept the fact that bad things can happen. I have bad reactions to the bad things. But that is just human."
	ACT OWN: Checking in on yourself	Taking a moment to assess ones current mental, physical and emotional state.	"I think I'm good at detecting when I'm not doing so well, like just from a well being perspective. Um, and then usually also realize, okay, I need to find a solution for this. I need to calm down and to prioritize my well-being."
	ACT OWN: Taking responsibility	Taking responsibility for the outcomes of ones actions.	"I'm like, okay, I need to change something. I want to change something. This can't continue like this. Like, I'm having like a down phase. I can't get up to study. Okay, what do I need to change?"
	ACT OWN: Therapy	Seeking out professional psychological help.	"I did go to therapy at some point. So I did get a package of knowledge that I can use. And I know that somehow I have to do those things to be okay."
WISH OWN		Aspects the participant thinks they themselves could improve on to foster their student well-being.	
	WISH OWN: RELA	Action to increase sense of relatedness that the student wishes to take in the future	"Finding a study group would be something that I want to do."
	WISH OWN: COMP	Action to increase sense of competence that the student wishes to take in the future	"I would just like to stop the comparison, because I am my own person. And my success is independent of how well [my friends] do. Even if they do better, I still do good."
	WISH OWN: AUTO	Action to increase sense of autonomy that the student wishes to take in the future	"I want to get back in touch with my hobbies, just to stay anchored in my identity and develop it a bit more. I also need to put effort into something else [than school]."
	WISH OWN: Self-compassion	Wishing to be more compassionate towards oneself in the future	"I feel like there is still room for more acceptance towards my grades."
	Wish OWN: Work/Life balance	Wishing to have more balanced life in the future	"I am always saying that I want to have weekends off, I think that is a big thing."