

University of Groningen

Well-being of students in higher education

Douwes, Rynke; Metselaar, Janneke; Pijnenborg, Gerdina Hendrika Maria; Boonstra, Nynke

Published in:
 Cogent Education

DOI:
[10.1080/2331186X.2023.2190697](https://doi.org/10.1080/2331186X.2023.2190697)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
 Publisher's PDF, also known as Version of record

Publication date:
 2023

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Douwes, R., Metselaar, J., Pijnenborg, G. H. M., & Boonstra, N. (2023). Well-being of students in higher education: The importance of a student perspective. *Cogent Education*, 10(1), [2190697].
<https://doi.org/10.1080/2331186X.2023.2190697>

Copyright

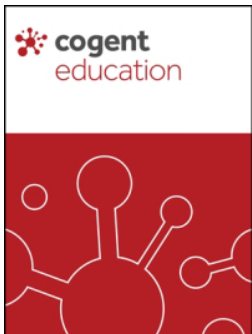
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.



Well-being of students in higher education: The importance of a student perspective

Rynke Douwes, Janneke Metselaar, Gerdina Hendrika Maria Pijnenborg & Nynke Boonstra

To cite this article: Rynke Douwes, Janneke Metselaar, Gerdina Hendrika Maria Pijnenborg & Nynke Boonstra (2023) Well-being of students in higher education: The importance of a student perspective, Cogent Education, 10:1, 2190697, DOI: [10.1080/2331186X.2023.2190697](https://doi.org/10.1080/2331186X.2023.2190697)

To link to this article: <https://doi.org/10.1080/2331186X.2023.2190697>



© 2023 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 17 Mar 2023.



Submit your article to this journal [↗](#)



Article views: 255



View related articles [↗](#)



View Crossmark data [↗](#)



EDUCATIONAL PSYCHOLOGY & COUNSELLING | RESEARCH ARTICLE

Well-being of students in higher education: The importance of a student perspective

Rynke Douwes^{1*}, Janneke Metselaar¹, Gerdina Hendrika Maria Pijnenborg² and Nynke Boonstra^{1,3}

Received: 04 November 2022
Accepted: 09 March 2023

*Corresponding author: Rynke Douwes, Department of Social Studies and Healthcare, NHL Stenden University of Applied Sciences, Leeuwarden, Rengerslaan 10, 8917 DD LEEUWARDEN, The Netherlands
E-mail: rynke.douwes@nhlstenden.com

Reviewing editor:
Marcin Gierczyk, Institute of Pedagogy, University of Silesia: Uniwersytet Śląski w Katowicach, Katowice, Poland

Additional information is available at the end of the article

Abstract: Recently, there has been an increased interest in the well-being of students in higher education. Despite the widespread consensus on the importance of student well-being, a clear definition continues to be lacking. This study qualitatively examined the student perspective on the topic through semi-structured interviews at a university of applied sciences in the Netherlands ($n = 27$). A major recurring theme was well-being as a balance in the interplay between efforts directed towards studies and life beyond studies. This method of perceiving well-being deviates from theoretical definitions. Students mentioned various factors that influence their well-being. Responses ranged from personal and university related factors to external factors beyond their educational institution. This study contributes to the body of knowledge on the well-being of students in higher education and provides suggestions for educational institutions, such as incorporating a holistic perspective on students and learning; and focus points for the development of policies and practices.

Subjects: Study of Higher Education; Educational Research; School Psychology

Keywords: well-being; students; higher education; student perspective; General Welfare; Research Institutions

1. Introduction

The well-being of students in higher education is under attention. Students' age in full time higher education generally ranges between 17–24 years. This is also the critical age for the onset of psychological problems (Lipson & Eisenberg, 2018). Studies report that a substantial number of students in higher education are dealing with well-being issues such as psychological and emotional distress, feelings of anxiety and depression, and an increased risk of burnout (Backhaus et al., 2020; Baik et al., 2019; Dopmeijer, 2021). Such numbers, combined with research indicating

ABOUT THE AUTHORS

Rynke Douwes is a member of the research group on care and welfare, Child and Youth Care at NHL Stenden University of Applied Sciences, Leeuwarden, the Netherlands. She has a special interest in the mental health of students in higher education. ORCID ID: 0000-0002-6262-6565

Janneke Metselaar is Professor, Child and Youth Care, at NHL Stenden University of Applied Sciences. Her research focuses primarily on the quality of youth services (prevention, child and youth care, inclusive education) and effectiveness of interventions. ORCID ID: 0000-0001-7137-0306

Gerdina Hendrika Maria Pijnenborg is Professor at the Department of Clinical and Developmental Neuropsychology at the University of Groningen. She is specialised in cognitive impairments and psychotic disorders. ORCID ID: 0000-0002-1461-0649

Nynke Boonstra is Professor of Nursing in Mental Health at University Medical Center Utrecht and Professor, Care and Innovation in Psychiatry at NHL Stenden University of Applied Sciences. The main topic of her research is prevention, resilience, and recovery of psychiatric disorders in young people.

that well-being plays an important role in students' academic performance and drop-out rates (Lipson & Eisenberg, 2018), lead to increasing attention on student well-being in higher education. The COVID-19 pandemic and its consequences, such as social distancing, lockdowns, and online education, have further boosted this attention because of the negative impact on the well-being of students in higher education (Doolan, 2021).

A holistic focus on the development of the student, rather than simply focusing on the cognitive development of a student as measured by educational achievement, has become significant in policy making in higher education (Centre for Education Statistics and Evaluation CESE, 2015). Under this holistic perspective, educational institutions are recognised to play a key role in supporting and promoting the well-being of their students.

Historically, there are two main approaches to well-being in psychology. One is primarily related to happiness (hedonic well-being) and another is linked to the development of human potential (eudemonic well-being) (Diener et al., 1999; Ryan & Deci, 2001). The hedonic perspective has been applied in studies on affect and satisfaction with life (Ryan & Deci, 2001). The eudemonic perspective on well-being includes dimensions of positive functioning, which are experienced when one realises the human potential in terms of psychological well-being (e.g., autonomy and personal growth) (Magyar & Keyes, 2019; Ryan & Deci, 2001; Ryff & Keyes, 1995) and social well-being (e.g. social integration and social contribution; Keyes, 1998). In general, well-being is considered a multifaceted construct, comprising certain basic needs which need to be satisfied. Well-being nowadays is often approached from a positive perspective. This view entails well-being as more than the mere absences of disease, and also focuses on the flourishing or optimal functioning of people (Gable & Haidt, 2005). This is also reflected in the two continua model of mental health and well-being (Westerhof & Keyes, 2010), which holds that mental illness and mental health are related but distinct dimensions. From this perspective, there is optimal mental health and well-being when someone has no or only minimal psychological complaints and also functions positively.

Despite significant attention to the well-being of students in educational settings, there is limited consensus about how student well-being should be defined. Similar to general well-being, well-being of students in higher education is defined in various ways. For instance, one definition is "the degree to which a student is functioning effectively in the school community" (Fraillon, 2004, p24). Others define student well-being as "a sustainable state of positive mood and attitude, resilience, and satisfaction with self, relationships and experiences at school" (Noble et al., 2008, p21). A third definition used in literature is "students' well-being in school is an emotional experience characterised by the dominance of positive feelings and cognitions towards school, persons in school and the school context in comparison to negative feelings and cognitions towards school life. Well-being in school represents subjective, emotional and cognitive evaluations of school reality and can be seen as a misbalance of positive and negative aspects in favour of positive aspects' (Hascher, 2008, p86). In these definitions, components of emotional, psychological, social, and subjective well-being as used in definitions of general well-being are recognisable. Moreover, a positive health approach is used across definitions of student well-being, with the use of terms such as "a sustainable state of positive mood and attitude" (Noble et al., 2008), "effective functioning" (Fraillon, 2004), and a "misbalance of positive and negative aspects in favour of positive aspects" (Hascher, 2008). A similarity in definitions of student well-being is that they focus on well-being in the school context and therefore can be considered as a more focused version of definitions of general well-being. The various methods of defining student well-being complicate the assessment of well-being, as well as the development of interventions. As various theories and measures are applied, outcomes are difficult to interpret and compare (Soutter et al., 2014). Furthermore, it is problematic to develop interventions aimed at enhancing student well-being without a clear understanding of the concept. Moreover, determining the role of higher education institutions on the matter is difficult without a clear definition.

Studies from various countries have indicated that well-being and mental health of students appear to be under pressure (Backhaus et al., 2020; Dopmeijer et al., 2021). In literature, focus is often on mental health in particular and to a lesser extent on other aspects of well-being or general well-being. Certain studies reveal that students report more mental disorders compared with their non-studying peers (Kovess-Masfety et al., 2016), or the general population (Stallman, 2010) while other studies do not find such a difference (van der Velden et al., 2019). Multiple studies report deterioration in levels of well-being and mental health in student populations, particularly since the outbreak of the COVID-19 pandemic (Alkureishi et al., 2022; Chen et al., 2022). High performance pressure and performance drive are often used to explain lower levels of well-being of students in higher education (Dopmeijer et al., 2021), with specific consequences of the COVID-19 pandemic as additional explanations (Doolan, 2021; Mathews et al., 2022; Petillion & McNeil, 2020). It is also known that university students often do not seek help from formal sources of support within or outside the educational context (Eisenberg et al., 2012; Hunt & Eisenberg, 2010; Kearns et al., 2015). Various approaches and services targeting the well-being and mental health of students exist, with evidence indicating that student well-being can be enhanced by an integral approach that focuses on academic integration, social integration, and skill-training programmes (e.g. coping) (see for instance Conley et al., 2015, 2017; Deunk et al., 2021). Despite the existing body of research, relatively limited information is available regarding student perspectives on their well-being and factors influencing it. This is surprising, as students themselves can be considered experts in the student experience (Baik et al., 2019). Determining how emerging conceptualisations of student well-being relate to and resonate with students and their educational experiences is important, since such conceptualisations are often the foundation on which policies and practices are developed. Furthermore, studying student well-being from the student perspective may provide more practical insight into defining and stimulating factors that increase well-being in the critical developmental period of the students (Hunt & Eisenberg, 2010).

Therefore, this study aims to examine the a) definition and b) influencing factors of well-being experienced by students at a university of applied science.

2. Method

A qualitative study was conducted at a university of applied sciences in Northern Netherlands. This university offers approximately 150 different associate degrees, bachelor's, and master's programmes from 14 different academies, ranging from teacher training and social studies to business, economics, and hospitality management. In total, over 24,000 students study at this institution.

Data were collected through in-depth and open-ended interviews between May and November 2020. Data collection happened to coincide with the beginning of the COVID-19 pandemic. Consequently, all interviews were held online by means of a video call which both the interviewer and interviewee attended from their respective locations. The interviews were conducted by a well-trained female interviewer (RD), also a lecturer at the above university. This offered the opportunity to understand information provided by students regarding their experiences, which made it possible to ask more in-depth questions.

Students were informed about the study by a message on the intranet, which is available to students of all 14 academies. The purpose of the study was explained and a link to a participation form was provided in the message. Simultaneously, the Heads of School of all the academies were requested to advertise the same information and opportunity to participate, among students of their academies. A total of 113 students signed up for an interview, after which purposive sampling was applied to select cases. This non-probability sampling technique was selected because the study aimed to achieve a deeper understanding (Etikan et al., 2016). Certain selection criteria were set to select information rich cases that would help to obtain that understanding. For the selection of participants from those who signed up, the following criteria were used: participants had to be a fulltime student and should have had experience of self-reported well-being problem(s) during

their studies. Furthermore, the sample was selected in such a manner that as many academies as possible were properly represented; there was diversity in study year (varying from first year to >4 years, where study programmes generally have a duration of four years), as well as gender. This was adopted as examining the topic from different angles would deepen the understanding. For those who signed up, an appointment for the interview was set by e-mail. Non-participation occurred because of non-response to the invitation ($n = 8$) and no-shows ($n = 2$). Data was collected until saturation, which in our study implies that no new information was obtained through the interviews. In total, 27 students were interviewed. The interviews lasted from 28 to 52 minutes, with an average of 34 minutes.

The participants and interviewer were not known to each other beforehand. Written consent was obtained prior to the interview and all interviews were video recorded. The (pilot tested) interview guide was semi-structured to provide structure as well as flexibility and comprised questions on two topics related to the well-being of students: 1. definition of student well-being; 2. factors influencing student well-being. The interview began with an open-ended question on how students experienced their studies and life at their university. Other questions that were asked are, for instance, “State what student well-being in the context of the university means to you?”, “How would you describe a student who is doing well?”, and “Which experiences contribute to your sense of well-being?” Along with the interview, a limited amount of background information was collected (age, year of study, programme of study, and any well-being issues students were or had been struggling with).

2.1. Analysis

Thematic analysis was applied to interpret the data, as it best fitted with the purpose of finding themes in student opinions and experiences (Saldaña, 2013). After a verbatim transcription of the data, a member check was conducted to validate and review the data. Thereafter, a check on consistent coding was performed by independent, blind parallel coding. Three researchers (RD, JM and NB) coded the transcription of one interview, after which the codes were reviewed for consistency, overlap, and discrepancies to enhance reliability. Subsequently, one researcher (RD) coded all the remaining interviews using ATLAS.ti. Initially, it was performed on a line-by-line basis, using an open coding approach to generate initial concepts. These codes were short words or phrases that were more general than the coded text segment itself, however, those that remain close to the original text (Saldaña, 2013). Here, it must be noted that it was possible to apply more than one code to a passage. For instance, the sentence “*What I find important is to have easy access to teachers, so that they know me and my needs. Additionally, when I have questions, I feel comfortable to ask them*”, (R25) was coded with “connection” and “availability”. Thereafter, related codes were assembled into meaningful categories, based on both the data as well as concepts derived from literature. For instance, the codes “connection”, “accessibility”, and “informal contact” together form the category “good relationship”. Subsequently, these categories were formalized into themes. For instance, the category “good relationship” is part of the theme “impacting factor: teacher”. As further example, the coding tree of all the themes of the first part of the research question (definition of well-being) is presented in Table 1. In the final phase of coding, the set was used to verify the data set again, to check whether any initial codes had been missed or required adjustment. Finally, a clarity assessment of the categories and themes as well as data allocation check per theme was conducted by two other researchers (JM and NB). Consistency and discrepancies were discussed until an agreement was reached.

3. Results

3.1. Sample characteristics

Table 2 illustrates respondent characteristics and self-reported well-being issue(s). Five male students, twenty-one female students, and one non-binary student, all aged between 17–24 years, participated. Respondents came from nine different academies. Of this group, eight students were in their first year, six in their second year, three in their third year, eight in their fourth year, and two students studied longer than four years. All applicants were enrolled in a bachelor’s programme.

Table 1. Coding tree for student perspectives on the definition of student well-being

Theme	Categories	Codes
Definition student well-being	Subjective well-being	Feeling well; doing well; happy
	Balance between life domains	Interaction of personal problems and studies; maintaining boundaries; balance social life and studies; interaction family issues and studies; financial situation; interaction job and studies
	Effort-achievement ratio	Interaction of achievements and stress levels; energy levels; interaction achievements and study delay; be an easy learner; interaction effort and grades
	Stress levels	No stress; cope with stress; adding up of different kinds of stress; stress to perform well; panic; experiencing pressure
	Resilience	Cope with adversity; acknowledge adversity as part of life
	Combination of well-being “types”	Function well and be happy; general well-being; mental, physical and social well-being
	Support facilities in educational context	Available support when problems, student training, not being left alone, additional features for exams

3.2. Defining student well-being

In response to the question what student well-being meant to them, students often mentioned aspects impacting their well-being or indicated that they were unable to answer that question. As the interview progressed, their opinion on this subject often became clearer. For instance, a student shared her story about certain life events that led to fatigue and performance anxiety. At first, she defined student well-being as feeling well: *“Hmm, difficult question to answer what student well-being means to me. I suppose it’s about feeling well”* (R6), which she elaborated on during the interview with a defining term as stress:

It is also about how you deal with phases when events or activities do not happen according to us. For instance, last year I went through a phase in which I completely had it and eh ... I was not enjoying studying at all. My mind was only focused on achieving higher grades and not at all on enjoying my studies. It was all about studying, studying, studying...

Students would characterise well-being as a broad term. Furthermore, well-being stood out to refer to balancing between studies, non-study related activities, and relationships—referring to students’ work, social, and private life. As a student mentioned, *“it is about balancing your studies, private life, and work; that something is not wrong in any of those domains”* (R13). Another student mentioned in this respect:

“I find it important to have my act together; that I take my exams and resits, that I spend sufficient time to study but also that I spend sufficient time on myself because that is something I easily overlook. I notice how little time students spend on themselves although that is very important for well-being. So yes, spend sufficient time studying but sometimes also say to yourself: not today. Sometimes just decide to sit on your couch and watch a television-series instead of only spending time studying” (R1).

Another theme, indicating another kind of balance, was well-being of students as an effort-achievement ratio. As a student stated, *“ ... getting your credits, being able to do your work in*

Table 2. Respondent characteristics

Respondent	Academy	Gender	Age	Year of study	Self-reported well-being issue
1	Hotel Management School	Female	20–22	3	Inadequate support from school
2	Hotel Management School	Female	20–22	4	Anxiety (disorder), family issues, physical problem
3	Technology and Innovation	Non-binary	<20	1	(Symptoms of) depression, gender dysphoria
4	Technology and Innovation	Female	<20	1	Fatigue, family issues
5	Technology and Innovation	Female	Undisclosed	2	Physical problem, (side effects of) medication
6	Technology and Innovation	Female	Undisclosed	2	Fatigue, performance anxiety
7	Technology and Innovation	Female	23–25	2	Stress, planning difficulties, study pressure
8	Technology and Innovation	Female	20–22	1	(Symptoms of) depression, performance anxiety, (side effects of) medication
9	Social Studies	Female	23–25	2	Stress, physical problem
10	Social Studies	Female	20–22	1	Family issues, planning difficulties, getting used to studying
11	Social Studies	Female	20–22	1	Fatigue, anxiety (disorder), getting used to studying
12	Social Studies	Female	23–25	4	Anxiety (disorder), family issues, physical problem, loneliness
13	Maritime Institute	Female	20–22	3	Stress, anxiety (disorder), family issues, perfectionism
14	Maritime Institute	Male	20–22	1	Loneliness, motivation
15	Maritime Institute	Male	<20	1	Stress, fatigue, planning difficulties
16	Int. Business Administration	Female	Undisclosed	2	Fatigue, (symptoms of) depression, physical problem
17	Int. Business Administration	Female	23–25	4	Family issues, getting used to studying, AD(H)D, drug use
18	Primary education	Female	23–25	4	Stress, fatigue

(Continued)

Respondent	Academy	Gender	Age	Year of study	Self-reported well-being issue
19	Primary education	Male	>25	>4 years	Physical problem, performance anxiety
20	Primary education	Female	23–25	4	(Symptoms of) depression, AD(H)D, life phase related problems
21	Healthcare	Female	23–25	3	Stress, planning difficulties
22	Healthcare	Male	23–25	4	Stress, planning difficulties, AD(H)D, life phase related problems
23	Healthcare	Female	23–25	2	Fatigue
24	Economics and Logistics	Female	23–25	>4 years	Stress, (symptoms of) depression, planning difficulties, performance anxiety, inadequate support from school
25	Economics and Logistics	Male	Undisclosed	4	Fatigue, anxiety (disorder), family issues
26	Commerce and International Business	Female	20–22	1	Stress, fatigue, anxiety (disorder), perfectionism
27	Communication and Creative Business	Female	23–25	4	Anxiety (disorder), (side effects of) medication, ASS

such a way that it does not ask too much mentally. Because ... I know that I could have done more, but then I would have been less ok now” (R3). This effort-achievement ratio was related to stress levels by students, for instance for a student who shared that she experienced much stress when she exercised all her efforts into achieving sufficient study credits to be able to continue her study, however, receiving an insufficient grade in the end:

“It was all adding up for me at one point. I did not pass my exams which caused stress because I needed enough credits to get a positive binding recommendation to study. Hence, that was continuously a cause of stress for me. Really decisive for my well-being was that in the end, while I dropped everything to fully focus on my studies, I simply did not make it. I became angry at myself and somewhat desperate, because I had no idea of how I could do everything differently” (R7).

Stress was also mentioned as a defining theme itself, as well as resilience. This theme referred to being able to cope with adversity and less rosy periods. For example, according to one student, some problems are part of life and it is no use denying them but one should rather focus on being able to cope with them:

“Everyone encounters problems. Some are born with them and some run into them during their lives, unfortunately. I would not completely deny problems ... sometimes they are simply

there. If you deal well or receive appropriate help for them then it should be ok. (...) I believe the ability to bounce back is important simply because there are certain problems you have to deal with. Certain periods in your studies are simply going to be stressful or sometimes you run into something unexpected that is not in your planning. In those cases you need to be able to adapt” (R22).

For some students, student well-being was mainly about mental health or about subjective well-being, referred to as “feeling well”: “I believe it means that someone is doing well, that he or she feels good” (R12). Students also referred to their well-being as a combination of well-being “types” (mental, physical, and social well-being). For some respondents, student well-being referred to support (facilities) offered by the university of applied sciences: “to me, student well-being refers to a student feeling well and the possibility to address problems and help being available at university in case of problems” (R16). Students mentioned that their level of well-being fluctuates in time and that their well-being had a significant impact on their studies: “I know from my own experience and from my friends” that when you are not feeling well, the first thing in which that can be noticed is studies because of the amount of energy it requires’ (R3).

3.3. Influencing factors

In this part of the interview, students were presented with an open-ended question as to what or who impacted their well-being. Different factors affecting student well-being as mentioned by students are: the self, factors relating to the university of applied sciences (peers, tutors, teachers, studies, and university), and factors beyond the university of applied sciences (friends and family). An overview of impacting factors is presented in Table 3. Aspects of the self-excepted, for all factors account that impacts had been described in such a manner in the results section that they concern a positive impact on well-being. However, responses indicate that not all students had positive experiences.

Personal factors that impact student well-being can be protective or risky to well-being. Self-regulation as a protective impacting factor was described by students as the ability to select thoughts, behaviours, or feelings to achieve certain goals:

I have learned, for instance, to blow the whistle earlier than I normally would have. Like saying, “hey, I’m doing not so well at the moment. Can we make the agreement that I show my work regularly to be sure I stay on top of it” (R22).

Another personal factor was difficulty in planning, which negatively impacted student well-being. Few of them found it difficult to begin on time or they tended to postpone assignments because of a lack of interest in the subject. Moreover, perfectionism was mentioned as a negative impacting factor, although some mentioned they had learned to deal with it: “Owing to therapy I have learned to ask myself the question: is this realistic or not. The answer I give myself is: no, this is not realistic; and then I feel calm again” (R13). Finally, study achievements (e.g. passing exams) were experienced as an impacting factor in both positive (satisfactory grades, passing exams) and negative manner (in case of insufficient grades).

As regards peers, students distinguished fellow students from friends outside the university of applied sciences. Both friends as well as fellow students were mentioned as an influencing factor on well-being (e.g. as means of enjoyment and sharing problems).

My friends are important to me as we have much in common and I can speak to them about anything that goes wrong or well in my study group. We go shopping together, chat, go to movies, and have drinks together. They make me feel as though I am in a world different from simply school and my study group. We talk about everything without focussing on school. They help me escape the cycle where everything is about school, school, school (R1).

Table 3. Factors impacting student well-being

Level	Aspects
Student	Self-regulation, perfectionism, motivation levels, ability to plan, study achievements
Fellow students	Practical support, exchange ideas, enjoyment, community atmosphere
Tutor	<p>Conditions: Good relationship (trustworthiness, accessibility) and time (availability), have a close link with the educational program</p> <p>Attitude and behaviour: Empathy (listening, interest, understanding and recognition), guidance, personal attention</p>
Teacher	<p>Conditions: Good relationship (accessibility, informal contact, community atmosphere) and time (availability)</p> <p>Attitude and behaviour: Empathy (reassurance, understanding and recognition), personal attention, teaching skills, clear communication about expectations, feedback style</p>
Study	Clear communication (about study program), flexibility, workload, scale of education
University of applied sciences	Support facilities, community atmosphere
Peers outside university of applied sciences	Enjoyment, exchange ideas, understanding and recognition
Family	Support, exchange ideas, enjoyment

Furthermore, fellow students were considered important for contributing to an atmosphere in which one feels part of a community: *“When I visit the university and if the atmosphere feels like: we are going to manage this together, then I have a good day”* (R11). Friends outside the university were also mentioned for understanding and recognition.

Respondents named a variety of aspects concerning their tutor and teachers in relation to their well-being. In this respect, a “tutor” at the university refers to a teacher who operates as an academic career advisor for the student. A “teacher” refers to a person who teaches in courses. In particular, tutors were considered important for almost all the students, as they believe that within the educational setting, the tutor is the closest to them and therefore they believe for sharing, the barrier is lowest with them.

I believe my study coach is very important. That has always been the person I would like to approach because of their proximity to my studies. I also believe they know you well and can therefore, support you adequately (R12).

Within themes, a distinction appeared between conditions that were considered important with regard to tutors and those with regard to teachers, as well as desired behaviour. Respondents reported attitudes and behaviours of tutors and teachers to impact their well-being, in comparable though different manners. However, an empathic attitude was mentioned for both.

I believe I would have appreciated ... after my mother passed away it was about a week before I returned to school. It really felt odd, because so much has happened in your life and when you return to your class most of them do not pay attention to what happened; perhaps not strange for peers, as most of them did not know. Nonetheless, teachers did, however, most classes that I attended were as they always were. They did not even ask about it or wish me strength. They simply did not think about it (...), not until someone mentioned it, after which they responded with, “Oh ... Yeah ...”. That was really weird. My tutor also did not approach me although he knew I would be back at school (R19).

Tutors were mentioned for guidance and support. Conditions that were deemed important for tutors were a comfortable relationship (in which trustworthiness and accessibility were mentioned) and time (in terms of availability). “My tutor was mostly unavailable. If I sent a message on her telephone, she simply did not respond” (R10). Interviews were held during the first lockdown during the COVID-19 pandemic and availability was often mentioned in a negative manner: “Normally we receive a reply within a week. Now it could take more than three weeks before we received a reply, in which she responds with ‘oh, I totally forgot ... ’” (R12). Furthermore, tutors were considered important owing to their close link to the educational programme. Important features mentioned in relation to teachers were also comfortable relationship (accessibility, informal contact, and contributing to a community-like atmosphere) and time (availability).

I like the teachers. I believe I learn much from them, not so much through their classes, but because of the contact I have with them. I actively seek those contacts myself, to have a coffee with or talk to them in a different setting (R2).

Furthermore, teachers were associated with their teaching skills, clear communication, and feedback style. Feedback style was mentioned in relation to courses and assignments as well as life events of students.

I had some understanding of what was happening. Some teachers simply told me I was stupid, that it was my fault; it was too difficult for me and that maybe I had to consider quitting. At one point, one teacher said, “<Student name> is not going to quit, we will think of a solution together”. The way she treated me lifted my spirits. I began introspecting because of this and realized I was not stupid, as I had achieved almost all my credits in the first year and that my circumstances were responsible for the situation. At one point, one or two teachers who believed I had potential began supporting me. That has made a huge difference for me (R17).

Studies related factors, clear communication, workload, scale of education, and flexibility (of learning route and pace) impact student well-being.

When you have mental health issues, it is difficult to study; sometimes even impossible because of the high pressure. There should be more flexibility for students who suffer from financial or psychological problems. I believe that one rule being applied to all, is not working in the world how it is nowadays (R23).

Small-scale education (having few students) was preferred and would be directly linked to the amount of personal attention, community atmosphere, and availability of teachers: “what really satisfies me is that we are at a very small location, where teachers know all the students. Therefore, we are a very close community” (R21). At the university level, important impacts on student well-being were a community-like atmosphere and the availability of support facilities. In terms of family-related matters, stability in the family was considered an important factor, as well as the possibility to share problems and seek support (e.g. in finding balance or in practical support) and for undertaking social activities.

4. Discussion

Well-being of students in higher education is an important topic in both educational practice and research. In this study, the focal point was on the student perspective on well-being in higher education, specifically regarding: a) how they define well-being and b) what they consider as influencing factors.

Defining themes mentioned were related to balance (between contexts and also between effort and achievement), dimensions of well-being (such as social, emotional, and mental well-being), resilience, stress, and the support facilities at the university of applied sciences. The major recurring theme was well-being as a balance in the interplay between efforts directed

towards studies and life beyond studies. The perception of well-being as a balance is similar to perspective of general well-being (Dodge et al., 2012). However, in literature, the focus is on balance between (psychological, social, and physical) resources and challenges. The balance mentioned by the students would focus more on balancing different aspects of their lives or social contexts. This apparent importance of balancing social contexts resembles aspects of a systemic perspective on well-being, such as Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979). In this perspective, individuals are considered embedded within systems. In the educational context, the ecological systems theory has for instance been used to understand experiences of university students' experiences (McLinden, 2017) and well-being of doctoral students (Jackman et al., 2022). The theory proposes that individuals interact with four levels of their environment which impact their general development and well-being. Microsystem, the first level, refers to the activities and interpersonal relationships experienced by an individual within their immediate environment (e.g. educational context, family, and friends). Mesosystem, the second level, constitutes the interrelations and interactions between two or more elements of the microsystem in which the individual is participating (e.g. academic contexts and the home environment). Exosystem, the third level, describes links with a context in which an individual does not have an active role and immediate contact, such as policies of the educational institution. Elements in this level impact the individual indirectly through an impact on elements in the microsystem. Macrosystem, the fourth level, constitutes the wider culture, including the attitudes, and prevailing norms that permeate the other systems. The theory considers well-being not only as multi-dimensional, but also acknowledges that it spans across multiple levels (e.g. individual and community levels). This multi-level understanding of well-being signals the importance of the interrelations between person and environment (Ng & Fisher, 2013), which is also reflected in student emphasis in balancing multiple aspects of their lives as what constitutes well-being.

Findings indicate that students perceive their well-being in a broad sense, that is, not limited to the context of their study. Referring to the social ecological perspective, one could say students experience their well-being as interplay between multiple systems. In our study, students primarily emphasised the interrelations between the individual experience of well-being and the impact of elements of the microsystem, such as support from and relations with peers, family, tutors, teachers, and support facilities within the educational context. From this finding, it appears that students distinguish between their well-being as a student and well-being as a person beyond their studies, however, they consider both equally important for their well-being as a student. In this respect, findings differ from theoretical definitions of student well-being, in which the focus is often on the university (of applied sciences) context and well-being as a student. For instance, Hascher (2008) considers well-being in the educational setting as a balance between positive and negative aspects in the school reality. In this definition, the balance students mentioned in our study is present, although narrowed down to the school context.

Students mentioned resilience as a defining theme. Definitions of resilience in literature range from a set of traits, an outcome, or a dynamic process that involves the exposure to stress or adversity, followed by successful adaptation. The relationship between resilience and well-being is not straightforward (Harms et al., 2018), however, research reveals that resilience is positively associated with well-being in university (Pidgeon et al., 2014). In our study, students also referred to the importance of resilience in case of imbalance in the interplay between their studies and life beyond the university of applied sciences.

Contrary to the apparent difficulty in defining student well-being, students could easily indicate various factors influencing their well-being. Although it was not a specific focus of this exploratory study, it appeared that the basic psychological needs (autonomy, competence, and relatedness) as proposed in the Self Determination Theory (SDT) can be recognised. SDT is a macro theory of human motivation that postulates the importance of three basic

psychological needs, including autonomy, competence, and relatedness for optimal functioning (Ryan & Deci, 2017). The need for autonomy relates to feeling volitional or willingness. Competence refers to the experience of effectiveness and mastery. The need for relatedness pertains to a person's desire to connect with others and feel a sense of belonging (Ryan & Deci, 2001). When these three needs are satisfied, individuals flourish. The theory has often been used to study development, motivation, and engagement in educational settings and could be identified in the factors mentioned by the students. The need for autonomy is reflected in impacting factors such as self-regulation, flexibility of the study programme and workload. The need for competence is reflected in factors such as the ability to plan, study achievements and perfectionism, the importance of peers and family for support and exchange ideas, guidance (tutor), teaching skills, clear communication and feedback style (teacher), as well as support facilities at the university. The need for relatedness is reflected in factors such as community atmosphere (mentioned for peer students, teachers and the university level), the quality of the relationship with and personal attention of tutors and teachers, enjoyment (fellow students, peers, and family), and scale of the education. Although results indicate SDT could be used as a framework to assess impacting factors, it is important to bear in mind that in its original form, SDT is used in defining well-being.

Influencing factors could predominantly be allocated to the context of the university of applied sciences, which might appear to contradict the identified major theme of well-being as an interplay and balance between contexts. A possible explanation is that students exert more emphasis in the context of the university of applied sciences in their responses, since the interview focused on this particular context.

Social factors appear important for students in relation to their wellbeing. It is reasonable to assume that at this stage of their lives, feeling connected to significant others, such as peers, teachers and family, plays a central role in a student's well-being. Students are adolescents, and in the process of becoming autonomous adults. Becoming autonomous is preceded by a phase of interdependence. It is a phase of learning and adjustment in which social and affective processes have crucial roles (Crone & Dahl, 2012). For instance, peer support and a sense of belonging (particularly belonging to a university community) during late adolescence and emerging adulthood have been identified as key areas for building protective factors for positive mental health outcomes and lower rates of health-risk behaviours (Bond et al., 2007). Alternative explanation for the importance of others could also be that because of the COVID-19 pandemic and the consequence of limited social contact, students realised how important others are for their well-being.

As regards teachers, students indicated competences and qualities of teachers, aspects that relate to a suitable student-teacher relationship, and the quality of their classes. The importance of these aspects is also highlighted in other studies, in which support, empathy, approachability, communication and relationships with staff, and perceived attitudes towards students by staff have been identified as important factors for the well-being of students in higher education (e.g. Baik et al., 2019; Byrnes et al., 2020).

5. Implications

The manner in which students describe their well-being corresponds with the increasingly acknowledged holistic view that education and learning are not simply about academic outcomes, rather about the entire personal well-being (CESE, 2015). Therefore, defining student well-being as a concept different from general well-being, does not resonate with the perspective of students in our study. Definitions that distinguish student well-being from general well-being move away from the perception students hold: persons with different roles and a life beyond the university of applied sciences. This implies that for higher education institutions, the use of a definition of general well-being instead of specifically *student* well-being might be

preferable. Defining well-being of students in such general terms, is in accordance with the apparent need of students to be considered as “whole persons”.

Higher education institutions that seek to develop policy and practice for their student’s well-being, could benefit from a perspective or theoretical definition that includes this student viewpoint, for instance, applying a theoretical approach that incorporates this multifacetedness and multicontextuality, such as the Ecological Systems Theory and Self Determination Theory (SDT). In addition, both perspectives resonate with the student perspective, and reflect the holistic perspective on learning and development that has become significant in higher education. In SDT, the role of educational institutions in the facilitation of high-quality motivation, engagement, participation, citizenship, and social-emotional well-being is emphasised. SDT suggests that when the conditions for holistic development are optimised, so are learning and educational outcomes (Ryan & Deci, 2017). One could argue that using a generic well-being definition makes it more complex for higher education institutions to support the well-being of their students and that this goes beyond the responsibility of educational institutions. However, educational institutions could communicate clearly about which “part” of the well-being of students they may contribute to and how they intend to do that. In our study, students were able to indicate particular aspects of their study programme, organisational aspects of their studies, peers, tutors, teachers, and facilities as influencing factors on their well-being, which could all be applied to add focus on educational institutions’ policies. Outcomes thus imply that promoting student well-being should not be narrowed down to one actor or level, however that well-being is dependent on the successful cooperation of multiple actors in the university environment such as students, lecturers, deans, and (other) support facilities. Here, Bronfenbrenner’s Ecological System Theory might help to consider more specifically which aspects of the system of a student can be impacted by higher education institutions to enhance the well-being of students.

Finally, although contextual factors were considered important for the well-being of students, a clear focus should be placed on students’ own role, for instance by focusing on developing the skills to ask for support as well as coping skills such as resilience. Supporting students to become autonomous adults who are capable of self-regulation, independent functioning, and who can be resilient in case of setbacks, appears to be an important long-term investment in students. It is in accordance with the holistic perspective on learning and development (Centre for Education Statistics and Evaluation CESE, 2015). It is therefore important to focus on the development of such skills in higher education.

6. Strengths and limitations

This study contributes to the body of knowledge on the well-being of students in higher education. To the best of our knowledge, it is one of the first studies focusing on the conceptualisation and perceptions on well-being in higher education from a student perspective. Strengths of this study are the narratives of a relatively large sample of students and the relatively homogenous characteristics of the sample. Conversely, the sample has certain limitations. International students have not been part of the sample, although these students are known to have specific well-being concerns (McKenna et al., 2017). Moreover, in the sample, female students and fourth-year students were overrepresented, whereas students studying longer than four years were underrepresented. However, this did not appear to impact the students’ responses.

In our study we used inductive research methods, because of the focus on student perspective and the lack of insights in these perceptions so far. Therefore, for the purpose of our study, this is considered one of the strengths. As the results of our study point towards certain existing conceptualisations of (general) well-being that might be appropriate to use (SDT or the Ecological System Theory), it could be interesting to study student perceptions on their well-being from these perspectives in a more deductive manner. For instance, it might be

fruitful to consider whether students' experiences of their well-being and factors influencing their well-being contribute to the psychological needs of relatedness, autonomy, and competence as defined in the Self Determination Theory.

Results might differ in perspectives and needs of the general student population, as only students with self-reported well-being issues participated in this study, all of whom had addressed their issues within the university of applied sciences at an earlier stage. This might have influenced the importance of others as an influencing factor.

The students' responses did not always clearly distinguish between defining concepts and influencing factors. For instance, students indicated stress as a defining theme, whereas in literature, stress is generally viewed as a reaction to impaired well-being. As our study focused on student perception, this was not considered problematic.

Our study focused on comprehensive findings collected by applying a qualitative research design and by reporting design and results following the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (Tong et al., 2007). The qualitative approach of course entails limitations concerning quantitative insights. The design limits the opportunity to discover (the direction of) relations between concepts of well-being and indicators of well-being. Moreover, owing to the qualitative design, the extent to which factors are deemed important remains unclear. Future studies could benefit from incorporating mixed methods or quantitative designs into this line of research, for instance to study the relationship between the types of well-being issue and impacting factors.

7. Conclusion

This study contributes to the understanding of the well-being of students in higher education. Focus of our study was to study student perspectives on a) definition of student well-being and b) factors impacting student wellbeing. Findings indicate that, to students, well-being is a positive and holistic construct. Students distinguish their student life and other life domains, however they consider all domains important to their well-being as a student. This is an important finding, since it may provide higher education institutions a different perspective on how to support the well-being of their students. Results of our study imply that the use of a general definition of well-being instead of a definition on specifically *student* well-being fits best in the perspective of students. Multiple actors in primarily the direct context of the students are impacting student well-being: peers within and outside the educational context, their family, tutors, teachers, characteristics of their study (programme) and educational institution. These can impact their well-being in multiple ways.

This study reveals that incorporating the students' viewpoint is of added value when discussing their well-being. For educational institutions, it is important to have a clear perspective on the meaning of the concept and also critical to have an insight into the extent to which the definition they use for developing policies and practice on student well-being is in accordance with the students' experience. Moreover, educational institutions might significantly benefit from insight in factors influencing well-being. This insight will enable institutions to further improve (the support of) student well-being. For institutions developing policies and practices to support the well-being of their students, it is important to also focus on enhancing their self-regulation skills and resilience. By doing so, educational institutions may provide care at different levels and adopt a holistic perspective on learning and development, which will provide students with useful abilities for the rest of their lives.

8. Ethical approval

The research proposal was submitted to and approved by the Ethical Committee of Behavioural and Social Sciences of the University of Groningen under registration number PSY-1920-S-0483.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors

Author details

Rynke Douwes¹

E-mail: rynke.douwes@nhlstenden.com

Janneke Metselaar¹

Gerdina Hendrika Maria Pijnenborg²

Nynke Boonstra^{1,3}

¹ Department of Social Studies and Healthcare, NHL Stenden University of Applied Sciences, Leeuwarden, the Netherlands.

² Department of Clinical and Developmental Neuropsychology, Faculty of Behavioral Sciences, University of Groningen & Department of Psychotic Disorders, Groningen, The Netherlands.

³ University Medical Center Utrecht, Utrecht, the Netherlands.

Disclosure statement

No potential conflict of interest was reported by the authors.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author, RD. The data are not publicly available due to their containing of information that could compromise the privacy of research participants.

Citation information

Cite this article as: Well-being of students in higher education: The importance of a student perspective, Rynke Douwes, Janneke Metselaar, Gerdina Hendrika Maria Pijnenborg & Nynke Boonstra, *Cogent Education* (2023), 10: 2190697.

References

- Alkureishi, M. L., Jaishankar, D., Dave, S., Tatini, S., Zhu, M., Chretien, K. C., Woodruff, J. N., Pincavage, A., & Lee, W. W. (2022). Impact of the early phase of the COVID-19 pandemic on medical student well-being: A multisite survey. *Journal of General Internal Medicine*, 37(9), 2156–2164. <https://doi.org/10.1007/s11606-022-07497-2>
- Backhaus, I., Varela, A. R., Khoo, S., Siefken, K., Crozier, A., Begotaraj, E., Fischer, F., Wiehn, J., Lanning, B., Lin, P., Jan, S., Zaranza Monteiro, L., Al-Shamli, A., La Torre, G., & Kawachi, I. (2020). Associations between social capital and depressive symptoms among college students in 12 countries: Results of a cross-national study. *Frontiers in Psychology*, 11, 644. <https://doi.org/10.3389/fpsyg.2020.00644>
- Baik, C., Larcombe, W., & Brooker, A. (2019). How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research & Development*, 38(4), 674–687. <https://doi.org/10.1080/07294360.2019.1576596>
- Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 40(4), 9–18. <https://doi.org/10.1016/j.jadohealth.2006.10.013>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Byrnes, C., Ganapathy, V. A., Lam, M., Mogensen, L., & Hu, W. (2020). Medical student perceptions of curricular influences on their wellbeing: A qualitative study. *BMC Medical Education*, 20(1), 288. <https://doi.org/10.1186/s12909-020-02203-4>
- Centre for Education Statistics and Evaluation (CESE). (2015). *Student wellbeing: Literature review*. NSW Department of Education and Communities. https://www.cese.nsw.gov.au/images/stories/PDF/student_wellbeing_LR_AA.pdf
- Chen, T., Lucock, M., Mittal, P., & Mittal, P. (2022). The mental health of university students during the COVID-19 pandemic: An online survey in the UK. *PLoS One*, 17(1), e0262562. <https://doi.org/10.1371/journal.pone.0262562>
- Conley, C. S., Durlak, J. A., & Kirsch, A. C. (2015). A meta-analysis of universal mental health prevention programs for higher education students. *Prevention Science*, 16(4), 487–507. <https://doi.org/10.1007/s11121-015-0543-1>
- Conley, C. S., Shapiro, J. B., Kirsch, A. C., & Durlak, J. A. (2017). A meta-analysis of indicated mental health prevention programs for at-risk higher education students. *Journal of Counseling Psychology*, 64(2), 121–140. <https://doi.org/10.1037/cou0000190>
- Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience*, 13(9), 636–650. <https://doi.org/10.1038/nrn3313>
- Deunk, M., Korpershoek, H., Myroniuk, S., Oorebeek, M., Post, W., & Gronings Instituut voor Onderzoek van Onderwijs, Opvoeding en Ontwikkeling. (2021). *Studentenwelzijn in Het Hoger Onderwijs: Een overzichtsstudie van veelbelovende aanpakken voor docenten(Teams), opleidingen en instellingen [Student Well-being in Higher Education: A Review of Promising Approaches for Teacher(s), Study Programs and Institutions]*. GION Onderwijs/Onderzoek, Rijksuniversiteit Groningen.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), 222–235. <https://doi.org/10.5502/ijw.v2i3.4>
- Doolan, K. (2021). *Student life during the COVID-19 pandemic lockdown: Europe-wide insights*. European Students' Union.
- Dopmeijer, J. M. (2021). *Running on empty. The impact of challenging student life on wellbeing and academic performance*. [Doctoral dissertation, University of Amsterdam]. Digital Academic Repository
- Dopmeijer, J. M., Nuijen, J., Busch, M. C. M., & Tak, N. I. (2021). *Monitor Mentale gezondheid en Middelengebruik Studenten hoger onderwijs Deelrapport 1 Mentale gezondheid van studenten in het hoger onderwijs*. RIVM, Trimbos-instituut and GGD GHOR.
- Eisenberg, D., Hunt, J., & Speer, N. (2012). Help seeking for mental health on college campuses: Review of evidence and next steps for research and practice. *Harvard Review of Psychiatry*, 20(4), 222–232. <https://doi.org/10.3109/10673229.2012.712839>
- Etikan, I., Abubakar Musa, S., & Alkassim, S. M. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>

- Frailon, J. (2004). Measuring student wellbeing in the context of Australian schooling: Discussion paper. Commissioned by the South Australian department of education and children's services as an agent of the ministerial council on education, employment, training and youth affairs. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1008&context=well_being
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103–110. <https://doi.org/10.1037/1089-2680.9.2.103>
- Harms, P. D., Brady, L., Wood, D., & Silard, A. (2018). Resilience and well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* (pp. 643–653). DEF Publishers.
- Hascher, T. (2008). Quantitative and qualitative research approaches to assess student well-Being. *International Journal of Educational Research*, 47(2), 84–96. <https://doi.org/10.1016/j.ijer.2007.11.016>
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, 46(1), 3–10. <https://doi.org/10.1016/j.jadohealth.2009.08.008>
- Jackman, P. C., Sanderson, R., Allen-Collinson, J., & Jacobs, L. (2022). There's only so much an individual can do: An ecological systems perspective on mental health and wellbeing in the early stages of doctoral research. *Journal of Further and Higher Education*, 46(7), 931–946. <https://doi.org/10.1080/0309877X.2021.2023732>
- Kearns, M., Muldoon, O. T., Msetfi, R. M., & Surgenor, P. W. G. (2015). Understanding help-seeking amongst university students: The role of group identity, stigma, and exposure to suicide and help-seeking. *Frontiers in Psychology*, 6, 6. <https://doi.org/10.3389/fpsyg.2015.01462>
- Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly*, 61(2), 121–140. <https://doi.org/10.2307/2787065>
- Kovess-Masfety, V., Leray, E., Denis, L., Husky, M., Pitrou, I., & Bodeau-Livinec, F. (2016). Mental health of college students and their non-college-attending peers: Results from a large French cross-sectional survey. *BMC Psychology*, 4(1). <https://doi.org/10.1186/s40359-016-0124-5>
- Lipson, S. K., & Eisenberg, D. (2018). Mental health and academic attitudes and expectations in university populations: Results from the healthy minds study. *Journal of Mental Health*, 27(3), 205–213. <https://doi.org/10.1080/09638237.2017.1417567>
- Magyar, J. L., & Keyes, C. L. M. (2019). Defining, measuring, and applying subjective well-being. In M. W. Gallagher & S. J. Lopez (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 389–415). American Psychological Association.
- Mathews, H. M., Hirisch, S. E., Hernández, M., & Kauffman, J. M. (2022). A sketch of the problem. In Kaufmann J. M. & Badar (Eds.), *Navigating students' mental health in the wake of COVID-19* (pp. 1–19). Routledge. <https://doi.org/10.4324/9781003264033>
- McKenna, L., Robinson, E., Penman, J., & Hills, D. (2017). Factors impacting on psychological wellbeing of international students in the health professions: A scoping review. *International Journal of Nursing Studies*, 74, 85–94. <https://doi.org/10.1016/j.ijnurstu.2017.06.007>
- McLinden, M. (2017). Examining proximal and distal influences on the part-time student experience through an ecological systems theory. *Teaching in Higher Education*, 22(3), 373–388. <https://doi.org/10.1080/13562517.2016.1248391>
- Ng, E., & Fisher, A. (2013). Understanding well-being in multi-levels: A review. *Health, Culture and Society*, 5(1), 308–323. <https://doi.org/10.5195/hcs.2013.142>
- Noble, T., McGrath, H., Roffey, S., & Rowling, L. (2008). *A scoping study on student well-being*. Department of Education, Employment & Workplace Relations.
- Petillion, R. J., & McNeil, W. S. (2020). Student experiences of emergency remote teaching: Impacts of instructor practice on student learning, engagement, and well-being. *Journal of Chemical Education*, 97(9), 2486–2493. <https://doi.org/10.1021/acs.jchemed.0c00733>
- Pidgeon, A., Rowe, N., Stapleton, P., Magyar, H., & Lo, B. (2014). Examining characteristics of resilience among university students: An international study. *Open Journal of Social Sciences*, 2(11), 14–22. <https://doi.org/10.4236/jss.2014.211003>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-Being. *Annual Review of Psychology*, 52(1), 141. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press. <https://doi.org/10.1521/978.14625/28806>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <https://doi.org/10.1037/0022-3514.69.4.719>
- Saldaña, J. (2013). *The coding manual for qualitative researchers*. SAGE Publications.
- Soutter, A. K., O'steen, B., & Gilmore, A. (2014). The student well-being model: A conceptual framework for the development of student well-being indicators. *International Journal of Adolescence and Youth*, 19(4), 496–520. <https://doi.org/10.1080/02673843.2012.754362>
- Stallman, H. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249–257. <https://doi.org/10.1080/00050067.2010.482109>
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- van der Velden, P. G., Das, M., & Muffels, R. (2019). The stability and latent profiles of mental health problems among Dutch young adults in the past decade: A comparison of three cohorts from a national sample. *Psychiatry Research*, 282, 112622. <https://doi.org/10.1016/j.psychres.2019.112622>
- Westerhof, G. J., & Keyes, C. L. M. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development*, 17(2), 110–119. <https://doi.org/10.1007/s10804-009-9082-y>



© 2023 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Cogent Education (ISSN: 2331-186X) is published by Cogent OA, part of Taylor & Francis Group.

Publishing with Cogent OA ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a Cogent OA journal at www.CogentOA.com

