# The mental well-being of students during the COVID-19 pandemic III

The third measurement by the Caring Universities consortium

#### **SUMMARY**

In November 2021, Caring Universities (CU) sent an online questionnaire about psychological problems to more than 155.723 thousand students from five universities (Vrije Universiteit Amsterdam, Leiden University, Utrecht University, Maastricht University and the Erasmus University Rotterdam). We also asked them how they experience the COVID-19 pandemic and how they deal with its consequences. 11.246 (7.2%) responses have now been received and we can provide a provisional indication of the problems students experience in the areas of mood, anxiety and stress. We compare these results with data from our January 2021 survey (conducted in another group of students). The results show that the COVID-19 pandemic and the corresponding safety measures still have an impact on the students who completed the survey. For example, 29% of the respondents expect to experience a study delay. 66% say they feel depressed, and 25% experience anxiety about being physically near others. The percentage of students remaining active during the pandemic is 66%, which is higher than during the previous CU survey in January when it was 51%. The percentage of students with moderate to severe depressive symptoms is 2.6% lower compared to the second wave of COVID-19 (January 2021) and moderate to severe anxiety symptoms are 1.5% higher. A limitation of this survey is the low percentage of students who responded. It is also a measurement based on self-report. The conclusions should therefore be interpreted with caution.

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## Colophon

Date: 31-03-2022

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## Introduction

Psychological problems such as depression, anxiety and stress occur worldwide in an average of one in three students<sup>1</sup>. In addition, students may suffer from psychosocial problems such as procrastination (avoiding tasks that need to be done), perfectionism, fear of failure, lack of self-confidence and excessive shyness. Such problems can be partly explained by the stage of life referred to as 'nascent adulthood'<sup>2</sup>. In this phase of life, the young adult is expected to perform a number of developmental tasks, such as detaching from parents, entering into relationships, forming identity, etc. This phase of life can be turbulent because the developmental tasks demand a lot from a young adult. Scientific research has shown that psychological and psychosocial problems within a study context can lead to study delay and dropout, and that they can have a negative effect on the personal development of students in the long term<sup>3–5</sup>. Psychological and psychosocial problems in students have been in the news a lot lately and both universities and colleges continue to work on initiatives to support students where needed.

In the Caring Universities project, The Vrije Universiteit Amsterdam, Leiden University, Utrecht University, Maastricht University, the Erasmus University Rotterdam, InHolland university of applied sciences and the University of Amsterdam work together to research and understand these psychological and psychosocial problems of students, prevent them where possible and improve upon the available services for this target group. In addition to a questionnaire (survey) to uncover the problems, we also set up an online infrastructure to offer students preventive and early low-intensity help. Research<sup>3</sup> shows that students with psychological complaints do not always seek out and receive appropriate care in a timely manner. There are several barriers to help-seeking in this group, including a preference to solve problems independently<sup>6</sup>. It is precisely this group that could benefit from low-threshold eHealth interventions. We do all this in a scientifically substantiated way in collaboration with the WHO World Mental Health International College Student (WMH-ICS) Initiative<sup>7</sup>.

<sup>\*</sup>Inholland university of applied sciences and the University of Amsterdam joined the Caring Universities project after November 2021. This is why there are no results yet from these institutions.

## The survey

The survey is designed to research the psychological and psychosocial problems of students in a structured and scientifically sound manner. The procedure is as follows: all students from the participating universities receive a link via their student email to an online questionnaire that measures the most important psychological and psychosocial problems (including depression, anxiety, alcohol problems). This is not about diagnoses of mental disorders such as major depressive disorder, but rather about symptoms that can accompany these disorders such as a low mood and loss of interest, as well as other relevant characteristics. The results of the survey offer all participating universities information about and insight into the mental health status of their students. Since the COVID-19 pandemic, questions about the impact of the pandemic on study progress, mental health and student behavior have been added to the survey. It also identifies key student concerns about the pandemic. Filling in the questionnaire takes approximately 25 minutes.

Between March 2018 and September 2019, the survey was filled out by 2,507 students from the Vrije Universiteit Amsterdam and the University of Amsterdam. In June 2020 we carried out the first measurement in the current Caring Universities consortium, in which more than eight thousand students took part. On November 6, 2020, we published the results of this measurement on our website<sup>8</sup>. In January 2021, we repeated this measurement among more than eleven thousand students. The results of these studies indicate that mental complaints are common among students in the Netherlands and have become worse during the lockdown of January 2021. The current report is about the results of the third CU measurement, data for which was collected from November 2021.

### **Results**

In November 2021, the survey was sent to 155,723 students who had not yet completed a previous CU survey, see table 1 for details. These students were approached by the Vrije Universiteit Amsterdam (n = 40.173), Leiden University (n = 30.636), Utrecht University (n = 33.346), Maastricht University (n = 19.988) and Erasmus University Rotterdam (n = 31.580). Of these students, 11.146 (7.2%) gave consent to participate in the survey and completed the questionnaire from start to finish: VU Amsterdam (n = 2.113; 5.3%), Leiden University (n = 2.390, 7.8%), Utrecht University (n = 2.882; 8.6%), Maastricht University (n = 19.987; 9.9%) and Erasmus University Rotterdam (n = 1.774; 5.6%).

On average, the students were 22 years old, mainly female (69%) and of Dutch origin (67%), see also Table 2. A total of 2.755 students (24.8%) report being diagnosed with COVID-19 (based on symptoms or a laboratory test), which is significantly higher than the percentage of students with a COVID-19 diagnosis in January 2021 (8%). For more details, see table 2.

Few students report experiencing poor physical health (2.2%), while more students experience poor mental health (12.5%). Feelings of loneliness are often reported (29.4%) and for many students these feelings are severe (25.1%). Students who aren't receiving help but who do feel that they need it (51.7%) indicate they want to solve their problems on their own (60.4%), do not know where to look for help (45.6%) or find help too expensive (37.8%). According to students, the strongest sources of stress are their academic progress (53.0%) and the health of loved ones (19.7%). For more details, see table 2.

The students who completed the survey indicate that they experience various negative consequences with regard to their study progress, mental health and behavior due to the COVID-19 pandemic. The coronavirus period negatively affects their mood (66%) and results in study delay (29%). However, we also see that most students remain active (66%). This percentage is higher than the percentage of active students in January 2021 (51%). See table 3 for more data on the impact of the COVID-19 pandemic on students.

When we look at the results of common psychological complaints, it becomes clear that current mood complaints, anxiety complaints and stress complaints are on average relatively common in this group of students when compared to the Dutch population (this population was studied before the COVID-19 pandemic)<sup>9</sup> (see table 4). About 10% of all students indicate

that they procrastinate a lot (IPS score of > 31) and 17% of all students indicate that they have moderate to severe sleep complaints (ISI score of > 14).

There is a statistical difference in complaints between students per university. However, these differences are small to very small. We can therefore state that the differences in common psychological problems among students at the participating universities are insignificant, despite the statistical significance. International students report more complaints (in terms of mood, anxiety, stress and sleep) than Dutch students, which is indicated by a difference of 2.0, 1.4, 1.1 and 1.4 points on the PHQ-9, GAD-7, PSS and ISI respectively (all p < 0.001, small to moderate effect). International students report less procrastination (difference of -0.22 points on the IPS, p = .01, small effect).

When the results regarding mood and anxiety complaints are divided into categories, we see that 35.9% of all students report moderate to severe mood complaints and 22.1% moderate to severe anxiety complaints (see tables 5 and 6). Compared to the January 2021 survey, this is a statistically significant decrease in mood complaints (-2.6%), and an increase in anxiety complaints (1.5%).

### **Discussion**

Psychological and psychosocial problems such as depression, anxiety, stress, procrastination, sleeping problems and self-reported negative consequences of the COVID-19 pandemic on academic progress and mental health for university students are common among students who completed the survey. The fairly high percentage of students with mood and anxiety complaints has remained relatively stable compared to previous surveys. Psychological and psychosocial complaints experienced by students can have consequences in several areas, including negative effects on study progress and future opportunities on the job market, relational functioning, and health in both the short and long term. Students also indicate that the COVID-19 pandemic is causing study delay. However, study results remain at the same level as before the pandemic<sup>10</sup>.

With regard to these results, it must be mentioned that 7.2% of the students that were approached filled in the questionnaire, and the results may therefore not be

representative for all students. Results of an end-game strategy that we used in a previous survey<sup>11</sup> show that complaints of low mood and stress are probably less in the total population of students than shown in the survey. However, these differences are not large. This means that we may have more confidence in the representativeness of the results than the response rate initially suggests. In addition, the answers are based on self-report, which may be subject to bias. Therefore, no firm conclusions can be drawn about the possible consequences of the COVID-19 pandemic.

Since the beginning of the COVID-19 pandemic, many measures have been taken by the government and the universities to support students, such as easing the binding study advice regulations, and offering more options when it comes to graduation and financial arrangements. Based on the results found, these measures seem appropriate. Continued and possibly more intensive monitoring of students is recommended, as is additional support for students in the area of well-being.

# **Attachments**

Table 1. Number of students that received an invitation to the survey and completed it

	Invited	Completed
Vrije Universiteit Amsterdam	40.173	2.113 (5.3%)
Universiteit Leiden	30.636	2.390 (7.8%)
Universiteit Utrecht	33.346	2.882 (8.6%)
Universiteit Maastricht	19.988	1.987 (9.9%)
Erasmus Universiteit Rotterdam	31.580	1.774 (5.6%)
Total	155.723	11.146 (7.2%)

**Table 2.** Demographic and psychosocial variables of the survey (N = 11.146\*)

Demographic variables	Number (%)
Gender: female	7.723 (69.3%)
Gender: male	3.168 (28.4%)
Gender: other	248 (2.3%)
Age	μ=22.0, SD=3.7
Dutch	7.447 (66.8%)
International	3.697 (33.2%)
Bachelor	6.671 (59.9%)
Master	4.470 (40.1%)
COVID-19 diagnosis	2.755 (24.8%)
Psychosocial variables	
Poor physical health	243 (2.2%)
Poor mental health	1390 (12.5%)
Experiencing loneliness often to very often	3.268 (29.4%)
(Very) Severe feelings of loneliness	2.653 (25.1%)
Students who received some form of treatment in their lives	5.091 (45.7%)
Students who received some form of treatment last year	2.898 (26.0%)
Students without support who feel like they need it	4.260 (51.7%)
(Very) Important reasons for these students to not seek support $(N=4.260^{**})$	
Uncertainty regarding effectiveness	1.093 (25.8%)
Wanting to solve it themselves	2.565 (60.4%)
Feelings of shame	1.140 (26.9%)
Talking to friends and acquaintances	1.628 (38.4%)
Too expensive	1.604 (37.8%)
Uncertain of where to go	1.935 (45.6%)
Logistical difficulties	1.195 (28.2%)
Fear of consequences for their career	7558 (17.9%)
Fear of being treated differently by others	867 (20.5%)
Current stress (severe to very severe) (N=8.463***)	
Financial situation	1.871 (22.1%)
Health	1.120 (13.2%)
Academic progress	4.485 (53.0%)
Love life	1.782 (21.1%)
Family ties	1.191 (14.1%)
Social contact at work or university	1.472 (17.4%)
Health of loved ones	1.670 (19.7%)
Other workland and a superior and built-stands	1 472 (17 40()

<sup>\*</sup>Some variables have missing values. Therefore, not everything adds up to 11.146. \*\*This only concerned students without support who feel like they need it. \*\*\*This question was presented to a random sample of 75% of the total survey sample.

1.472 (17.4%)

Other problems experienced by loved ones

**Table 3.** Consequences of the COVID-19 pandemic for the study progress of students (n = 11.146)

Experi	enced consequence	Percentage January 2021*	Percentage November 2021*
1.	The Coronavirus period lowers my mood.	63.7%	66%
2.	Due to the threat of the Coronavirus, I am afraid to be around other people.	34.1%	29%
3.	I am facing study delays because of the coronavirus.	23.9%	25%
4.	Despite the Coronavirus, I remain active (household chores, gardening, walking, sports, yoga).	50.9%	66%

<sup>\*</sup>Percentages of students who agree or strongly agree with statements regarding consequences of the COVID-19 pandemic for those it applies to.

**Table 4.** Average ( $\mu$ ) and standard deviation (SD) of the PHQ-9, GAD-7, PSS and IPS per university in November 2021 (n = 11.146)

	Total		Leiden (n=2.385)	Utrecht (n=2.679)	Maastricht (n=1.983)	VU (n=2.112)	Erasmus (n=1.774)
	μ	SD	μ	μ	μ	μ	μ
PHQ-9	8.38	5.79	8.73	7.93	8.95	8.03	8.40
GAD-7	6.71	5.04	6.89	6.42	7.06	6.56	6.87
PSS	19.19	6.62	19.68	18.96	19.39	18.81	19.13
IPS	26.26	4.24	26.86	26.27	25.95	26.24	26,06
ISI	8.65	5.83	8.87	8.16	9.04	8.67	8.72

PHQ-9 = Patient Health Questionnaire-9; GAD-7 = Generalized Anxiety Disorder-7; PSS = Perceived Stress Scale; IPS = Irrational Procrastination Scale.

**Table 5.** Frequencies and percentages of the PHQ-9 categories of all students (n = 11.146)

Category	Frequency	Percentage	Percentage previous survey (n = 8.349)	Difference
Some depressive symptoms (5-27)	7.824	70.2%	74.3%	-4.1%
Moderate severe depressive symptoms (10-27)	4.000	35.9%	38.5%	-2.6%
None (0-4)	3.322	29.8%	25.7%	4.1%
Mild (5-9)	3.824	34.3%	35.8%	-1.5%
Moderate (10-14)	2.273	20.4%	22.7%	-2.3%
Moderate severe (15-19)	1.118	10.0%	10.6%	-0.6%
Severe (20-27)	609	5.5%	5.3%	0.2%

PHQ-9 = Patient Health Questionnaire-9

**Table 6.** Frequencies and percentages of the GAD-7 categories of all students (n = 11.146)

Category	Frequency	Percentage	Percentage previous survey (n = 8.349)	Difference
Some anxiety complaints (6-21)	5.692	51.1%	50.1%	1.0%
Moderate severe anxiety complaints (11-21)	2.460	22.1%	20.6%	1.5%
None (0-5)	5.454	48.9%	49.9%	-1.0%
Mild (6-10)	3.232	29.0%	29.5%	-0.5%
Moderate (11-15)	1.650	14.8%	14.4%	0.4%
Severe (16-21)	810	7.3%	6.3%	1.0%

GAD-7 = Generalized Anxiety Disorder-7

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