



# How is it going with international students at Dutch higher education institutions?

A report on study experience and well-being

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## Main findings

We researched the current level of study satisfaction and well-being among international credit and degree students. We also examined possible factors that are associated with study satisfaction and well-being in this group. To do this, we conducted a survey between 8 December 2021 and 10 January 2022 among 1,171 international students enrolled at Dutch higher education institutions. Our main findings are as follows:

- Most of the students are satisfied or very satisfied with their study experience (76%), especially those who receive more **emotional support from their teachers** and who are more satisfied with their **social life and accommodation**.
- When asked how happy they are with their decision to study at a Dutch higher education institution, students mention **quality of education, personal development** and **support** as the main reasons for being happy. On the other hand, **low quality of education, high stress** and **lack of social interaction and support** are cited as important reasons to be unhappy with the decision to study at a Dutch higher education institution.
- When it comes to well-being, more than half of the students (61%) are satisfied with their life. This is especially true for those who feel **socially and culturally integrated** and **supported** and who are satisfied with their **accommodation**.
- Positive emotions like **happiness** and **motivation** are experienced often or always by roughly half of the respondents. Negative emotions like **loneliness** or **boredom** are experienced often or always by about a third of the respondents. However, **stress** is the most common emotion: 62% of the students often or always experience stress. More **emotional support** from the higher education institution (such as from teachers), satisfaction with **social life** and **accommodation** are associated with less stress. Especially students with a disability and female students are more likely to experience stress often or always.
- Having **online classes** is not associated with study and life satisfaction, but it is significantly associated with stress: students with a higher percentage of online classes are more likely to feel stressed.
- Students mostly worry about **study-related issues** (57%), their **future career** (55%) and the **pandemic** (49%). Worries about personal finances and mental health are also common.

### Recommendations for higher education institutions:

- Improve pre-departure preparation to ensure prospective students have realistic expectations about studying in the Netherlands.
- Stimulate social interaction both inside and outside the classroom. Create more opportunities for integration between Dutch and international students.
- Enhance the role of teachers in supporting international students' well-being and creating a safe and open learning environment.
- Create clear and accessible pathways to professional assistance for international students who experience mental health issues.
- Pay special attention to international students with special needs or a disability. This group may be at increased risk of experiencing stress and lower life satisfaction.

# Introduction and aims of the study

The Netherlands is a popular destination for international students from all over the world. In the academic year 2021-2022 alone, more than 115,068 international degree students were enrolled in Dutch public higher education (Elfferich, Favier & Snethlage, in prep). International students often need to undergo many life changes in order to adapt to their new country, which can be challenging, overwhelming, and frustrating (Rahim, 2021). Some possible stressors are the language barrier, adapting to a new educational system, making new friends, and arranging practical issues such as finding accommodation (Smith & Khawaja, 2011).

Studying abroad during the COVID-19 pandemic also poses its own challenges and, according to a recent study by the Trimbos Institute (Nuijen, Dopmeijer, Busch & Tak, 2021), seems to have a negative effect on the well-being of students. This study focused on the general student population at Dutch higher education institutions (HEIs), 10% of which consists of international students. A lot of students (around 50%) had psychological complaints, such as feelings of anxiety and sadness. These feelings were even more prevalent among international students. A big majority of students (80%) reported feeling lonely. Given these findings and the lack of studies that focus specifically on international students, the present study focuses on this group. Paying attention to international students' study experience and well-being is key to understanding what is needed in order to provide them with better support.

In February 2021, we published a report on the experiences of international credit and degree students at Dutch higher education institutions during the COVID-19 pandemic (Elfferich, Geurts, Thravalou & Van Tuijl, 2021). The results indicated that a substantial number of international students struggled with anxiety and loneliness, and were dissatisfied with their social life. This year, we repeated this study, but also included some new elements, such as life satisfaction (as a way to measure well-being) and three types of support: emotional, practical (help with finding accommodation, health care and so on) and financial (scholarships, loans and so on). Adding these factors when studying international students' well-being is valuable, as previous research has shown a positive link between social support and well-being (Smith & Khawaja, 2011). Specifically, international students who felt socially connected and supported were less psychologically distressed and had higher well-being.

With the present study, we aim to provide higher education institutions (HEIs) and other stakeholders with insights into the study experience and well-being of international students. We hope these insights and recommendations will further help professionals working in the field to develop policies and action plans to support international students.

## Research questions

This study addresses the following questions:

1. What is the current study experience and state of well-being among international credit and degree students studying at Dutch higher education institutions?
2. Which factors relate to students' study experience and well-being? The factors we tested relate to social life and cultural adaptation, social and institutional support, satisfaction with accommodation, and educational and personal characteristics.

# Methodology

To answer our research questions, we conducted a survey of international credit and degree students studying at Dutch HEIs.

## Distribution of the survey

The survey was aimed at international students who were studying at a Dutch HEI at the time of completing the survey, either for a full degree or as part of an HEI exchange programme. Students could be living in or outside of the Netherlands, with the last group following their study programme at a Dutch HEI online. The survey could be completed online and was distributed through a variety of channels, such as the higher education institutions network, the websites and social media channels of Study in Holland, the Erasmus Student Network (ESN), a variety of international student organisations and student associations, and the Netherlands Education Support Offices (Neso's). Responses were collected between 8 December 2021 and 10 January 2022.

## Respondents

For this study, we used only questionnaires that were fully completed. After filtering out incomplete reactions, we were left with a sample of 1,171 respondents (approximately 1% of the total international student population in 2021-2022). Of these respondents, 51% were studying at a research university (RU) and 49% were enrolled at a university of applied sciences (UAS). The majority of the respondents (60%) were doing a Bachelor's degree, 33% were enrolled in a full Master's programme and the rest were doing an exchange (6%) or a pre-Master's programme (2%). 37% of our sample was studying in the field of Engineering. After Engineering, Economics & Business was the most common field of study (19%), followed by Science (13%).

About half of the respondents (49%) were from a country within the European Economic Area (EEA) and 51% were from a non-EEA country. Indian students were among the most frequent participants in this survey (8%), closely followed by German and Romanian students (both 7%). In total, 109 nationalities were represented in the sample, studying at 38 different Dutch HEIs. About 91% of the respondents pursued the majority of their studies from the Netherlands, while 9% were studying at a Dutch HEI from abroad.

Most respondents (46%) started their studies in the Netherlands in September 2021. Some 22% started between 1 September 2020 and 31 December 2020 and 24% started before 2020. 77% of the respondents have no study delay, 7% have a study delay of less than one semester and 7% a delay of one semester. A further 7% are delayed by one academic year, and 2% by more than one academic year.

Furthermore, 53% of the respondents identified as female, 44% as male and 2% as non-binary or other. Additionally, 17% of the respondents identified as LGBTQ+, 9% had special needs or a disability and 27% were first-generation students.

Finally, the respondents in the present study differed from the respondents in the previous Nuffic study by Elfferich, Geurts, Thravalou & Van Tuijl (2021), most notably in terms of size (357 respondents in the previous study compared to 1,171 respondents in the present study), but also in some other respects, such as the mix of EEA and non-EEA students. It is important to keep this in mind when comparing the present results with those of the previous study.

## **Representation**

As data on international students studying at Dutch higher education institutions in 2021-2022 were only available for degree students and not for exchange students, we could only check representation for the first group.

Keeping the aforementioned in mind, our sample is partially representative of the international degree student population at Dutch HEIs. In terms of the distribution between Bachelor's and Master's degree students, our sample is representative, but it is less representative when it comes to field of study, country of origin, and type of institution (RU/UAS). Furthermore, technical universities (and thus engineering programmes), non-EEA countries, and universities of applied sciences are overrepresented in our sample (to view the sample and representation issues in more detail, see Table 1 in the Appendix).

## **Method of analysis**

We conducted a multiple linear regression and two binary logistic regressions with the statistical programme SPSS. Our outcome variables were study satisfaction, life satisfaction, and stress (for more details on how we measured these variables, see Table 2 in the Appendix). The predictor variables were the following: satisfaction with social life, feeling connected to fellow students, difficulty adapting to Dutch culture and society, emotional support from teachers/tutors, financial support from the HEI in the Netherlands, satisfaction with accommodation, and percentage of online classes. We controlled for the effects of gender, age, country of origin (EEA/non-EEA), type of institution (RU/UAS), having special needs/a disability, and belonging to the LGBTQ+ community. We analysed the responses to the open-ended questions using the programme NVivo.

# Results

Below we present the results of the survey. We begin with the results for study experience and then we present results for well-being (life satisfaction, emotions, and worries). In the last part, we examine factors such as social life, support, and accommodation.

## Study experience

### 1. About 7 out of 10 students are satisfied with their study experience.

The majority of the students in our sample (76%) are satisfied or very satisfied with their study experience (see also Figure 1).

**Figure 1.** Results for the question 'How satisfied are you with your study experience?'



We also asked students to what extent their study experience lived up to their expectations. 42% of all respondents said that their study experience at a Dutch HEI lived up to the expectations they had before coming to the Netherlands. For 29% of the students in our sample, studying in the Netherlands even exceeded expectations. However, another 29% indicated that their expectations of studying at a Dutch HEI were not met. A commonly cited reason for this was the negative impact of the COVID-19 pandemic.

*"Happy but the experience wasn't as good as I expected. This is probably due to the pandemic as well."*

### 2. Quality of education and personal development a plus for some students.

When asked how happy they were with their decision to study in the Netherlands, 29% of the respondents reported being very happy, 49% happy, 18% neutral, 5% unhappy, and 3% very unhappy. When asked to clarify their answer, the quality of Dutch education was mentioned most by both happy and unhappy respondents. Students who were happy often mentioned that the quality of education is higher than what is offered in their home country. However, students who were unhappy often mentioned the quality of Dutch education as a source of dissatisfaction.

The value of the whole experience of studying abroad was also often mentioned as a reason for being happy to study in the Netherlands. Among others, students mentioned their personal development and the possibility of coming into contact with people from different cultures and with different views.

*“It’s very challenging, but I feel like I learn something new every day and become a better version of myself. I also learn to be independent and how life actually is when you become an adult, have to deal with hardship and be mature.”*

### **3. Stress and a lack of support make students unhappy to be studying in the Netherlands.**

Another important reason for being happy with studying in the Netherlands is the support they experience (from teachers, their HEI, fellow students and so on). However, many of those who were unhappy with their decision mentioned that they did not feel supported enough.

*“Too much pressure, too much self-study, and too little human interaction with teachers and staff. Not much help when it comes to answering questions.”*

Other important reasons for being unhappy about studying in the Netherlands are the high workload and stress associated with their studies, the lack of social interaction (partly due to online classes) and the lack of integration (mainly with Dutch students). Several students stated that they have even felt discriminated against. Respondents also mentioned the difficult housing situation in the Netherlands as a reason for being dissatisfied.

Finally, financial reasons were often a reason for dissatisfaction. Respondents found living in the Netherlands expensive. Moreover, they thought it was unfair that they do not get the same financial compensation that Dutch students get. In addition, non-EEA students felt financially disadvantaged compared to EEA students.

### **4. Social life, support, and accommodation are linked to study satisfaction, while studying online is not.**

Here we describe the factors associated with study satisfaction, based on the results of a binary logistic regression analysis. The odds ratio tells us about the size and direction of each effect: where the odds ratio is greater than 1, there is a positive association with study satisfaction. The higher the number, the stronger the positive effect of that factor. An odds ratio of less than 1 implies a negative association with study satisfaction. The lower the number, the stronger the negative effect of that factor.

Factors positively associated with study satisfaction:

- Students who are more satisfied with their social life are 1.3 times more likely to be satisfied or very satisfied with their study experience.
- Students who feel more connected to their fellow students are 1.4 times more likely to be satisfied or very satisfied with their study experience.
- Students who receive more emotional support from their teachers and tutors are 1.6 times more likely to be satisfied or very satisfied with their study experience.
- Students who are more satisfied with their accommodation are 1.3 times more likely to be satisfied or very satisfied with their study experience.
- Students from EEA countries are 1.5 times more likely to be satisfied or very satisfied with their study experience.
- Students who study at research universities are 1.7 times more likely to be satisfied or very satisfied with their study experience.

As for factors negatively associated with study satisfaction:

- Students who find it more difficult to adapt to Dutch culture and society are 0.8 times as likely to be satisfied or very satisfied with their study experience.
- The older the student, the less likely they are to be satisfied or very satisfied with their study experience.

Studying online is not associated with differences in study satisfaction. Gender, having a disability and belonging to the LGBTQ+ community are also not associated with differences in study satisfaction. For an overview of all regression results for study satisfaction, see Table 3 in the Appendix.

## Well-being

### 1. About 6 out of 10 students are satisfied with their life.

When asked to grade their current life satisfaction on a scale from 1 (worst possible life) to 10 (best possible life), a majority of the respondents (61%) reported to be in the thriving area (7 or higher). About 34% reported to be struggling (4-6) and 5% did not grade their life higher than a 3 (suffering area) (see also Figure 2).

**Figure 2.** Results for the question 'Assume the following ladder is a way of picturing your life. The top of the ladder (number 10) represents the best possible life for you. The bottom rung of the ladder (number 1) represents the worst possible life for you. Indicate where on the ladder you feel you personally stand right now.'



We also asked students to grade how satisfied they were with their life before starting their studies at a Dutch HEI. Based on their responses, just over half of the students (55%) were thriving before beginning their studies in the Netherlands. Of these, 57% are still thriving, 32% are now struggling and 11% are in the suffering area. Some 41% of students reported to be in the struggling area prior to starting their studies. The majority of those students (60%) are now thriving, 35% are still struggling, and 6% are suffering. Finally, of the 59 respondents who rated their life previously as no more than a 3 (5% of the total), just over half are now thriving, about one third are struggling, and the rest remain in the suffering area.

## 2. Social life, support, and accommodation are associated with life satisfaction.

The statistical analysis shows that the following groups of students are significantly more satisfied with their life:

- Students who are more satisfied with their social life.
- Students who feel more connected to their fellow students.
- Students who receive more emotional support from their teachers and tutors.
- Students who receive more financial support from their HEI.
- Students who are more satisfied with their accommodation.

As for the negative associations with life satisfaction:

- Students who find it more difficult to adapt to Dutch culture and society tend to be less satisfied with their life.
- Students with a disability tend to be less satisfied with their life. For instance, among the group of students with a disability, 14% rated their life as 1, 2 or 3 (suffering area), while this percentage was much lower for students without a disability (4%). Moreover, among the group of students with a disability, 43% rated their life as 4, 5 or 6 (struggling area), while this percentage was 33% for students without a disability.

Studying online is not associated with differences in life satisfaction. Gender, age, country of origin (within the EEA or not), type of institution (RU or UAS), and belonging to the LGBTQ+ community are also not associated with differences in life satisfaction. For an overview of all regression results for life satisfaction, view Table 4 in the Appendix.

## 3. About 6 out of 10 students are often or always stressed, 5 out of 10 are happy.

Out of a list of positive and negative emotions, positive emotions like motivation and happiness are often or always experienced by roughly half of the respondents. This is a higher percentage than that for most of the negative emotions like loneliness or boredom, which are often or always experienced by about a third of the respondents. However, stress is the emotion most respondents (62%) report often or always experiencing (see also Figure 3).

**Figure 3.** Results for the question 'Please indicate to what extent you have felt the following emotions in the past 4 weeks.'



#### **4. Students with a disability, women, EEA students and those with more online classes are more stressed.**

When respondents were asked how happy they were with their decision to start their studies in the Netherlands, stress was an important reason for being dissatisfied. This was often caused by high demands and a large workload in their study programme. The financial pressure to finish their studies was another significant stressor. Respondents also reported a lack of support from their HEI as an important cause of stress.

*"I feel like the work is rushed. Too much work in a period and it's gone through very quickly. It doesn't really leave much time for true understanding. And to make it worse, we have no breaks in between, so it's really just a full academic year of non-stop stress."*

The statistical analysis shows that special needs/a disability, gender, origin, and online classes are associated with more stress. More specifically:

- Students with a disability are 2.9 times more likely to often or always feel stressed. Among students with a disability, 76% often or always feel stressed. This percentage is 61% for students without a disability.
- Women are 1.9 times more likely to often or always feel stressed compared to the other gender categories (men and non-binary). Among the female students, 67% often or always feel stressed, while this percentage is on average 56% for the other gender categories.
- Students from an EEA country are 1.4 times more likely to often or always feel stressed. Among EEA students, 70% often or always feel stressed, while this percentage is 54% for non-EEA students. It is worth noting that on average, EEA students perceive less emotional support from teachers and study/student associations compared to non-EEA students.
- The higher the percentage of online classes, the more likely students are to often or always feel stressed. For instance, of those who had 100% online classes (372 students in total), 72% often or always feel stressed. In contrast, of students who had no online classes (165 students in total), 57% often or always feel stressed.

#### **5. Less stress among students who feel supported and satisfied with their social life and accommodation.**

The following factors are associated with feeling less stressed:

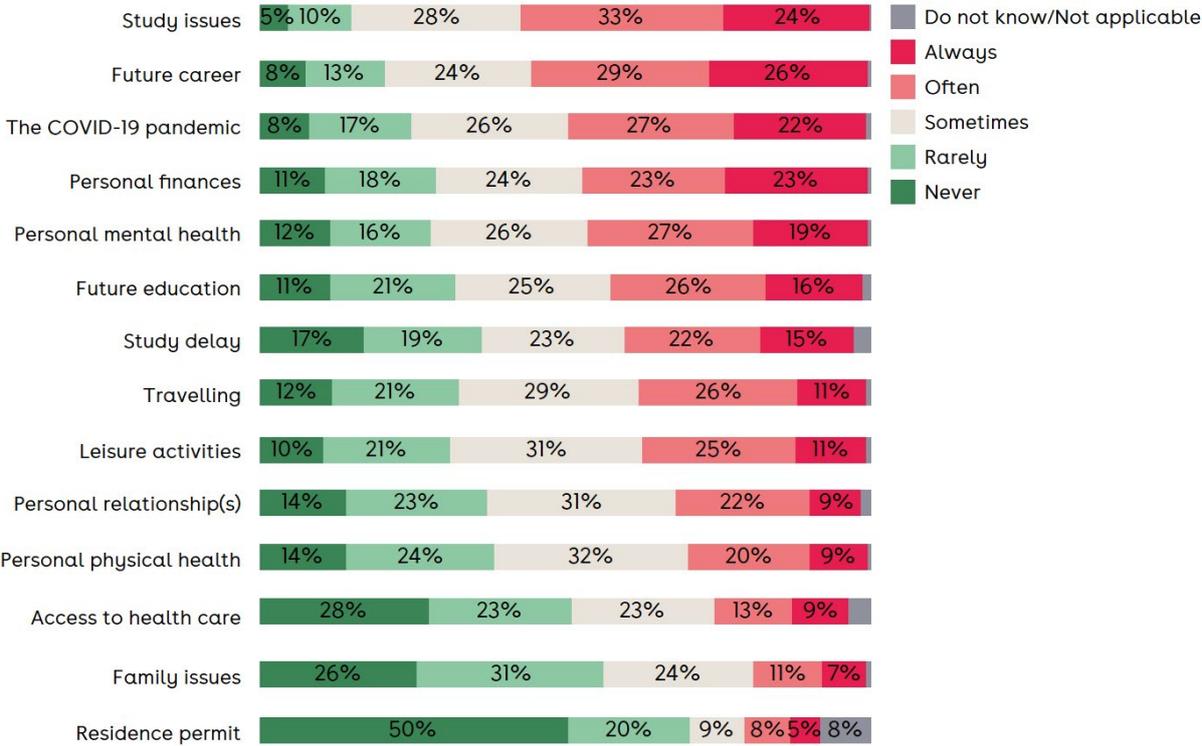
- Students who are more satisfied with their social life are 0.8 times as likely to often or always feel stressed.
- Students who receive more emotional support from their teachers and tutors are 0.7 times as likely to often or always feel stressed.
- Students who are more satisfied with their accommodation are 0.8 times as likely to often or always feel stressed.
- Older students are 0.9 times as likely to often or always feel stressed.

The type of institution (RU or UAS) and belonging to the LGBTQ+ community are not associated with differences in stress. For an overview of all regression results for stress, see Table 5 in the Appendix.

**6. Students worry most about study-related issues and their future career.**

Given that a substantial number of students experience stress related to their studies, it may not be a surprise that study-related issues like exams and lectures are the things most students often or always worry about (57%). Other important worries that respondents reported to always or often have on their mind are their future professional career (55%), the COVID-19 pandemic (49%), their personal finances (47%), and their personal mental health (46%). The topics that are mentioned the least as worries are access to the Dutch health care system (22%), family issues (18%), and residence permit (13%). Figure 4 presents detailed results about the worries of students.

**Figure 4.** Results for the question ‘In the past 4 weeks, did you worry about the following (personal) circumstances?’



Some students also reported worrying about finding accommodation and part time work in the Netherlands .

Last year’s survey showed that students worried most often about their future professional career (69%), with worries about study-related issues and future education coming in second and third.

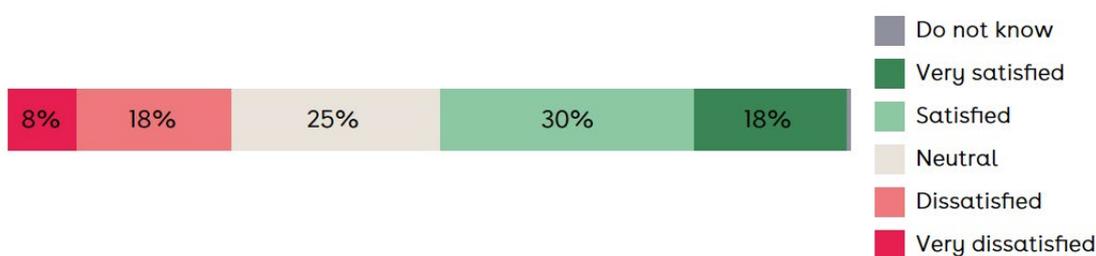
## Social life, support and accommodation

As we already mentioned, social life, support, and accommodation are associated with study and life satisfaction and stress. Because of their importance, we delve further into these aspects below.

### 1. Almost half of the students are satisfied with their social life and feel connected to fellow students.

About 48% of the students are satisfied or very satisfied with their social life and feel connected to their fellow students (see also Figure 5 and 6 below). At the same time, over two thirds of the respondents (69%) indicated that they missed their home country, friends, and family. Finally, 23% agreed or strongly agreed that it is hard to adapt to Dutch culture and society.

**Figure 5.** Results for the question 'How satisfied are you with your social life?'



**Figure 6.** Results for the question 'To what extent do you agree with the following statements?'

I feel connected to my fellow students.



I find it hard to adapt to the Dutch culture and society.



I miss my home country, family and friends back home.

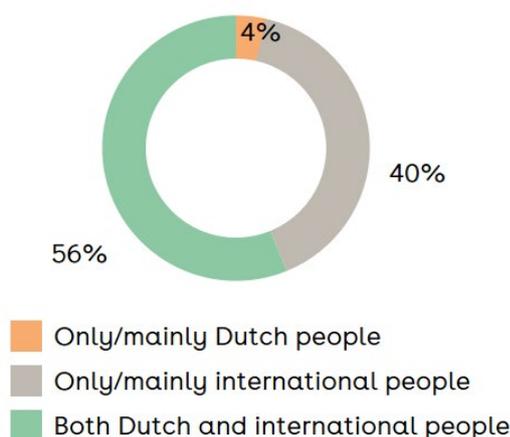


According to a study conducted just before the outbreak of the pandemic (Annual International Student Survey, 2019), 62% of international students were either satisfied or very satisfied with their social life in the Netherlands. In Nuffic's survey last year (in other words, during the pandemic), only 14% reported being either satisfied or very satisfied with their social life. This year, about 48% of the respondents were satisfied or very satisfied with their social life.

## 2. Students would like more interaction with Dutch people and other internationals.

Approximately two thirds of the respondents (67%) said they would like to have more contact with Dutch people. 69% said they would like more contact with other international people. The majority of the respondents interacted with both Dutch and international people (56%). However, 40% reported interacting only/mainly with international people (see also Figure 7).

**Figure 7.** Results for the question 'Please choose the option that is most applicable to your current situation. In my social life, I interact with...'

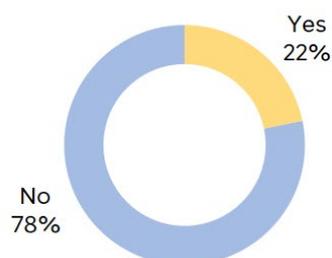


*"I find it quite hard making Dutch friends here. In lectures I'm the only international and everyone around me speaks Dutch the whole time (including the teachers) and only speak in English when giving an instruction. When there are more international students they always put us up together excluding us from the Dutch students. This is quite lonely and we cannot adapt well."*

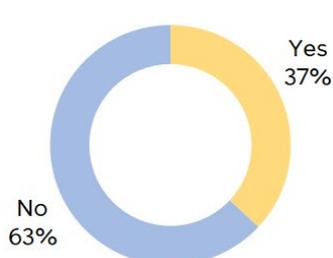
About 22% of the respondents were a member of a Dutch study or student association, while this percentage was higher (37%) for international study or student associations (see also Figure 8). About 21% of the respondents reported that they had been paired with a buddy at their HEI.

**Figure 8.** Results for the question 'Are the following statements applicable to your situation?'

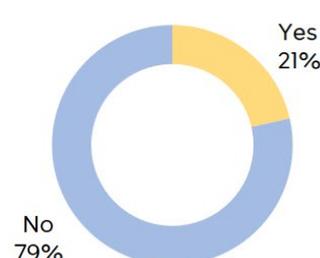
I am a member of a Dutch study/student association



I am a member of an international study/student association



I am paired with a buddy at my university



### 3. Students need more emotional, practical, and financial support from their HEI.

#### Emotional support

The three most important sources of emotional support for students are family, friends outside of the Netherlands, and friends in the Netherlands. As shown in Figure 9, only a very small percentage of students reported receiving a lot or quite a lot of emotional support from study and student associations, their teachers and tutors/mentors. When asked from which groups students would like more emotional support, about one third indicated that they would like more emotional support from their teachers and tutors/mentors. About one quarter indicated that they would like more emotional support from study or student associations.

*“Please do more training for teachers about mental health of students. That is not their job fully, but they do need to be aware of their impact on students’ lives and mental health.”*

#### Practical support

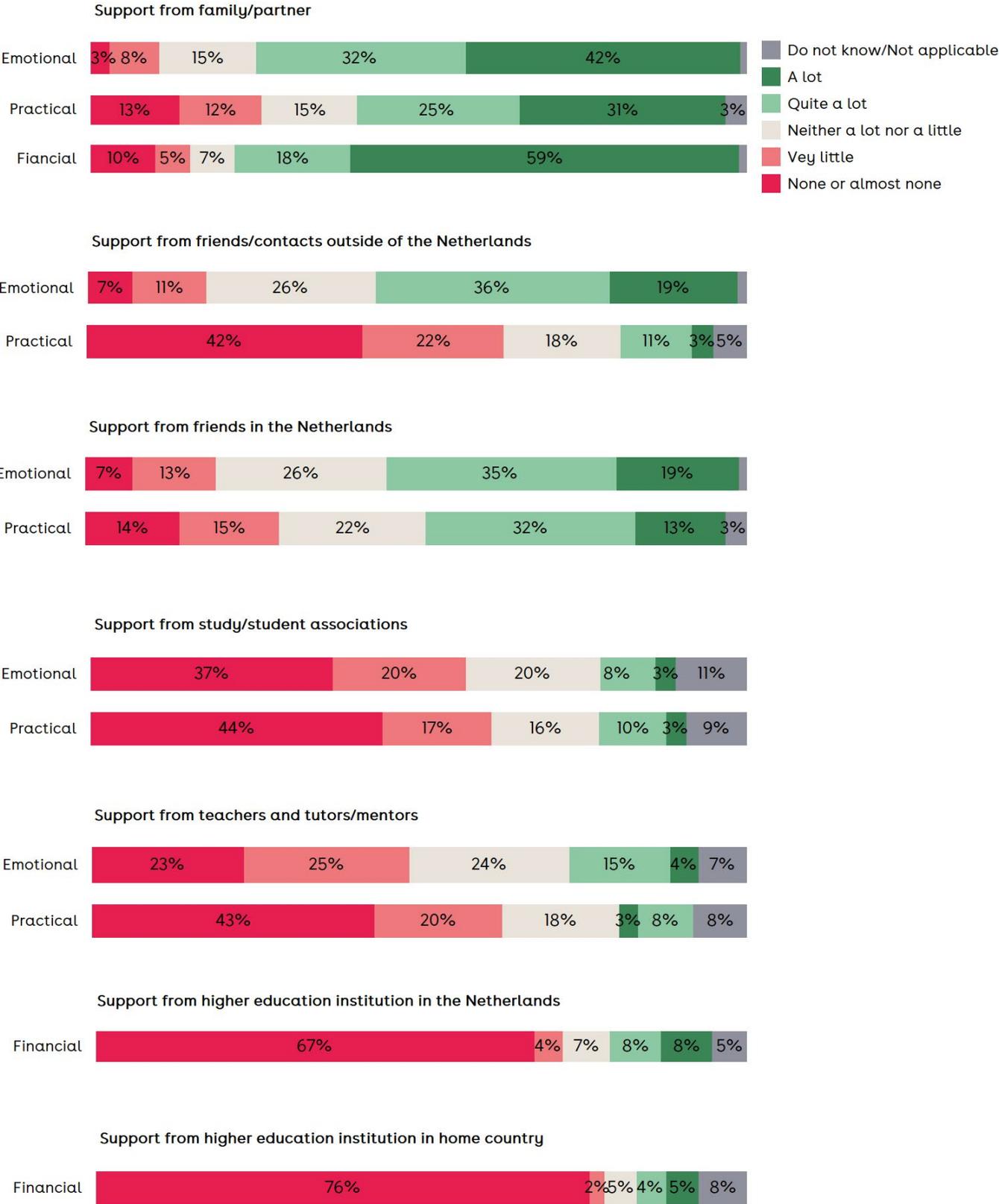
The most important sources of practical support for students are family/partner and friends in the Netherlands. Only a very small percentage reported receiving a lot or quite a lot of practical support from study and student associations, their teachers and tutors/mentors. When asked from which groups students would like more practical support, more than half indicated that they would like more practical support from teachers and tutors/mentors and from study and student associations.

#### Financial support

The most important source of financial support is family/partner. The vast majority of students indicated receiving no or almost no financial support from their institution in the Netherlands or an institution in their home country. The majority (60%) would like to receive more financial support from their HEI in the Netherlands, 33% would like more financial support from their institution in their home country and 17% would like more financial support from study and student associations.

*“It would be great if there is more support (especially financially) from the government for non-EU students, such as something like DUO for EU students.”*

**Figure 9.** Results for the question ‘How much emotional, practical and financial support do you receive from the following groups?’



Note: not all types of support were applicable to all groups.

#### 4. Half of the students are happy with their accommodation.

About 55% of all respondents indicated that they were satisfied or very satisfied with their accommodation (see also Figure 10). 20% answered neutral to this question and almost a quarter (24%) were dissatisfied or even very dissatisfied with their accommodation. They reported that it is difficult to find suitable accommodation.

*"I've spent two years trying to find a liveable and friendly environment. I've moved around seven times in two years."*

**Figure 10.** Results for the question 'How satisfied are you with your accommodation?'



#### 5. Housing situation and starting search early are not clearly linked to satisfaction with accommodation.

When looking at students' housing situation, we found that the most common situation is sharing accommodation with flatmates (43%). A slightly smaller share (39%) lives alone. Less common housing situations are living together with a partner (12%), parents or family (6%), or children (1%). Other housing situations include living in a hotel, living with a landlord/lady, and living with parents-in-law. About 7% indicated that they were looking for accommodation in the Netherlands.

Among the students who live with a partner, 61% indicated that they were satisfied or very satisfied with their accommodation, similar to the percentage among those living alone (60%). Among those living with housemates, about 53% indicated that they were satisfied or very satisfied with their accommodation, while that percentage was 51% for those living with their parents/family.

We also asked students when they started searching for accommodation. Some 19% started searching more than 6 months before coming to the Netherlands, 38% started 3 to 6 months before, and another 38% started 3 months to 1 month before their arrival. A small percentage (6%) started searching as soon as they arrived in the Netherlands. Among those students who started searching for accommodation in the Netherlands before their arrival, 55% indicated that they were satisfied or very satisfied with their accommodation, while this percentage was 50% for those who started searching as soon as they arrived in the Netherlands.

# Conclusions

## **Most international students are satisfied with their study experience and life, despite high levels of stress**

The experiences of international students at Dutch HEIs are mixed. The majority are satisfied or very satisfied with their study experience and report a high life satisfaction. However, about one third of the students report a moderate life satisfaction, and a small minority reports very low life satisfaction. A high level of stress is reported by more than half of the students; feelings of loneliness, boredom, and depression are experienced frequently by around one third of international students. The high occurrence of these negative feelings does not necessarily correspond to a negative perception of the educational experience, as only about 1 in 10 students is dissatisfied or very dissatisfied with their study experience.

Study-related issues are currently the most common worry among international students, followed by concerns about their future career and the COVID-19 pandemic.

## **More social connections and emotional support benefit students' well-being**

When it comes to international students' study experience and well-being, social life, connection to classmates and to Dutch society are the factors that seem to matter most. When students receive emotional support and feel socially connected, they have a better study experience and feel happier with their life. However, about one fifth of international students find it hard to adapt to Dutch culture and society and almost half do not interact with Dutch people.

## **Students would appreciate more practical support from their HEI**

About half of the students would like to receive more practical support from their HEI. This could include help with accommodation, but also administrative, legal or financial issues.

## **Online classes associated with more stress, but not lower study and life satisfaction**

Having more online instead of offline classes is not significantly associated with study and life satisfaction, but is significantly associated with stress. Students with a higher percentage of online classes are more likely to feel stressed.

## **Housing situation associated with both study satisfaction and well-being**

About a quarter of international students are dissatisfied with their housing situation. Satisfaction with accommodation is associated with both study experience and students' well-being.

# Recommendations

In February 2022, we discussed the preliminary results of this study with more than 30 professionals who work with international students at 15 different Dutch HEIs. The majority were international officers, well-being officers, teachers, and student counsellors. These discussions gave rise to the following recommendations and best-practices for HEIs and policy-makers, aimed at improving the well-being and study experience of international students.

## Improve pre-departure preparation

During the application process, HEIs are required to inform prospective international students about study programmes and the services they provide (as set out in this [Code of Conduct](#)). However, it is just as essential that prospective students gain a realistic and complete picture of what studying in the Netherlands entails, including the challenges they may encounter. A key objective of pre-departure preparation should be to ensure students have their finances in order: what expenses can they expect in addition to their tuition fees? Will they be able to cover their living costs in case of a study delay? Our results show that financial support from the HEI relates to higher life satisfaction. HEIs should inform prospective students about the available scholarships so that they can apply on time. Moreover, it is important that the ministry of Education, Culture and Science continues supporting HEIs with grants for international students.

HEIs should prepare international students for the potentially difficult process of finding suitable and affordable accommodation in the Netherlands, including practical advice on how and when to begin the search. Another essential topic to be covered by pre-departure information is health care, including how the Dutch health care system works, the importance of good insurance, and registering on time with a general practitioner.

Being 'fit for study' does not only refer to practical preparedness, however. Prospective students also need to know what they can expect from a Dutch HEI in terms of the teaching style, expectations, and workload. More generally, they should feel confident about being able to settle in quickly and function in a foreign country. Thorough and transparent pre-departure preparation allows students to make an informed decision about studying in the Netherlands, and increases the chance that those who do apply are 'fit for study'.

## Stimulate social life

A healthy social life is essential for a positive study experience and the well-being of international students. HEIs can take an active role in this by creating a welcoming environment for students and by informing them of the opportunities that are available to enrich their social life. Many already organise introduction/orientation weeks for newly arrived international students, including a wide variety of social events and activities.

According to higher education professionals, feelings of isolation may be more prevalent in programmes with relatively small shares of international students. There is much to be gained from improving integration between Dutch and international students. HEIs can promote social integration both within and outside the classroom through group discussions, peer feedback, and group assignments, as well as field trips and extra-curricular activities.

Creating opportunities for international students to build their own social networks is equally important for combatting loneliness. Several HEIs have successful 'buddy' programmes that pair a student with another student or a volunteer from the local community. Others provide forms of peer-to-peer coaching or mentoring. Apps that facilitate social interaction online may be of use as complementary tools. However, especially for students currently lacking social contact, the solution will need to remain focused on real-life interaction.

Membership of study and student associations can be a way for international students to connect with their local environment and get to know more Dutch people. To become more accessible to international students, it is important that study and student associations currently operating in Dutch get support to internationalise. That could be achieved for example by translating some of their activities in English so that international students feel welcome to join.

To further support international students, HEIs could provide workshops on personal development and cultural adaptation. These could focus on helping students develop resilience and flexibility, in order to cope better with the various challenges involved in living in a foreign country.

### **Create clear and accessible pathways for professional assistance**

Many international students come from countries where professional support for emotional problems may be an underdeveloped part of the health care system or considered taboo. For international students in the Netherlands who experience serious emotional problems, there must be a clear and accessible pathway to professional support. HEIs should ensure students are aware of the services that are available to them, and understand what they can expect in terms of safety and confidentiality.

Students often mention that even if they know where to seek professional support to help manage their stress and frustration (for instance from a psychologist), there is often a long waiting list. It is very important that HEIs and municipalities have sufficient capacity for students to get appointments as quickly as possible. We should not forget that some students experience financial barriers to seeing a psychologist. These services are free for a few sessions, after which students have to cover the costs themselves. HEIs could consider setting up an emergency fund for those who are unable to afford necessary care.

### **Enhance the role of teachers in supporting international students' well-being**

Teachers play a critical role in the lives of international students, and many students indicate that they would appreciate more emotional support from their teachers. For teachers, simple steps like asking students how they are doing can make a meaningful difference. HEIs could support teachers in this role by offering training in communication techniques, and by stimulating an open and culturally-sensitive learning environment.

Besides showing an interest, teachers can play an important role in signalling when a student is not doing well. An increasing number of HEIs are appointing well-being officers. Since they see their students on a regular basis, teachers are well-placed to act as a linking pin between student and well-being officer. It is important that HEIs have a clear internal pathway for student support so that onward referral is as efficient as possible. Likewise, HEIs should maintain active links with external psychological services.

Finally, we found an association between online education and stress. HEI's that provide online classes could pay extra attention to how they support their students in order to minimise unnecessary stress. This could mean quickly resolving technical issues so that online classes run as smoothly as possible. The lack of physical interaction during online education and its effects on well-being also deserve more attention.

### **Focus on students with special needs or a disability**

In this study, we found that international students with special needs or disabilities are more likely to be unhappy with their life and feel stressed. That includes students who experience obstacles due to such factors as learning disabilities, physical or sensory impairments, mental health issues, or chronic illness. We recommend that HEIs pay specific attention to these groups when designing initiatives to promote the well-being of international students.

# Reference list

Elfferich, A., Favier, S., Snethlage, F. (in prep). Incoming degree mobility in Dutch higher education 2021-22. The Hague: Nuffic.

Elfferich, A., Geurts, M., Thravalou, E., Van Tuijl, P. (2021). **The experience of international students at Dutch higher education institutions during the COVID-19 pandemic**. The Hague: Nuffic.

Dopmeijer, J. M., Nuijen, J., Busch, M. C. M., & Tak, N. I. (2021). *Monitor Mentale gezondheid en Middelengebruik Studenten hoger onderwijs. Deelrapport I. Mentale gezondheid van studenten in het hoger onderwijs*. **Monitor Mentale gezondheid en Middelengebruik Studenten hoger onderwijs. Deelrapport I. Mentale gezondheid van studenten in het hoger onderwijs**.

Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of intercultural relations*, 35(6), 699-713.

Rahim, N.A.A. (2021). Adjustment Experiences of International Graduate Students to Life in the United States. *Pertanika Journal of Social Sciences & Humanities*, 29(4).

# Appendix

**Table 1.** Representation of the research sample

Below, the research sample is compared to the population of international students in Dutch higher education in 2021-2022 with regard to different variables. The data on the actual international student population were obtained from the Education Executive Agency (DUO)'s *I-cijfer ho* dataset. This dataset only includes data on international degree students, whereas our sample also includes data on international exchange students and international pre-Master's students. Therefore, we only compare full degree respondents in our sample with the actual international student population. Note that percentages may not always add up to 100% due to rounding.

Variable		Research sample (degree students)	International degree student population in Dutch HEIs
HEI type	Research university	52%	70%
	University of applied sciences	48%	30%
Degree type	Full Bachelor's degree	65%	68%
	Full Master's degree	35%	32%
Field of study	Agriculture & Environment	5%	3%
	Arts & Culture	9%	13%
	Economics & Business	18%	28%
	Education	3%	1%
	Engineering	39%	16%
	Health care	1%	4%
	Law	2%	4%
	Liberal Arts & Sciences	2%	6%
	Science	13%	7%
	Social Sciences	8%	17%
EEA/non-EEA	EEA	49%	72%
	Non-EEA	51%	28%
Top 5 countries of origin	India	9%	3%
	Germany	7%	21%
	Romania	7%	5%
	Indonesia	6%	1%
	Bulgaria	6%	4%
Gender	Female	53%	-
	Male	44%	-
	Non-binary/other	2%	-
	Prefer not to say	2%	-
Special needs/a disability	Yes	9%	-
	No	84%	-
	Don't know/prefer not to say	7%	-
First-generation student	Yes	27%	-
	No	70%	-
	Don't know/prefer not to say	3%	-
LGBTQ+	Yes	17%	-
	No	76%	-
	Don't know/prefer not to say	8%	-
Age	< 18	1%	-
	18	8%	-
	19	14%	-
	20	14%	-

Variable		Research sample (degree students)	International degree student population in Dutch HEIs
	21	13%	-
	22	9%	-
	23	8%	-
	24	7%	-
	25	6%	-
	26-30	15%	-
	≥ 31	5%	-
Main country of residence	The Netherlands	93%	-
	Other	7%	-

**Table 2.** Description of variables used in the regression models

Outcomes	Question and answer options
Being satisfied or very satisfied with study experience	How satisfied are you with your study experience at a Dutch higher education institution? 1=Very dissatisfied, 2=Dissatisfied, 3=Neutral, 4=Satisfied, 5=Very satisfied. 'Do not know' was set to missing. A binary variable was created, where answer options 4 and 5 were coded as '1' and options 1, 2, and 3 were coded as '0'.
Life satisfaction	Assume the following ladder is a way of picturing your life. The top of the ladder (number 10) represents the best possible life for you. The bottom rung of the ladder (number 1) represents the worst possible life for you. Indicate where on the ladder you feel you personally stand right now. 1-worst possible life- 10-best possible life. This measure is called 'Cantril Ladder'. Entered into the model as a continuous variable.
Feeling often or always stressed	Please indicate to what extent you have felt stressed in the past 4 weeks. 1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Always. 'Do not know' was set to missing. A binary variable was created, where answer options 4 and 5 were coded as '1' and options 1, 2, and 3 were coded as '0'.
Predictors	
Satisfaction with social life	How satisfied are you with your social life? 1=Very dissatisfied, 2=Dissatisfied, 3=Neutral, 4=Satisfied, 5=Very satisfied. 'Do not know' was set to missing.
I feel connected to my fellow students	To what extent do you agree with the following statement? I feel connected to my fellow students. 1=Strongly disagree, 2=Disagree, 3=Neither disagree nor agree, 4=Agree, 5=Strongly agree. 'Not applicable' was set to missing.
I find it hard to adapt to Dutch culture and society	To what extent do you agree with the following statement? I find it hard to adapt to Dutch culture and society. 1=Strongly disagree, 2=Disagree, 3=Neither disagree nor agree, 4=Agree, 5=Strongly agree. 'Not applicable' was set to missing.
Emotional support from teachers/tutors	How much emotional support do you receive from the following groups? Teachers, Tutors/Mentors. 1=None or almost none, 2=Very little, 3=Neither a lot nor a little, 4=Quite a lot, 5=A lot. 'Do not know/Not applicable' was set to missing.
Financial support from the higher education institution in the Netherlands	How much financial support do you receive from the following groups? Institution in the Netherlands (for example a scholarship). 1=None or almost none, 2=Very little, 3=Neither a lot nor a little, 4=Quite a lot, 5=A lot. 'Do not know/Not applicable' was set to missing.
Satisfaction with accommodation	How satisfied are you with your accommodation? 1=Very dissatisfied, 2=Dissatisfied, 3=Neutral, 4=Satisfied, 5=Very satisfied. 'Do not know' was set to missing.
Percentage of online classes at the moment	Approximately what percentage of your classes at your Dutch higher education institution are online at the moment? Entered into the model as continuous variable.
Control variables	
Female	What is your gender? Female=1, Male=0, Non-binary/other and 'Prefer not to say'=0.
Age	How old are you? (Drop-down list of years, entered into the model as a continuous variable. .
Coming from an EEA country	What is your nationality? (Drop-down list of countries, categorised in the analysis as EEA (=1)/non-EEA (=0)).
Research university	What type of institution are you registered at? Research university=1, University of applied sciences=0.
Special needs or a disability	Are you a student with special needs or a disability (in the sense that you experience obstacles due to, for example, a learning disability, physical or sensory impairment, mental health issue, or chronic illness)? Yes=1, No=0. 'Don't know/I prefer not to say' was set to missing.
LGBTQ+	Do you identify as LGBTQ+ (lesbian, gay, bisexual, transgender, queer/questioning, plus)? Yes=1, No=0. 'Do not know/I prefer not to say' was set to missing.

**Table 3.** Results of binary logistic regression with study satisfaction as outcome variable (946 observations; -2 Log likelihood = 876.59; Nagelkerke  $R^2 = .23$ ). The intercept represents the log-odds of a respondent being (very) satisfied with their study experience when all predictor variables are at reference level.

Predictors	Coefficient	Standard error	Odds ratio
Satisfaction with social life	.266**	.082	1.305
I feel connected to my fellow students	.342***	.091	1.407
I find it hard to adapt to Dutch culture and society	-.204*	.082	.815
Emotional support from teachers/tutors	.441***	.092	1.554
Financial support from the higher education institution in the Netherlands	.002	.002	1.002
Satisfaction with accommodation	.266*	.082	1.305
Percentage of online classes at the moment	.342	.091	1.407
<b>Control variables</b>			
Female	-.294	.174	.745
Age	-.042*	.021	.958
Coming from an EEA country	.410*	.186	1.506
Research university	.541**	.186	1.717
Special needs or disability	-.122	.303	.885
LGBTQ+	-.155	.218	.856
Intercept	-1.245	.733	.288

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

The binary logistic regression model (see Table 3) correctly classified 78.0% of the cases, accounting for 22.7% of the explained variance (Nagelkerke  $R^2$ ). This means that this model explains 22.7% of the variance in the students' satisfaction with their study experience and that the remaining 77.3% must be explained by other (non-measured) variables and random error. The analysis was also significant:  $\chi^2(13) = 154.3$ ,  $p < .0001$ .

**Table 4.** Results of multiple linear regression with life satisfaction as outcome variable (945 observations; Adjusted  $R^2 = .25$ )

Predictors	Coefficient	Standard error
Satisfaction with social life	.438***	.048
I feel connected to my fellow students	.146**	.055
I find it hard to adapt to Dutch culture and society	-.162**	.049
Emotional support from teachers/tutors	.229***	.049
Financial support from the higher education institution in the Netherlands	.097*	.041
Satisfaction with accommodation	.138**	.041
Percentage of online classes at the moment	.001	.001
<b>Control variables</b>		
Female	-.056	.101
Age	-.013	.012
Coming from an EEA country	.038	.110
Research university	.170	.110
Special needs or disability	-.594**	.187
LGBTQ+	.077	.134
Intercept	4.217***	.101

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

The multiple linear regression model (see Table 4) explains 25.4% of the variance in the students' life satisfaction (adjusted  $R^2$ ). The remaining 74.6% of variance must be explained by other (non-measured) variables and random error.

**Table 5.** Results of binary logistic regression with stress as outcome variable (946 observations; -2 Log likelihood = 1088.14; Nagelkerke  $R^2 = .23$ ). The intercept represents the log-odds of a respondent often or always feeling stressed when all predictor variables are at reference level.

Predictors	Coefficient	Standard error	Odds ratio
Satisfaction with social life	-.208**	.073	.812
I feel connected to my fellow students	-.113	.082	.893
I find it hard to adapt to Dutch culture and society	.048	.075	1.050
Emotional support from teachers/tutors	-.337***	.072	.714
Financial support from the higher education institution in the Netherlands	-.067	.059	.935
Satisfaction with accommodation	-.166**	.064	.847
Percentage of online classes at the moment	.006**	.002	1.006
<b>Control variables</b>			
Female	.636***	.153	1.889
Age	-.057**	.019	.944
Coming from an EEA country	.331*	.166	1.393
Research university	.246	.165	1.279
Special needs or disability	1.062**	.323	2.892
LGBTQ+	-.008	.204	.992
Intercept	3.179	.688	24.031

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

The binary logistic regression model (see Table 5) correctly classified 70.9% of the cases, accounting for 22.9% of the explained variance (Nagelkerke  $R^2$ ). This means that this model explains 22.9% of the variance in the students' experience of stress and that the remaining 77.1% must be explained by other (non-measured) variables and random error. The analysis was also significant:  $\chi^2(13) = 174.46$ ,  $p < .0001$ .

### Limitations of the study

As with any research, this study has some limitations. First, this is an observational study, meaning that no conclusions can be drawn about causal relationships between predictor and outcome variables. Future research could further test the associations found here by using experimental or longitudinal designs. Second, as discussed in the Methodology, the sample used in this research is not fully representative of the international student population at HEIs in the Netherlands (see Table 1).

# Colophon

## Authors

Elli Thravalou  
Lynette Peeters  
Kumi Tempels  
Peter van Tuijl  
Saoradh Favier



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