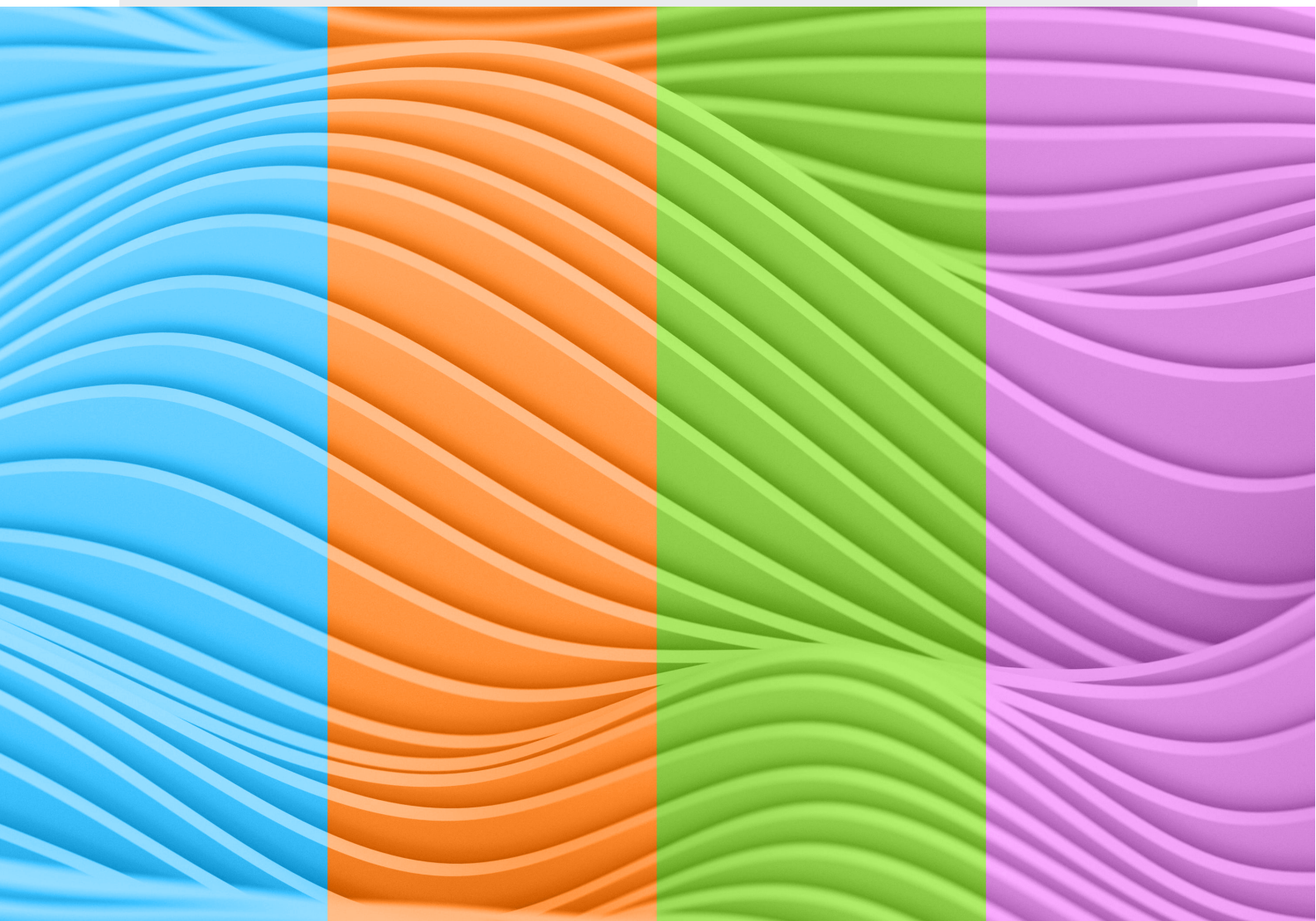


Starting out in higher education

Findings of a Europe-wide survey on the social and academic integration of beginner students



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Content

Introduction	1
Theoretical background and aim of study	1
Method	2
1. Adapting to university life: The first semester experience and entry phase	4
2. Relationship to staff	6
3. Institutional support	8
4. Social integration and interaction with other students	13
5. Academic difficulties and workload issues	15
6. Likelihood of dropout	17
7. Satisfaction, belonging and feeling part of a community	19
8. Online Learning and the impact of Covid19	22
9. Differences BA-MA-PhD	24
10. The role of demographics	25
Closing remarks	27
References	27
Annex	29

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Introduction

The ENTRANTS project focused on challenges in adapting to student life and the transition phase into higher education. While the project in its title (“Enhancing the transition of non-traditional students”) addresses so-called non-traditional students, for example mature students, those with a specific socioeconomic background or educational path that might face stronger challenges in adapting to new ways of learning and a certain “academic habitus”, in devising its outputs, the project opted for an anti-categorical approach. This was done to avoid triggering “othering” effects or stereotype threat of certain groups, i.e., by developing outputs for a certain “disadvantaged” group only and by doing so singling out and to a degree stigmatising these students as “others”, in need of help.

The project’s outputs (an anonymously available support platform, a community building course) were essentially developed for all students, assuming, however, that some students might need or profit from them more strongly.

The project focused strongly on “softer factors” in the transition phase: especially on students’ sense of belonging. A lacking “sense of belonging” or social and academic integration is considered to be one of the main reasons students decide to break off their studies early. Feeling out of place, having little to no contact with other students or just difficulties in finding your way in this new, often anonymous and foreign world of university life can make it hard to start out and succeed in higher education. The COVID19 crisis only amplified these problems. Based on Vincent Tinto’s seminal studies on student departure, a Europe-wide survey among first-semester students was carried out to gauge this sense of belonging, i.e., the degree of social and academic integration of first-semester students in order to identify the main challenges beginner students are confronted with.

Theoretical background and aim of study

Vincent Tinto’s analyses of student departure essentially identified three main reasons for early dropout: (1) the wrong choice of study programme, (2) academic difficulties and (3) the “failure to become or remain incorporated in the intellectual and social life of the [higher education] institution” (Tinto 1993, 176; 1975). Tinto focused especially on the latter which pertains to the relationship to teachers and other students, but also includes habitus issues, adapting to university life or getting used to previously unknown modes of learning at higher education institutions. Also, Spady’s (1970) more differentiated model stressed lacking social and academic integration as a reason for early student departure. In recent years, a focus on belonging-issues has been gaining track again: “In dropout research there is a trend to a heightened recognition of the relevance of ‘soft’ factors, including relationships, pedagogy, trust, emotional security and sense of belonging” (Nairz-Wirth 2017, 12). Based on these theoretical models and approaches a Europe-wide survey among beginner students was carried out in order to gauge the social and academic integration of beginner students (their “sense of belonging”) in detail.

The main questions the present study attempts to answer are:

- How are students coping with/during the entry phase into higher education? (also with a view to the situation brought about by COVID19)
- What are the main problems/challenges students are confronted with?
- What affects beginner students’ satisfaction and their (successful) adaptation into higher education most strongly? (Tinto 1-3)
- As a result: which support offerings are thus most useful to enhance the first semester experience and can possibly prevent early dropout?

The aim of the study is to gain insight into the most pressing problems and challenges experienced by first semester students in order to develop adequate support offerings that are actually useful to students. How-

ever, the results are also of theoretical interest as it will hopefully be shown which aspects influence first semester students' satisfaction with their studies, their likelihood of dropout and their integration or embeddedness into the institution most strongly: Is it the relationship to teachers or fellow students, is it academic difficulties or more vague feelings of "feeling out of place" or perceptions of loneliness/anonymity. It will be shown which items most strongly influence a perceived "sense of belonging" or overall satisfaction with the higher education experience among beginner students and how students are faring in "adapting to university life".

Method

A detailed online questionnaire was developed within the international Erasmus+ project ENTRANTS. The survey also served as a needs assessment for the project's outputs. While the questionnaire that altogether comprised over 70 items also addressed the choice of study programme (Tinto 1) as well as academic difficulties and workload issues (for example, „It is easy for me to follow content in class“, „I feel overwhelmed by what is asked of me“; Tinto 2), the main focus of the questionnaire was on students' academic and social integration (Tinto 3), which was explored in detail.

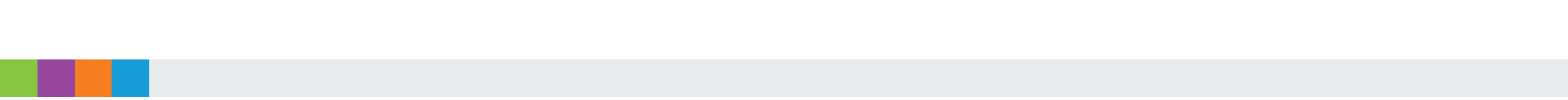
Framing students' "sense of belonging" was achieved by addressing various layers or aspects, among them:

- Perception of entry phase, adaptation to higher education, for example: „It was easy for me to adapt to university life“.
- Academic integration and habitus issues, for example: „The way people express themselves at university is very different from what I am used to“.
- Sense of belonging per se, for example: „Sometimes I wonder if I really fit in“, „I feel part of a community“, „I feel that I belong at university“.
- Social integration, relationship to fellow students, for example: „Looking back, it was easy for me to work together with other students“, „It was easy for me to make new friends“.
- Relationship to teachers, for example: „Overall, I have a good relationship with my teachers“, „In case of problems, I feel I can turn to teachers for help and guidance“, „My teachers are concerned when I am absent from classes“.
- Notions of anonymity, for example: „I could disappear for days and no one would notice“.
- Motivation: „Often I don't want to go to class.“;

Also, familiarity with and access of existing support offerings were addressed, further, an open question asked in which areas more support would be needed. The survey also addressed possible difficulties arising from the Covid19-situation and online/blended learning.

Most items in the survey were Likert-type scales, gauging agreement to given statements on a scale of 1 (Do not agree at all) to 5 (Fully agree). The analysis focused on levels of agreement (>3) and disagreement to statements (<3), while sometimes the arithmetic mean is also given. The following analysis remains largely descriptive, yet strongly focuses on correlations between the respective items.

The online survey was carried out among first semester students at higher education institutions across the European Higher Education Area (EHEA) from November 2021 to March 2022 following a test-run in the previous academic year/fall semester. The field phase was set differently for each European country, after and according to when the exam period ended. The survey was thus carried out in a semester still strongly affected by the Covid19-pandemic. This needs to be taken into account when interpreting the results. Dissemination relied largely on the networks of the European Student Union as a project partner. Almost 4000 students across Europe participated in the survey, after data clearance and validation exactly 3905 completed questionnaires were collected. Only students from EU member-states and the UK (still part of the ENTRANTS project) were counted.



The initial dataset included a strong bias by country, with certain countries over-represented (for example, Romania, Czechia, Malta, see Annex for overview). For this reason, the data were weighted by country according to the number of students in tertiary education in the 27 EU member-states and the UK issued by Eurostat and gov.uk for the academic year 2021/22. Results shown pertain to the weighted dataset. However, differences between the results of (the highly biased) unweighted dataset and the weighted results were only minor, highlighting the validity of the results for the group of “beginner students in Europe”. For reasons of transparency, the results of the unweighted dataset are also given in the annex.

1. Adapting to university life: The first semester experience and entry phase

The questionnaire opened by asking students to give an overall rating of their first semester experience (“Overall, how was your first semester?”) based on a rating-scale from one to five stars. On average (arithmetic mean) students gave 3,55 stars out of five (see below, chapter 7 in more detail). The question was accompanied by an open comments box on their first semester.

The comments given by students paradigmatically mirror (research on) the first semester experience, highlighting the changed environment and modes of learning as compared to school or secondary education. Students especially pointed out the freer, more unstructured environment and new, independent learning techniques in academic life and communicated challenges they were confronted with.

„Adjusting to a new beginning can be hard, and I feel like only having online courses made it just so much worse. I felt like I graduated and left my beloved high school for some weird new professors and some online courses.“

“A little bit stressing, a completely different lifestyle, really advanced material all at once, depression, eating disorders, there’s no possible way to study all at once or you’re gonna fail [...]”

“A lot of long days at uni made it hard to stay focused till the end. Also, some planning from our faculty was very poor when organising the chronology of lectures. The teaching style is obviously very different from my other years of education, hence it was harder to pick up a study method/ routine.”

“Could’ve been better, but I think it’s more about how I felt moving out from home and basically starting a new life.”

“Enjoyable! Difficult to get used to independent learning.”

“Felt really lonely and unsupported.”

“Felt very much out of my depth and underprepared.”

The comments underline the experience as a transition phase into something new, the beginning of a new chapter of life. Students stressed workload issues, learning styles and loneliness/mental health, difficulties in establishing connections as well as timetables and scheduling. Also, the challenges of online learning were a topic (see on this Chapter 8 below in more detail).

When surveyed on their experiences during the entry phase more specifically, around half of respondents claimed that it was easy for them to adapt to student life, however, around a fifth (18%) also explicitly disagreed (see Table 1 below).

Table 1: Entry phase, transition

Please indicate to what extent you agree or disagree with the following statements ¹	Agree	Disagree	Arithmetic Mean
It was easy for me to adapt to university life.	53%	18%	3,5
The way people express themselves at university is very different from what I am used to.	34%	38%	3,0

¹ Scale of 1 (Do not agree at all/disagree) to 5 (fully agree); Agree: >3; Disagree: <3

Not surprisingly, those students who claimed that it was for them easy to adapt to university life, also rated their first semester experience more highly overall, with 67% of them giving a four or five stars rating, as opposed to only 27% of students for whom it was not easy to adapt (correlation between both items, Pearson: 0,382**). The first group also “liked it” decidedly more at university. Looking at correlations to the ease of adaptation item (pointing to what might influence the ease of adaptation), workload and academic issues correlate more strongly (Tinto 2), but issues of social integration and an overall feeling of belonging and community at university play a role as well (Tinto 1, see also Chapters 4 and 7 below). The ease of adaptation correlates strongly with academic and workload items, even more strongly than with items related to social integration.

Table 2 Correlations to ease of adaptation (“It was easy for to adapt to university life.”) with other items

	Pearson correlation coefficient r
I like it at university.	,445** ²
I was able to handle the workload.	,431**
It is easy for me to speak up in class.	,414**
It was easy for me to follow the content in my classes.	,403**
Sometimes I wonder if I really fit in.	-,393**
I feel part of a community at my university.	,383**
How was your first semester (stars-rating)	,382**
I feel that I belong at university.	,380**
Looking back, it was easy for me to work together with other students.	,343**
It was easy to make new friends.	,343**

Male students found it easier to adapt (59% agreed, 14% disagreed that it was easy) than female students (52% and 20% respectively), while students who entered “diverse” as gender (n=221) found it least easy in the sample, with only 38% agreeing to this notion and 33% explicitly disagreeing.

Similarly, students who claimed to have a disability or learning difficulty (n=269, around 7% of the sample) were among the groups for whom it was least easy to adapt to university life, only 40% of students with disability agreeing, 36% explicitly disagreeing.

With regard to the living situation, it was students living in dormitories who saw it as least easy to adapt compared to those living in their own place, with roommates or their family, indicating that adapting to a fully new lifestyle and living situation brings additional challenges. With regard to the possible impact of Covid19 on the living situation, there are no differences in the ease of adaptation between students living in dormitories according to mode of study (only face-to-face, in blended mode or fully online). However, of all possible combinations between mode of study and living situation, adaptation was most difficult for online-only students living with their family or roommates (22% and 32% agreed to having found it easy to adapt compared to an average of 53%), while it was also most easy for only-online students living in their own place (86% agreement).

Interestingly, with regard to parental education, i.e., of the 43% of students in the sample who studied as the first in their families, where neither one of their parents had previously studied at HEI, no discernible differences could be observed in adapting to university life in the sample.³ This finding is counterintuitive, as various studies have shown that in families where no role models or parents able to give advice are present, adapting to university life can present somewhat stronger difficulties.⁴

It was also presumed that for first-in-family students (working class, non-academic households) adapting

² All correlations are highly statistically significant: p<0,001, indicated by the ** symbols.

³ Measured by the following item: “At least one of my parents also studied at university (even if they did not finish their studies).” – Yes, No, Prefer not to say.

⁴ For example, the work carried out by the German non-profit Arbeiterkind.de [Working class kid]

to an academic habitus, a certain way of speaking and using academic vocabulary, presented a specific challenge in the adaptation process.

In the construction of an item gauging or measuring academic habitus the consortium opted for: “The way people express themselves at university is very different from what I am used to”. On this item, the sample was essentially split, with around a third (34%) agreeing and another 38% disagreeing to this notion. Still, a third of students perceived differences of expression and behavior at university compared to what they were used to.

While there are slight differences between first-in-family students and students from families with previous study experience (37% vs. 33% agreement), these differences are not as pronounced as expected. In fact, the groups who claimed to see the strongest differences in expression at universities compared to what they were used to were students with disabilities, those somewhat struggling financially and those living in a dormitory, to a lesser degree also students who considered themselves as belonging to an ethnic minority and international students. There are no differences between genders on this item, with the exception of the (few) students who entered their gender as diverse. In the latter group, only 10% agreed, while 67% disagreed, claiming that they do not see a difference of expression compared to what they were used to.

The influence of habitus issues on the study experience is mirrored in the sample, however. Students with habitus issues (i.e., those who perceived a marked difference between the way people are expressing themselves at university compared to what they were used to), scored comparatively lower on all items regarding academic difficulties, workload, speaking up in class as well as a feeling of belonging and community. The most pronounced differences pertain to items on academic work (courses too difficult, not easy to follow content in class) and to a feeling of belonging. Also, students with habitus issues found it less easy to adapt.

For example, 17% of students with habitus issues did not find it easy to follow content in class (as opposed to 10% of those with no habitus issues), on the other hand 52% found it easy (as opposed to 66% of student who saw no difference in expression, see also further Chapter 5 on academic difficulties and workload issues).

Comments on these items focus strongly on the “culture shock” of studying at university as compared to high school and also about difficulties in raising your voice and speaking up in class, issues of shyness highlighting also time management, mental health issues and the relationship to teachers.

2. Relationship to staff

The exchange between teachers and students in the learning process is at the core of higher education. The present study assumed that a positive relationship and interaction with teachers affects students’ first semester experience, not only in the classroom, but also as an integral aspect of institutional integration, of feeling part of a community of teachers and learners. Teachers do not only convey content, but play a central role as support figures, they provide guidance and, next to administrative staff, act as a personal link to the institution.

Table 3: Relationship to staff

	Agree	Disagree	Mean
Overall, I have a good relationship with my teachers.	60%	11%	3,7
Most of my teachers know my name.	26%	57%	2,4
In case of problems, I feel I can turn to teachers for help and guidance.	53%	23%	3,4

My teachers are concerned when I am absent from classes.	16%	66%	2,1
I can easily approach administrative staff.	47%	25%	3,3
I found staff at my institution really welcoming.	59%	18%	3,6

A large majority (60%) agreed to having a good relationship with their teachers overall (only roughly every tenth student disagreed) and the majority (53%) also viewed them as supportive figures and found staff at their institution “welcoming” (59%). However, when asked if teachers knew students’ names or showed concern when students did not show up for class, students largely denied such closer exchanges.

However, the positive assessment of their relationship to teachers correlates strongly with teachers knowing students’ names (Pearson: 0,49***) and teachers being perceived as someone to turn to in case of problems (Pearson: 0,56***). Knowing students’ names and concern when absent from class (0,59***), i.e., a personal relationship with and awareness of individual students by teachers are among the most closely correlated items in the sample, pointing to existing personal networks between students and teachers. This tighter integration with teachers, however, pertains only to a minority of students.

Further, there is a connection between the relationship with teachers and how easy it was for students to speak up in class (0,43***); in the sample, students who found it easier to speak up in class also rated their relationship to teachers more highly. This might be due to teachers being more aware of actively participating students in the classroom who are more confident to speak up, interacting with them, knowing them personally, and thus establishing a more immediate relationship or connection with them. It might also be the other way around, with engaged teachers facilitating an inclusive learning environment that encourages students to speak up and thus aid students in losing possible inhibitions that keep them from speaking up. Arguably, whether students find it easy to speak up in class (i.e., contribute more actively themselves to the learning process) not only depends on personality types or personal propensities, but also on the (inclusive) climate in the classroom that enables and encourages students to do so.

There is also a strong correlation between the ease of speaking up and adapting to university life. Students who found it easier to speak up in class also found it easier to adapt to university life (Pearson: 0,41***). This affected the adaptation item more strongly (stronger correlation) than the relationship to teachers per se (0,324***). Supporting beginner students in finding their voice and the confidence to speak up thus impacts on the first-semester experience or might ease the adaptation process. This might be mediated by engaged, aware teachers who employ inclusive teaching styles that lower the threshold for raising one’s voice in class.

Especially younger students under the age of 23 found it more difficult to speak up in class (Under 23: 37% agreed it was easy to speak up, 23 and over: 56%). The ease of speaking up appears to increase with age, it was highest among students over 26. Also, around 40% of the youngest students between 18 and 19 years old explicitly disagreed, claiming it was not easy for them to speak up. Younger students thus showed stronger inhibitions to make their voice heard.

On the other hand, working students, students living in their own place or those with care responsibilities claimed it was easier for them to speak up in class than young, non-working students still living with their families.⁵ This might point to the fact that confidence also builds with (life, professional) experience. These demographic groups also depicted their overall relationship with teachers more favourably.

“Traditional” beginner students right out of upper secondary school appear to need support in this area more than more mature, working students. Interestingly, students with a migration background, international students, those from ethnic minorities also scored higher (more positively) on this item than those without these respective characteristics. As elsewhere in the sample, males claimed to be more confident to speak up than females (54% agreed it was easy vs. 33% of females).

⁵ This finding was confirmed by the UNICOMM survey.

Administrative staff also plays a vital role in supporting students in finding their way around in the new, often foreign environment of higher education (scheduling, timetables, exams, formal procedures, information on available support and events). About half of students in the sample claimed they could easily approach administrative staff, with a quarter disagreeing to this notion, however.

The relationship to teachers and their perceived role as figures that offer support, correlates with satisfaction with the first semester experience and appears to affect how much students claim to “like it at university” (see Table 4 below). Interestingly, also the ease by which administrative staff is approachable, influenced satisfaction and belonging items in the sample. The relationship to staff thus impacts on the study experience during the first semester.

Table 4: Correlations between relationship to staff and satisfaction, belonging

Correlations (Pearson)	I belong at uni.	I like it at uni.	Satisfaction 1st sem (stars-rating)
Overall, I have a good relationship with my teachers.	,301**	,330**	,432**
Most of my teachers know my name.	,176**	,206**	,291**
In case of problems, I feel I can turn to teachers for help and guidance.	,303**	,342**	,411**
My teachers are concerned when I am absent from classes.	,146**	,161**	,285**
I can easily approach administrative staff.	,339**	,297**	,317**
I found staff at my institution really welcoming.	,276**	,329**	,386**

While males agreed somewhat more strongly to having a good relationship with their teachers than females (66% vs. 58% agreement), among the demographic groups that least agreed to having a good relationship with their teachers were students with a migration background (53% agreed compared to 63% of students without migration background) and especially students with strong financial difficulties (only 44% agreed to having a good relationship with their teachers). On the other hand, among the groups that particularly stressed their positive relationship with teachers were international students (67% agreed to this notion, compared to average of 60%), those with care obligations (76% agreed), more mature students over the age of 26 (74%) and those working over 20 hours a week (70%) or full time over 35 hours (78%).

The youngest beginners (those 18 and 19 years old, agreement: 58%) showed comparatively lower scores, pointing to a need to get to know teachers and possible inhibitions towards authority figures.

The relationship to teachers also affected the items on academic difficulties and workload (and/or vice versa). Those who claimed to have a better relationship with their teachers said it was easier to follow content in class and were able to handle the workload better (Pearson correlation coefficients: 0,378** and 0,354** respectively).

3. Institutional support

University support structures intend to facilitate the adaptation process into university life, to aid students in gaining a footing and orientation in the new environment of higher education. How are institutional support structures (administration, teachers) viewed by students? Were they successful in helping students to adjust and did they ease the adaptation into university life?

Can/Does institutional support facilitate and enhance the first semester experience and if yes, to what extent?

Table 5: Institutional support and information

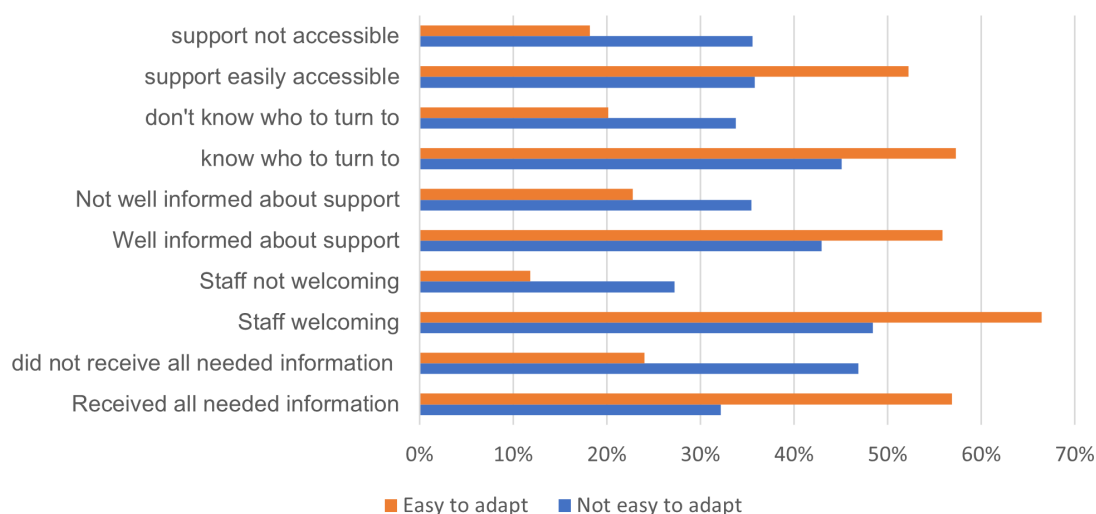
Please indicate to what extent you agree or disagree with the following statement	Agree	Disagree	Mean
I know who to turn to in case of problems.	53%	24%	3,4
In case of problems, I feel I can turn to teachers for help and guidance.	53%	23%	3,4
I can easily approach administrative staff.	47%	25%	3,3
I find support services are easily accessible.	47%	25%	3,3
I feel well informed about existing support offerings at my institution.	51%	26%	3,3
When I started, I received all the information I needed.	47%	31%	3,2
I found staff at my institution really welcoming.	59%	18%	3,6

Around half (47-53%) of students in the sample viewed institutional support positively, claiming they knew who to turn to, that support services were easily accessible and approachable and that they felt adequately informed. Around a quarter of students, however, explicitly disagreed to these notions (see Table 5 above), pointing to a need for more targeted and accessible forms of support for a considerable part of students.

While the above items correlate strongly with each other, (not surprisingly, Pearson: between around 0,5** and 0,7**), there are also mild correlations between items measuring institutional support (know who to turn to, services easily accessible) and satisfaction with the first semester experience (Pearson: 0,32** and 0,304** respectively). Similarly, for the two items on the perceived level of information. Apart from each other, support items correlate most strongly with the perception that students help each other, that they felt part of a community and the degree to which they “liked it” at university. This points to a perception of institutional support as embeddedness in a supportive environment, rather than targeted, hands-on support.

Although in the sample there is only a minor correlation between support and ease of adaptation (Pearson both around 0,2**), the differences between the group who claimed it was easy for them to adapt to university life and the group who claimed that this was not the case are striking. For example, while 57% of students for whom it was easy to adapt claimed they received all the information they needed when they started, only 37% of those with difficulties in adapting to university life stated the same (see below Figure 1 for the respective items).

Figure 1: Institutional support and information and ease of adaptation into university life



The perception, degree of information and accessibility of institutional support thus affects and contributes to the first semester experience and eases the entry into higher education.

The survey also asked which support structures students had actually accessed during their first semester; Table 6 outlines the least and most accessed support offerings quoted by students.

Table 6: Most/least accessed support offerings

Type of support	Quoted by	In percent
Administrative support/organisation of studies	2020	52%
Library services	1876	49%
Tutoring/peer learning groups	1046	27%
Language courses	771	20%
IT services	695	18%
Financial aid/support	660	17%
Psychological support/counselling	658	17%
Mentoring	657	17%
Support for international students	498	13%
Career services	458	12%
Buddy programme	387	10%
Academic writing	276	7%
Equal treatment/non-discrimination counselling	185	5%
Disability or learning difficulties support (Accessibility)	178	5%
Bridging courses (for example, Maths)	167	4%
Social skills training	139	4%
Childcare	36	1%
Other	28	1%

General administrative support regarding the organisation of studies as well as library services top the list, with around half of respondents claiming to have accessed this form of support. Interestingly, tutoring or peer-learning groups were also mentioned quite frequently, with 27% of students claiming to have accessed this form of support. Buddy programmes, on the other hand, are either less well known, not in existence at

specific institutions or were not accessed as much. Language courses, IT services, counselling and mentoring occupy the middle field (accessed by between 17 and 20% of students), while bridging courses and support related to inclusion and equal treatment were less frequently accessed. The bottom of the list falls to childcare offerings.

Of the 269 (around 7%) of students who claimed to have a disability or learning difficulty, only 87 (29%) actually turned to institutional support.

Bridging courses are designed to help and alleviate academic difficulties esp. in the field of maths. Yet only around 5% of those students claiming to have encountered academic difficulties (the courses I am enrolled in are too difficult for me, it was (not) easy to follow content in my class) took bridging courses.

In fact, it was the other way around, the vast majority (60 and 73% respectively) of those students who claimed to have taken bridging courses, scored highly on the academic items, i.e., they claimed the courses were not difficult and that it was easy for them to follow content in class. This might point either to the effectiveness of these courses or the care taken by students to be able to follow in that they were actively counteracting possible academic difficulties. Or, there could be a mismatch between need and access to support, in a sense that the academic support offerings do not reach students in need of academic help.

Does institutional support facilitate belonging and feeling part of a community at university, does it impact on the first semester experience?

Overall, the answer based on the survey data is yes, with a few notable exceptions, however. Students who accessed a specific form of institutional support rated their first semester experience higher than those who did not access that support. Especially those who took advantage of social skills trainings, academic writing courses, career services and support for international students (in addition to library and IT services and administrative support) showed consistently higher levels of satisfaction than those who did not. The exceptions are students who accessed disability support and psychological counselling, as well as those with financial difficulties, who rated their first semester experience lower than their peers who had not accessed or felt the necessity to access these services. This might pertain to the challenging situation these students find themselves in in the first place, not to the quality of the support itself. In fact, students with disabilities and learning difficulties who had not accessed support rated their first semester experience even lower (around 5% points), pointing to the alleviating effects of support structures in place in a generally challenging situation.

Checking for a possible influence of institutional support on belonging ("I feel that I belong at university"), the results are similar. Again, students who had accessed support structures scored higher than those who did not on belonging. Especially, tutoring and peer support, social skills trainings and academic writing courses positively affected the perceived sense of belonging. However, again, students who had accessed psychological and disability support, and especially those who requested financial support, rated their feeling of belonging lower than those who did not. Similar results can be observed for feeling part of a community at university as well.

Anonymity presents a challenge at mass universities, when entering from more regulated cohorts and class formations at school. Institutional support also affected the item "I could disappear for days and no one would notice". The above pattern remains the same, with those students having accessed a specific support offering perceiving less of an anonymous environment. Here especially, tutoring, social skills trainings and equal treatment/non-discrimination counselling made a difference (of around 13-17 per cent points in agreement). On the other hand, those who had accessed psychological and disability and learning support scored lower than those who did not. A similar pattern can be observed for the item "Sometimes I wonder if I really fit in".

Overall, students who interacted with their institution, looking and accessing support actively, appear also more content and happy, with the notable exception of the generally challenging situation of students with disabilities and learning difficulties, those in need of psychological support (i.e., those who went out and sought help) and students who accessed financial aid. Not only the results for satisfaction and belonging/

community illustrate that students with disabilities and learning difficulties and those in need of psychological support as well as students struggling financially feel less well and less integrated during the first semester.

The survey also gauged in which areas students would need more support.

Table 7: In what areas would you need more support⁶

Psychological support, mental health, counselling	183
Academic (exams, study skills)	76
Financial support	69
Administrative support	65
Career services	63
Social skills training	35
Academic (subject-specific)	32
Language courses	31
Tutoring/peer support/learning groups	27
Academic writing	21
Mentoring	20
Organisation of studies	20
IT services	18
Making friends/social element	17
Mobility	14
Accessibility	13
Extracurricular activities	13
Support for international students	9
Accommodation	8
Information	8
Workload issues	7
Communication	6
Library services	6
Orientation	4
Bridging courses	3
Childcare	3
Equal Treatment	3
Other	58
None lacking	215
All lacking	20
don't know	21
n.a.	8

The area where students saw the strongest need for additional support was psychological support, mental health, counselling. This point emerges as the number one priority topping the list by far, indicating a strongly articulated need and a corresponding lack of support in this area. The survey results can thus be considered a clear call for additional institutional support in this area. Academic support related to exam

⁶ Answers to open questions were manually assigned to the above categories.

preparation and learning techniques came in second, closely followed by financial support and overall administrative support in the organisation of studies.

Interestingly, career services (i.e., information on future employment possibilities and respective preparation) come in closely afterwards, but also social skills trainings, subject-specific academic help (esp. with regard to maths) and language courses were requested. Tutoring, learning groups, buddies and mentoring, extracurricular activities and offerings that facilitate social exchange with other students, i.e., making friends, were also mentioned.

However, a considerable part of students (n=215) also answered that there were no support offerings lacking and that they were content with the current offerings by their institution.

4. Social integration and interaction with other students

Meeting and interacting with other students and establishing friendships can be considered an essential prerequisite to developing a sense of belonging and to feel part of a community at university.

Thus, the questionnaire focused strongly on this aspect.

Table 8: Level of social integration

	Agree	Disagree	Mean
Looking back, it was easy for me to work together with other students.	58%	17%	3,5
I met with fellow students outside of the classroom.	61%	25%	3,6
It was easy to make new friends.	51%	31%	3,3
I felt respected by my fellow classmates.	72%	7%	3,9
At my institution students help each other.	72%	9%	3,9
I have taken part in extracurricular activities (e.g. sports clubs, etc.)	43%	44%	3,0
I was informed about the opportunity to join societies and activities I can participate in.	68%	14%	3,8
I could disappear for days and no one would notice.	29%	54%	2,6
Sometimes I wonder if I really fit in.	39%	36%	3,0

While the majority of students (58%) claimed that it was easy for them to work with other students, 17% explicitly disagreed to this notion, indicating difficulties of working together. Further, there is somewhat less agreement that it was easy to make new friends at university. In fact, around a third of students (31%) disagreed, claiming that it was not easy to establish more personal, close contacts with fellow students. Also, for around a quarter of students, contacts with peers were more or less restricted to working together or to seeing each other in the classroom, as 25% denied that they met with fellow students outside of the classroom. These findings reflect difficulties in establishing closer contacts beyond working together by a considerable part of beginner students.

An alarming 29% of students claimed that they could disappear for days and no one would notice, pointing to experiences of anonymity and isolation at university. Further, around 40% of students wondered if they actually fit in.

Interestingly, the perception of students as respectful to each other and helping each other is very high, with over 70% agreeing to these notions.

The items on social interaction correlate strongly with each other, especially the item that it was easy to make friends with meeting students outside of the classroom (Pearson: 0,650**), as one is hardly imaginable without the other, as well as the ease of working together (0,563**) and feeling respected by other

students (0,501 **).

However, the ENTRANTS project hypothesized that the level of social integration strongly impacts on belonging and the overall perception of the first semester experience. The data back this hypothesis, as the items on overall satisfaction and belonging correlate decisively with social integration items (see Table 9 below).

Table 9: Correlations between social integration and satisfaction, belonging

	How was 1st semester	I feel that I belong at university.	I feel part of a community at my university.	Looking back, it was easy for me to work together with other students.	I met with fellow students outside of the classroom.	It was easy to make new friends.	I felt respected by my fellow classmates.	At my institution students help each other.	I could disappear for days and no one would notice.	Sometimes I wonder if I really fit in.
How was 1st semester	1	,431 **	,482 **	,383 **	,342 **	,436 **	,332 **	,395 **	-,401 **	-,389 **
I feel that I belong at university.	,431 **	1	,616 **	,376 **	,322 **	,370 **	,378 **	,419 **	-,386 **	-,475 **
I feel part of a community at my university.	,482 **	,616 **	1	,448 **	,432 **	,476 **	,327 **	,444 **	-,484 **	-,450 **
Looking back, it was easy for me to work together with other students.	,383 **	,376 **	,448 **	1	,477 **	,563 **	,453 **	,472 **	-,326 **	-,326 **
I met with fellow students outside of the classroom.	,342 **	,322 **	,432 **	,477 **	1	,650 **	,432 **	,355 **	-,374 **	-,253 **
It was easy to make new friends.	,436 **	,370 **	,476 **	,563 **	,650 **	1	,501 **	,438 **	-,462 **	-,423 **
I felt respected by my fellow classmates.	,332 **	,378 **	,327 **	,453 **	,432 **	,501 **	1	,462 **	-,329 **	-,351 **
At my institution students help each other.	,395 **	,419 **	,444 **	,472 **	,355 **	,438 **	,462 **	1	-,333 **	-,261 **
I could disappear for days and no one would notice.	-,401 **	-,386 **	-,484 **	-,326 **	-,374 **	-,462 **	-,329 **	-,333 **	1	,409 **
Sometimes I wonder if I really fit in.	-,389 **	-,475 **	-,450 **	-,326 **	-,253 **	-,423 **	-,351 **	-,261 **	,409 **	1

Students for whom it had been easy to make new friends, for example, rated their experience at university much higher than those for whom it was not easy and showed decidedly higher levels of belonging. Whereas 72% of students who claimed that it was easy to make new friends gave a four or five star rating on their first-semester experience, only 31% of those for whom it was not easy gave such high ratings. Conversely, only 4% of students who had made friends easily gave a low rating of one or two stars, as opposed to 25% of students with difficulties in making friends, a quarter of them rated their experience lowly, giving only one

or two stars.

The same holds for belonging (“I feel that I belong at university.”). 79% of students for whom it was easy to make new friends felt they belonged, whereas only 46% of those for whom it was not easy agreed (mirrored in disagreement to belonging: 5% for those who made friends disagreed to belong compared to 28% of those who had difficulties in making friends). The item of feeling part of a community delivered even stronger results along the same pattern.

This is also confirmed by the negative items on perceived anonymity and wondering if one fit in: On the other hand, those who wondered if they fit in and experienced anonymity at university showed contrary results. Whereas of students who did not feel anonymous 71% rated their first semester experience with 4 or 5 stars, only 36% of students who claimed they “could disappear for days and no one would notice” gave these high ratings. Of the latter group, 22% gave only one or two stars, as compared to 3% of those students who did not feel anonymous. The item on “fitting in” delivered similar results.

The social element, feeling embedded in a community, establishing relationships with other students, thus strongly impacts on the first semester experience. These results can be considered a clear call (and confirmation of the importance of social interaction) to develop activities and support offerings that focus on the social element, on “community building courses” as foreseen in the ENTRANTS project.

Looking at specific groups that might have found it harder to make friends, it is especially students with financial difficulties and those with disabilities, students who entered “diverse” as gender, as well as full-time working students for whom it appears to have been most difficult to establish social connections; but also students from ethnic minorities, those with a migration background and female students overall found it harder to make friends than their respective counterparts.

5. Academic difficulties and workload issues

Academics - content and classes: learning - are at the centre and arguably the aim of higher education. How easy was it for students to handle studying, both with regard to understanding content as well as to time management and workload issues? How does academic success, the ease or effectiveness by which one learns and the ability to handle the workload, affect the first semester experience?

Table 10: Academic and workload issues

	Agree	Disagree	Mean
It was easy for me to follow the content in my classes.	58%	14%	3,5
I was able to handle the workload.	55%	15%	3,5
It is easy for me to speak up in class.	39%	36%	3,1
The courses I am currently enrolled in are too difficult for me.	10%	68%	2,2
I feel overwhelmed by what is asked of me.	26%	42%	2,8

The majority of students in the sample agreed that it was easy for them to follow content in class and that they were able to handle the workload. However, this also means that for around 40% of students it was not easy, with 14% and 15% explicitly disagreeing, claiming it was not easy for them to follow content in class and to handle the workload. When asked again negatively at a later point in the survey, i.e., if courses were too difficult for them, an even stronger majority (68%) denied that this was the case, most likely also because the question gauged their personal abilities more strongly. However, when asked if they felt overwhelmed by what was asked of them, a quarter of students agreed to this notion, stating they were overwhelmed and only 42% disagreed.

Table 11: Academics and workload and the first semester experience

Correlations Pearson)	I belong at uni.	I like it at uni.	Satisfaction 1st sem.
It was easy for me to follow the content in my classes.	,261**	,318**	,469**
I was able to handle the workload.	,267**	,284**	,420**
The courses I am currently enrolled in are too difficult for me.	-,256**	-,260**	-,252**
I feel overwhelmed by what is asked of me.	-,230**	-,317**	-,264**

Academics, i.e., the ability to follow content in class and to tackle the workload strongly affected the perception of the first semester experience. Whereas 72% of students for whom it was easy to follow content in class gave a four or five stars-rating on their first semester, only 17% of students with difficulties to follow content in class rated their first semester with four or five stars. In fact, 43% of the group with academic difficulties gave a one or two stars rating only (as opposed to 5% of those without difficulties). This is one of the most pronounced differences between groups in the sample.

Academics matter and they impact on how students viewed their first semester. This further confirms Tinto’s model (“Tinto 2”), with all three “Tinto reasons” depicted in the data.

Similarly, workload issues also affected the rating of the first semester experience: 70% of students who were able to handle the workload gave a four- or five-stars rating, as opposed to only 24% of students who felt unable to handle the workload. 38% of the latter group gave a one or two stars rating (as opposed to six percent of the group who found the workload manageable). The results for “I feel overwhelmed by what is asked of me” and “courses are too difficult” follow the same pattern, although slightly less pronounced.

What demographic groups perceived the strongest difficulties in the sample?

Despite this positive finding, with only a minority struggling academically, the groups of students who indicated the highest levels of academic difficulties were especially those with disabilities or learning difficulties and also students from ethnic minorities; further, students with strong financial difficulties and full-time working students expressed more strongly that it was not easy for them to follow content in class.

Not surprisingly, the items on academic difficulties correlate (strongly) statistically with each other, but equally strongly with the ability to handle the workload (Pearson: 0,521** on easy to follow), overall satisfaction with the first semester and ease of adaptation (Pearson: >0,4**) into university life.

With regard to workload issues, two groups stood out: students with disabilities and students with strong financial difficulties, indicating that the socio-economic situation affects the ability to handle the demands of studying.

Looking solely at work-status, however, the results were mixed. While students working full-time (over 35 hrs) expectedly scored below average on being able to handle the workload (agreement: 48%), those working part-time scored somewhat better than students not working at all (57% agreement vs. 53% agreement to be able to handle the workload by non-working students). The most strongly challenged group were students who considered their work more important than their studies (agreement: 27% on being able to handle the workload).

Only minor differences appeared in other groups: women, students with a migration background and first-in-family students claimed to be slightly less able to handle the workload than men, students without a migration background and those where at least one parent had already studied at university. Interestingly – and counterintuitively – students with care obligations scored higher than average on workload issues, claiming they could handle the workload (59% vs. 55% agreement), although among this group, disagree-

ment was also higher than average (22% vs. 15%) and they also felt slightly more overwhelmed by what was asked of them.

The groups that stated they were most “overwhelmed by what is asked of them”, were also students with disabilities and learning difficulties and those with strong financial difficulties (agreement rates: 54% and 46% respectively compared to average of 26%). These two groups emerge as the two most “challenged” in the sample.

Academic support focused on content comprehension, but also support offerings focusing on time management issues or learning styles can be useful in bridging the path through the first semester. However, with regard to the impact of such offerings (for example mentoring, tutoring, academic writing courses), the data are inconclusive: Students who had accessed support showed similar assessments of academic difficulties or workload issues than those in the sample who did not; this could possibly be explained in so far as students who accessed these forms of support might have been struggling and actively sought (or were offered) help. The impact of these support offerings could be mirrored in the data, by balancing out the results.

6. Likelihood of dropout

The theoretical framing of this study largely also emerged from dropout-research, i.e., identifying reasons why students decide to break off their studies early, especially Tinto’s model (see introduction). The likelihood of dropout also served as an indicator for (lacking) satisfaction with the higher education experience, negatively mirroring satisfaction and belonging. In the questionnaire three items gauged the likelihood of dropout. The first one asked whether students wanted to switch their study programme, pointing to a mismatch of expectations with the chosen subject, the second, if they intended to switch to another university, pointing to dissatisfaction with this specific institution and the third, if they wanted to give up higher education and leave university altogether (see Table 12 below).

Table 12: Likelihood of dropout

	Agree	Disagree	Fully agree (5)
I am thinking about changing my programme/field of study.	17%	73%	7%
I am thinking about enrolling at another university.	15%	76%	6%
I am thinking about leaving university altogether.	7%	87%	3%

While 17% of respondents considered changing their field of study, 15% pondered changing their university, and only a small minority of students (7%) was thinking about dropping out of higher education entirely.

However, overall, 922 students in the sample agreed to at least one of the three items, indicating that about a quarter of first-semester students was pondering a change of some sort, either a change of programme or institution or leaving higher education altogether.

Students who had intentions of dropping out scored lower on all Likert-type items than those who had no such intentions, which is an intuitive result backed by the data.

There is also a discernible pattern whereas negative views of the study experience intensified according to the type of pondered change: first, students who thought about switching university, then students who wanted to switch their study programme; finally, the group that – not surprisingly – scored lowest (with the most drastic differences) was the one that intended to leave university altogether (see Figure 2 below).

What were the problem areas for students in this least content group? What leads students to ponder breaking off their studies entirely? Was it academic difficulties and workload, the relationship to teachers, lack of institutional support or the degree of social integration and interaction with other students?

Figure 2: views on study experience according to likelihood of dropout

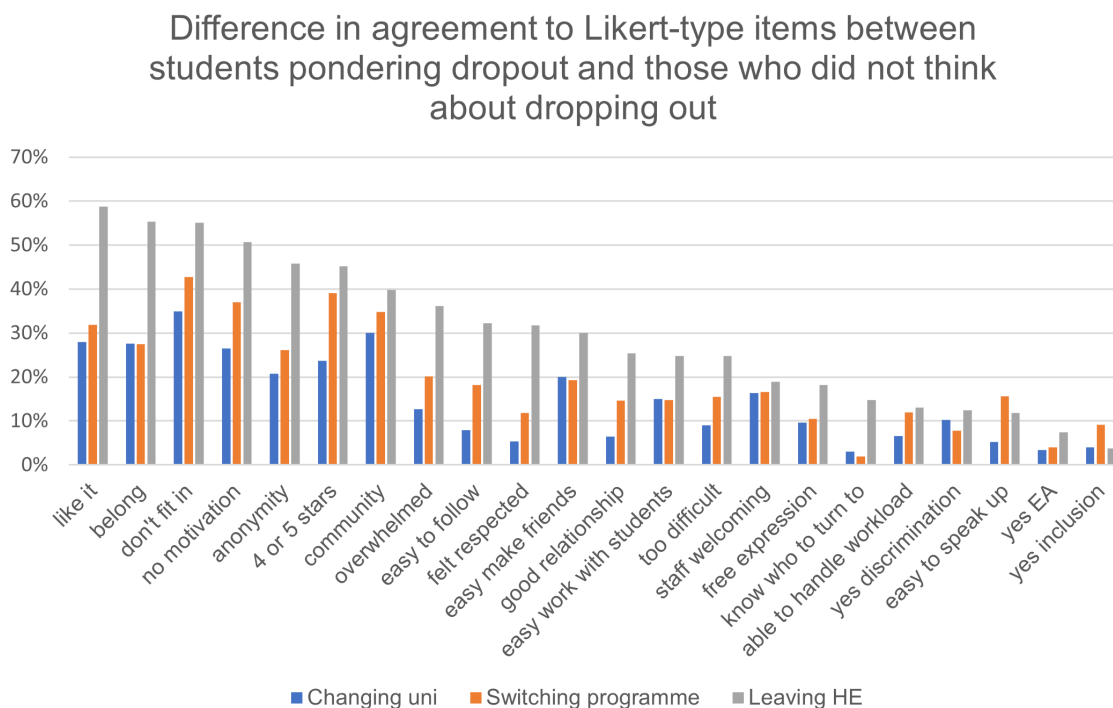


Figure 2⁷ shows the difference in agreement to Likert-type items in the survey between students thinking about dropping out (either switching universities, changing programmes or leaving HE altogether) and those who did not. For example, while only 37% of students who thought about leaving university altogether agreed to have a good relationship with their teachers, 63% of students who were not thinking about leaving university stated to have a good relationship to their teachers, a difference of 25 percent points (which is shown in the graph). These results are also mirrored in disagreement to the items. For example, while 60% of students who pondered leaving university explicitly disagreed to the notion that “they belonged at university”, only 8% of students without inclinations to drop out stated the same (a difference of 52% per cent points, disagreement not shown in table).

The data thus underlines that students pondering dropout fared worse in all aspects, i.e., they rated their relationship to students and staff, their workload and academic difficulties as well as their overall experience worse than students who were not thinking about dropping out.

However, while it is not surprising that students pondering to drop out scored lower (less positively) on all items, it is highly interesting to see in what areas the strongest differences emerged. Items relating to the relationship to teachers and social interaction with other students as well as those on academic difficulties and workload and institutional support appear in the middle section of the graph, i.e., the differences are not as pronounced. Especially with regard to being able to handle the workload the difference is relatively small, almost at the bottom end of the graph. The top eight spots - and thus the strongest differences between dropouts and non-dropouts - are held by more intangible items: “I like it at university.”, “I feel that I belong at university.”, “Sometimes I wonder if I fit in.”, “Often I don’t want to go to class.”, “I feel I could disappear for days and no one would notice” and “I feel part of a community” in addition to the overall stars rating on the first semester experience.

These items refer to a degree of discomfort, of feeling out of place, of anonymity and a lack of integration: of not belonging to a community that is difficult to grasp. It is more soft, vague, intangible issues, such as a feeling of belonging, not fitting in, not wanting to go to class: they just “don’t like it” at university.

Is there a difference in the inclination to drop out between certain demographic (i.e., “vulnerable”) groups?

7 Negative items were reversed.

For students thinking about enrolling at a different university, i.e., those not content with the specific institution they were studying at, especially students claiming “diverse” as their gender (n=22) agreed to this notion (47% vs. 15% average agreement); also – as mirrored elsewhere in the survey – students with strong financial difficulties (n=124) were thinking about switching universities at a much higher rate than the average (42% agreement vs. 15% average). But also students with a migration background or from an ethnic minority, international students and those with disabilities and learning difficulties showed slightly higher proclivities to changing universities (around 20% agreement vs. 15% average). Gender (males, females), parental education or work status had no (or only very minor) effects.

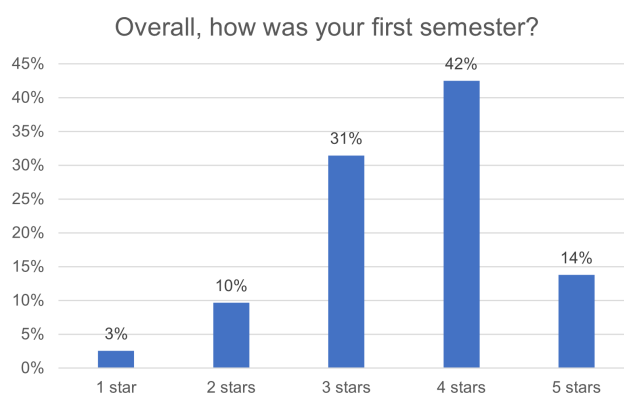
When it comes to switching study programmes, i.e., students not having found the right fit subject-wise, the results are similar as above, although not as pronounced, with diverse students and those with strong financial difficulties most inclined to switch subjects (32% agreement vs. 17% average); the same applies for the other groups mentioned above. Interestingly, students working full time (over 35 hours) and those who see work as their priority, show the least inclination to switch studies (agreement 11% and 10% vs. 17% average), most likely indicating that these students chose their subjects very intentionally, with a clear professional aim in mind.

Finally, the group of students who were thinking about leaving university altogether, for whom higher education itself was not the right fit. Here, especially students with disabilities and learning difficulties (14% vs. 7% average) agreed they were thinking about dropping out of HE entirely. Also, students with strong financial difficulties (20%), those who considered work more important than their studies (17%) and to an extent also students with care obligations (12%) and from ethnic minorities (12% agreement) were more prone to consider dropping out entirely and giving up on their higher education. For the other demographic groups, no discernible differences could be made out (between 1-3% divergence from the average). The data thus underline that in the sample especially students with strong financial difficulties and those with disabilities and learning difficulties were struggling to stay either at their institution or in higher education at all. They emerged as the most “critical” or the groups with the strongest difficulties throughout the survey, not only on dropout items. Interestingly, and counterintuitively (or at least counter to what was expected), parental education, i.e., “first-in-family” students as a group often considered especially “vulnerable” in HE, as well as gender and work-status had no discernible effects on the likelihood of dropout in the sample (with specific exceptions, “diverse students”, full-time working students on changing study programme, see above).

7. Satisfaction, belonging and feeling part of a community

The results on the likelihood of dropout showed that more intangible, vague items of belonging, liking it at university, feeling part of a community, fitting in, being noticed, not part of an anonymous crowd made the difference. To what extent do these issues then, conversely, affect overall satisfaction with the first semester experience?

Figure 3: Satisfaction with study experience



As Figure 3 shows, the majority of beginner students (56%) gave a four or five stars rating overall, indicating they were satisfied and very satisfied with their first-year experience. Around a third of students gave a mediocre three stars-rating and only a minority (13%) rated their experience badly with only one or two stars. This brings the arithmetic mean to 3,55 and the median to a reassuring 4 stars. Still, 44% of students asked were not particularly satisfied with their experience.

With regard to the satisfaction levels of certain demographic groups, female students and those who considered themselves part of an ethnic minority or as having a migration background gave comparatively fewer 4 and 5 stars ratings and higher 1 and 2 stars-ratings and thus can be considered less satisfied with their experience overall. Among the least satisfied groups were diverse students and especially students with strong financial difficulties, only 34% of them gave four or five stars (average of 56%, 58% of those with no financial difficulties) and 27% of them giving one or two stars ratings. This group emerged as the least satisfied.

Interestingly, working students were more satisfied and rated their experience better than those not working at all.⁸ The same is true for international students in the sample: International students were overall more satisfied with their first-semester experience than “local” students studying in their home-country.

Counterintuitive are the results for first-in-family students who rated their experience slightly better than students where at least one parent had previously studied at university (58% vs. 55% 4 and 5 star ratings). Various studies have underlined the importance of parental support and the possibility to lean on parents’ experience as a decisive factor that puts students with parents who have HE-experience at an advantage. On the other hand, those first-in-family students who made it to higher education already underwent a selection process and had to beat the odds in prior educational crossroads.

To look into this further, the survey also asked for parental support that students received. There are slight differences in satisfaction for students whose family supported them in the decision to enrol at university (57% vs. 52% who gave 4 or 5 stars, for both groups 12% 1 and 2 stars) and whose families supported them financially (57% vs. 53% 4 and 5 stars, 12% 1 and 2 stars vs. 15% of students who received no financial support from their parents). These findings are in line with previous literature, however, the strongest differences appear with regard to the item “I am able to talk to my family about my studies”. Those students who agreed to this notion, rated their first semester experience much more highly than those who could not talk to their parents (60% vs. 39% 4 and 5 stars, 10% vs. 23% 1 and 2 stars). These findings again support the above hypotheses that being able to turn to parental advice or discussing their studies impacts on the experience. Parents matter.

First-in-family students in the sample claimed to receive less support in their decision to enrol, they were less able to talk to their parents and were also less frequently financially supported, as fits the picture.

A main aim of the ENTRANTS study was also to find out how “soft factors”, i.e., feelings of belonging, considering oneself part of a community, being seen in a non-anonymous environment and “fitting in”, affected the first semester experience.

Table 13: Belonging and feeling part of a community at university

	Agree	Disagree	Ar. Mean
I feel that I belong at university.	66%	14%	3,8
I like it at university.	76%	7%	4,0
I feel part of a community at my university.	49%	25%	3,3
I could disappear for days and no one would notice.	29%	54%	2,6
Sometimes I wonder if I really fit in.	39%	36%	3,0

8 However, students who claimed their work was more important than their studies, scored decidedly lower than average.

Overall, around two thirds of students felt “they belonged at university”, over three quarters also claimed to “like it at university”, pointing to a positive view.

However, only half of the students in the sample (49%) saw themselves as “part of a community” at their university, with a quarter explicitly disagreeing to this notion. A third of students agreed to the statement that “they could disappear for days and no one would notice”, pointing to prevalent perceptions of anonymity among a large part of beginner students. Around 40% of students - and thus a considerable part of the sample - also sometimes wondered “if they really fit in”.

How do these soft factors impact on overall satisfaction and how students rated their first-semester-experience?

Table 14: Strongest correlations with the stars rating on the first semester experience („Overall, how was your first semester?“)

I like it at university.	,487**
I feel part of a community at my university.	,482**
It was easy for me to follow the content in my classes.	,468**
It was easy to make new friends.	,436**
Overall, I have a good relationship with my teachers.	,432**
I feel that I belong at university.	,431**
I was able to handle the workload.	,42**
In case of problems, I feel I can turn to teachers for help and guidance.	,411**
Going to university was the right decision.	,41**
Often I don't want to go to classes.	-,41**
I feel I have chosen the right study programme.	,40

Table 14 shows the items in the survey that most closely correlated to the overall satisfaction item. While “liking it at university” gauges a similar perception as overall satisfaction, and thus it is not surprising, rather confirmatory, that the two items would correlate, “feeling part of a community” is second on the list. Students who felt part of a community were also more likely to rate their experience higher.

But also items on academic difficulties and workload correlate to satisfaction as well as those focusing on social integration and the relationship to teachers and the items on study choice. In fact, all of Tinto’s reasons (choice of study, academic difficulties, and integration into the “social and intellectual life” of the institution) appear mirrored in the sample. All three aspects contribute and impact on the first-semester experience.

However, a more intangible feeling of “being part of a community” showed almost the strongest correlation. If feeling part of a community is important in how students rate their first-semester experience, what then contributes to developing such feelings of community“?

Table 15 Strongest correlations with the item „I feel part of a community at my university.“

I feel that I belong at university.	,616**
I like it at university.	,535**
I could disappear for days and no one would notice.	-,484**
Overall, how was your first semester?	,482**
It was easy to make new friends.	,476**
Sometimes I wonder if I really fit in.	-,45**
Looking back, it was easy for me to work together with other students.	,448**

At my institution students help each other.	,444**
I met with fellow students outside of the classroom.	,432**

Besides the similar items of belonging, satisfaction, liking it at university, the focus is clearly on social interaction: making friends and meeting other outside of the classroom, working together with other students and a feeling of mutual support among students, being noticed, not anonymous and fitting in.

While it is of course not surprising that feeling part of a community is spawned by social networks and interaction, of interconnectedness and friendship and good working relations, the data clearly underline the importance of social aspects in how students view their first semester experience.

Further research is required (and forthcoming) on how vague, intangible feelings of community and belonging impact on the student experience. However, it becomes clear at this point that social interaction and actions aiming at enhancing “community building” among (first) semester students are vital in order to provide the best start-out in higher education.

8. Online Learning and the impact of Covid19

The survey was carried out at the end of the autumn semester 21/22, that is, during the Covid pandemic (although not in the first Covid semesters), in a state heavily reliant on digital education. Still, 29% of students claimed to have been taught only in face-to-face settings (see Table 16), with the overwhelming majority (64%) studying in blended mode and 8% claiming to have studied only online. Further, students were asked to indicate their level of equipment and digital skills (Table 17) and to describe their experience (What was good about online learning, what was bad).

Table 16: Mode of study

Please indicate your mode of study during your first semester.	Quoted by
Only face-to-face	28,6%
Blended teaching and learning (i.e. both face-to-face and online learning)	63,5%
Only online teaching and learning	7,9%

Table 17: Digital equipment and skills

Please indicate to what extent you agree or disagree to the following statements.	Agree	Disagree	Ar. Mean
I liked having classes in an online setting.	30%	46%	2,8
I am adequately equipped with hardware (laptop, computer, webcam, etc.) for online education.	88%	4%	4,5
I have sufficient internet access (broadband, bandwidth) for online education.	82%	9%	4,2
I feel confident in my digital skills.	79%	6%	4,2

Overall, 46% of students, and thus almost half, disagreed to the statement “I liked having classes in an online setting”, however, about a third (30%) also claimed to have liked online classes. Among the demographic groups who viewed online classes most positively were – not surprisingly – working students, especially those working over 20 hours a week and those who considered work more important than their studies, students with care obligations and those with strong financial difficulties.

The vast majority claimed to have been adequately equipped with hardware, having sufficient internet access and feeling confident in their digital skills (88%, 82% and 79% agreement rates respectively).

When asked what was good about online education in an open question, flexibility, and especially being spared the time-consuming commute to the university was mentioned frequently, also the ability to study at one's own pace enabled by digital education. Further, the comfort and ease of working in one's own home, the ability to combine work and studies, and the ease of scheduling/organising time plans was repeatedly mentioned as an advantage of digital educational settings.

Regarding disadvantages of online learning, i.e., "what was bad", especially difficulties to concentrate, that it was harder to stay focused or pay attention came to mind. Frequently, digital lectures were described as "boring or dull" and that one could be easily distracted. A disadvantage that was also highlighted frequently was the lack of social interaction and socialisation and limited interaction with other students, that it was difficult to make new friends, being alone and isolated in front of the computer. One student commented: "I don't feel university's life."

Interestingly, students who claimed to have liked online classes scored considerably and consistently lower on the Likert-type items. They rated their relationship to teachers and institutional support worse, felt less part of a community, less of a sense of belonging and more anonymous. They were also more overwhelmed by the workload and it was more difficult for them to follow content in class and to adapt to university life. They also showed lower rates of social interaction with other students and rated their first semester experience lower overall and were more likely to drop out. Vice versa, those students who claimed they didn't like online classes, for whom it can be presumed that they would have wanted more face-to-face interaction and who were in a way also looking for a "university experience", had a more positive view of their first semester overall. This could indicate while online education can be considered practical, it adversely affects the higher education experience.

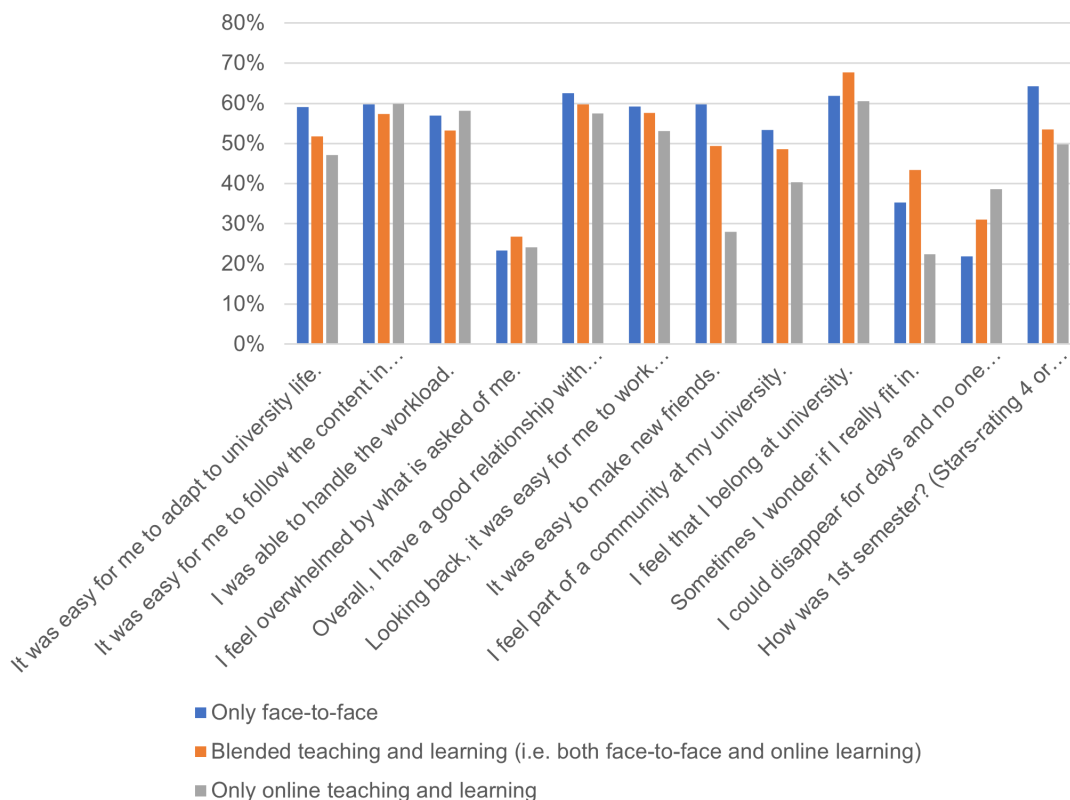
When looking at mode of study (only face-to-face, blended, only online), the results are not as consistent and pronounced; however, clearly, students who were online studying online scored lowest on all items regarding social interaction as well as feeling part of a community, anonymity, ease of adaptation and

To what extent and how did the mode of study influence the first semester experience? What differences between students studying only in face-to-face settings, those in a blended learning environment and online-only learners could be identified? Did students in online-only settings fare worst on all aspects? They certainly – and not surprisingly – scored lowest on social integration items (especially making friends, but also working with other students, perceived anonymity) and the relationship to teachers (see Figure 4 below). They also felt considerably less part of a community at university and had the most difficulties in adapting to university life. Also, their likelihood of dropout was highest. For example, while 19% of students in online-only programmes considered leaving university altogether, this was only stated by 5% of students who only had face-to-face instruction (7% blended).

In contrast, it was students who only studied only in face-to-face settings that scored most positively on these items. However, with regard to academic and workload issues, online-only students were not the most challenged group, rather, it was students in blended-learning environments that scored lowest on these items, pointing to challenges in accommodating both modes of teaching for students.

Ultimately, when asked for their overall satisfaction with their first semester, face-to-face students clearly scored highest, and online-only students showed the lowest degrees of satisfaction (as measured in 4 or 5 stars for "Overall, how was your first semester"). This finding again underlines the importance of the social aspect, of interaction with students and staff, for a positive first semester experience.

Figure 4: The impact of mode of study on selected items (agreement shown)



9. Differences BA-MA-PhD

The survey targeted all first-semester students, including students who were in their first semester of a master or PhD programme and thus did not only look at experiences of complete beginners who had “started out in higher education” entirely.

The results for BA (78% of respondents), MA (13%) and PhD (3%) beginner students differ in the survey.⁹ In the sample, MA beginner students rated their experience worst overall. They scored lower than BA and PhD beginners on support items, academic difficulties and workload, belonging and community, social integration with other students and the relationship to teachers; they were also the least satisfied group when rating their first-semester experience overall. There are few exceptions where MA-students in the sample did not score worst, for example in adapting to higher education, motivation (“often I don’t want to go to class”) and “fitting in” (where BA-students scored lowest).

This rather negative view of MA-students was surprising at first, as MA-students tend to be more satisfied with their studies (as outlined in previous studies) and their experience overall.¹⁰ One possible explanation could be that Covid and the shift to online teaching adversely affected the experience of MA-students, who were (as previous BAs) used to a different style of learning, whereas BA-beginners started out under these circumstances. However, BA-students also liked online classes least, by far.

PhD students on the other hand, were most convinced of their study choice, most able to follow content in their class, to speak up in class and able to handle the workload. They had the best and closest relationships to their teachers (close interaction between student and teachers at PhD levels) and admin staff and viewed support most favourably.

⁹ The remaining 6% of respondents stated: Other, meaning two programmes at once or specific programmes outside the Bologna-scheme (diploma studies, medical schools, etc.).

¹⁰ See, for example, the survey on the social situation of students in Austria: Zucha 2020, p. 20 and 42.

Interestingly, PhD students carving out their own path at the university by doing independent research, scored worst on the two items related to a discrimination and the free expression of ideas (“I have experienced discrimination at my university” and “My study programme provides an environment for the free and open expression of ideas, opinions and beliefs”). It appears that PhD beginners most strongly perceive or are most aware of limitations to the free expression of their (own, new) ideas. They also scored highly on leaving university altogether, i.e., they were considering giving up on their PhD project. Also, family support (in the decision to enrol, financially and in being able to talk to family about one’s studies) appeared to be lowest for PhD students who are overall more mature and advanced in their studies.

10. The role of demographics

In devising its outputs, the ENTRANTS project opted for an anti-categorical approach, essentially developing support offerings that address all students alike to avoid the triggering of “Othering” mechanisms or stigmatisation (by being addressed as a “vulnerable” and thus “weak” group, for example, women in STEM or first-in-family students).

However, in the analysis of this survey, demographics (gender, age, work-status, socioeconomic background and parental education) were included to find out if specific groups of students are struggling (more) and in what areas difficulties and differences arise for and between specific groups of students. To what extent does the socio-economic background influence the first semester experience?

In the previous chapters, especially students with disabilities and those with strong financial difficulties appeared to have been struggling the most, often giving the least positive responses on various items.

Looking at the role of demographics in the survey is sobering. The socioeconomic background impacts on how students view and perceive their first semester experience, especially when looking at central categories of the ENTRANTS project, belonging, community, liking it at university and, finally, overall satisfaction.

Table 18: Demographic groups and belonging and satisfaction with studies (agreement shown)¹¹

	I feel that I belong at university.	I feel part of a community at my university.	I like it at university.	4 or five stars
Migration background - yes	59%	38%	72%	51%
Migration background – no	68%	53%	77%	58%
Ethnicity – yes	59%	43%	66%	54%
Ethnicity – no	67%	52%	77%	57%
Disability – yes	63%	48%	73%	57%
Disability – no	66%	49%	76%	57%
Work -no	63%	47%	73%	54%
Work - part-time	69%	53%	77%	58%
Work - full time	63%	41%	81%	58%
Financial difficulties – no	68%	51%	77%	58%
Financial difficulties – somewhat	61%	45%	76%	53%
Financial difficulties – high	46%	33%	52%	34%
Gender – female	66%	49%	74%	55%
Gender – male	66%	54%	78%	63%

¹¹ No answer/prefer not to say not shown.

Gender – diverse	40%	7%	55%	34%
Parental education: „first-in-family“	59%	47%	75%	58%
Parental education: HE experience	69%	50%	76%	55%

Table 18 shows that gender, migration background, ethnicity and financial situation/socioeconomic status influence the results and (negatively) impact on the perception of belonging and community at university, liking it at university and overall satisfaction with the first semester experience. Female and especially “diverse” students, those with a migration background or from an ethnic minority and students with disabilities and strong financial difficulties scored lower on the items than their respective counterparts. Two exceptions to this rule can be identified in the sample. Work-status per se resulted in a differentiated picture: with non-working students scoring lowest on satisfaction and “liking it” at university, part-time working students having the highest rates of belonging and community and – surprisingly – full-time working students “liking it” most at university. Also, while first-in-family students, i.e., those students where neither one of the parents studied at university (even if they did not finish their studies), scored considerably lower on belonging, in the sample they rated their first semester experience higher (gave more 4 or 5 stars) than students from an academic family background. However, this is balanced out in disagreement and the arithmetic mean is the same for both groups on this item.

Closing remarks

The ENTRANTS project focused strongly on aspects of belonging and feeling part of a community in higher education. The data confirm the importance of these aspects, especially the level of social integration, for the first semester experience. While further research is required to analyse the connections between satisfaction, academic and workload issues and social integration in more depth, the development of community-building courses or other activities that foster embeddedness in and with the institution can certainly be considered a valuable investment to enhance satisfaction and to counteract dropout.

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Annex

Demographic Composition of sample (unweighted data shown, n=3905)

Gender

What is your gender?		n
Female	66%	2568
Male	32%	1237
Diverse	0,6%	22
Other	0,5%	21
n.A./prefer not to say	1,5%	57

Country of study

In which country are you currently studying?		
Austria	17	0,4%
Belgium	19	0,5%
Croatia	13	0,3%
Cyprus	2	0,1%
Czech Republic	639	16,4%
Denmark	37	0,9%
Estonia	3	0,1%
Finland	64	1,6%
France	35	0,9%
Germany	67	1,7%
Greece	16	0,4%
Hungary	14	0,4%
Ireland	83	2,1%
Italy	462	11,8%
Latvia	55	1,4%
Lithuania	16	0,4%
Malta	251	6,4%
Netherlands	28	0,7%
Poland	87	2,2%
Portugal	61	1,6%
Romania	1698	43,5%
Slovakia	12	0,3%
Slovenia	1	0,0%
Spain	43	1,1%
Sweden	11	0,3%
United Kingdom	171	4,4%

Age

What is your age in years?	n	
17	1	0,03%
18	366	9,4%
19	1262	32,3%
20	826	21,2%
21	356	9,1%
22	254	6,5%
23	176	4,5%
24	127	3,3%
25	71	1,8%
26	35	0,9%
27 to 30	97	2,5%
31 to 40	85	2,2%
41 and over	57	1,5%
No answer/prefer not to say	192	4,9%

Migration background

I have a migration background.		n
Yes	12%	459
No	85%	3324
No answer/prefer not to say	3%	122

International student

I am an international student.		n
Yes	15%	583
No	83%	3260
No answer/prefer not to say	2%	62

Ethnicity

I consider myself part of an ethnic minority.		n
Yes	10%	372
No	86%	3358
No answer/prefer not to say	4%	175

Disability or learning difficulty

I consider myself to have a disability or learning difficulty		n
Yes	6,9%	269
No	89,6%	3499
No answer/prefer not to say	3,5%	137

Financial situation

I have financial difficulties.		n
Yes, somewhat.	28%	1089
Yes, strongly.	3%	124
No.	60%	2346
No answer/prefer not to say	9%	346

Work status

I am working alongside my studies.		n
No.	59,9%	2340
Yes, under 10 hours per week.	15,8%	616
Yes, between 10 and 20 hours per week.	12,6%	492
Yes, between 20 and 35 hours per week.	5,1%	200
Yes, full time (35 hours and up).	6,0%	235
No answer/prefer not to say	0,6%	22

I consider my work obligations more important than my studies.		n
Yes	4,4%	173
No	63,0%	2462
Equally important	19,1%	745
No answer/prefer not to say	13,4%	525

Parental education

At least one of my parents also studied at university (even if they did not finish their studies).		n
Yes	54%	2116
No	43%	1670
No answer/prefer not to say	3%	119

Care obligations

I have care obligations (children, elderly).		n
Yes	6,8%	267
No	89,6%	3500
No answer/prefer not to say	3,5%	138

Living situation

I live in		n
a dormitory on campus	19,5%	763
my own place	19,5%	762
with roommates	19,8%	773
with my family	36,0%	1407
Other:	3,4%	131
No answer/prefer not to say	1,8%	69

Agreement to Likert-type items

Entry phase

Please indicate to what extent you agree or disagree with the following statements	Weighted Data			Unweighted data		
	Agree	Disagree	Ar. Mean	Agree	Disagree	Ar. Mean
Going to university was the right decision.	87%	4%	4,4	86%	4%	4,5
I feel I have chosen the right study programme.	74%	7%	4,03	78%	6%	4,17
I was able to handle the workload.	55%	15%	3,5	59%	13%	3,6
It is easy for me to speak up in class.	39%	36%	3,1	37%	35%	3,1
It was easy for me to adapt to university life.	53%	18%	3,5	61%	12%	3,7
It was easy for me to follow the content in my classes.	58%	14%	3,5	57%	18%	3,6
The way people express themselves at university is very different from what I am used to.	34%	38%	3,0	41%	34%	3,1

Relationship to teachers and fellow students

Please indicate to what extent you agree or disagree with the following statements	Weighted Data			Unweighted data		
	Agree	Disagree	Ar. Mean	Agree	Disagree	Ar. Mean
Overall, I have a good relationship with my teachers.	60%	11%	3,7	65%	9%	3,8
Most of my teachers know my name.	26%	57%	2,4	27%	54%	2,5
In case of problems, I feel I can turn to teachers for help and guidance.	53%	23%	3,4	53%	22%	3,5
My teachers are concerned when I am absent from classes.	16%	66%	2,1	19%	58%	2,3
I can easily approach administrative staff.	47%	25%	3,3	47%	25%	3,3
Looking back, it was easy for me to work together with other students.	58%	17%	3,5	65%	12%	3,8
I met with fellow students outside of the classroom.	61%	25%	3,6	62%	24%	3,6
It was easy to make new friends.	51%	30%	3,3	55%	24%	3,5
I felt respected by my fellow classmates.	72%	7%	3,9	71%	8%	4,0
At my institution students help each other.	72%	9%	3,9	71%	11%	3,9
I was informed about the opportunity to join societies and activities I can participate in.	68%	14%	3,8	70%	13%	3,9

I have taken part in extracurricular activities (e.g. sports clubs, etc.)	43%	44%	3,0	35%	50%	2,7
I have difficulties with the language spoken in my study programme.	5%	90%	1,4	6%	88%	1,5

Belonging at HEI

Please indicate to what extent you agree or disagree with the following statements	Weighted Data			Unweighted data		
	Agree	Disagree	Ar. Mean	Agree	Disagree	Ar. Mean
I feel that I belong at university.	66%	14%	3,8	67%	12%	3,9
I feel part of a community at my university.	49%	25%	3,3	53%	21%	3,5
I could disappear for days and no one would notice.	29%	54%	2,6	26%	57%	2,5
Sometimes I wonder if I really fit in.	39%	36%	3,0	34%	42%	2,9
I perceive that peers of different cultural backgrounds, sexual orientations or students with disabilities are treated fairly within my study programme.	75%	10%	4,0	68%	12%	3,9
I have experienced discrimination at my university.	10%	81%	1,7	10%	82%	1,7
My study programme provides an environment for the free and open expression of ideas, opinions and beliefs.	69%	9%	3,9	64%	12%	3,8
I like it at university.	76%	7%	4,0	76%	7%	4,1
Often I don't want to go to classes.	26%	51%	2,7	24%	54%	2,6
The courses I am currently enrolled in are too difficult for me.	10%	68%	2,2	10%	68%	2,2
I feel overwhelmed by what is asked of me.	26%	42%	2,8	25%	44%	2,7
I am thinking about enrolling at another university.	15%	76%	1,9	11%	79%	1,8
I am thinking about changing my programme/field of study.	17%	73%	2,0	12%	78%	1,8
I am thinking about leaving university altogether.	7%	87%	1,5	7%	86%	1,5

Information, support and digital skills

Please indicate to what extent you agree or disagree with the following statements	Weighted Data			Unweighted data		
	Agree	Disagree	Ar. Mean	Agree	Disagree	Ar. Mean
When I started, I received all the information I needed.	47%	31%	3,2	49%	27%	3,3

I found staff at my institution really welcoming.	59%	18%	3,6	60%	16%	3,6
I feel well informed about existing support offerings at my institution.	51%	26%	3,3	51%	23%	3,4
I know who to turn to in case of problems.	53%	24%	3,4	55%	23%	3,5
I find support services are easily accessible.	47%	25%	3,3	46%	23%	3,3
My family supported me in the decision to enrol at university.	90%	4%	4,6	90%	4%	4,6
I am able to talk to my family about my studies.	83%	8%	4,3	84%	7%	4,4
I liked having classes in an online setting.	30%	46%	2,8	37%	39%	3,0
I am adequately equipped with hardware (laptop, computer, webcam, etc.) for online education.	88%	4%	4,5	88%	4%	4,5
I have sufficient internet access (broadband, bandwidth) for online education.	82%	9%	4,2	84%	6%	4,4
I feel confident in my digital skills.	79%	6%	4,1	78%	7%	4,2