

Does going to university in a different country affect your mental health? A Japanese international university surveyed its students in 2018 and published a study the following year that was approved by several ethical and regulatory boards.

The study found that international students have a higher risk of mental health difficulties than the general population, and that social connectedness (belonging to a social group) and acculturative stress (stress associated with joining a new culture) are predictive of depression.

Explore the `students` data using PostgreSQL to find out if you would come to a similar conclusion for international students and see if the length of stay is a contributing factor.

Here is a data description of the columns you may find helpful.

Field Name	Description
<code>inter_dom</code>	Types of students (international or domestic)
<code>japanese_cate</code>	Japanese language proficiency
<code>english_cate</code>	English language proficiency
<code>academic</code>	Current academic level (undergraduate or graduate)
<code>age</code>	Current age of student
<code>stay</code>	Current length of stay in years
<code>todep</code>	Total score of depression (PHQ-9 test)
<code>tosc</code>	Total score of social connectedness (SCS test)
<code>toas</code>	Total score of acculturative stress (ASISS test)

```
In [33]: -- Run this code to save the CSV file as students
SELECT *
FROM 'students.csv';
```

Out[33]:

	inter_dom	region	gender	academic	age	age_cate	stay	stay_cate	japanese	japanese_c
0	Inter	SEA	Male	Grad	24.0	4.0	5.0	Long	3.0	Aver
1	Inter	SEA	Male	Grad	28.0	5.0	1.0	Short	4.0	H
2	Inter	SEA	Male	Grad	25.0	4.0	6.0	Long	4.0	H
3	Inter	EA	Female	Grad	29.0	5.0	1.0	Short	2.0	L
4	Inter	EA	Female	Grad	28.0	5.0	1.0	Short	1.0	L
...
281	None	None	None	None	NaN	NaN	NaN	None	NaN	Nc
282	None	None	None	None	NaN	NaN	NaN	None	NaN	Nc
283	None	None	None	None	NaN	NaN	NaN	None	NaN	Nc
284	None	None	None	None	NaN	NaN	NaN	None	NaN	Nc
285	None	None	None	None	NaN	NaN	NaN	None	NaN	Nc

286 rows × 50 columns

```
In [34]: -- summary stats
SELECT inter_dom,
       COUNT(*) AS total_records,
       ROUND(AVG(todep)) AS avg_depression_score,
       ROUND(AVG(tosc)) AS avg_social_connectedness_score,
       ROUND(AVG(toas)) AS avg_acculturative_stress_score
FROM students
WHERE inter_dom NOT LIKE 'null'
GROUP BY 1;
```

Out[34]:

	inter_dom	total_records	avg_depression_score	avg_social_connectedness_score	avg_accultura
0	Inter	201	8.0	37.0	
1	Dom	67	9.0	38.0	

```
In [35]: SELECT stay,  
          ROUND(AVG(todep), 2) AS average_phq,  
          ROUND(AVG(tosc), 2) AS average_scs,  
          ROUND(AVG(toas), 2) AS average_as  
FROM students  
WHERE inter_dom = 'Inter'  
GROUP BY stay  
ORDER BY stay DESC;
```

Out[35]:

	stay	average_phq	average_scs	average_as
0	10.0	13.00	32.00	50.00
1	8.0	10.00	44.00	65.00
2	7.0	4.00	48.00	45.00
3	6.0	6.00	38.00	58.67
4	5.0	0.00	34.00	91.00
5	4.0	8.57	33.93	87.71
6	3.0	9.09	37.13	78.00
7	2.0	8.28	37.08	77.67
8	1.0	7.48	38.11	72.80