

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)

DataFrames and CSVs DataFrame as `students`

-- Run this code to save the CSV file as students
SELECT *
FROM 'students.csv';

...	↑↓	i...	...	↑↓	...	↑↓	...	↑↓	...	↑↓	...	↑↓	s...	...	↑↓	...	↑↓	japane...	...	↑↓	...	↑↓	engli...	...	↑↓	...
0		Inter		SEA		Male		Grad		24		4	5	Long		3		Average		5		High			null	▲
1		Inter		SEA		Male		Grad		28		5	1	Short		4		High		4		High			null	
2		Inter		SEA		Male		Grad		25		4	6	Long		4		High		4		High			Yes	
3		Inter		EA		Female		Grad		29		5	1	Short		2		Low		3		Average			No	
4		Inter		EA		Female		Grad		28		5	1	Short		1		Low		3		Average			Yes	
5		Inter		SEA		Male		Grad		24		4	6	Long		3		Average		4		High			Yes	
6		Inter		SA		Male		Grad		23		4	1	Short		3		Average		5		High			Yes	
7		Inter		SEA		Female		Grad		30		5	2	Medium		1		Low		1		Low			Yes	
8		Inter		SEA		Female		Grad		25		4	4	Long		4		High		4		High			No	
9		Inter		Others		Male		Grad		31		5	2	Medium		1		Low		4		High			Yes	
10		Inter		Others		Female		Grad		28		5	1	Short		1		Low		2		Low			No	
11		Inter		SEA		Female		Grad		31		5	1	Short		1		Low		4		High			Yes	
12		Inter		SA		Male		Grad		29		5	1	Short		1		Low		4		High			Yes	
13		Inter		EA		Male		Grad		23		4	1	Short		3		Average		4		High			Yes	
14		Inter		SEA		Female		Grad		31		5	1	Short		1		Low		3		Average			Yes	
15		Inter		Others		Female		Grad		30		5	1	Short		1		Low		5		High			Yes	▼

Rows: 286 ⬇

DataFrames and CSVs DataFrame as `df`

-- Start coding here...
SELECT COUNT(*) AS total_records
FROM students

index	...	↑↓	total_records	.
			0	

Rows: 1 ⬇

DataFrames and CSVs

DataFrame as df1

```
SELECT inter_dom, COUNT(*) AS count_inter_dom,
FROM students,
GROUP BY inter_dom;
```

index	...	↑↓	inter_dom	...	↑↓	count_inter_dom	•
		0	Inter				
		1	Dom				
		2	null				

Rows: 3 ↓

DataFrames and CSVs

DataFrame as df2

```
SELECT inter_dom
FROM students
WHERE inter_dom IN ('Inter', 'Dom', 'null')
GROUP BY inter_dom;
```

...	↑↓	i.	...	↑↓	
	0	Inter			
	1	Dom			

Rows: 2 ↓

DataFrames and CSVs

DataFrame as

```
SELECT inter_dom,
      MIN(todep) AS min_todep,
      MIN(tosc) AS min_tosc,
      MIN(toas) AS min_toas,
      MAX(todep) AS max_todep,
      MAX(tosc) AS max_tosc,
      MAX(toas) AS max_toas,
      ROUND(AVG(todep), 2) AS avg_todep,
      ROUND(AVG(tosc), 2) AS avg_tosc,
      ROUND(AVG(toas), 2) AS avg_toas
FROM students
GROUP BY inter_dom;
```

...	↑↓	i.	...	↑↓	π	...	↑↓	...	↑↓	...	↑↓	π	...	↑↓	...	↑↓	α	...	↑↓	...	↑↓	...	↑↓	
	0	Inter			0		11		36		25		48		145		8.04		37.42		75.56			
	1	Dom			0		8		36		23		48		112		8.61		37.64		62.84			
	2	null																						

Rows: 3 ↓

DataFrames and CSVs

DataFrame as

```
SELECT inter_dom,
      MIN(todep) AS min_todep,
      MIN(tosc) AS min_tosc,
      MIN(toas) AS min_toas,
      MAX(todep) AS max_todep,
      MAX(tosc) AS max_tosc,
      MAX(toas) AS max_toas,
      ROUND(AVG(todep), 2) AS avg_todep,
      ROUND(AVG(tosc), 2) AS avg_tosc,
      ROUND(AVG(toas), 2) AS avg_toas
FROM students
WHERE inter_dom = 'inter'
GROUP BY inter_dom;
```

Your query ran successfully but returned no results.

DataFrames and CSVs

DataFrame as

```
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;
```

...	↑↓	...	↑↓	av...	...	↑↓	av...	...	↑↓	a...	...	↑↓
0		10				13				32		50
1		8				10				44		65
2		7				4				48		45
3		6				6				38		58.67
4		5				0				34		91
5		4				8.57				33.93		87.71
6		3				9.09				37.13		78
7		2				8.28				37.08		77.67
8		1				7.48				38.11		72.8
Rows: 9 ↓												