PROJECT: ANALYZING STUDENTS' MENTAL HEALTH

datalab

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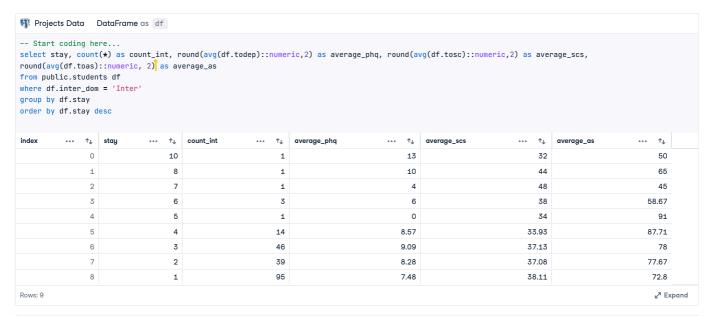
The study found that international students have a higher risk of mental health difficulties than the general population, and that social connectedness (belonging to a social group) and acculturative stress (stress associated with joining a new culture) are predictive of depression.

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

🐘 Projects Data   DataFrame as `students`

```sql
-- Run this code to view the data in students
SELECT *
FROM students;
```

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

Rows: 286

⤢ Expand

🐘 Projects Data   DataFrame as `df`

```sql
-- Start coding here...
select stay, count(*) as count_int, round(avg(df.todep)::numeric,2) as average_phq, round(avg(df.tosc)::numeric,2) as average_scs,
round(avg(df.toas)::numeric, 2) as average_as
from public.students df
where df.inter_dom = 'Inter'
group by df.stay
order by df.stay desc
```

index	stay	count_int	average_phq	average_scs	average_as
0	10	1	13	32	50
1	8	1	10	44	65
2	7	1	4	48	45
3	6	3	6	38	58.67
4	5	1	0	34	91
5	4	14	8.57	33.93	87.71
6	3	46	9.09	37.13	78
7	2	39	8.28	37.08	77.67
8	1	95	7.48	38.11	72.8

Rows: 9   ↗ Expand

From the output table, we can see that

- the average score of the PHQ test increases as the length of stay rises
- the score of social connectedness and acculturative stress don't show strong relative with the score of PHQ

🐘 Projects Data   DataFrame as `df`