



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)

-- Run this code to view the data in students

SELECT *

FROM students;

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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

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Projects Data DataFrame as df
SELECT
                                          -- Length of stay of the student (in years)
    stay,
    COUNT(stay) AS count_int,
                                          -- Number of international students for each length of stay
    ROUND(AVG(todep), 2) AS average_phq,
                                          -- Average depression score (PHQ-9), rounded to 2 decimals
                                          -- Average social connectedness score (SCS test), rounded to 2 decimals
    ROUND(AVG(tosc), 2) AS average_scs,
    ROUND(AVG(toas), 2) AS average_as
                                          -- Average acculturative stress score (ASISS test), rounded to 2 decimals
FROM students
WHERE inter_dom = 'Inter'
                                          -- Only include international students
GROUP BY stay
                                          -- Group results by length of stay
ORDER BY stay DESC;
                                          -- Sort from longest stay to shortest
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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 **Z** Expand

Key Insights:

- 1. Depression (PHQ-9):
- Students with a longer stay (7–10 years) show higher depression scores (10–13).
- Those in the first 1-4 years have lower averages (7.5-9).
- 2. Social Connectedness (SCS):
- Scores remain moderate (33-48) across all groups.
- Staying longer does not guarantee stronger social ties.
- 3. Acculturative Stress (ASISS):
- Highest in the first years (72–88), then decreases with longer stays (45–65).