

Mental Health Survey Analysis

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TODO:

- add counts to tables
- significance to difference table
- fix 1D error things
- Chi-sq...choose which ones want to examine significant associations
- 1) sexual orientation 2) gender identity 3) ethnicity 4) where they live

1 Demographics

Data representing the ethnic diversity of the fall 2016 undergraduates at the University of California, Berkeley (UCB). Information provided from the office of planning and development (<http://opa.berkeley.edu/uc-berkeley-fall-enrollment-data>).

1.1 UC Berkeley Demographics

Ethnicity	Count	Prop.F.	Prop.M.	Prop.D.	Prop.T.
African American/Black	947	0.58	0.41	0.00	0.03
Mexican American/Chicano	3056	0.59	0.41	0.00	0.10
Other Hispanic/Latino	1102	0.57	0.43	0.00	0.04
Native American/Alaska Native	172	0.58	0.41	0.01	0.01
Pacific Islander	58	0.57	0.43	0.00	0.00
Chinese	5050	0.51	0.48	0.00	0.17
Filipino	867	0.59	0.41	0.00	0.03
Japanese	461	0.57	0.43	0.00	0.02
Korean	1347	0.49	0.51	0.00	0.05
Other Asian	331	0.57	0.43	0.00	0.01
South Asian	2240	0.46	0.53	0.00	0.08
Vietnamese	907	0.58	0.42	0.00	0.03
White	7594	0.50	0.50	0.00	0.26
Decline to State	1199	0.42	0.42	0.16	0.04
International	3979	0.49	0.50	0.01	0.14
Total	29310	0.52	0.47	0.01	1.00
Underrepresented Minority Subtotal	5277	0.58	0.41	0.00	0.18

- Prop.F = Proportion Female, Prop.M = Proportion Male, Prop.D = Proportion Undefined, Prop.T = Proportion Total.
- Data from: <http://opa.berkeley.edu/uc-berkeley-fall-enrollment-data>
- Note, underrepresented groups are defined as African American, Chicano/Latino, and Native American/Alaska Native.

1.2 Survey Demographics

Table represents the ethnicity profile (as populated by the UCB) for survey participants who completed the Undergraduate Student Well-being Survey - 2016" (USWBS).

Ethnicity	Count	Proportion
White	156	0.1692
Korean	21	0.0228
Chinese	115	0.1247
Filipino	15	0.0163
Japanese	9	0.0098
Vietnamese	23	0.0249
Other Asian	10	0.0108
South Asian	33	0.0358
International	40	0.0434
Decline to State	24	0.0260
Pacific Islander	7	0.0076
Other Hispanic/Latino	84	0.0911
African American/Black	93	0.1009
Mexican American/Chicano	267	0.2896
Native American/Alaska Native	25	0.0271

1.3 UC Berkeley and survey comparison

Table represents a comparison between the proportions reported by UCB and those individuals who completed the USWBS.

	Ethnicity	Berkeley_Prop	Survey_Prop	Difference
1	African American/Black	0.03	0.12	-0.09
2	Mexican American/Chicano	0.10	0.28	-0.18
3	Other Hispanic/Latino	0.04	0.10	-0.06
4	Native American/Alaska Native	0.01	0.02	-0.02
5	Pacific Islander	0.00	0.01	-0.01
6	Chinese	0.17	0.11	0.07
7	Filipino	0.03	0.02	0.01
8	Japanese	0.02	0.01	0.01
9	Korean	0.05	0.03	0.02
10	Other Asian	0.01	0.01	0.00
11	South Asian	0.08	0.04	0.04
12	Vietnamese	0.03	0.02	0.01
13	White	0.26	0.15	0.11
14	Decline to State	0.04	0.02	0.02
15	International	0.14	0.07	0.06
16	Total	1.00	1.00	0.00
17	Underrepresented Minority Subtotal	0.18	0.52	-0.34

2 All results

The following section provides a breakdown of each of the questions asked and how participants responded. Sections are broken down into the various survey subject areas, including: general living, academic life, sleeping and eating habits, mental well-being, sexual violence, and campus resources.

2.1 General living

Questions pertaining to the "General Living" aspect of the survey. As noted on the survey, "The [general living questions] will cover satisfaction with life as well as questions about how your financial situation affects your everyday life. Please indicate your agreement with the statements below to the best of your ability."

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree	NA
The conditions of my life are excellent	0.057	0.093	0.107	0.115	0.228	0.306	0.088	0.005
I am satisfied with my life	0.050	0.095	0.104	0.101	0.207	0.315	0.123	0.005
I am satisfied with my living conditions	0.056	0.086	0.112	0.086	0.208	0.311	0.136	0.005
Where I live, I feel safe	0.040	0.080	0.101	0.095	0.206	0.331	0.141	0.005
Confidence in financial situation	0.118	0.152	0.136	0.095	0.171	0.200	0.106	0.022
Often cut back on important spending	0.114	0.121	0.146	0.093	0.154	0.234	0.115	0.022
I have been concerned about money lately	0.050	0.103	0.062	0.069	0.194	0.251	0.249	0.022

	Very Poor	Poor	Fair	Good	Very Good	NA
Physical Health	0.041	0.133	0.317	0.389	0.114	0.005
Mental Health	0.097	0.227	0.311	0.286	0.073	0.007
Academic life	0.060	0.125	0.295	0.380	0.119	0.022
Social life	0.072	0.153	0.313	0.343	0.098	0.022
Residential life	0.056	0.131	0.331	0.361	0.098	0.023

2.2 Academic Life

Questions pertaining to the "Academic Life" aspect of the survey. As noted on the survey, "The [academic life] section will cover anxiety and academic stress. We would like to learn more about how academics are affecting your levels of stress, and also how you have felt within the last month. We would like to know how stress and anxiety is affecting you as it plays a large role in your general well-being."

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree	NA
Academics is the main reason I am stressed in my life	0.020	0.070	0.065	0.077	0.228	0.300	0.202	0.038
I feel pressured by parents' expectations to succeed	0.169	0.163	0.107	0.151	0.183	0.117	0.072	0.038
I feel pressured by my own expectations to succeed	0.012	0.005	0.011	0.040	0.150	0.333	0.411	0.038
My stress impacts me more physically than mentally	0.048	0.159	0.182	0.277	0.159	0.075	0.062	0.038
Univ. adequately provides support with academic stress	0.092	0.117	0.120	0.291	0.180	0.137	0.025	0.038
I utilize campus resources for anxiety/academic stress	0.150	0.238	0.125	0.190	0.134	0.086	0.040	0.038

	Rarely or none of the time	Some or a little of the time	Occasionally or a moderate amount of the time	All of the time	NA
Past week: I felt anxious and agitated	0.114	0.280	0.311	0.266	0.029
Past week: I felt stressed due to academic reasons	0.062	0.200	0.345	0.364	0.029
Past week: My academic stress prevented me from maintaining my self-care	0.227	0.253	0.246	0.245	0.029

2.3 Sleeping and eating habits

Questions pertaining to the "sleeping and eating habits" aspect of the survey. As noted on the survey, "The [sleeping and eating habits section] will cover sleeping and eating habits. We would like to learn more about the quality and amount of sleep undergraduate students receive, as well as the extent to which they have access to and eat healthy food because sleep and diet are both essential elements of wellness."

	No	Yes	NA
Sleep obstacles: Academics	0.182	0.774	0.043
Sleep obstacles: Anxiety	0.465	0.491	0.043
Sleep obstacles: Concerns about post-graduation	0.684	0.272	0.043
Sleep obstacles: Finances	0.636	0.321	0.043
Sleep obstacles: Living conditions	0.740	0.217	0.043
Sleep obstacles: Social concerns	0.706	0.251	0.043
Sleep obstacles: Something else (please specify)	0.844	0.113	0.043
Sleep obstacles: Nothing - I am not being prevented from more sleep	0.845	0.086	0.069

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree	NA
I am satisfied with the amount of sleep I usually receive	0.114	0.145	0.140	0.081	0.197	0.210	0.030	0.081
The quality of my sleep is good	0.086	0.130	0.139	0.090	0.190	0.231	0.053	0.081
The amount of sleep I receive makes me feel irritable	0.033	0.145	0.130	0.202	0.214	0.141	0.054	0.081
The amount I sleep negatively affects my mental health	0.036	0.157	0.103	0.172	0.203	0.168	0.079	0.081
I prioritize my academic performance above sleep	0.043	0.067	0.092	0.132	0.214	0.215	0.155	0.081
I have a problem with daytime sleepiness	0.023	0.092	0.068	0.102	0.254	0.215	0.165	0.081
I would benefit from naps during the day	0.024	0.064	0.047	0.139	0.194	0.269	0.182	0.081
I eat health food that is good for my body	0.050	0.092	0.139	0.107	0.259	0.198	0.072	0.082
I have easy access to places that sell healthy food	0.073	0.111	0.133	0.099	0.191	0.231	0.081	0.081
I have easy access to affordable healthy food	0.146	0.153	0.146	0.110	0.155	0.161	0.048	0.081

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## Error in apply(df, 2, function(x) prop.table(table(x, useNA = "always"))): dim(X) must have a positive length
```

2.4 Mental Well-being

Questions pertaining to the "Mental Well-being" aspect of the survey. As noted on the survey, "The "mental well-being section" of the survey will assess undergraduate students happiness and how they feel about life. Some of the following questions are related to feelings of depression, and responses will be used to learn more about the wellness of the undergraduate population and shape what the campus can do to address it."

	Rarely or none of the time	Some or a little of the time	Occasionally or a moderate amount of the time	All of the time	NA
Past week: I felt depressed	0.357	0.245	0.195	0.104	0.099
Past week: I felt hopeful about the future	0.134	0.282	0.316	0.169	0.099
Past week: I felt happy with my life	0.111	0.264	0.323	0.203	0.100
Past week: I felt alone and isolated	0.279	0.280	0.219	0.124	0.099
Past week: I felt like it was hard to "get up " from lack of energy & motivation	0.223	0.253	0.222	0.202	0.100
Past week: I felt less interested in things I usually enjoy	0.332	0.256	0.196	0.116	0.100
Past week: I felt upset about the way my life was heading	0.376	0.235	0.170	0.119	0.099
Past week: I felt like utilizing campus resources for mental distress	0.580	0.188	0.099	0.035	0.099
Past week: I felt like a bad person	0.488	0.226	0.111	0.077	0.099
Past week: I found it hard to focus on the positive aspects of life	0.312	0.275	0.189	0.125	0.099

```
## Error in apply(df, 2, function(x) prop.table(table(x, useNA = "always"))): dim(X) must have a positive length
```

2.5 Sexual Violence

Questions pertaining to the "Sexual Violence" aspect of the survey. As noted on the survey, "The ASUC is committed to helping create a campus where sexual violence is not tolerated, where survivors are supported, and perpetrators are held accountable. The purpose of the [sexual violence section] is to identify the strengths and needs of our campus sexual violence prevention and response services. Feel free to answer all, some, or none of the questions."

```
## Error in apply(df, 2, function(x) prop.table(table(x, useNA = "always"))): dim(X) must have a positive length
```

	1 = Not at all										10 = Extremely comfortable/ effective and helpful	NA
UG Student Well-Being Survey	0.042	0.052	0.052	0.052	0.053	0.054	0.073	0.066	0.029	0.051	0.475	
Sexual assault and harassment	0.050	0.017	0.028	0.018	0.064	0.054	0.051	0.060	0.021	0.023	0.614	
Mental health	0.051	0.020	0.052	0.026	0.077	0.048	0.056	0.030	0.012	0.016	0.612	
Maintaining a balanced lifestyle	0.053	0.022	0.049	0.037	0.080	0.050	0.046	0.025	0.010	0.014	0.615	
Alcohol use	0.049	0.021	0.023	0.024	0.056	0.038	0.048	0.064	0.036	0.029	0.613	

```
## Error in apply(df, 2, function(x) prop.table(table(x, useNA = "always"))): dim(X) must have a positive length
```


	Yes, for information only	Yes, for support only	Yes, for both information and support	No, have not accessed	NA
Tang medical services	0.053	0.011	0.025	0.422	0.489
Tang social services	0.023	0.012	0.023	0.452	0.490
Confidential CARE advocates	0.016	0.003	0.005	0.485	0.490
Title IX office/OPHD	0.016	0.002	0.007	0.486	0.489
EOP counselors	0.015	0.001	0.013	0.482	0.489
Resident Assistant/Resident Director	0.030	0.007	0.012	0.461	0.490
Sexual Assault Commission/Cal Consent Campaign	0.036	0.003	0.003	0.469	0.489
UCPD	0.020	0.001	0.010	0.479	0.490
Other	0.007	0.001	0.008	0.447	0.538

2.6 Campus Resources

Questions pertaining to the "Campus Resources" aspect of the survey. As noted on the survey, "The [campus resources section] of the survey will address to what extent you, as an undergraduate student, are aware of and utilize resources the University of California, Berkeley offers to improve student wellness. Responses will be used to see what services are most effective and can be improved. The following questions are about your knowledge and awareness of different campus-related mental health resources."

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## Error in 'colnames<-'(*tmp*', value = c("", "", "", "", "")): length of 'dimnames' [2] not equal to array extent
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