

Mental Health Survey Analysis

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1 Demographics

The following section compares the ethnic diversity of the Fall 2016 undergraduates at the University of California, Berkeley (UCB) with the profile of survey participants who completed the “Undergraduate Student Well-being Survey - 2016” (USWBS), as populated by the UCB.

1.1 UC Berkeley Demographics

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##
## Attaching package: 'gplots'
## The following object is masked from 'package:stats':
##
## lowess
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Ethnicity	Count	Prop. Female	Prop. Male	Prop. Undefined	Prop. Total
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

Table 1: Data representing the ethnic diversity of the Fall 2016 undergradates at UCB. Information provided from the office of planning and development (<http://opa.berkeley.edu/uc-berkeley-fall-enrollment-data>).

This table was made in order to make a comparison with the survey demographics (Table 2). Note: underrepresented groups are defined as African American, Chicano/Latino, and Native American/Alaska Native.

1.2 Survey Demographics

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

Table 2: Ethnicity for survey participants who completed the USWBS.

Note: ethnicity for participants was pre-populated via information on record with UCB prior to the survey being dispersed. Information in this table **does not** reflect individual responses on the USWBS part 7, demographic information.

1.3 UC Berkeley and USWBS demographic comparison

Using an α level of .05, we observe that the population of Fall 2016 undergraduates at UCB is mostly significantly different from those who completed the USWBS. Significance was not reached within the “Japanese” and “Other Asian” categories. Thus, generalizing the USWBS results to the undergraduate population of UCB may be unwise as the USWBS convenience sample appears to over-sample from underrepresented minority populations while under-sampling from other ethnic groups (such as “White”, for example).

Ethnicity	Berkeley_Prop	Survey_Prop	Difference	Significance
African American/Black	0.03	0.12	-0.09	*
Mexican American/Chicano	0.10	0.28	-0.18	*
Other Hispanic/Latino	0.04	0.10	-0.06	*
Native American/Alaska Native	0.01	0.02	-0.02	*
Pacific Islander	0.00	0.01	-0.01	*
Chinese	0.17	0.11	0.07	*
Filipino	0.03	0.02	0.01	*
Japanese	0.02	0.01	0.01	0.0665
Korean	0.05	0.03	0.02	*
Other Asian	0.01	0.01	0.00	0.7828
South Asian	0.08	0.04	0.04	*
Vietnamese	0.03	0.02	0.01	*
White	0.26	0.15	0.11	*
Decline to State	0.04	0.02	0.02	*
International	0.14	0.07	0.06	*
Total	1.00	1.00	0.00	NA
Underrepresented Minority Subtotal	0.18	0.52	-0.34	*

Table 3: Comparison between the proportions reported by UCB and those individuals who completed the USWBS. An asterisk (*) in the Significance column represents a significant difference between individuals in the Fall 2016 undergraduate population at UCB and the convenience sample from USWBS.

2 Descriptive statistics

The following section provides a breakdown of each of the questions asked and how participants responded. The following proportions were derived **only from participants where the survey status was marked "complete" or "partial complete"**. Thus, for all proceeding questions the $N = 922$ (i.e., all proportions can be multiplied by 922 to obtain the counts for each question).

Sections are broken down into the various survey subject areas: general living, academic life, sleeping and eating habits, mental well-being, sexual violence, and campus resources. The last column is always "NA," which is the proportion of people who did not answer the question from the pool of people who answered at least one question.

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
a01 The conditions of my life are excellent	0.057	0.093	0.107	0.115	0.228	0.306	0.088	0.005
a02 I am satisfied with my life	0.050	0.095	0.104	0.101	0.207	0.315	0.123	0.005
a03 I am satisfied with my living conditions	0.056	0.086	0.112	0.086	0.208	0.311	0.136	0.005
a04 Where I live, I feel safe	0.040	0.080	0.101	0.095	0.206	0.331	0.141	0.005
a07 I am confident about my financial situation	0.118	0.152	0.136	0.095	0.171	0.200	0.106	0.022
a08 Often cut back on important spending	0.114	0.121	0.146	0.093	0.154	0.234	0.115	0.022
a09 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
a05 Physical Health	0.041	0.133	0.317	0.389	0.114	0.005
a06 Mental Health	0.097	0.227	0.311	0.286	0.073	0.007
a10 Satisfaction with academic life	0.060	0.125	0.295	0.380	0.119	0.022
a11 Satisfaction with social life	0.072	0.153	0.313	0.343	0.098	0.022
a12 Satisfaction with residential life	0.056	0.131	0.331	0.361	0.098	0.023

2.2 Academic Life

Following are questions pertaining to the "Academic Life" aspect of the survey. As noted on the survey, "The [academic life questions] 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
b04 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
b05 I feel pressured by parents' expectations to succeed	0.169	0.163	0.107	0.151	0.183	0.117	0.072	0.038
b06 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
b07 My stress impacts me more physically than mentally	0.048	0.159	0.182	0.277	0.159	0.075	0.062	0.038
b08 Univ. adequately provides support with academic stress	0.092	0.117	0.120	0.291	0.180	0.137	0.025	0.038
b09 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
b01 Past week: I felt anxious and agitated	0.114	0.280	0.311	0.266	0.029
b02 Past week: I felt stressed due to academic reasons	0.062	0.200	0.345	0.364	0.029
b03 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 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
c02a Sleep obstacles: Academics	0.182	0.774	0.043
c02b Sleep obstacles: Anxiety	0.465	0.491	0.043
c02c Sleep obstacles: Concerns about post-graduation	0.684	0.272	0.043
c02d Sleep obstacles: Finances	0.636	0.321	0.043
c02e Sleep obstacles: Living conditions	0.740	0.217	0.043
c02f Sleep obstacles: Social concerns	0.706	0.251	0.043
c02g Sleep obstacles: Something else (please specify)	0.844	0.113	0.043
c02h 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
c03 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
c04 The quality of my sleep is good	0.086	0.130	0.139	0.090	0.190	0.231	0.053	0.081
c05 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
c06 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
c07 I prioritize my academic performance above sleep	0.043	0.067	0.092	0.132	0.214	0.215	0.155	0.081
c08 I have a problem with daytime sleepiness	0.023	0.092	0.068	0.102	0.254	0.215	0.165	0.081
c09 I would benefit from naps during the day	0.024	0.064	0.047	0.139	0.194	0.269	0.182	0.081
c10 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
c11 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
c12 I have easy access to affordable healthy food	0.146	0.153	0.146	0.110	0.155	0.161	0.048	0.081

	0-2	3-4	5-6	7-8	8-10	10+	NA
c01 Hours of sleep per day	0.002	0.065	0.418	0.389	0.070	0.010	0.046

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
d01 Past week: I felt depressed	0.357	0.245	0.195	0.104	0.099
d02 Past week: I felt hopeful about the future	0.134	0.282	0.316	0.169	0.099
d03 Past week: I felt happy with my life	0.111	0.264	0.323	0.203	0.100
d04 Past week: I felt alone and isolated	0.279	0.280	0.219	0.124	0.099
d05 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
d06 Past week: I felt less interested in things I usually enjoy	0.332	0.256	0.196	0.116	0.100
d07 Past week: I felt upset about the way my life was heading	0.376	0.235	0.170	0.119	0.099
d08 Past week: I felt like utilizing campus resources for mental distress	0.580	0.188	0.099	0.035	0.099
d09 Past week: I felt like a bad person	0.488	0.226	0.111	0.077	0.099
d10 Past week: I found it hard to focus on the positive aspects of life	0.312	0.275	0.189	0.125	0.099

	No	Yes	NA
d12 Ever diagnosed with depression by a clinical professional	0.753	0.149	0.099

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.”

	No	Yes	NA
e01 Option to answer sexual violence prevention section	0.367	0.533	0.101

	1 = Not at all										10 = Completely comfortable/effective	NA
e02 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	
e14 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	
e15 Mental health	0.051	0.020	0.052	0.026	0.077	0.048	0.056	0.030	0.012	0.016	0.612	
e16 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	
e17 Alcohol use	0.049	0.021	0.023	0.024	0.056	0.038	0.048	0.064	0.036	0.029	0.613	

	Yes, for information only	Yes, for support only	Yes, for both information and support	No, have not accessed	NA
e03 Tang medical services	0.053	0.011	0.025	0.422	0.489
e04 Tang social services	0.023	0.012	0.023	0.452	0.490
e05 Confidential CARE advocates	0.016	0.003	0.005	0.485	0.490
e06 Title IX office/OPHD	0.016	0.002	0.007	0.486	0.489
e07 EOP counselors	0.015	0.001	0.013	0.482	0.489
e08 Resident Assistant/Resident Director	0.030	0.007	0.012	0.461	0.490
e09 Sexual Assault Commission/Cal Consent Campaign	0.036	0.003	0.003	0.469	0.489
e10 UCPD	0.020	0.001	0.010	0.479	0.490
e11 Other	0.007	0.001	0.008	0.447	0.538

e13 Why haven't used services for information or support about sexual violence	I did not have a need	I did not know about these resources	I did not feel comfortable accessing these services	No, have not accessed
	0.279	0.009	0.025	0.688

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."

	I have not heard about until now	I have heard about but have not used	I have used this service	NA
f01 UHS at the Tang Center: Counseling & Psychological Services	0.065	0.539	0.273	0.123
f02 Tang Center CPS Satellite Counseling Services on campus	0.356	0.401	0.121	0.121
f03 Nap spaces on campus	0.149	0.641	0.090	0.120
f04 Peer Health Workers for IFC, PHC, Housing, Co-Op residents	0.343	0.461	0.075	0.121
f05 Student-to-Student Peer Counseling	0.302	0.535	0.042	0.121
f06 Tang Center Health Coaching	0.379	0.465	0.035	0.121
f07 Confidential Care Advocates	0.541	0.318	0.020	0.121

	No	Yes	NA
f08a How hear about: CPS - A friend	0.562	0.248	0.190
f08b How hear about: CPS - Professor/GSI	0.716	0.094	0.190
f08c How hear about: CPS - Peer Support Organization	0.745	0.065	0.190
f08d How hear about: CPS - Flier	0.689	0.121	0.190
f08e How hear about: CPS - Email/Online Website	0.464	0.346	0.190
f08f How hear about: CPS - Other	0.716	0.094	0.190
f08g How hear about: CPS - Don't know/Don't remember	0.663	0.148	0.190
f09a How hear about: CPS campus Satellite Counseling Services - A friend	0.430	0.092	0.478
f09b How hear about: CPS campus Satellite Counseling Services - Professor/GSI	0.487	0.035	0.478
f09c How hear about: CPS campus Satellite Counseling Services - Peer Support Organization	0.484	0.038	0.478
f09d How hear about: CPS campus Satellite Counseling Services - Flier	0.469	0.053	0.478
f09e How hear about: CPS campus Satellite Counseling Services - Email/Online Website	0.350	0.171	0.478
f09f How hear about: CPS campus Satellite Counseling Services - Other	0.448	0.074	0.478
f09g How hear about: CPS campus Satellite Counseling Services - Don't know/Don't remember	0.373	0.149	0.478
f10a How hear about: Nap spaces on campus - A friend	0.411	0.319	0.270
f10b How hear about: Nap spaces on campus - Professor/GSI	0.710	0.020	0.270
f10c How hear about: Nap spaces on campus - Peer Support Organization	0.717	0.013	0.270
f10d How hear about: Nap spaces on campus - Flier	0.611	0.119	0.270
f10e How hear about: Nap spaces on campus - Email/Online Website	0.313	0.416	0.270
f10f How hear about: Nap spaces on campus - Other	0.679	0.051	0.270
f10g How hear about: Nap spaces on campus - Don't know/Don't remember	0.674	0.056	0.270
f11a How hear about: Peer Health Workers - A friend	0.395	0.139	0.466
f11b How hear about: Peer Health Workers - Professor/GSI	0.523	0.011	0.466
f11c How hear about: Peer Health Workers - Peer Support Organization	0.501	0.033	0.466
f11d How hear about: Peer Health Workers - Flier	0.427	0.106	0.466
f11e How hear about: Peer Health Workers - Email/Online Website	0.409	0.125	0.466
f11f How hear about: Peer Health Workers - Other	0.476	0.057	0.466
f11g How hear about: Peer Health Workers - Don't know/Don't remember	0.389	0.144	0.466
f12a How hear about: Student-to-Student Peer Counseling - A friend	0.447	0.129	0.424
f12b How hear about: Student-to-Student Peer Counseling - Professor/GSI	0.560	0.016	0.424
f12c How hear about: Student-to-Student Peer Counseling - Peer Support Organization	0.535	0.041	0.424
f12d How hear about: Student-to-Student Peer Counseling - Flier	0.475	0.101	0.424
f12e How hear about: Student-to-Student Peer Counseling - Email/Online Website	0.420	0.156	0.424
f12f How hear about: Student-to-Student Peer Counseling - Other	0.528	0.048	0.424
f12g How hear about: Student-to-Student Peer Counseling - Don't know/Don't remember	0.411	0.165	0.424
f13a How hear about: Tang Center Health Coaching - A friend	0.428	0.070	0.501
f13b How hear about: Tang Center Health Coaching - Professor/GSI	0.473	0.026	0.501
f13c How hear about: Tang Center Health Coaching - Peer Support Organization	0.476	0.023	0.501
f13d How hear about: Tang Center Health Coaching - Flier	0.447	0.052	0.501
f13e How hear about: Tang Center Health Coaching - Email/Online Website	0.335	0.164	0.501
f13f How hear about: Tang Center Health Coaching - Other	0.460	0.039	0.501
f13g How hear about: Tang Center Health Coaching - Don't know/Don't remember	0.320	0.179	0.501
f14a How hear about: Confidential Care Advocates - A friend	0.293	0.043	0.664
f14b How hear about: Confidential Care Advocates - Professor/GSI	0.315	0.022	0.664
f14c How hear about: Confidential Care Advocates - Peer Support Organization	0.308	0.028	0.664
f14d How hear about: Confidential Care Advocates - Flier	0.321	0.015	0.664
f14e How hear about: Confidential Care Advocates - Email/Online Website	0.238	0.099	0.664
f14f How hear about: Confidential Care Advocates - Other	0.296	0.040	0.664
f14g How hear about: Confidential Care Advocates - Don't know/Don't remember	0.214	0.123	0.664
f22a Resource expansion: Counseling and Psychological Services	0.358	0.527	0.115
f22b Resource expansion: CPS Satellite Counseling Services on campus	0.702	0.183	0.115
f22c Resource expansion: Nap spaces on campus	0.541	0.344	0.115
f22d Resource expansion: Peer Health Workers	0.822	0.063	0.115
f22e Resource expansion: Student-to-Student Peer Counseling	0.760	0.125	0.115
f22f Resource expansion: Tang Center Health Coaching	0.765	0.120	0.115
f22g Resource expansion: Confidential Care Advocates	0.802	0.084	0.115
f24 Talk with GSI/professor about mental health and resources	0.575	0.302	0.124
f25 Was information accurate, relevant and beneficial	0.024	0.277	0.700

	Very poor/Strongly disagree	Poor/Slightly disagree	Average/Neutral	Good/Slightly agree	Very Good/Strongly agree	NA
f15 Rate services: Counseling and Psychological Services	0.017	0.016	0.079	0.099	0.055	0.733
f16 Rate services: Tang Center CPS Satellite Counseling Services on campus	0.008	0.009	0.029	0.044	0.027	0.883
f17 Rate services: Nap spaces on campus	0.003	0.011	0.033	0.028	0.011	0.914
f18 Rate services: Peer Health Workers	0.002	0.001	0.022	0.027	0.020	0.928
f19 Rate services: Student-to-Student Peer Counseling	0.001	0.002	0.012	0.012	0.012	0.961
f20 Rate services: Tang Center Health Coaching	0.003	0.002	0.009	0.012	0.004	0.970
f21 Rate services: Confidential Care Advocates	0.001	0.002	0.007	0.002	0.004	0.984
f23 Wait for mental health aid impedes on students use of these resources	0.018	0.039	0.337	0.218	0.260	0.127
f26 GSIs and professors should be better trained to help with mental health issues	0.036	0.054	0.238	0.279	0.267	0.127
f27 How likely would you be to approach the Tang Center or other campus resources	0.076	0.132	0.206	0.322	0.139	0.125

3 Inference

The following tables denote, for each of the above sections, whether or not there is an association between ethnicity, gender, sexual orientation, or living status versus all of the questions in the previous sections. χ^2 tests were done to assess significance of associations at the $\alpha = 0.05$ level. For example, in the table immediately below, there is an asterisk at “I am confident about my financial situation” and “Ethnicity.” This means there is a significant association between satisfaction of living conditions and ethnicity. All p-values were adjusted for multiple comparisons using the bonferroni correction.

	Ethn.	Gender	S. Orient	Living
a01 The conditions of my life are excellent	0.6502	0.0084 *	1	0.0022 *
a02 I am satisfied with my life	1	0.1101	0.026 *	1
a03 I am satisfied with my living conditions	0.2892	0.0165 *	1	1
a04 Where I live, I feel safe	0.1628	0.0091 *	0.6861	<0.0005 *
a05 Physical Health	0.6696	<0.0005 *	0.0423 *	0.0175 *
a06 Mental Health	1	0.0325 *	0.0352 *	1
a07 I am confident about my financial situation	<0.0005 *	0.0111 *	0.3072	8e-04 *
a08 Often cut back on important spending	<0.0005 *	0.0185 *	1	0.0021 *
a09 I have been concerned about money lately	<0.0005 *	0.0492 *	1	0.2314
a10 Satisfaction with academic life	1	0.0129 *	1	0.0064 *
a11 Satisfaction with social life	0.596	1	1	0.8119
a12 Satisfaction with residential life	0.894	0.6788	1	<0.0005 *

Table 4: Table of p-values and significance for General Living section

	Ethn.	Gender	S. Orient	Living
b01 Past week: I felt anxious and agitated	1	<0.0005 *	0.0159 *	1
b02 Past week: I felt stressed due to academic reasons	1	0.0873	0.4114	1
b03 Past week: My academic stress prevented me from maintaining my self-care	1	8e-04 *	0.888	1
b04 Academics is the main reason I am stressed in my life	0.5753	1	1	1
b05 I feel pressured by parents’ expectations to succeed	7e-04 *	0.1058	1	0.0173 *
b06 I feel pressured by my own expectations to succeed	1	0.1536	1	1
b07 My stress impacts me more physically than mentally	1	0.0457 *	1	0.0273 *
b08 Univ. adequately provides support with academic stress	1	0.0016 *	0.3647	0.0224 *
b09 I utilize campus resources for anxiety/academic stress	1	0.0048 *	0.1466	1

Table 5: Table of p-values and significance for Academic life section

	Ethn.	Gender	S. Orient	Living
c01 Hours of sleep per day	1	0.051	1	1
c02a Sleep obstacles: Academics	1	0.504	1	1
c02b Sleep obstacles: Anxiety	1	7e-04	* 0.022	* 1
c02c Sleep obstacles: Concerns about post-graduation	0.0034	* 0.2771	1	0.0026 *
c02d Sleep obstacles: Finances	<0.0005	* 0.6929	0.6158	<0.0005 *
c02e Sleep obstacles: Living conditions	1	1	1	1
c02f Sleep obstacles: Social concerns	1	1	0.201	1
c02g Sleep obstacles: Something else (please specify)	1	1	1	0.0457 *
c02h Sleep obstacles: Nothing - I am not being prevented from more sleep	1	1	1	1
c03 I am satisfied with the amount of sleep I usually receive	1	0.0253	* 1	1
c04 The quality of my sleep is good	0.2074	1	1	1
c05 The amount of sleep I receive makes me feel irritable	0.0571	0.0108	* 1	1
c06 The amount I sleep negatively affects my mental health	1	0.0666	1	0.4514
c07 I prioritize my academic performance above sleep	1	0.0045	* 0.2192	0.6483
c08 I have a problem with daytime sleepiness	1	0.0051	* 0.0501	0.6647
c09 I would benefit from naps during the day	1	0.3072	1	1
c10 I eat health food that is good for my body	0.12	0.5977	0.8133	1
c11 I have easy access to places that sell healthy food	1	1	0.5566	1
c12 I have easy access to affordable healthy food	1	1	1	0.1843

Table 6: Table of p-values and significance for Sleeping and eating habits section

	Ethn.	Gender	S. Orient	Living
d01 Past week: I felt depressed	1	0.0128	* <0.0005	* 0.2104
d02 Past week: I felt hopeful about the future	0.8553	0.0055	* 1	0.8027
d03 Past week: I felt happy with my life	1	0.8869	1	1
d04 Past week: I felt alone and isolated	0.4004	0.0509	0.0361	* 1
d05 Past week: I felt like it was hard to “get up ” from lack of energy & motivation	1	0.0092	* <0.0005	* 0.2236
d06 Past week: I felt less interested in things I usually enjoy	0.4703	0.11	<0.0005	* 1
d07 Past week: I felt upset about the way my life was heading	0.3109	1	0.0486	* 1
d08 Past week: I felt like utilizing campus resources for mental distress	0.7079	<0.0005	* 0.0029	* 0.0043 *
d09 Past week: I felt like a bad person	1	8e-04	* 0.0075	* 1
d10 Past week: I found it hard to focus on the positive aspects of life	1	0.0123	* <0.0005	* 0.031 *
d11 In the past month I felt like utilizing campus resources for mental distress	1	1	0.5339	1
d12 Ever diagnosed with depression by a clinical professional	0.1571	<0.0005	* <0.0005	* 0.0285 *

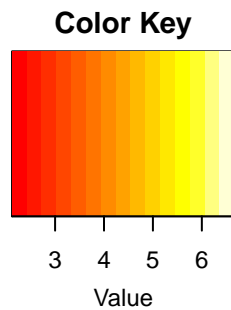
Table 7: Table of p-values and significance for Mental well-being section

4 Additional Inference

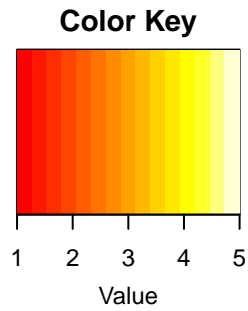
This section displays two heatmaps to identify possible trends in the data.

	Ethn.		Gender		S. Orient		Living
e01 Option to answer sexual violence prevention section	0.0014	*	0.0061	*	0.7612		1
e02 UG Student Well-Being Survey	1		0.0381	*	1		1
e03 Tang medical services	0.007	*	1		0.9157		1
e04 Tang social services	1		0.6354		1		0.0024 *
e05 Confidential CARE advocates	1		<0.0005	*	1		0.3916
e06 Title IX office/OPHD	1		<0.0005	*	1		0.6083
e07 EOP counselors	1		<0.0005	*	1		1
e08 Resident Assistant/Resident Director	1		<0.0005	*	1		1
e09 Sexual Assault Commission/Cal Consent Campaign	1		1		1		1
e10 UCPD	1		<0.0005	*	1		1
e11 Other	1		<0.0005	*	1		1
e13 Why haven't used services for information or support about sexual violence	1		<0.0005	*	0.1585		0.1102
e14 Sexual assault and harassment	1		0.1894		0.0076	*	1
e15 Mental health	1		1		1		1
e16 Maintaining a balanced lifestyle	1		1		1		1
e17 Alcohol use	1		1		1		1

Table 8: Table of p-values and significance for Sexual violence section



4.81	5.03	5.01	5.19	4.48	4.5	4.98	White
4.74	4.92	4.51	4.77	3.88	3.99	5.23	Other Hispa
4.42	4.67	4.61	4.94	3.34	3.46	5.61	African Ame
4.36	4.44	4.68	5	3.4	3.6	4.96	Native Amer
4.4	4.59	4.65	4.85	3.49	3.62	5.57	Mexican Arr
4.86	4.43	4.67	4.1	3.74	4.26	5.53	Korean
4.47	4.6	4.53	3.6	3.93	4.33	5.8	Filipino
4.88	4.97	5.42	5.21	5.33	5.36	3.97	South Asian
5.89	5.89	5.56	5.11	5.22	5.56	4.89	Japanese
4	4.35	4.55	4.78	4.38	4.72	4.36	Internationa
5.35	5.22	5.09	4.87	5.39	5.52	4.57	Decline to S
3.71	4.43	4	4.71	4	3.86	5.57	Pacific Islan
5.12	4.96	5.13	5.15	5.22	5.47	3.88	Chinese
4.35	4.39	4.61	4.52	3.7	3.74	4.91	Vietnamese
5.1	4.4	4.7	4.7	4.3	4.7	4.9	Other Asian
4.77	4.85	4.8	5.08	4.47	4.51	4.78	Male
4.57	4.71	4.78	4.82	3.88	4.09	5.2	Female
6.4	6.67	6.25	6.04	5.69	5.71	4.4	Slightly Agre
3.66	3.78	4.22	4.43	3.4	3.68	5.35	Disagree MI
5.65	5.85	5.34	5.34	4.76	4.74	4.79	Neither Agre
4.72	4.85	4.84	4.97	4.14	4.33	5.03	Slightly Disa
2.37	2.12	3.21	3.76	2.45	2.69	5.66	Strongly Dis
4.76	4.93	4.87	4.97	4.24	4.37	4.92	Heterosexua
4.33	4.33	4.44	4.28	4.1	4.31	5.08	Gay or lesbi
4.32	4.14	4.62	4.69	3.51	3.58	5.71	Bisexual/Pai
4.15	4.45	4.85	5.5	3.45	3.9	5.9	Other
a01	a02	a03	a04	a07	a08	a09	



3.72	3.11	3.62	3.35	3.48	White
3.17	3.04	3.62	3.3	3.25	Other Hispa
3.4	3.02	3.3	3.14	3.32	African Ame
3.28	2.84	3.48	3.2	3	Native Amer
3.28	2.86	3.24	3.21	3.2	Mexican Arr
3.29	2.95	3.16	3.37	3.16	Korean
3.4	2.73	2.8	2.87	3.33	Filipino
3.61	3.33	3.48	3.21	3.64	South Asian
3.33	3.44	3.56	4.22	3.67	Japanese
3.38	2.9	3.46	3.03	3.15	Internationa
3.52	3.39	3.48	3.65	3.39	Decline to S
3.43	2.71	3.29	2.71	2.29	Pacific Islan
3.44	3.21	3.42	3.34	3.53	Chinese
3.13	2.96	2.96	3.09	3.3	Vietnamese
3.7	2.5	2.9	2.6	3.1	Other Asian
3.47	3.16	3.45	3.27	3.35	Male
3.36	2.92	3.34	3.24	3.3	Female
4.48	5	4.32	4.25	4.35	Slightly Agre
2.9	2	2.93	2.87	2.92	Disagree MI
3.83	4	3.87	3.68	3.62	Neither Agre
3.41	3	3.41	3.26	3.39	Slightly Disa
2.48	1	2.23	2.05	2.38	Strongly Dis
3.48	3.13	3.4	3.32	3.37	Heterosexua
3.23	2.92	3.44	2.87	3.26	Gay or lesbi
3.14	2.57	3.29	3.02	3.15	Bisexual/Pai
3	2.6	3.6	3.05	3.3	Other
a05	a06	a10	a11	a12	

	Ethn.	Gender	S. Orient	Living
f01 UHS at the Tang Center: Counseling & Psychological Services	1	0.0337	* <0.0005	* 0.1035
f02 Tang Center CPS Satellite Counseling Services on campus	1	1	0.0026	* 1
f03 Nap spaces on campus	0.0123	* 1	1	0.0061 *
f04 Peer Health Workers for IFC, PHC, Housing, Co-Op residents	1	1	1	<0.0005 *
f05 Student-to-Student Peer Counseling	1	0.0038	* 1	0.3252
f06 Tang Center Health Coaching	1	5e-04	* 1	<0.0005 *
f07 Confidential Care Advocates	1	<0.0005	* 1	0.0368 *
f08a How hear about: CPS - A friend	1	1	1	1
f08b How hear about: CPS - Professor/GSI	1	1	1	0.1036
f08c How hear about: CPS - Peer Support Organization	0.141	0.598	1	1
f08d How hear about: CPS - Flier	1	1	1	0.0474 *
f08e How hear about: CPS - Email/Online Website	1	1	1	1
f08f How hear about: CPS - Other	1	1	1	1
f08g How hear about: CPS - Don't know/Don't remember	1	1	1	1
f09a How hear about: CPS campus Satellite Counseling Services - A friend	1	1	1	1
f09b How hear about: CPS campus Satellite Counseling Services - Professor/GSI	0.735	1	1	1
f09c How hear about: CPS campus Satellite Counseling Services - Peer Support Organization	1	1	1	1
f09d How hear about: CPS campus Satellite Counseling Services - Flier	1	1	1	0.246
f09e How hear about: CPS campus Satellite Counseling Services - Email/Online Website	1	1	1	1
f09f How hear about: CPS campus Satellite Counseling Services - Other	1	1	1	1
f09g How hear about: CPS campus Satellite Counseling Services - Don't know/Don't remember	1	1	1	1
f10a How hear about: Nap spaces on campus - A friend	1	1	1	1
f10b How hear about: Nap spaces on campus - Professor/GSI	1	1	1	1
f10c How hear about: Nap spaces on campus - Peer Support Organization	1	1	1	1
f10d How hear about: Nap spaces on campus - Flier	1	0.9227	1	1
f10e How hear about: Nap spaces on campus - Email/Online Website	1	0.1475	1	1
f10f How hear about: Nap spaces on campus - Other	0.2354	1	1	1
f10g How hear about: Nap spaces on campus - Don't know/Don't remember	1	0.0642	1	1
f11a How hear about: Peer Health Workers - A friend	1	1	1	0.143
f11b How hear about: Peer Health Workers - Professor/GSI	1	<0.0005	* 1	1
f11c How hear about: Peer Health Workers - Peer Support Organization	1	1	1	1
f11d How hear about: Peer Health Workers - Flier	1	1	1	1
f11e How hear about: Peer Health Workers - Email/Online Website	1	1	1	1
f11f How hear about: Peer Health Workers - Other	1	1	1	1
f11g How hear about: Peer Health Workers - Don't know/Don't remember	1	1	1	1
f12a How hear about: Student-to-Student Peer Counseling - A friend	1	1	1	1
f12b How hear about: Student-to-Student Peer Counseling - Professor/GSI	1	1	1	1
f12c How hear about: Student-to-Student Peer Counseling - Peer Support Organization	1	0.188	1	1
f12d How hear about: Student-to-Student Peer Counseling - Flier	1	1	0.7308	1
f12e How hear about: Student-to-Student Peer Counseling - Email/Online Website	1	1	1	1
f12f How hear about: Student-to-Student Peer Counseling - Other	1	1	1	1
f12g How hear about: Student-to-Student Peer Counseling - Don't know/Don't remember	1	0.8242	1	1
f13a How hear about: Tang Center Health Coaching - A friend	1	1	1	1
f13b How hear about: Tang Center Health Coaching - Professor/GSI	1	1	1	1
f13c How hear about: Tang Center Health Coaching - Peer Support Organization	1	0.0128	* 1	1
f13d How hear about: Tang Center Health Coaching - Flier	1	1	1	1
f13e How hear about: Tang Center Health Coaching - Email/Online Website	1	1	1	1
f13f How hear about: Tang Center Health Coaching - Other	1	1	1	0.0917
f13g How hear about: Tang Center Health Coaching - Don't know/Don't remember	1	1	1	1
f14a How hear about: Confidential Care Advocates - A friend	1	0.3253	1	1
f14b How hear about: Confidential Care Advocates - Professor/GSI	1	1	1	0.3437
f14c How hear about: Confidential Care Advocates - Peer Support Organization	1	1	0.6236	1
f14d How hear about: Confidential Care Advocates - Flier	1	1	1	1
f14e How hear about: Confidential Care Advocates - Email/Online Website	1	1	1	1
f14f How hear about: Confidential Care Advocates - Other	1	1	1	1
f14g How hear about: Confidential Care Advocates - Don't know/Don't remember	1	1	1	1
f15 Rate services: Counseling and Psychological Services	1	1	1	1
f16 Rate services: Tang Center CPS Satellite Counseling Services on campus	1	1	1	1
f17 Rate services: Nap spaces on campus	1	1	1	1
f18 Rate services: Peer Health Workers	1	0.201	1	0.3043
f19 Rate services: Student-to-Student Peer Counseling	1	1	1	1
f20 Rate services: Tang Center Health Coaching	1	1	1	1
f21 Rate services: Confidential Care Advocates	1	1	1	1
f22a Resource expansion: Counseling and Psychological Services	1	0.0497	* 0.5768	1
f22b Resource expansion: CPS Satellite Counseling Services on campus	1	1	1	1
f22c Resource expansion: Nap spaces on campus	1	1	1	1
f22d Resource expansion: Peer Health Workers	1	0.9146	1	1
f22e Resource expansion: Student-to-Student Peer Counseling	1	1	1	1
f22f Resource expansion: Tang Center Health Coaching	1	1	1	1
f22g Resource expansion: Confidential Care Advocates	1	1	1	1
f23 Wait for mental health aid impedes on students use of these resources	1	1	1	0.0341 *
f24 Talk with GSI/professor about mental health and resources	1	1	1	1
f25 Was information accurate, relevant and beneficial	1	1	1	1
f26 GSIs and professors should be better trained to help with mental health issues	0.6313	0.0034	* 1	1
f27 How likely would you be to approach the Tang Center or other campus resources	1	1	1	1

Table 9: Table of p-values and significance for Campus Resources section