Executive Summary

Student mental health is a growing concern for higher education institutions. Within the University of California (UC), surveys of graduate students at UC Berkeley in 2004 and 2014 showed substantial shares of students reporting symptoms of depression. Though UC has implemented some initiatives to respond to increasing student mental health issues as well as other areas of well-being, there have not been comparable data on graduate student mental health and well-being across all campuses. As a result, campus Graduate Deans and Graduate Assembly members requested data be collected on the mental health and well-being of UC graduate students, universitywide. This information will likely have implications for institutions of higher education across the country.

On behalf of these campus leaders, Institutional Research & Academic Planning with Research and Graduate Studies in the UC Office of the President (UCOP) administered a survey of graduate students across all ten UC campuses in Winter/Spring 2016. The survey was administered to a stratified random sample of over 13,400 graduate students and received 5,356 completed responses, for a response rate of 40%. Oversampling of subgroups by campus, race/ethnicity, and discipline increased the likelihood of sufficient respondent by race/ethnicity and discipline for reliable analysis. Due to this oversampling, underrepresented minority respondents, respondents in the humanities and social sciences, and academic doctoral respondents who had not advanced to candidacy were overrepresented. Respondents in professional fields by student level and professional respondents by discipline were underrepresented. However, this did not affect the results shown in this report. This report presents major findings based on the survey responses as well as recommendations for addressing the mental health and well-being issues documented by these findings. We disaggregated the data by student level, discipline, race/ethnicity, gender, and LGBTQ status. Differences by gender were not statistically significant for any of the topics presented here. For the other categories, we report disaggregated figures for the major findings if the differences are significant. We also checked differences by discipline within student levels and by discipline within race/ethnicity categories. The differences by discipline within race/ethnicity are not significant for the topics presented here. When the differences by discipline within student level are significant, we report findings by discipline crossed with student level rather than by each category separately.

Major Findings

Life Satisfaction

- Approximately 73% of respondents (n=3,873) reported being generally satisfied with their life, representing about 35,000 graduate students across UC.
- Academic doctoral respondents who have advanced to candidacy (67%, n=884) were less likely to be satisfied with their life than other respondents.
- Respondents in the humanities (65%, n=502) were less likely to be satisfied with their life than those in professional fields (79%, n=1,235) or STEM\(^1\) (73%, n=1,462).

\(^1\) Science, Technology, Engineering, and Mathematics.
• LGBTQ respondents (68%, n=427) were less likely to be satisfied with their life than other respondents. There was no significant difference by race/ethnicity and gender.

• Respondents’ self-reported life satisfaction was correlated with academic progress and engagement. Respondents who were satisfied with life were more likely to report that they were on track to complete their degree program on time (85%, n=3,290) and were engaged by their day-to-day work (64%, n=2,486), compared to dissatisfied respondents (58%, n=831 and 36%, n=513, respectively).

**Depression**

• Over one-third (35%, n=1,782) of respondents reported symptoms indicative of clinical depression, representing about 16,000 graduate students total. While this is higher than other measures of the prevalence of depression among U.S. graduate students, young adults, or the general U.S. population, methodological differences make it difficult to make direct comparisons between different surveys.

• Among academic doctoral respondents who had not advanced to candidacy, nearly half (47%, n=182) of those in the humanities and in the social sciences (45%, n=192) experienced symptoms of depression, higher than their peers in professional fields (33%, n=58) and in STEM (34%, n=296). Similarly, about 41% (n=47) of academic master’s respondents in humanities and 47% (n=36) in social science were more likely to experience depressive symptoms than their peers in STEM (30%, n=110). Within humanities, academic doctoral respondents who had not advanced to candidacy (47%, n=182) self-reported symptoms of depression at a higher rate than academic doctoral respondents who had advanced to candidacy (36%, n=84). LGBTQ respondents (48%, n=289) reported a significantly higher rate of depressive symptoms than other respondents (33%, n=1,471). There was no significant difference by race/ethnicity and gender.

• Respondents’ self-reported symptoms of depression were correlated with academic progress and engagement. Respondents with elevated scores on the depression symptoms scale were less likely to report being on track to complete their degree programs on time (66%, n=1,181) or being engaged by their day-to-day work (39%, n=693), compared to respondents without elevated scores on the depression index (84%, n=2,812 and 66%, n=2,226).

**Mentorship and Advising**

• Over two-thirds (68%, n=3,598) of respondents reported being satisfied with the mentorship and advising they received in their programs, while almost one-quarter (23%, n=1,204) were dissatisfied, and almost one-tenth (9%, n=473) were neither satisfied nor dissatisfied. Focusing on those who were dissatisfied, who represent about 11,000 students across all UC graduate students, we found significant differences by student level, race/ethnicity, and whether the respondent had an advisor.

• A smaller share (20%, n=390) of academic doctoral respondents who had not advanced to candidacy was dissatisfied compared to academic master’s respondents (23%, n=140) and academic doctoral respondents who had advanced to candidacy (28%, n=376) and professional respondents (22%, n=281). Less than one-fifth (17%, n=209) of international respondents were
dissatisfied with mentorship and advising, a smaller share than all other ethnic groups except American Indian and Asian (21%, n=206). Less than one-sixth (15%, n=12) of American Indians were dissatisfied, a significantly smaller share than African Americans (33%, n=89). Respondents with an advisor were less likely to be dissatisfied with mentorship and advising in their program (22%, n=967) than those without an advisor (30%, n=237). There was no significant difference by discipline, gender, and LGBTQ status.

- Respondents satisfied with mentorship and advising were more likely to report being on track to complete their degree programs on time (85%, n=3,047) compared to those who were dissatisfied (60%, n=726). Those who were satisfied with mentorship and advising were more likely to report being engaged by their day-to-day work (65%, n=2,321) compared to those who were dissatisfied (39%, n=464).

- Almost three-quarters (75%, n=2,322) of academic doctoral respondents with advisors found their advisors supportive, while one in ten (10%, n=316) found their advisors unsupportive, and almost one in six (15%, n=464) found their advisors neither supportive nor unsupportive. For academic doctoral respondents who found their advisors unsupportive, we found significant differences by student level and race/ethnicity. Academic doctoral respondents who had advanced to candidacy were more likely (13%, n=172) to find their advisors unsupportive compared to those who had not advanced to candidacy (8%, n=144). There was no significant difference by discipline, race/ethnicity, gender, and LGBTQ status.

**Financial Confidence**

- Nearly half (48%, n=2,543) of respondents indicated being confident about their financial situation, representing 24,000 graduate students total. Over half (55%, n=2,911) reported that they can “get by financially” without having to cut back on things important to them, representing about 27,000 graduate students total. However, almost two-thirds (65%, n=3,493), representing 30,000 graduate students total, indicated they were “concerned about money lately.”

- Academic doctoral respondents who had advanced to candidacy were less likely than those in other levels to be financially confident. For example, such respondents were less likely (41%, n=547) than graduate professional respondents (53%, n=704) to be confident. Across all three questions, respondents in the humanities indicated less favorable feelings about finances than those in all other disciplines and those in STEM fields indicated more favorable feelings about finances than those in all other disciplines. For example, less than one-third of humanities respondents (32%, n=253) were financially confident compared to the majority (54%, n=1,093) of STEM respondents. International respondents were more likely to be financial confident than all other ethnic groups. For example, the majority of international respondents were financially confident (54%, n=674) compared to less than two-fifths of African Americans (38%, n=103) and American Indians (38%, n=31). LGBTQ respondents were less likely than non-LGBTQ respondents to be financially confident (37%, n=232 vs. 49%, n=2,269). There was no significant difference by gender.

- Financial confidence was associated with being on track to complete their programs on time and being engaged by their day-to-day work. The vast majority (86%, n=2,187) of those who
were confident about their financial situation were on track to complete their programs on time compared to only 70% (n=1,598) of those who were not financially confident.

**Food Security**
- Over one quarter (29%, n=1,514) of respondents experienced food insecurity in the most recent year, representing about 12,000 graduate students total. This is lower than the rate for UC undergraduates in the same time period (44%). These findings are similar to findings from the Food Access and Security (FAS) survey of UC students one year earlier, which found that 25% of graduate respondents and 48% of undergraduate respondents experienced food insecurity.
- Master’s respondents (33%, n=205) and academic doctoral respondents who had not advanced to candidacy (32%, n=624) had higher food insecurity than professional respondents (23%, n=307).
- Respondents in the humanities (43%, n=331) and social sciences (36%, n=288) had higher rates of food insecurity than those in other fields. African American (44%, n=117) and Hispanic/Latino(a) (41%, n=287) respondents generally had higher food insecurity than other ethnic groups. LGBTQ respondents (39%, n=2,241) had notably higher levels of food insecurity than non-LGBTQ respondents (27%, n=1,249). There was no significant difference by student level and gender.
- Experiencing food insecurity was negatively associated with being on track to graduate on time and being engaged by day-to-day work. Only 73% (n=1,105) of food insecure respondents reported being on track to graduate on time, compared to 80% (n=2,990) of food secure respondents. Only 52% (n=783) of food insecure respondents reported being engaged by day-to-day work, compared to 59% (n=2,203) of food secure respondents.

**Career Prospects**
- About half (53%, n=2,823) of respondents reported being upbeat about their post-graduation career prospects, representing about 27,000 graduate students total.
- There was considerable variation between different categories by discipline and student level. For example, within academic doctoral respondents, those in the humanities (24%, n=59 to 29%, n=117) and social sciences (39%, n=109 to 40%, n=176) were less likely to be upbeat than their peers in STEM (50%, n=328 to 54%, n=494) or professional fields (54%, n=98 to 57%, n=68) and within the humanities, academic doctoral respondents were less likely (24%, n=59 and 29%, n=117 for those with and without candidacy, respectively) than academic master’s respondents (44%, n=52) to be upbeat about career prospects. Asian respondents (51%, n=500) were less likely to be upbeat about career prospects than their African American (57%, n=156) and international (53%, n=668) peers. LGBTQ respondents (47%, n=290) were less likely to be upbeat than their non-LGBTQ peers (54%, n=2,478). There was no significant difference by gender.
- Respondents who were upbeat about their career prospects were more likely to report being on track to graduate on time (91%, n=2,565) and more likely to be engaged with their day-to-day work (67%, n=1,875), compared to those who were not (61%, n=967 and 43%, n=685).
Factors Influencing Mental Health and Well-Being

- According to the survey results, career prospects were shown to be the most important factor in predicting life satisfaction, followed by overall health, social support, financial confidence and living conditions. Program climate, academic progress, academic preparation, mentorship and advising, skipped meals and sleep hours are also important predictors of life satisfaction.
- Overall health is the most important factor in predicting depression, followed by academic preparation, career prospects, social support and sleep hours. Skipped meals, program climate, academic progress and financial confidence are also important predictors of depression. Living conditions are a significant predictor of depression for respondents in professional fields and STEM. Mentorship and advising a significant predictor for respondents in STEM.

Students’ Top Priorities

- The top priorities respondents reported they would like university to prioritize with regard to attention and resources are (in order): mental health, financial resources/management, career development, housing and academic progress, quality or engagement.
- The top five priorities were the same for respondents overall and by student level, except for academic masters and graduate professional respondents where health and fitness replaced housing in the top five. However, the order of the top priorities varied by student level.
- The top five priorities were the same as for respondents overall and by discipline, except for professional fields where health and fitness replaced housing in the top five. However, the order of the top priorities varied by discipline.

Campus Efforts to Improve Graduate Student Well-Being Using the Survey Data

- UC campuses are using the results of this survey to understand and address concerns about graduate student wellness in various areas such as mental health, mentoring, financial support, food insecurity, housing, basic needs, campus climate, and diversity.
- For example, campuses are using the results:
  - to identify priorities with regard to attention and resources to increase graduate student well-being.
  - to assess existing programs, develop initiatives, and offer workshops to improve graduate student mental health and enhance professional development and career preparation.
  - to evaluate existing workshops for faculty on mentoring and select new topics for faculty training on mentoring.