

Conceptualizing, Measuring, and Analyzing the Characteristics of Academically Disengaged Students: Results From UCUES 2010

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We theorize 5 dimensions of academic disengagement based on students' values, motivations, study behaviors, academic interactions, and competing involvements. Using 2010 survey data from the University of California, we find support for this conceptualization. The size of disengaged populations varied between 5% and 25%, depending on the measure used. On most measures, male students, upper-division students, students with low college GPAs, and students in the humanities and social sciences were significantly more likely, net of covariates, to be among academically disengaged populations. Students with high SAT scores were also more likely to be among academically disengaged populations.

Recent literature on college student learning has brought into sharp focus how many and what types of students are disengaged from their studies and fail to take advantage of opportunities for intellectual and skills development. This research has questioned the extent to which colleges and universities are producing significant gains in student learning in spite of their attention to benchmarks of engagement (Carini, Kuh, & Klein, 2006). Former Harvard President Derek Bok (2006) described U.S. colleges and universities as "underachieving" in undergraduate education in spite of their concern for creating engaging environments. More recently, Arum and Roksa (2011) found that nearly half of college

students failed to achieve statistically significant gains in analytical and critical thinking skills between their freshman year and the middle of their sophomore year. A follow-up study by Arum, Roksa, and Cho (2011) indicated that more than one third of the sampled students failed to achieve significant gains between their freshman and senior years. Pascarella, Blaich, Martin, and Hanson (2011) replicated these findings using a different test of analytical and critical thinking. Recent estimates of learning gains during college are about half as high as those achieved by students in studies conducted between 1969 and 1989 (Pascarella et al., 2011). Some part of this change may be due to students' decreasing time investments in study (Babcock & Marks, 2011).

While most students in public research universities are engaged in academic life, these studies suggest that the population of academically disengaged students merits attention. Our research focuses on how best to conceptualize academically disengaged students. It also estimates their numbers in a major research university system and examines their sociodemographic and academic background characteristics.

THEORETICAL FRAMEWORK

We focus exclusively on academic disengagement rather than other forms of disengagement (such as social disengagement) because

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contemporary concerns about student culture have focused on engagement with studies. We begin by building on a basic insight of the Durkheimian tradition in sociology: namely, that anomie is a result of inconsistency between the values and practices of individuals and those prescribed by the organizations and institutions in which they are participants (Durkheim, 1912; 1895/1982). However, we take pains to avoid the tendency of Durkheimians to reify social structures and to adopt unrealistic expectations concerning the extent and sincerity of ordinary participants' conformity with the values of authorities.

For students, colleges are pluralistic environments. Study has never been the primary interest of all students, even at elite institutions (Horowitz, 1987). Moreover, students receive signals throughout their college careers about their academic performance. Students who receive repeated low grades would perhaps be well served to renew their commitment to study, but realistically many will not. Instead, they may take these signals as reasons to disinvest from study. Any hierarchical system is bound to create disengaged populations among those who have failed to succeed on the institution's terms. We also make no assumption that academically disengaged students are necessarily alienated from the campus. Many academically disengaged students are happy on campus because of the friends they have met and the student life activities in which they are involved (Armstrong & Hamilton, 2013; Grigsby, 2009; Nathan, 2005).

Thus, academic disengagement indicates only that students are out of alignment with one important feature of the college experience: the intellectual and skills development that comes through study. This feature is the one that the majority of the American public (Pew Research Center, 2011) and the great majority of faculty members (Schuster &

Finkelstein, 2008, pp. 127-136) consider the main purpose of college.

It is plausible to treat low levels of time spent on study as a sufficient indicator of academic disengagement. However, other indicators of disengagement may be important as well. For example, students who rarely interact with professors or classmates about course materials may be just as disengaged, from an interactional perspective, as those who spend little time on study. Moreover, these interactions are clearly important for stimulating and reinforcing commitments to study and learning (Brint, Cantwell, & Saxena, 2011). Similarly, students who spend large amounts of time on activities such as socializing or entertaining themselves on the Internet demonstrate that their priorities are out of alignment with the educational goals of universities. Moreover, these competing involvements have been shown to be associated with lower grades and lower levels of academic conscientiousness (Brint et al., 2011).

Such reflection has led us to conclude that academic disengagement is a multidimensional phenomenon. Specifically, we theorize academic disengagement as composed of five analytically distinct dimensions based on students' (a) values, (b) motivations, (c) study behaviors, (d) academic interactions, and (e) competing involvements. Disengagement in one area does not necessarily imply disengagement in others. Instead, in our conceptualization the cultural and behavioral environment of the college campus includes a variety of "zones of disengagement," some overlapping and mutually reinforcing, and some distinct from one another. We discuss the five dimensions of academic disengagement below.

Values disengagement is the first dimension. Students who say that developing thinking skills and subject matter knowledge is the primary reason for attending college are in alignment with the officially stated

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core values of undergraduate education. The views of those who deemphasize or deny the importance of educational values reflect values disengagement. Students may deemphasize educational values if they are simply interested in obtaining a credential without much work investment (Greenberger, Lessard, Chen, & Faruggia, 2008; Labaree, 1997; Mullen, 2009), or if they give priority to the nonacademic side of the college experience. Motivational disengagement is the second dimension. Values and motivations, while very often connected, are analytically distinct. Students who hold educational values may not express the motivation to follow through on those values. They may hold educational values in a ritualistic way without being highly motivated to realize them.

Behavioral disengagement is the third dimension. It is arguably the most important form of academic disengagement because it provides direct evidence of students' lack of commitment to academic work in their daily activities. Behavioral disengagement is expressed through low levels of time spent attending and/or preparing for class, and, at an extreme, through noncompletion of assignments and infrequent class attendance. Motivations and behaviors are analytically distinct. In fact, college students frequently express strong motivations to succeed without engaging in conscientious study behaviors consistent with achieving academic success (Greenberger et al., 2008; Kuh, 2003). Conversely, students who are not academically motivated may conform to institutional study norms to avoid external sanctions or to achieve the rewards they associate with conformity.

Interactional disengagement is the fourth dimension. For most students engagement in learning requires interaction with professors and other students about course materials. Students who do not interact with their teachers or peers are cut off from the social intercourse

that reflects and reinforces commitment to the educational process. Previous research has established that classroom participation and contact with professors out of class are strongly associated with academically beneficial outcomes: higher levels of study time, greater conscientiousness, and more frequent reports of analytical and critical thinking experiences (see, e.g., Brint et al., 2011).

Competing involvements are the fifth dimension. These reflect investments of time that draw students' energies and attention away from study. These are not direct measures of academic disengagement, but they are significant because they highlight centrifugal forces that tend to reduce the motivation or capacity of students to engage academically (Brint et al., 2011). Competing involvements that limit success in the classroom for most students are large amounts of time spent on (a) passive entertainments (watching television or surfing the Internet for fun), (b) campus social life (spending social time with friends and partying), and (c) paid employment (Brint & Cantwell, 2010; Brint et al., 2011; Nathan, 2005). Paid employment, however, is a mixed case. Many students cannot attend college without working, and research indicates that students who work fewer than 15 to 20 hours per week tend not to be hampered academically when compared to otherwise similar students who do not work (McCormick, Moore, & Kuh, 2010; Pascarella & Terenzini, 2005, pp. 399-402; Pike, Kuh, & McKinley, 2009).

We distinguish our approach from two plausible alternatives. One alternative approach to identifying academically disengaged populations examines those who score low on the National Survey of Student Engagement (NSSE) benchmarks. The NSSE benchmarks emphasize (a) level of academic challenge, (b) active and collaborative learning, (c) student-faculty interaction, (d) enriching educational experiences, and (e) supportive

forces commitment to class. Previous research shows that classroom participation by professors out of class are academically beneficial. Students' use of study time, greater frequency of reports, and more frequent reports of thinking experiences (Brint & Cantwell, 2011).

Distractions are the fifth most common investment of time on campus. Energies and attention are not direct measures of engagement, but they are important. They highlight centrifugal forces that reduce the motivation or ability to engage academically. Competing involvements in the classroom for most students include watching television (for fun), (b) campus social time with friends, (c) paid employment (Brint & Cantwell, 2011; Nathan, 2011), (d) commuting, however, is a mixed blessing. (e) Students cannot attend college if they are not engaged. Research indicates that more than 15 to 20 hours of time spent on campus hampered academically disengaged students. (Cormick, Moore, & Terenzini, 2005; Nathan, 2011, & McKinley, 2009). Our approach from this study is to focus on lives. One alternative is to focus on academically disengaged students. Those who score low on the Survey of Student Experiences benchmarks. The NSSE benchmarks include (a) level of academic engagement, (b) collaborative learning, (c) interaction, (d) enriching experiences, and (e) supportive

campus environments (see, e.g., Kuh, 2009). The NSSE and its forerunner, the College Student Experiences Questionnaire (CSEQ), have been the leading instruments for understanding student engagement and have been used to study disengaged student populations. In the CSEQ, disengagement is measured using a summation of time and effort devoted to both academic and nonacademic activities (see, e.g., Hu & Kuh, 2002), in NSSE as low scores on selected benchmarks (see, e.g., Kuh, Gonyea, & Palmer, 2001; Umbach & Kuh, 2004). NSSE remains the gold standard for understanding what instructors and institutions can do to foster student engagement on college campuses.

NSSE adopts an institutional-level perspective, focusing on the instructional and institutional practices associated with student engagement. Our conceptualization begins from a different point: individual students whose attitudes and behaviors are indicative of academic disengagement. We also have a more limited focus than the NSSE benchmarks. We focus on academic disengagement, rather than engagement or disengagement more generally. With the exception of student-faculty interaction, the NSSE benchmarks are not closely aligned to the phenomenon of academic disengagement as it is experienced in the values, motivations, and behaviors of students. At least three of the benchmarks—active and collaborative learning, enriching educational experiences, and supportive campus environment—can be understood as ways instructors and institutions intervene to raise levels of engagement on campus. Low scores on these benchmarks are not necessarily indicative of academic disengagement. For example, students who do not choose to engage in enriching educational experiences, such as study abroad or undergraduate research, are not necessarily academically disengaged. They may simply have too little room in their

schedules to participate in these activities. These difficulties in adapting the NSSE benchmarks to the study of academically disengaged student populations has led us to treat academic disengagement as a distinctive phenomenon, meriting an independent conceptualization, and not simply the obverse of student engagement as conceptualized and measured by the NSSE benchmarks.

We also distinguish our work from the literature on retention and graduation. Studies of retention and graduation tend to focus on the integration of students into campus community life through activity-based friendship communities, residential life communities, and first-year learning communities (see, e.g., Astin, 1984; Braxton, Hirschy, & McClendon, 2004; Tinto, 1993). Many of these programs have proven track records for retaining "at-risk" students, but they do not address the sources of academic disengagement directly. As those familiar with college campuses know, quite a few students who persist and manage to graduate are not engaged in their studies beyond a minimal level.

DATA AND METHOD

This study is based on responses of students to the University of California's Undergraduate Experiences Survey (UCUES) fielded in spring and summer 2010. UCUES is administered biannually as a census at the nine University of California undergraduate campuses. The UC system is the largest system of publicly supported research universities in the country. In 2010, UCUES response rates on the campuses in our study varied from a low of 33% to a high of 53%. Studies indicate that respondents have somewhat higher grade point averages than nonrespondents but that parameter estimates are unbiased due to the large size of the sample (Chatman, 2011). Because of the higher GPAs of respondents,

we can assume that our estimates of the size of disengaged populations are conservative.

Students must graduate in the top 12.5% of high school students statewide to be eligible for admission into the University of California. The sample therefore constitutes a relatively high-achieving group of students (Douglass, 2007). Nonetheless, high levels of variability exist within the population—in student grades, student behaviors conducive to academic success, and student background and experiences. The extent to which relationships observed for UC students generalize to the population of students attending large public research universities must be investigated empirically. The size of academically disengaged populations is likely larger in less selective institutions because they tend to enroll more students whose connections to academic life are fragile (see, e.g., Holland & Eisenhart, 1990; London, 1978; Nathan, 2005). In addition, peer and institutional support for alternative student identities can influence the size of academically disengaged populations. On some campuses, the social centrality of fraternities and sororities closely aligned with revenue-producing college sports tends to privilege student identities embedded in the “party scene” over those tied to the classroom, the library, and the laboratory (see, e.g., Armstrong & Hamilton, 2013; Clotfelter, 2011).

UCUES began more than a decade ago as a sample survey of undergraduates at UC Berkeley and was expanded to the rest of the University of California undergraduate campuses in 2004. Since that time it has developed into a census survey of undergraduates (Center for Studies in Higher Education, 2013). Each campus develops its own incentives, such as gift cards or digitally enhanced tablets, to encourage students to participate in the survey. Methodological studies of UCUES have not shown response biases due to the use of

incentives (Chatman, 2011). All participating students complete a set of core items and, in addition, one of five randomly assigned modules. The data for this study come from the core items and the student development module. The student development module included measurement of student values, one dimension in our theorization of academic disengagement. Students in the sample took the core first, followed by the student development module, with items presented in the same order. Following each survey administration, data on student backgrounds, high school records, SAT scores, and UC GPA were appended to the file by the UC Office of the President.

The census approach adopted in UCUES yielded a large 2010 sample (8,823 students) in spite of the modular design of the survey. We found sizable numbers of respondents located across each of eight UC campuses in the sample and among all student categories we studied. (Because of its small size, UC Merced was excluded from the study.)

Measuring Academic Disengagement

UCUES does not include questions to measure motivational disengagement independent of values and study behaviors. Consequently, we focus here on four rather than all five of the hypothesized dimensions of disengagement. We identify student populations whose members are not merely higher than average in academic disengagement, but are rather “truly disengaged” insofar as measurement is possible using survey data.

Values Disengagement. Students’ stated goals are the clearest indicators of values disengagement. The UCUES student development module asks students a series of questions about how important each of a number of college goals is to them. Answer choices range from 1 (*not important*) to 3 (*very important*). Our measure of *low educational values* is

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composed of three variables focused on educational goals: how important it is (a) to prepare for graduate or professional school, (b) to achieve a high GPA, and (c) to develop an in-depth understanding of a specific field of study. The items are unidimensional, with an alpha reliability of .59. We categorized students who responded to all three items as either *not important* or *somewhat important* as disengaged. Individuals in this disengaged population were coded 1, and the rest were coded 0.

Study Behavior Disengagement. The minimal responsibilities of schooling are attending class, coming prepared, and turning in assignments on time. Our measure of *academic irresponsibility* is composed of four items: the frequency with which students say they (a) turn in assignments late, (b) come to class unprepared, (c) come to class without having done the reading, and (d) skip class. Response categories range from 1 (*never*) to 6 (*very often*). These four variables load on one dimension and have an alpha reliability of .74. Students high on academic irresponsibility responded with a 5 (*often*) or 6 (*very often*) to at least three of the four items. One response could vary below 5. Students in the high academic irresponsibility group were coded 1, and the rest were coded 0.

Our measure of *low study time* is composed of a measure of how many hours per week, on average, students spent attending class and studying or preparing for class. The average student is expected to be in class for a minimum of 12 hours per week to be considered full-time. In addition, students are expected to study 2 hours out of class for every 1 hour in class. Thus, students with a minimal full load would be expected to be in class and to study out of class 36 hours per week. Most students take a higher unit count, meaning their expected class attendance and study time would be more than 40 hours per week. Adding class attendance and out-of-class study

together, we categorized students who spent less than 18 hours in class or studying as low in study time. This cutoff reflects class attendance and study time below what would be expected in a half-time job. This seems to us a clear indicator of low study time among full-time students. Students in the *low study time* group were coded 1, and all others were coded 0.

We measured *low reading completion* by responses to a question about the percentage of reading students said they completed on average during the current term. We categorized students who said they read less than 50% of the assigned reading as low in completion of assigned reading. Failing to do at least half of the assigned reading seems to us a clear indicator of minimal effort. Students in the low reading group were coded 1, and the rest were coded 0.

Interactional Disengagement. We based our measure of *low academic interaction* on a scale of course-based participation in and out of class. This scale consists of seven items measuring the frequency during the past year that students reported (a) communicating with faculty members via email, (b) talking with professors out of class, (c) interacting with a faculty member in a lecture or discussion section, (d) contributing to class discussion, (e) asking an "insightful" question in class, (f) bringing up a point from another class, and (g) finding courses interesting enough to do more work than required. Response categories ranged from 1 (*never*) to 6 (*very often*). The scale is unidimensional, with an alpha reliability of .88. Because of the large number of questions on this scale, we required only five of the seven answers to be 2 (*rarely*) or 1 (*never*), and allowed two of the answers to vary above 2. Students who scored low in academic interaction were coded 1, and the rest were coded 0.

Competing Involvements. We defined students who spent higher than average time

on *passive entertainments* as those who said they spent higher than the mean time on *both* of two measures: (a) watching television (4.22 hours/week) and (b) surfing the Internet "for fun" (11.67 hours/week). Students within this *high passive time* group were coded 1, and the rest were coded 0. We defined students whose competing involvements focused on the social life of the campus as those who said they spent higher than the mean time on *both* of two measures: (a) socializing with friends (10.28 hours/week) and (b) partying (3.16 hours/week). Students in the *high social time* category were coded 1, and the rest were coded 0. Students in the *high work time* group are defined as those reporting more than 20 hours of paid employment each week. This is the threshold used by most social scientists to identify students who are very likely to be working too much to focus sufficient time and energy on their studies (McCormick et al., 2010; Pascarella & Terenzini, 2005, pp. 399-402; Pike et al., 2009). Students in the *high work time* group were coded as 1 and the rest were coded 0.

Analyzing the Dimensionality of Disengagement

According to our conceptualization, low scores in one dimension of disengagement do not necessarily imply low scores in other dimensions. Instead, we hypothesize that the dimensions are only weakly related to one another, but that indicators *within* each dimension should be more strongly related to one another. Thus, those who have low scores on educational values and those who have low scores on academic interaction may be only weakly correlated with one another. At the same time, measures of low levels of study time and low levels of reading completion should, according to our conceptualization, be highly correlated with one another because both indicate study behavior disengagement.

Similarly, we expect students who invest heavily in passive entertainments and campus social life may overlap significantly in the counterschool student culture. However, working long hours may not allow students much time for socializing or passive entertainments, and we consequently anticipate that this competing involvement will be independent of the other two.

To examine the dimensionality of academic disengagement, we conducted a principal components factor analysis. We expected to find four factors—one for each of the theorized dimensions of academic disengagement—and further that paid employment would not factor with the other competing involvements.

Identifying the Characteristics of Disengaged Populations

Three general perspectives can be identified in the literature on student success to help frame hypotheses about student characteristics associated with academic disengagement. The first is that students from disadvantaged social backgrounds will be more likely to be disengaged from their studies, because the educationally relevant activities and cultural capital of their families of origin do not, in general, prepare them to compete well at college (see, e.g., DiMaggio & Mohr, 1985; Farkas & Hibel, 2007; Hart & Risley, 1995). This perspective suggests that indicators of social disadvantage, such as first generation to attend college, racial-ethnic minority status, and lower levels of family income, will be associated, net of covariates, with higher levels of academic disengagement. Gender is the exception. It is well established that women tend to perform better in academic settings than do men (see, e.g., Buchmann, DiPrete, & McDaniel, 2008). We therefore hypothesize that men will show higher levels of disengagement than women.

First-generation college students are those whose parents have not graduated from a

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4-year college. First-generation students were coded 1; the rest were coded 0. UCUES racial-ethnic data are organized into seven categories: African / African American, American Indian, Asian / Asian American, Chicano/Latino, International, Other (typically mixed race), and White/Caucasian. We coded each racial-ethnic group 1, with the other groups coded as 0. We excluded Whites as the reference category. Students were asked to report their family income if they were dependent or their personal income if they were independent. This variable was coded 1 for less than \$10,000 a year to 11 for students whose families earned \$200,000 or more a year. Females in our sample were coded 1, and males were coded 0.

The second perspective is that students with weaker academic backgrounds will be more likely to become disengaged from their studies (see, e.g., Jencks, Crouse, & Meuser, 1983; Murnane, Willett, & Levy, 1995). This perspective suggests that academic indicators such as lower high school grade point averages, lower standardized test scores, and lower college grade point averages will be associated, net of covariates, with higher levels of academic disengagement. In addition, it suggests that students who do not take advantage of academic enrichment opportunities, such as faculty-mentored research opportunities, are more likely to be found among disengaged populations.

Students' high school GPA ranged from 1.93 to 4.0. Students' SAT reading and math scores ranged from a low of 210 to a high of 800. We rescaled these variables to align with the coding of the variables in our analysis by dividing by 100. Students' cumulative college GPA was also included in our analysis and ranges from 0.1 to 4.0. The average college GPA for our sample was 3.14. Students were asked a series of questions about their participation in research-oriented or creative project-oriented independent study and

collaboration opportunities with faculty. This variable is the sum of nine variables that asked students if they participated in an independent study, volunteer opportunity, or paid position to do research or work on a creative project with a faculty member. The values on this variable ranged from 0 to 9.

The third perspective argues that academic disciplinary environments select for levels of student engagement. Some disciplines, such as engineering and mathematics, reduce the numbers of disengaged students early on by failing students out of introductory courses. These students find a home in majors in the arts, humanities, and social sciences where course demands are lower and disengagement is higher (Arcidiacano, 2003; Brint et al., 2011). Although UC campuses include engineering programs, their focus is otherwise on traditional basic fields in the arts and sciences. For this reason, we were not able to investigate a full range of fields, including some such as business that attract large numbers of students nationwide.

We classified students' majors into seven categories: engineering, physical sciences (including math), life sciences, social sciences, humanities, arts, and undeclared. Each category was coded 1 for students within the discipline and 0 for students not in the discipline. We used social sciences as the excluded reference category.

We included two control variables: (a) upper-division status and (b) campus. Some evidence suggests that students disengage from study as they move toward thinking about the labor market and the next stages in their lives or become disillusioned with academe (Brint & Cantwell, 2010). Upper-division students were coded 1 in these analyses, and lower-division students were coded 0. UC campuses vary significantly in their average levels of student academic engagement. It therefore seemed advisable

to control for campus. Campus identities are masked in the tables.

Analyzing the Characteristics of Disengaged Populations

We used logistic regression to investigate the influence of these variables on our measures of academic disengagement. Students in the high disengagement categories were coded 1, and those not in high disengagement categories were coded 0. Estimates are presented in odds ratios. Due to our large sample size, many of our coefficients would be statistically significant at the commonly used p value of .05. To guard against Type I errors, we used a standardized p value described in Woolley (2003). This formula, $p = q/(\sqrt{n/100})$, standardizes p values to a sample size of 100. Applying this formula to our data, $p = .05/(\sqrt{8823/100})$, we achieve a conservative p value of .005.

RESULTS

Dimensionality of Disengagement

To examine the dimensionality of academic disengagement, we entered all indicators of disengagement into a principal components factor analysis. Table 1 displays the factor loadings for each variable. Factor loadings above .40 are in bold to highlight which variables load on each factor. Factor 1 contains all of the indicators for academic interaction disengagement. The low reading completion variable loaded on Factor 1, but it loaded more highly on Factor 2, which characterizes study behavior disengagement. Factor 3 contains the variables related to social time use and entertainment time use. Both of these activities were hypothesized to be characteristic of competing involvements. Hours spent in paid employment did not load highly on any of the factors in this model, suggesting that work time is, as we have hypothesized, an

independent type of competing involvement. Factor 4 contains the variables composing educational values. Two of the variables, preparing for graduate or professional school and obtaining a high GPA, also loaded (negatively) on the competing involvements factor (Factor 3), but they loaded more highly on the values factor. Measures of low study time load highly on Factor 5, indicating that study time is independent of other indicators of study behavior disengagement. We continue to treat low study time as an aspect of behavioral disengagement, but one that does not factor with others.

The findings of this analysis provide considerable support for our conceptualization of disengagement. The multidimensionality of disengagement is clearly supported, and, with the exception of the independence of low study time from other forms of behavioral disengagement, the hypothesized dimensions do emerge as empirically distinct factors. Work time does not factor with any of the other variables, indicating, as hypothesized, its independence from other competing involvements.

Size of Academically Disengaged Populations

The size of disengaged populations varied depending on the dimensions and measures in question. On one extreme, students who work more than 20 hours per week constituted fewer than 5% of UCUES 2010 respondents. At the other, students who scored low on academic interaction constituted nearly 25% of respondents. Those who showed low levels of study effort—as measured by low study time and low reading completion—fell closer to the high end, at about one fifth of UCUES respondents. The estimates for each of the eight measures of disengagement are provided in Table 2.

We conclude from these findings that academic disengagement had not reached

TABLE 1.
Principal Components Factor Analysis of all Dependent Variables (N = 8,823)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Values: Educational					
Prepare for graduate or professional school	.17	-.31	.44	.48	-.18
Achieve a high GPA	.23	-.28	.42	.55	-.17
Develop an in-depth understanding of a specific field of study	.25	-.22	.30	.44	-.13
Behavior					
<i>Academic irresponsibility</i>					
Turned in a course assignment late	-.08	.52	-.07	.11	.23
Came to class without completing assigned reading	-.39	.63	-.02	.35	.12
Came to class unprepared	-.38	.64	-.01	.39	.15
Skipped class	-.31	.59	.07	.21	-.03
<i>Study time (sum of 2 items)</i>					
Time allocation: attend classes, discussions sections, or labs	.17	-.21	.34	-.06	.64
Time allocation: study and other academic activities outside class	.31	-.26	.29	-.01	.61
Reading completion: On average, how much of your assigned course reading have you completed this academic year?	.43	-.48	.09	-.20	-.06
<i>Academic interaction</i>					
Communicated with a faculty member by email or in person	.61	.21	-.02	.13	.22
Talked with the instructor outside of class about issues and concepts derived from a course	.69	.18	-.06	.10	.23
Interacted with faculty during lecture class sections	.72	.31	-.14	-.02	.07
Contributed to class discussion	.76	.27	-.08	-.03	-.18
Brought up ideas or concepts from different courses during class discussions	.77	.31	-.08	-.03	-.18
Asked an insightful question in class	.79	.31	-.08	-.02	-.17
Found a course so interesting that you did more work than required	.67	.12	.02	.04	-.02
<i>Alternative commitments</i>					
<i>Passive entertainment (sum of 2 items)</i>					
Time allocation: watching TV	-.17	.33	.51	-.20	-.01
Time allocation: using computer or smart phone for nonacademic purposes	-.07	.30	.43	-.27	-.05
<i>Social time (sum of 2 items)</i>					
Time allocation: socializing with friends	-.01	.35	.59	-.33	-.17
Time allocation: partying	.05	.42	.43	-.27	-.10
Work time ^a : time allocation: total work hours for pay per week	.09	.21	-.12	-.03	.17
Eigenvalue	4.50	2.98	1.70	1.43	1.22

^a Time working loaded highest on Factor 2. Its loading was low across all factors, indicating it did not fit very well along any dimension.

TABLE 2.
Size of Disengaged Population on Six Measures of Disengagement, UCUES 2010
(*N* = 8,823)

Disengagement Measures	Measurement	% <i>N</i>
Values: Low Education Values	Three items (see Table 1); selected "not important" or "important" on all three variables	12.2
Behavior		
Academic Irresponsibility	Four items (see Table 1); selected "often" or "very often" on at least three of the items	11.6
Low Study Time	Reported less than 18 hours per week spent in class or preparing for class	19.3
Low Reading	Reported reading less than 50% of the assigned reading in the last school year	21.5
Academic Interaction: Low Academic Interaction	Seven items (see Table 1); selected "rarely" or "never" on at least five of the items	24.2
Competing Involvements		
High Passive Time Use	Reported above the mean hours per week on both watching television and surfing the Internet for fun	15.2
High Social Time Use	Reported above the mean hours per week on both social activities socializing with friends and partying	12.6
High Work Hours	Reported working more than 20 hours per week	4.8

epidemic proportions among undergraduate students at the University of California who responded to UCUES 2010. Sizable minorities of academically disengaged populations were, however, found on every campus. Excluding the few respondents who worked long hours in paid employment, these minorities ranged from 10% to 25%, depending on the dimension of academic disengagement measured. Given the higher than average GPA composition of the UCUES sample, our estimates of the size of disengaged populations are almost certainly conservative.

Characteristics of Disengaged Populations

Table 3 displays the logistic regressions of our dependent variables on our independent variables. As Table 3 indicates, we were

unable to explain much of the variance in our disengagement variables with measures of social background, academic achievement, disciplinary major, and our control variables.

Within this context, a consistent story emerged about the social bases of academic disengagement at UC. Not surprisingly, (a) respondents with lower grade point averages were more likely to be found among all disengaged populations. In addition (b) men, (c) students with high SAT scores, (d) students majoring in arts, humanities, and social sciences, and (e) upper-division students were more likely, net of covariates, to be among the most disengaged populations.

Men were more likely than women to express low educational values and to report low study time, low reading completion, high passive time, and high social time. Men did

ment, UCUES 2010

	% N
important" or	12.2
"very often"	11.6
in class or	19.3
ined	21.5
or "never"	24.2
n both or fun	15.2
n both partying	12.6
week	4.8

ch of the variance in variables with measures academic achievement, our control variables. xt, a consistent story al bases of academic C. Not surprisingly, lower grade point ly to be found among lations. In addition with high SAT scores, n arts, humanities, and upper-division students covariates, to be among populations. kely than women to l values and to report ding completion, high social time. Men did

not differ from women on high academic irresponsibility. Women were, however, more likely than men to be in the low academic interaction group.

Students with higher SAT scores were more likely to fall into the academic irresponsibility group. In addition, those who scored higher on the SAT verbal test were more likely to be found among the low study time group, and those who scored higher on the SAT quantitative reasoning test were more likely to be found among the high social time group. We cannot infer from UCUES data the reasons why students who scored high on the SAT were more likely to be found among academically disengaged student populations. Plausible hypotheses that merit further study are that many students with high SAT scores have not found the intellectual challenges to keep them highly engaged with their studies or have chosen to rely on their aptitude for academic work to "coast" through their college years.

Social science majors were more likely than natural science and engineering students to be among disengaged populations. In most cases, arts and humanities students did not differ in their level of disengagement compared to social science majors. These patterns were evident with respect to variables measuring low educational values, high academic irresponsibility, low reading completion, high hours of passive time, and high hours of work time.

Upper-division students were more likely to be found among most disengaged populations. It may be that upper-division students tend to disengage from their studies once the "newness" of college wears off and as they begin to prepare for the labor market. Upper-division students did not, however, differ from lower division students in their propensity to be found among the high social time group.

Apart from gender, sociodemographic variables rarely emerged as significant predictors

of academic disengagement. The selectivity of the University of California may even out social disadvantages that would appear in other contexts. The results of these analyses did, however, indicate a few relationships related to social origins. Both Asian American and Latino students were more likely to be found among the low academic interaction group and less likely to be found in the high social time group. Students from more affluent families were more likely to be found among the high social time population.

DISCUSSION

Our research makes four contributions to the study of academic disengagement in U.S. public research universities. First, we developed a multidimensional conceptualization of student academic disengagement focusing on students' values, motivations, study behaviors, academic interactions, and competing involvements. This conceptualization is, we believe, a contribution to understanding the dimensions of academic disengagement.

Second, using data from UCUES 2010, we tested our conceptualization by investigating structural relationships among measures associated with four of the five dimensions of disengagement. Our analysis yielded a five-factor solution that closely mirrored our conceptualization. More analytical work is required, but we take these findings as providing provisional support for our conceptualization of academic disengagement.

Third, using the same survey data, we provided evidence on the size of disengaged populations in each of the four theorized dimensions we were able to study using UCUES. These data suggest that sizable minorities of University of California students can be characterized as academically disengaged. These populations ranged from about 1 in 10 for the most extreme forms of

TABLE 3.
Logistic Regressions for Students in Disengaged Groups (N = 8,823)

	Values	Academic Behaviors		
	Low Education Values	High Academic Irresponsibility	Low Study Time	Low Reading
Social Background				
Female	0.63*	<i>ns</i>	0.81*	0.70*
White	REF	REF	REF	REF
Latino	0.68*	<i>ns</i>	<i>ns</i>	0.82*
Asian	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Black/African American	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
American Indian	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Other	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
International	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
First Generation	<i>ns</i>	<i>ns</i>	0.55*	<i>ns</i>
Family Income	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Academic Achievement	<i>ns</i>	<i>ns</i>	0.97*	<i>ns</i>
High School GPA	<i>ns</i>	0.56*	0.63*	<i>ns</i>
SAT Reading ^a	<i>ns</i>	1.47*	1.17*	<i>ns</i>
SAT Math ^a	1.28*	1.31*	<i>ns</i>	1.36*
College GPA	0.49*	0.32*	0.62*	0.54*
Independent Study Discipline	<i>ns</i>	<i>ns</i>	0.95*	<i>ns</i>
Engineering	<i>ns</i>	<i>ns</i>	0.32*	<i>ns</i>
Physical Science	0.69*	<i>ns</i>	0.32*	<i>ns</i>
Life Science	0.51*	0.62*	0.39*	0.82*
Social Science	REF	REF	REF	REF
Humanities	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Arts	<i>ns</i>	<i>ns</i>	0.61*	<i>ns</i>
Undeclared	<i>ns</i>	<i>ns</i>	0.67*	<i>ns</i>
Controls				
Upper Division	1.71*	1.36*	1.35*	1.61*
Campus A	<i>ns</i>	1.11*	2.12*	<i>ns</i>
Campus B	<i>ns</i>	<i>ns</i>	2.25*	<i>ns</i>
Campus C	<i>ns</i>	<i>ns</i>	2.58*	<i>ns</i>
Campus D	<i>ns</i>	<i>ns</i>	2.40*	<i>ns</i>
Campus E	<i>ns</i>	<i>ns</i>	2.68*	<i>ns</i>
Campus F	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Campus G	REF	REF	REF	REF
Campus H	<i>ns</i>	0.60*	1.24*	<i>ns</i>
Pseudo-R ²	.05	.08	.07	.04
Log Pseudo-Likelihood	-3118.91	-2934.54	-4020.04	-4413.47
Social Background				
Female	0.68*	0.63*	<i>ns</i>	1.35*
White	REF	REF	REF	REF
Latino	<i>ns</i>	0.62*	<i>ns</i>	1.48*
Asian	1.30*	0.54*	0.46*	1.95*
Black/African American	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
American Indian	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Other	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
International	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
First Generation	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Family Income	1.04*	1.09*	<i>ns</i>	1.22*
Academic Achievement				
High School GPA	<i>ns</i>	<i>ns</i>	<i>ns</i>	1.57*
SAT Reading ^a	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.91*
SAT Math ^a	<i>ns</i>	1.15*	<i>ns</i>	1.20*
College GPA	0.73*	0.59*	0.42*	0.74*
Independent Study Discipline	<i>ns</i>	1.08*	1.14*	0.76*
Engineering	0.59*	0.49*	0.52*	1.52*
Physical Science	<i>ns</i>	0.42*	<i>ns</i>	<i>ns</i>
Life Science	0.65*	0.52*	<i>ns</i>	<i>ns</i>
Social Science	REF	REF	REF	REF
Humanities	<i>ns</i>	<i>ns</i>	<i>ns</i>	0.58*
Arts	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Undeclared	<i>ns</i>	0.70*	<i>ns</i>	<i>ns</i>
Controls				
Upper Division	1.26*	<i>ns</i>	3.72*	1.40*
Campus A	1.12*	1.07*	<i>ns</i>	<i>ns</i>
Campus B	1.19*	<i>ns</i>	0.83*	1.33*
Campus C	1.34*	0.78*	1.35*	1.48*
Campus D	1.18*	2.07*	<i>ns</i>	1.31*
Campus E	1.23*	0.77*	<i>ns</i>	1.54*
Campus F	1.80*	<i>ns</i>	1.29*	<i>ns</i>
Campus G	REF	REF	REF	REF
Campus H	<i>ns</i>	0.74*	0.91*	1.26*
Pseudo-R ²	.02	.07	.09	.08
Log Pseudo-Likelihood	-3672.02	-3104.77	-1562.54	-4500.73

^a SAT scores have been rescaled by dividing by 100 to reflect the rest of the data. The range is 2.2 to 8.0.

**p* ≤ .005.

; (N = 8,823)

Behaviors	
Study	Low Reading
31*	0.70*
EF	REF
7S	0.82*
7S	ns
7S	ns
7S	ns
7S	ns
55*	ns
7S	ns
37*	ns
33*	ns
17*	ns
7S	1.36*
52*	0.54*
35*	ns
32*	ns
32*	ns
39*	0.82*
EF	REF
7S	ns
31*	ns
37*	ns
35*	1.61*
12*	ns
25*	ns
58*	ns
40*	ns
58*	ns
7S	ns
EF	REF
24*	ns
77	.04
20.04	-4413.47
7S	1.35*
EF	REF
7S	1.48*
46*	1.95*
7S	ns
7S	ns
7S	ns
7S	ns
7S	1.22*
7S	ns
7S	1.57*
7S	0.91*
7S	1.20*
42*	0.74*
14*	0.76*
52*	1.52*
7S	ns
7S	ns
EF	REF
7S	0.58*
7S	ns
7S	ns
72*	1.40*
7S	ns
33*	1.33*
35*	1.48*
7S	1.31*
7S	1.54*
29*	ns
EF	REF
31*	1.26*
79	.08
32.54	-4500.73

; range is 2.2 to 8.0.

behavioral disengagement (which we labeled "academic irresponsibility") to 1 in 4 for interactional disengagement.

Fourth, we provided evidence from UCUES that gender, academic achievement, major, and class year were more important influences on academic disengagement than socioeconomic or racial-ethnic origins. Women and natural science and engineering respondents were less likely to be among academically disengaged populations. Upper-division students and students who scored high on the SAT were more likely to be among disengaged populations.

Campus decision makers will wonder whether it makes sense to attempt to encourage disengaged students to become more involved in academic life. The answer to this question may seem obvious to those who care about the centrality of teaching and learning in the research university environment, but it will not be as clear for many campus administrators whose priorities include maintaining and expanding enrollments. It will also not be clear for some faculty members whose priorities are primarily directed toward research and graduate education.

For many years, Harvard University practiced an admissions policy based on the "happy bottom quarter" (Karabel, 2005, pp. 291-293). These were students who had family resources or special talents (such as athletic or theatrical talent) that would allow them to enjoy their college years even though they were highly unlikely to finish anywhere near the top of their classes. In spite of their lack of academic distinction, Harvard officials reasoned, these students might become loyal alumni. The situation at other higher education institutions may equally support the idea of the happy bottom quarter. Because these students, like all others, bring in revenue to their colleges and universities, administrators may be disposed to accommodate them by nursing them to graduation through provision

of ample academic support services while providing cocurricular activities to promote a happy college experience.

Adherence to the logic of the happy bottom quarter has worked well for college and university administrators over many decades (see also Armstrong & Hamilton, 2013, chap. 1). The continuation of this logic may, however, be increasingly risky, for both students and institutions. Arum and Roksa (2014) have provided preliminary evidence that students who face few intellectual demands during their college years tend to have weaker labor market outcomes when they graduate than those whose programs include more in the way of intellectual challenges. This finding is consistent with the literature showing that college students who graduate with low grades suffer negative labor market consequences, controlling for many other influences on these outcomes (see, e.g., Bowen & Bok, 1998, pp. 395-398; Murnane et al., 1995). Moreover, rising college costs have raised public concern about whether the traditional 4-year college experience is still a good investment, particularly at a time when many college graduates struggle to find jobs (see Pew Research Center, 2011). Academic disengagement is no hindrance for affluent students who can use family social connections to obtain jobs after college (Armstrong & Hamilton, 2013). For other students, academic disengagement during the college years may be associated with long-term costs both for intellectual skills development and for employment opportunities. At a time when college costs are rising rapidly, these findings support efforts to reduce the size of academically disengaged populations on campus.

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