

2014 Emory University National College Health Assessment Summary



Office of Health Promotion

Division of Campus Life

Spring 2015

Authors

Casey Simon, MPH, NCHA Research Assistant
Office of Health Promotion, Division of Campus Life
1525 Clifton Road, Atlanta, GA 30322

Marc Cordon, MPH, Associate Director
Office of Health Promotion, Division of Campus Life
1525 Clifton Road, Atlanta, GA 30322

For additional information, please contact Marc Cordon at marc.cordon@emory.edu or the Office of Health Promotion at Emory University.

Suggested Citation

American College Health Association. American College Health Association-National College Health Assessment II: Institutional Data Report Fall 2014 Emory University. Hanover, MD: American College Health Association; 2015.

Websites

Office of Health Promotion: <http://studenthealth.emory.edu/hp>

Student Health and Counseling Services: <http://www.studenthealth.emory.edu>

Division of Campus Life: <http://www.campuslife.emory.edu>

National College Health Assessment: <http://www.achancha.org>

Table of Contents

EXECUTIVE SUMMARY	5
INTRODUCTION	7
METHODS	8
SAMPLE	8
PROCEDURE	9
MEASURES	10
ANALYSIS	10
STUDY STRENGTHS AND LIMITATIONS	11
SAMPLE STATISTICS	13
DEMOGRAPHIC CHARACTERISTICS	13
KNOWLEDGE OF HEALTH SERVICES AND RESOURCES	17
IMPEDIMENTS TO ACADEMIC SUCCESS	18
SLEEP HEALTH	19
MENTAL HEALTH BRIEF	20
NEGATIVE MENTAL HEALTH SYMPTOMS	21
LIFETIME DEPRESSION	22
DIAGNOSIS AND TREATMENT	23
SERVICE USE	23
DISTRESS	25
STRESS	26
WELL-BEING	27
SUBSTANCE USE BRIEF	28
ALCOHOL USE	29
CONSEQUENCES OF ALCOHOL USE	35
ALCOHOL RISK REDUCTION BEHAVIOR	37

TOBACCO USE	38
SMOKING ACROSS DEMOGRAPHICS AND BEHAVIORS	39
TOBACCO KNOWLEDGE AND SERVICES	39
MARIJUANA USE	40
OTHER ILLICIT SUBSTANCE USE	41
PERCEPTIONS OF SUBSTANCE USE	43
<u>VIOLENCE AND ABUSE BRIEF</u>	<u>45</u>
PREVALENCE OF VIOLENCE AND ABUSE	46
SAFETY ON CAMPUS	47
<u>SEXUAL HEALTH BRIEF</u>	<u>48</u>
SEXUAL ACTIVITY AND PROTECTION	49
CONTRACEPTION AND PREGNANCY	50
SEXUALLY TRANSMITTED INFECTIONS	52
<u>PHYSICAL HEALTH BRIEF</u>	<u>54</u>
GENERAL HEALTH	55
PHYSICAL ILLNESS	57
DISABILITY	58
DISEASE AND INJURY PREVENTION	59
PHYSICAL ACTIVITY AND NUTRITION	61
<u>FLOURISHING BRIEF</u>	<u>64</u>
<u>ADDITIONAL DATA</u>	<u>68</u>
<u>GLOSSARY</u>	<u>69</u>
<u>REFERENCES</u>	<u>70</u>
<u>APPENDIX</u>	<u>71</u>
FULL INSTRUMENT, INCLUDING SUPPLEMENTAL QUESTIONS	
EXECUTIVE SUMMARY REPORT	
INSTITUTIONAL DATA REPORT	

Executive Summary

During the Fall semester of 2014, Emory University partnered with the American College Health Association (ACHA) to administer the National College Health Assessment (NCHA) to a sample of Emory students. The NCHA is administered every three years at Emory University, with 2014 marking the fourth collection. The NCHA collects information about a wide range of college students' health habits, behaviors, and perceptions in regards to the most prevalent health topics. Some of these topics include: substance use, sexual health, mental health, and personal safety. In addition, the supplemental questions utilized by Emory included items regarding student flourishing (an optimal state of well-being).

The 2014 Emory NCHA was administered online to a representative sample of all Emory undergraduate, graduate, and professional students from October 20, 2014 to November 17, 2014. The response rate for the Emory NCHA was 23%, compared to the national average of 17%. Marketing campaigns and incentives were strategies employed to encourage students to participate in the survey.

In the sample, 69.5% of Emory NCHA respondents reported being female. Comparatively, only 56.5% of Emory enrolled students identify as female. 45.9% respondents reported being an undergraduate student, whereas 53.3% of respondents were graduate or professional students. Full-time students, in addition to first-year undergraduate students were overrepresented in the sample when comparing to Emory's enrolled student data.

A number of health issues were assessed through the NCHA. To begin, Emory respondents reported stress, anxiety, and depression as the top three impediments to academic success. Further, a quarter of respondents noted that sleep difficulties were "traumatic" or "very difficult to handle" in the last year.

Regarding mental health, 18% of Emory respondents report having ever been diagnosed with depression. Females and non-international students were more likely to have received this diagnosis than their counterparts. Additionally, 54% of respondents reported being "overwhelmed by all you had to do," making it the most common mental illness symptom experience in the past two weeks by Emory respondents. Stress is a substantial issue among 2014 Emory NCHA respondents, as 60% reported "tremendous" or "more than average" stress in the last year. Graduate students were significantly more stressed than undergraduates.

Substance use is a significant concern, especially among college students. Almost 18% of Emory respondents report never having used alcohol, with 19.1% of respondents reporting using alcohol between 10 and 30 days within the last month. Regarding binge drinking, of those who drink, almost 40% have consumed 5 or more drinks in one occasion at least once in the past two weeks. Undergraduate students were significantly more likely than graduate students to report binge drinking the last time they partied or socialized. Additionally, 92% of Emory respondents have not used cigarettes in the past month, with only 1.5% reporting daily cigarette use. In regards to all substance use, respondents' perceptions of their peers' substance use is far higher than how frequently their peers actually use substances, particularly in estimates of alcohol and marijuana use.

Campus safety is another health concern addressed by the NCHA. A majority of respondents reported feeling safe on campus during the day, although less than half reported feeling “Very Safe” on campus at night. This is a decrease from 2011 Emory respondents. In regards to violent acts, the top three most commonly experienced by Emory respondents are verbal threats, sexual touching without consent, and emotionally abusive intimate relationships.

Emory NCHA respondents reported on a wide range of sexual health issues. A majority of respondents reported being sexually active. Among those that are sexually active, 66% reported only having one partner in the past year. During last vaginal intercourse, 81% of respondents reported using contraception. The most common methods of contraception used by respondents were male condoms, birth control pills, and withdrawal. The most common STI reported by respondents was genital warts/HPV, with 27.3% of those diagnosed with an STI reporting the infection as negatively impacting their academic performance.

Regarding general health and well-being, a majority of NCHA respondents reported “Good,” “Very Good,” or “Excellent” health. The three most common physical illnesses experienced in the past year by Emory respondents were allergies, sinus infections, and back pain. Almost a quarter of respondents reported 2 or more illnesses. The top three disabilities reported by Emory respondents were psychiatric conditions, chronic illness, and ADHD, each reflecting an increase since 2011. Regarding prevention behavior, only 44% of respondents who ride a bicycle wear a helmet every time. However, a majority of respondents reported always wearing a seatbelt when riding in a car. Only 45% of respondents met the recommended guidelines for physical activity, a decrease from 2011. Additionally, less than half eat three or more servings of fruits and vegetables every day. However, almost half of all Emory respondents report trying to lose weight.

Finally, regarding mental well-being, almost half of respondents were categorized as flourishing, compared to 44% in the moderate category, and 4% in the languishing category. A majority (59%) of first year undergraduate students reported flourishing, higher than any other undergraduate classification. Further, a greater proportion of flourishing students reported having an “A” level GPA than moderate or languishing students. More detailed information about flourishing and its impact on academic success can be found in the Flourishing Brief (page 65).

The National College Health Assessment provides a breadth of information about the current state of Emory University students and students around the nation. Utilizing the information to better understand the student population, and eventually developing programmatic or policy changes to address issues is critical to promoting well-being.

Introduction

During the Fall 2014 semester, the Office of Health Promotion (OHP), in collaboration with the American College Health Association (ACHA), administered the National College Health Assessment (NCHA) to a sample of Emory University students. ACHA is a national organization comprised of college health professionals dedicated to advancing the health of college students through advocacy, education, and research. The NCHA is administered every three years at Emory University, with 2014 marking the fourth collection. The NCHA was first introduced to Emory University in 2006, and a new survey instrument (ACHA-NCHA II) was developed and administered in 2008. The most recent collection of data at Emory occurred in 2011.

The NCHA provides the largest known comprehensive data set on the health of college and university students. This assessment collects information about students' health habits, behaviors, and perceptions in regards to the most prevalent health topics. Some of these topics include: substance use, sexual health, mental health, and personal safety. In addition, the Emory NCHA included items regarding flourishing. The ACHA has been designing and implementing the NCHA for more than 550 higher education institutions around the country since the spring of 2000. Emory University uses NCHA data to track student health across time, compare student health to national averages, identify vulnerable populations, and inform health and wellness initiatives across the university. The next Emory NCHA will be administered in the Fall 2017 semester.

The 2014 Emory NCHA was administered online to a representative sample of all Emory undergraduate, graduate, and professional students from October 20, 2014 to November 17, 2014. The response rate for the Emory NCHA was 23%, compared to the national average of 17%.

The following report provides an in-depth description of the 2014 Emory NCHA methods, analyses, results, and strengths and limitations. Results are organized into sample statistics followed by individual briefs covering mental health, substance use, abuse and violence, sexual health, and physical health.

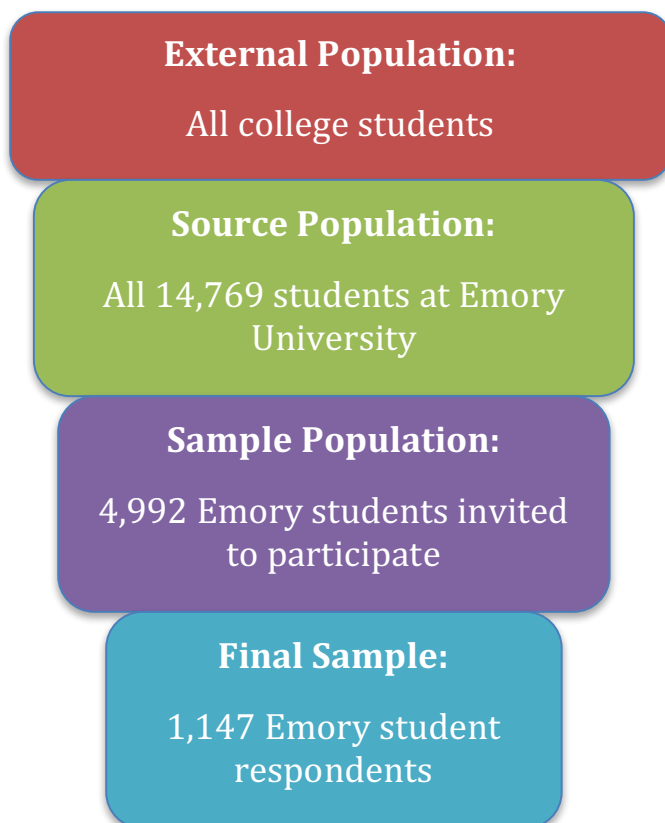
Methods

Sample

Using student enrollment records, the Office of Institutional Research utilized a proportional allocation method to generate the sample population, which is representative of the Emory student population by school affiliation. Due to the student population of Emory, an 800 person final sample was recommended by the ACHA. A sample size of 5,000 was determined based on a 20% expected response rate to reach this number.

The data contained in this report comes from a final sample of 1,147 Emory students, exceeding the ACHA recommended number for a school this size. Five thousand students comprise the sample population and represent, by school, the Emory student body of 14,769 students, known as the source population. Due to unsuccessful email delivery, the final sample population consisted of 4,992 students. At the assessment's completion, the actual number of respondents was 1,147 students, yielding a 23% response rate. The sampling structure of the 2014 Emory NCHA is represented in Figure 1.

Figure 1. Sampling Structure of the 2014 Emory NCHA



Procedure

Participant Communication

The initial invitation letter, including a link to the Emory NCHA, was emailed to the 4992 randomly chosen Emory students on October 20, 2014. The invitation letter described the purpose and content of the assessment, outlined the process of consent and informed participants of incentives.

The 2014 Emory NCHA was open from October 20th to November 17th for a total of four weeks. Throughout this time period, six reminder emails were sent to participants who had not yet completed the survey. Participants who submitted a survey were thanked at the end of the survey.

Incentives

Incentives were offered in this assessment. Every tenth student who completed the survey received a \$10 Visa Gift Card and all students who took the survey were entered into a drawing for one of six prizes; two \$500 Visa gift cards, two \$250 Visa gift cards, and two \$100 Visa gift cards. Consistent with Georgia law, non-responders were also eligible to receive one of these incentives by emailing a representative of the NCHA from their emory.edu address with the subject line "NCHA 2014 INCENTIVES."

The randomized drawing was conducted by ACHA and the names of those selected were provided to the 2014 Emory NCHA team. This practice ensured confidentiality of identifying participant information. Eighty-seven respondents were selected as \$10 Visa gift card recipients and six were selected as \$100-\$500 Visa gift card recipients. All recipients were sent a notification email one week after the survey closed with times and location of pick up for gift cards as well where to find more information about the Emory NCHA.

All Emory students enrolled in Fall 2014, regardless of being chosen to participate in the survey, were eligible for incentives by spreading the Emory NCHA 2014 video and marketing material (posted on Emory University's Office of Health Promotion's YouTube, Facebook and Twitter accounts) on personal Facebook, Twitter and Instagram pages. Students who helped spread the word about the NCHA to the Emory community through the hashtag "#EmoryNCHA" were entered to win one of five (5) gift cards to local restaurants.

Marketing Campaign

A video campaign was used to increase response rate. Two videos were developed and shared to the entire Emory student population through popular social media platforms including YouTube, Facebook, Twitter and Instagram. The videos utilized student and staff volunteers to explain the purpose and importance of the NCHA, as well as ways in which the NCHA can be taken (smartphone.g. via smartphone).

Additionally, in coordination with the Office of Student Leadership and Service, NCHA representatives attended a weekly university-sponsored tabling event. Students walking by were asked to volunteer for a photo campaign to be posted on the Office of Health Promotion's Facebook page. Participants/students filled out media release forms and were asked to hold up a small white board that said 'DID YOU TAKE THE #EMORYNCHA?' and 'WANT TO WIN \$500? TAKE

THE #EMORYNCHA.' The photos were uploaded and tagged, and students were asked to share the photo to spread the word about the campaign.

Measures

The 2014 Emory NCHA collected data using the ACHA-NCHA II survey instrument and a supplemental questionnaire specific to Emory University. The ACHA-NCHA II consists of 65 items on health status, substance use, nutrition, physical activity, weight, mental health service use, psychological distress, sexual health, sleep health, violence and abuse, injury prevention, knowledge of campus health resources, academic impediments, disability, and demographic characteristics. The 8-item supplement was developed by OHP staff at Emory University, based on input from various campus organizations. The supplement covers unhealthy consumption of energy products, recovery and addiction, flourishing and well-being, and additional demographic characteristics. Please contact Marc Cordon at marc.cordon@emory.edu or the Office of Health Promotion at Emory University for a copy of the full instrument, including the supplemental questions.

The ACHA-NCHA II was redeveloped by ACHA and implemented at Emory in 2008. An earlier version of the instrument was administered at Emory in 2006. However, the redesign limits comparison across versions. Therefore, results from the 2006 Emory NCHA are not included in trend analyses.

Analyses

Surveys were submitted electronically to ACHA upon completion. The ACHA conducted frequencies of all categorical variables and means and standard deviations for all continuous variables. The data was given to Emory OHP in three forms: an executive summary report, a full institutional data report and an SPSS file containing all variables from the ACHA-NCHA II and the supplemental questionnaire. Please contact Marc Cordon at marc.cordon@emory.edu or the Office of Health Promotion at Emory University for copies of the Executive Summary Report and Institutional Data Report, respectively.

SPSS 22.0 was used for all statistical analyses. Descriptive statistics were conducted for every applicable question on the NCHA, including frequencies, percentages and standard errors for categorical variables and means and standard deviations for continuous variables. All percentages are rounded to the tenths place, resulting in some categories adding to nearly, but not exactly, 100%. Chi square tests were conducted in certain cases order to determine potential statistically significant differences between demographic groups. The threshold for declaring statistical significance was set at 0.05.

Study Strengths & Limitations

Limitations

One limitation of this assessment is selection bias, which can affect the representativeness of the sample. A type of selection bias that may be present in this survey is non-response bias. This occurs when respondents to the survey differ from, and therefore do not accurately represent, the sample population. Non-response bias suggests that results may have been different if the entire sample responded. Selection bias reduces the generalizability, or external validity, of the results. However, random sampling and a high response rate helps to decrease the affect.

Additionally, as with almost all personal surveys, data collected for the NCHA is reliant on self-reporting by participants. This, in turn, increases the likelihood for recall bias. Recall bias occurs when survey questions inquire about past events, which may be difficult to remember accurately. Different behaviors are more or less salient depending on the person and frequency and severity of behavior.

Further, because the survey was administered shortly after Fall Break, responses for certain topics may reflect behavior common during vacations, such as increased drinking and drug use or increased sleep.

There is another limitation for the data analysis process in regards to respondents who reported being transgender in the gender category. Four respondents identified as transgendered. Due to this small number, especially in comparison to the high numbers of male and female respondents, data analysis for this category was not conducted. If responses for this category had been higher, all data tests conducted comparing gender would have included the transgender category.

Although analyses were not run for this segment of Emory's population, it is critical to recognize Emory transgender students as a unique group that may have individualized needs and assets. It may be beneficial for the Office of Health Promotion to conduct further data collection specific to these students.

Finally, survey fatigue can be an issue in lengthy surveys. This bias occurs because respondents are not at full cognitive capacity while taking the survey and thus do not answer questions accurately. Respondents were able to take the 2014 Emory NCHA anytime during a four-week period, on any Internet-accessible device, and in any environment they wish. Individual characteristics and proclivities may have the largest impact on this issue. For example, a respondent may answer questions differently if she or he is taking the survey while watching television versus alone in a library, or whether they have had a full night of sleep as opposed to just a few hours.

Strengths

Selection bias was reduced through random sampling and extensive, creative recruitment of respondents. The 1,146 respondents to the 2014 Emory NCHA exceeded the number of ACHA recommended responses, increasing the validity of findings and therefore making the data more useful. This response rate is likely due to a wide range of marketing efforts, the availability of the survey online over a four-week time period, and incentives offered.

Utilizing an online assessment, as opposed to an in-person survey or interview, is another strength of the 2014 Emory NCHA. This method reduces social desirability response bias, which occurs when a respondent answers a question in order to “please” the interviewer, research staff or institution who is conducting the assessment. Sensitive subjects such as substance use, relationship violence, and sexual activity may be reported more accurately using online methods of data collection.

The greatest strength of the 2014 Emory NCHA is the breadth of data regarding a comprehensive list of health topics collected from a large sample of Emory students. Information collected includes behaviors, diagnoses, attitudes and norms surrounding diet, exercise, alcohol use, prescription and other illicit drug use, mental health service use, mental disorders, disability, chronic health issues, sexual health, abuse and violence, challenges affecting mental health and academic ability, and more. Data gathered from the NCHA guides research, programs, initiatives and services across campus, especially within the Office of Health Promotion. Further, the scope of data available allows for in-depth analyses among sub-populations, such as members of Greek organizations or specific schools.

Sample Statistics

Demographic Characteristics

A total of 14,769 students were enrolled in Emory University during the Fall 2014 semester. The 4,992 students invited to participate in the 2014 Emory NCHA comprised 33.8% of all Emory students. With a response rate of 23%, 1,147 Emory students responded to the NCHA, constituting 7.8% of the entire Emory student population.

Demographic characteristics of 2014 Emory NCHA respondents are shown in Table 1. Only sex and ethnicity information were available for the 14,769 enrolled students. Notably, while 56.5% of enrolled students were female, 69.5% of Emory NCHA respondents reported being female.

Table 1. Demographic Characteristics of 2014 Emory Respondents

Demographic Characteristic	2014 Emory NCHA Respondents (n=1,147)
Age	23.90 years
Female¹	69.5%
Heterosexual²	89.9%
In a relationship	51.7%
Married	14.3%
Ever in U.S. Armed Forces	0.8%
Health Insurance	
Emory Plan	38.7%
Parent's Plan	48.7%
None/Don't know	0.8%

¹0.3% (n=4) respondents reported being transgender. Due to the limited amount of this data, these respondents have been excluded from all gender analyses. Please reference the Study Strengths and Limitations section for further explanation.

²Remaining options in this category included: Gay/Lesbian, Bisexual, and Unsure

Ethnicity comparisons are shown in Table 2. Whites, Asian or Pacific Islanders, American Indian or Alaskan, and Biracial or Multi-racial were overrepresented and those reporting "Other" were underrepresented.

Table 2. Ethnicity, 2014 Emory Respondents v. 2014 Emory Enrolled Students

Ethnicity	2014 Emory NCHA Respondents (n=1,147)	2014 Emory Students (n=14,769)
White	60.2%	44.9%
Black or African American	10.3%	10.0%
Hispanic or Latino/a	6.4%	5.9%
Asian or Pacific Islander	22.9%	15.5% ¹
American Indian or Alaskan	1.0%	0.2%
Biracial or Multi-racial	4.4%	2.3%
Other	3.7%	5.3% ²

¹Figure includes summed percentages of ethnic groups "Asian" and "Hawaiian," which are distinguished by Emory University.

²The 2014 NCHA reports the "Other" category and Emory University reports the "Unknown" category.

The sample is made up of 45.9% undergraduate and 53.3% graduate and professional students. Table 3 compares these proportions against 2014 enrolled Emory students along with other enrollment credentials. Full-time students were slightly overrepresented among compared to part-time. First-year undergraduates were overrepresented, whereas 4th year or more students were underrepresented.

Table 3. Enrollment Credentials, 2014 Emory Respondents v. 2014 Emory Enrolled Students

Enrollment Characteristics	2014 Emory NCHA Respondents % (n)	2014 Emory Students % (n)
Undergraduate	45.4% (519)	53.0% (7,829)
1st year¹	30.3% (157)	24.9% (1,953)
2nd year	25.6% (133)	22.6% (1,772)
3rd year	22.2% (115)	23.2% (1,816)
4th year or more	22.0% (114)	28.0% (2,189)
Graduate/Professional	53.3% (603)	47.0% (6,940)
Full-time student	96.0% (1,092)	90.4% (13,354)
International	13.6% (154)	15.1% (2,235) ²
Transfer Student	15.0% (169)	3.7% (290) ³
Oxford Continuee	8.5% (96)	11.1% (866) ⁴

¹First through fourth year enrollment percentages are given as a percentage of undergraduate students as opposed to a percentage of total Emory University enrollment.

²International student data includes enrolled international Emory University students (2,000) in addition to 235 Oxford College international students as provided by the Emory University Office of International Life

³Transfer student data is for incoming Emory University transfer students in the fall 2014 semester only, whereas NCHA totals are for students who transferred within the past 12 months. Percentage is given as a percentage of undergraduate students as opposed to a percentage of total Emory University enrollment.

⁴Oxford continuees are comprised all undergraduate students continuing from Oxford. Percentage is given as a percentage of undergraduate students as opposed to a percentage of total Emory University enrollment.

Table 4 contains information regarding school affiliation for respondents. The largest proportion of respondents reported affiliation with Emory College, followed by Laney Graduate School and Rollins School of Public Health. It is important to note that Rollins School of Public Health, Laney Graduate School, and Oxford College students are over-represented, and Goizueta School of Business, Allied Health, Emory College, and School of Law students are underrepresented.

Three schools contain both undergraduate and graduate programs. Goizueta School of Business made up 5.8% of respondents, of which about 57% were in the graduate program as opposed to the undergraduate program. The Woodruff School of Nursing represented 3.8% of respondents, with half of those respondents enrolled in the graduate program. Allied Health made up 2.9% of respondents, of which all respondents were in the graduate program.

Table 4. School Affiliation within Emory University, 2014 Emory Respondents v. 2014 Enrolled Emory Students

School Affiliation	2014 Emory NCHA Respondents n=1,147	2014 Emory Students n=14,769
Allied Health*	2.9% (33)	3.8% (557)
Candler School of Theology	3.1% (35)	3.1% (451)
Emory College	35.3% (398)	38.6% (5,703)
Goizueta School of Business*	5.8% (65)	10.9% (1,608)
Laney Graduate School	15.7% (177)	12.7% (1,879)
Neil Hodgson Woodruff School of Nursing*	3.8% (42)	3.4% (501)
Oxford College	7.4% (83)	6.4% (949)
Rollins School of Public Health	14.0% (158)	8.2% (1,217)
School of Law	6.1% (69)	6.7% (987)
School of Medicine	6.1% (69)	6.2% (917)

*Graduate and undergraduate percentages

Table 5 shows various academic and campus life characteristics among 2014 Emory respondents. The majority of respondents (89.4%) report having an “A” or “B” average GPA, and about 8% reported “N/A”, likely representing students enrolled in their first semester. Over half (54.9%) of respondents work for pay during the week and almost half (47.7%) of respondents volunteer during the week. In addition, respondents spent an average of 3.6 (SD=5.7) hours per week participating in Emory activities/organizations.

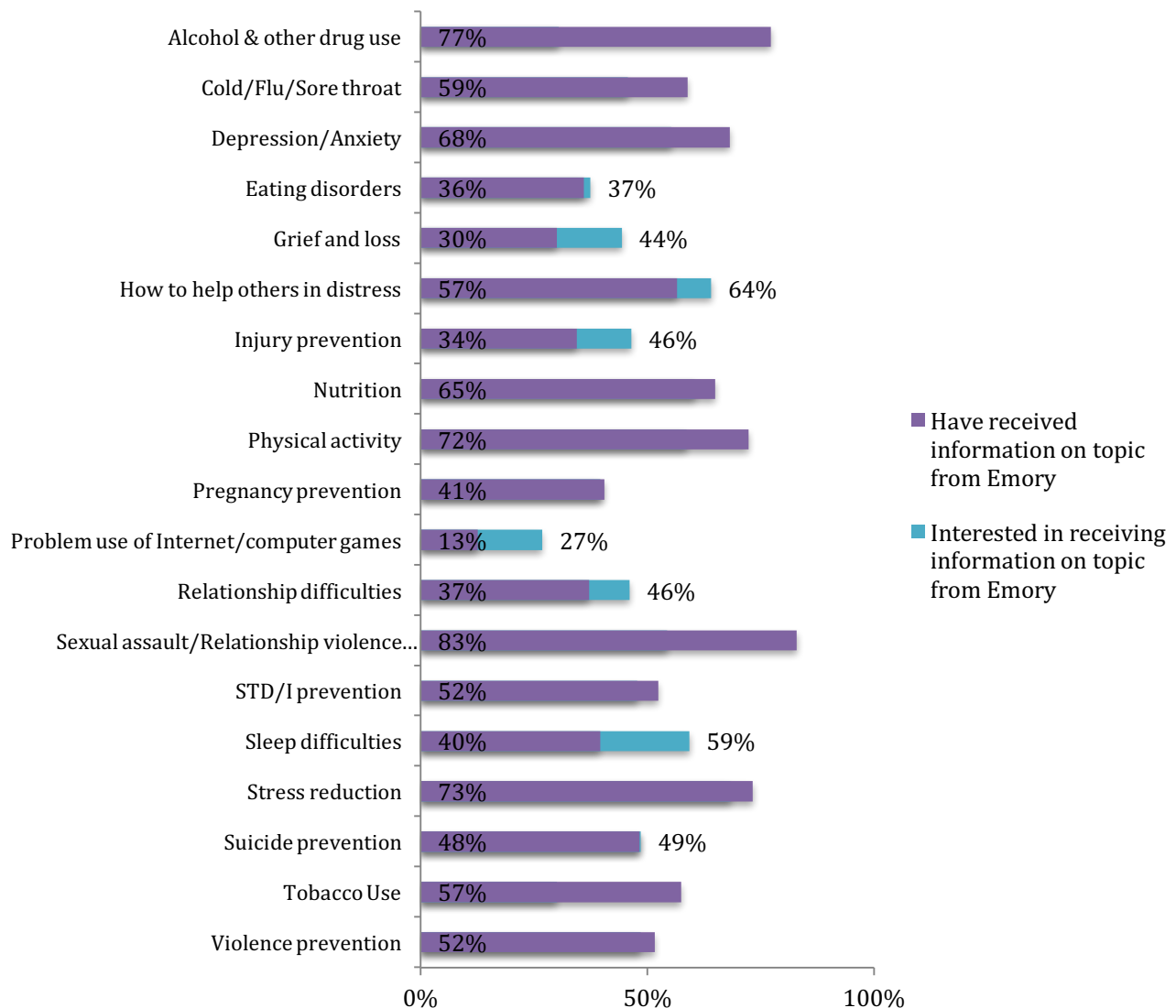
Table 5. Academic Status and Campus Life Involvement, 2014 Emory Respondents

Status or Characteristic	2014 Emory NCHA Respondents % (n)
Average GPA	
“A”	57.9% (656)
“B”	31.5% (357)
“C” or “D/F”	2.6% (29)
“N/A”	8.0% (91)
Greek member	11.1% (126)
Varsity athlete	3.4% (38)
Club sport athlete	11.1% (124)
Off-campus housing	58.2% (657)
Hours/week working for pay	
0 hours	45.1% (508)
1-9 hours	17.8% (201)
10-19 hours	19.6% (221)
20+ hours	17.5% (197)
Hours/week volunteering	
0 hours	52.4% (593)
1-9 hours	43.0% (486)
10+ hours	4.7% (52)
Holds office of student organization	29.1% (328)

Knowledge of Health Services and Resources

2014 Emory respondents indicated whether they have received information and whether they are interested in receiving information from their university regarding various health topics. Figure 2 shows the comparison of information received versus interest in receiving information. As reflected in the figure below, respondents indicated wanting more information on eating disorders, grief and loss, how to help others in distress, injury prevention, problem use of Internet/computer games, relationship difficulties, sleep difficulties, and suicide prevention.

Figure 2. Proportion of 2014 Emory Respondents Who Have Received Information and Would Like to Receive Information Regarding Specific Health Topics



Impediments to Academic Success

Respondents indicated factors that were barriers to their academic success in the last year. Criterion for impeding academic success included: receiving a lower grade in a class/exam, dropping or not completing a course, or having a significant disruption in thesis, practicum, or research work. Table 6 shows the top ten impediments across NCHA respondent groups as well the proportion of respondents who reported a given factor as an academic impediment. The top three academic impediments are stress, anxiety and sleep difficulties.

A greater proportion of 2014 Emory respondents reported stress, anxiety, and depression as academic impediments compared to 2011 Emory respondents. However, fewer 2014 Emory respondents reported the remaining categories as academic impediments compared to 2011. A smaller proportion of 2014 Emory respondents reported barriers to academic success compared to 2014 national respondents, excluding participation in extracurricular activities.

Table 6. Top 10 Academic Impediments, Across NCHA Respondent Groups

Impediment to Academic Success	2014 Emory Respondents	2011 Emory Respondents	2014 National Respondents	2011 National Respondents
1. Stress	26.8%	26.7%	30.4%	28.6%
2. Anxiety	20.6%	17.6%	21.3%	20%
3. Sleep Difficulties	16.3%	16.6%	19.8%	20.4%
4. Depression	12.6%	10.8%	13.2%	12%
5. Participation in extracurricular activities	10.9%	12.7%	10.2%	10.2%
6. Internet use/computer games	10.4%	11.1%	11.6%	11.9%
7. Work	10.0%	11.6%	12.9%	13.5%
8. Concern for troubled friend or family member	9.6%	10.5%	10.1%	10.8%
9. Cold/Flu/Sore throat	9.4%	12.9%	13.8%	14.7%
10. Relationship difficulties	8.1%	8.8%	9.2%	9.8%

The top three academic impediments among Emory University students are stress, anxiety and sleep difficulties.

Sleep Health

Following stress and anxiety, sleep difficulties ranked as the third highest impediment to academic success among 2014 Emory respondents. In addition, about 24% of respondents reported sleep difficulties being “traumatic” or “very difficult to handle” in the last 12 months. Please see the Mental Health Brief (pg. 20) for a breakdown of all mental health challenges among respondents.

Table 7 shows the proportion of 2014 and 2011 Emory respondents who reported four or more days of various negative sleep symptoms within the last week. In addition, 41.3% of respondents reported having “more than a little problem,” “a big problem,” or “a very big problem” with sleepiness during daytime activities. This is slightly lower than 2011 Emory respondents, of whom 44.5% fell into these categories in regards to sleepiness during the day. Sleep problems among respondents tend to be related to sleepiness and feeling unrested, as opposed to trouble falling or staying asleep.

Table 7. Proportion of 2014 and 2011 Emory Respondents Experiencing 4+ Days of Negative Sleep Symptoms in the Past Week

Sleep Problem	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)
Did not get enough sleep to feel rested	58.9% (668)	41.2% (640)
Felt tired, dragged out, or sleepy during the day	38% (430)	44.5% (692)
Gone to bed because you could not stay awake any longer	17.2% (195)	19.1% (297)
Had an extremely hard time falling asleep	13.4% (151)	12.2% (188)
Awakened too early in the morning and couldn't get back to sleep	6.7% (76)	5.9% (93)

24% of respondents reported sleep difficulties being “traumatic” or “very difficult to handle” in the last 12 months.

Mental Health Brief

The 2014 NCHA Briefs consist of summary reports of data collected from the National College Health Assessment (NCHA) at Emory, administered during the Fall 2014 semester to undergraduates, graduates and professional students (n=1,146). Emory is one of 34 institutions to collect NCHA data during Fall 2014 in collaboration with the American College Health Association (ACHA). The 2014 national reference group comprises total respondents (n=25,841) from the 34 institutions. The Office of Health Promotion (OHP), within the Emory University Student Health and Counseling Services (EUSHCS), prepared the following materials.

The “2014 Mental Health Brief” contains self-reported alcohol use perceptions and behaviors of NCHA respondents at Emory University. Specifics include negative mental health symptoms, diagnosis and treatment of mental disorders, mental health service use, distress and stress. Data are presented on all respondents across demographic characteristics as well as compared to national NCHA data from institutions around the United States.

Negative Mental Health Symptoms

Respondents answered 11 questions about having negative mental health symptoms in the last two weeks. See Table 8 for a list of symptoms and the proportion of 2014 and 2011 Emory respondents who reported each symptom.

- 33.1% reported no symptoms in the last two weeks, 12.8% reported only one symptom, 20.8% reported two symptoms, 9.9% reported three symptoms, and the remainder (23.7%) reported four or more symptoms.
- Feeling overwhelmed and feeling exhausted were the most common symptoms, each experienced by about half of respondents.

Within the last 12 months, 4.5% of respondents reported seriously considering suicide and 1.5% reported self-injury. This is similar to the 4.1% of 2011 Emory respondents who seriously considered suicide in the last 12 months; however 3.7% of 2011 respondents reported self-injury in the last 12 months. A smaller proportion of 2014 Emory respondents reported mental illness symptoms when compared to national respondents, excluding exhaustion and seriously considering suicide.

Table 8. Symptoms of Mental Illness in Last Two Weeks, 2014 Emory Respondents

Mental Illness Symptom in Last Two Weeks	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %	2011 National Respondents %
Overwhelmed by all you had to do	54.0% (612)	55.4% (863)	54.1%	53.5%
Exhausted, not from physical activity	53.2% (602)	55.4% (863)	52.7%	51.2%
Very sad	25.7% (291)	24% (374)	27.5%	24.4%
Very lonely	24.9% (282)	23.7% (370)	26.3%	23.9%
Overwhelming anxiety	23.3% (264)	20.7% (322)	24.8%	20.4%
Felt things were hopeless	16.7% (189)	14.1% (218)	19.0%	16.4%
Overwhelming anger	10.5% (119)	8.4% (130)	12.6%	11%
Depressed to the point of difficulty to function	10.0% (113)	7.8% (122)	12.0%	10%
Seriously considered suicide	2.3% (26)	1% (16)	2.0%	1.3%
Intentionally cut, bruised or injured self	1.5% (17)	1.4% (22)	1.6%	1.4%
Attempted suicide	0.2% (2)	0.3% (4)	0.3%	0.2%

Lifetime Depression

18.3% of respondents report having ever been diagnosed with depression. This figure is slightly higher than national respondents, of which 17.7% reported a depression diagnosis. Both Emory and national rates are similar to those in 2011; 17.6% of Emory respondents and 19% of national respondents reported a depression diagnosis in 2011.

Females and non-international students were more likely to be diagnosed with depression than males and international students, respectively. Oxford continuee and school status had no association with history of depression diagnosis. See Table 9 for frequency differences and statistical values for each demographic group.

Table 9. History of Depression by Demographic, 2014 Emory Respondents

Demographic Variable	Ever been diagnosed with depression % (n)	X ²	p-value
Gender			
Male	15.4% (51)	2.374	.123*
Female	19.3% (153)		
International Student			
Yes	7.7% (16)	7.309	.007*
No	19.7% (191)		
Oxford Continuee			
Yes	17.9% (17)	.017	.898
No	18.4% (190)		
School Status			
Undergraduate	16.3% (84)	2.885	.089
Graduate/Professional	20.2% (121)		

*p<.05, thus difference is significant across groups

18.3% of Emory University respondents report having ever been diagnosed with depression.

Diagnosis and Treatment

Respondents were asked to indicate whether they have been diagnosed or treated for various mental disorders within the last 12 months. Table 10 contains percentages and frequencies of respondents who have been diagnosed or treated and compares 2014 Emory, 2011 Emory, and 2014 national respondents.

Diagnosis or treatment of anxiety, insomnia, anorexia, bulimia, and other mental and sleep disorders are all higher among Emory respondents than national respondents.

Table 10. Diagnosis or Treatment of Mental Disorders in Last 12 Months, Across NCHA Respondent Groups

Mental Disorder	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
Anxiety	15.7% (178)	11.3% (177)	14.2%
Depression	11.5% (130)	10.6% (163)	11.9%
Panic attacks	5.8% (65)	2.6% (57)	6.6%
ADHD	5.2% (59)	3.8% (59)	5.6%
Insomnia	4.7% (54)	4.3% (66)	4.1%
Other mental disorder	3.2% (35)	2.3% (35)	2.8%
Other sleep disorder	2.8% (31)	1.9% (29)	2.3%
OCD	2.4% (27)	2.0% (31)	2.5%
Bipolar disorder	1.5% (16)	1.0% (14)	1.5%
Anorexia	1.4% (14)	<1%	1.2%
Bulimia	1.2% (13)	<1%	1.1%
Phobias, schizophrenia, substance use addictions, and other addictions	All ≤ 1.0%	All ≤ 1.0%	All ≤ 1.2%

Proportions of mental disorders reported by respondents increased among all categories except for phobias, schizophrenia, substance use addictions, and other addictions between 2014 and 2011. Anxiety and depression are the most common mental disorders, affecting at least 15% and 11% of respondents, respectively.

Anxiety, depression, and panic attacks are the top three mental disorders reported by Emory University respondents.

Service Use

Respondents were asked if they have ever received mental health services from various providers. Table 11 shows the proportion of respondents who reported receiving mental health services from each provider.

Table 11. Mental Health Services Received, Across NCHA Respondent Groups

Service Provider	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
Counselor/Therapist/Psychologist	42.2% (476)	37.5% (583)	35.6%
University Health/Counseling Services	21.5% (243)	20.4% (315)	16.5%
Psychiatrist	18.3% (206)	18.0% (278)	13.6%
Other Medical Provider	12.3% (139)	12.4 (191)	13.7%
Clergy	7.4% (84)	8.7% (134)	6.1%

Almost 80% of respondents would consider seeking help from a mental health professional in the future if they were having a personal problem. This is consistent with 2011 Emory respondents (79%). Among 2014 national respondents, 74% would consider seeking help.

Non-international students and graduate/professional students were more likely to consider seeking help from a mental health professional compared to international students and undergraduate students, respectively. Gender and Oxford continuee status had no association with health help-seeking intentions. See Table 12 for frequencies and statistical values among 2014 Emory respondents by demographic.

Table 12. Mental Health Help-Seeking by Demographic, 2014 Emory Respondents

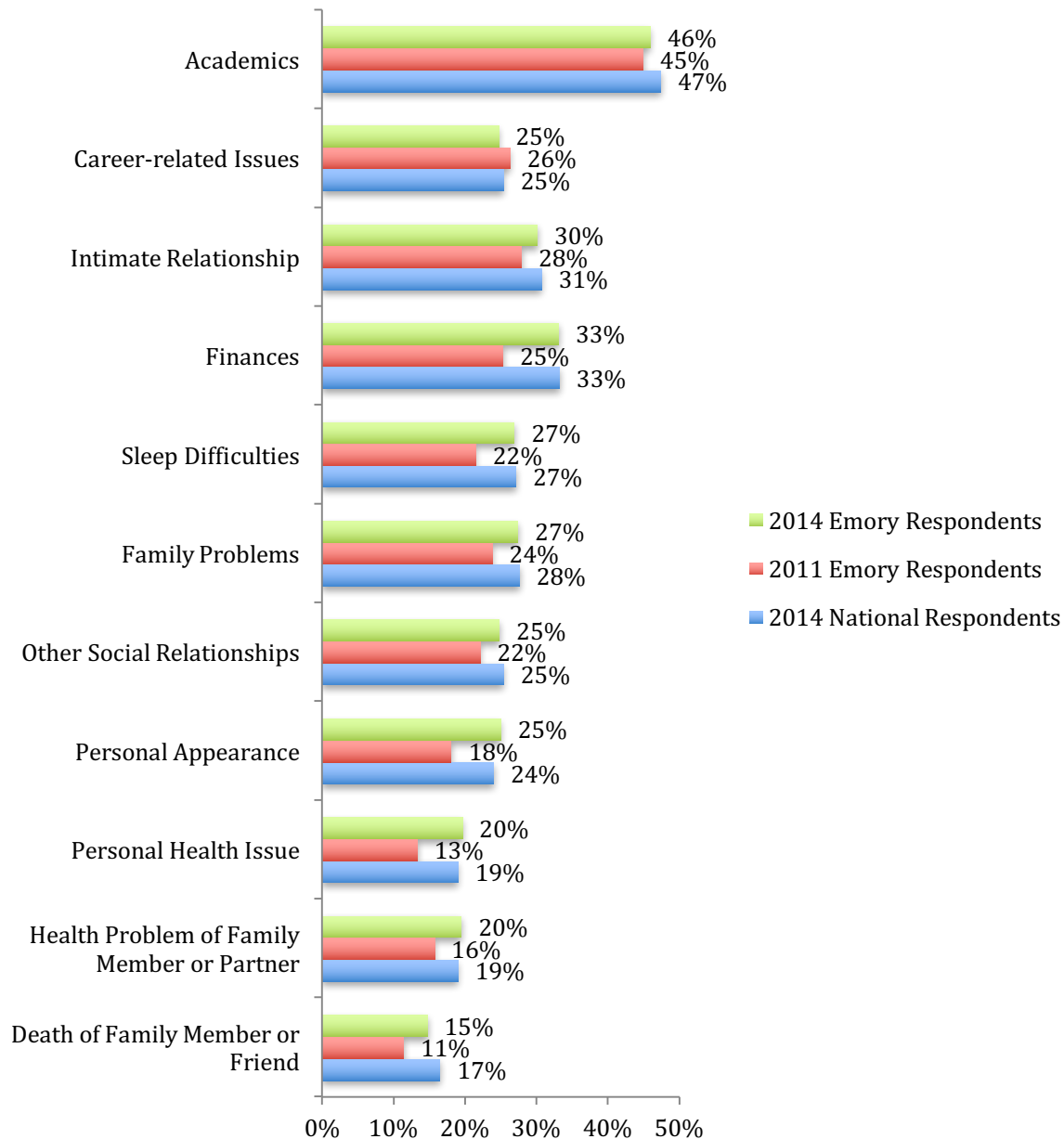
Variable	Would consider seeking help % (n)	X ²	p-value
Gender			
Female	81.7% (646)	5.354	.021
Male	75.6% (251)		
International Student			
Yes	73.7% (112)	4.439	.035*
No	81.0% (786)		
Oxford Continuee			
Yes	75.8% (72)	1.150	.284
No	80.4% (828)		
School Status			
Undergraduate	72.3% (373)	31.730	<.001*
Graduate/Prof.	85.9% (513)		

*p<.05, thus difference is significant across groups

Distress

Students were asked to indicate whether or not a given problem was “traumatic or very difficult to handle” in the last 12 months. Figure 3 compares mental health challenges across NCHA respondent groups.

Figure 3. Mental Health Challenges, Across NCHA Respondent Groups

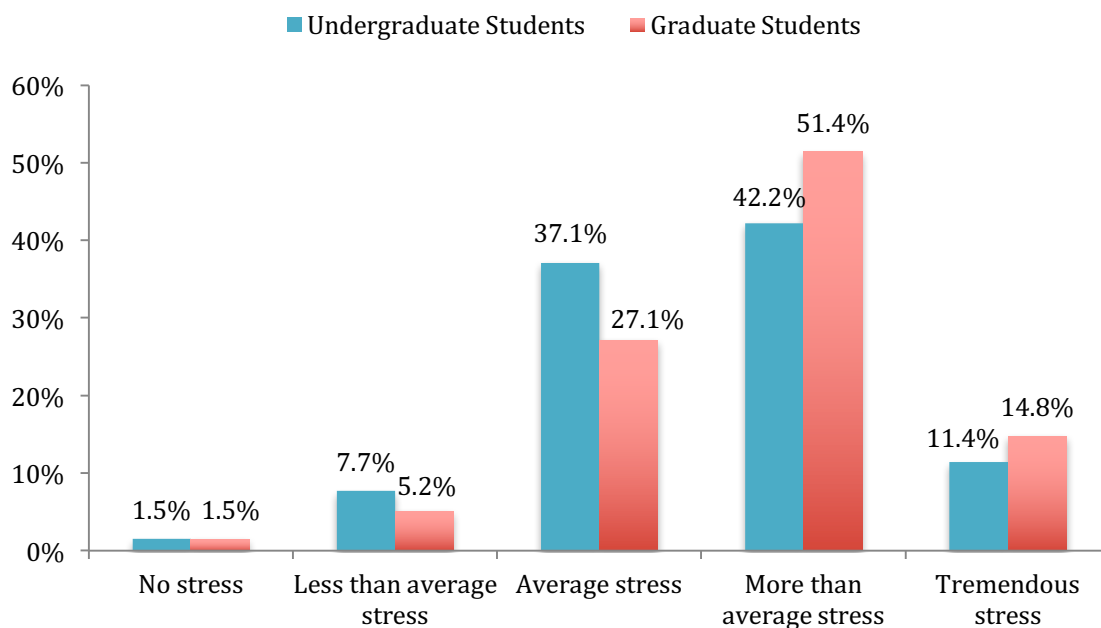


Stress

Emory respondents reported higher levels of stress within the last 12 months compared to national respondents. Sixty percent of Emory respondents reported “tremendous” or “more than average stress” in the last 12 months compared to 53% of national respondents.

Emory graduate respondents reported significantly higher levels of stress compared to undergraduate respondents ($X^2=19.16$, $p=.001$). See Figure 4 for the distribution of stress levels among these groups.

Figure 4. Stress Levels, 2014 Emory Graduate v. Undergraduate Respondents

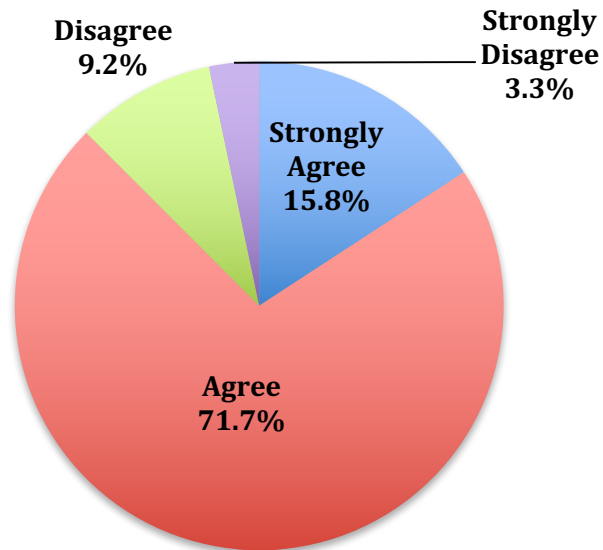


60% of Emory respondents reported “tremendous” or “more than average stress” in the last 12 months.

Well-Being

A majority of respondents (87.5%) strongly agreed or agreed that Emory cares about their well-being. See Figure 5 for percentages of all response categories.

Figure 5. “Emory Cares About My Well-Being”, 2014 Emory Respondents



Substance Use Brief

The 2014 NCHA Briefs consist of summary reports of data collected from the National College Health Assessment (NCHA) at Emory, administered during the Fall 2014 semester to undergraduates, graduates and professional students (n=1,146). Emory is one of 34 institutions to collect NCHA data during Fall 2014 in collaboration with the American College Health Association (ACHA). The 2014 national reference group comprises total respondents (n=25,841) from the 34 institutions. The Office of Health Promotion (OHP), within the Emory University Student Health and Counseling Services (EUSHCS), prepared the following materials.

The “2014 Substance Use Brief” contains self-reported substance use perceptions and behaviors of NCHA respondents at Emory University. Specifics include actual use, perceived peer use and service knowledge relating to alcohol, tobacco, marijuana and other illicit substances. Data are presented on all respondents, across demographic characteristics as well as compared to national NCHA data from institutions around the United States.

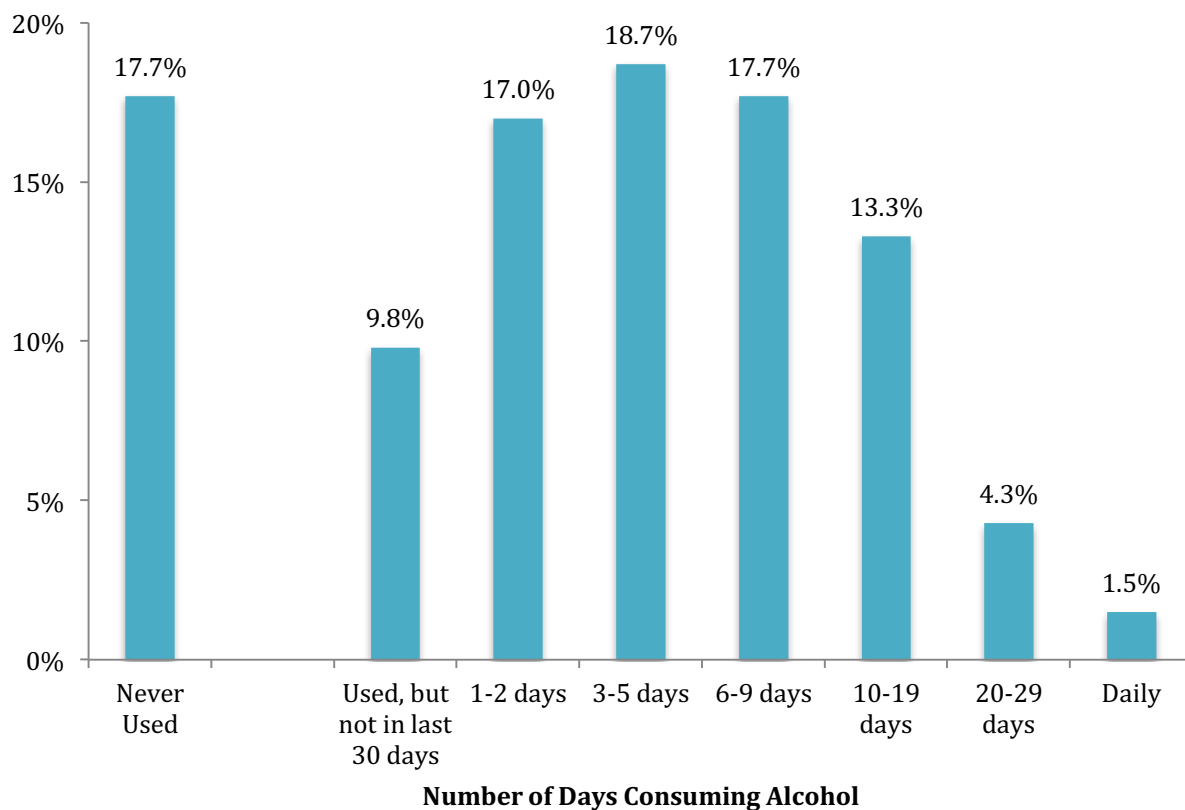
Alcohol Use

The proportion of respondents who reported they have never used alcohol decreases as year in school increases. Below shows how many respondents reported never drinking alcohol by school year:

- First year undergraduates: 35.9%
- Second year undergraduates: 35.1%
- Third year undergraduates: 18.6%
- Fourth year or more undergraduates: 16.8%
- Graduate / Professional: 9.2%

Seventy-two percent of respondents have used alcohol in the last 30 days. See Figure 6 for alcohol use by amount of days used over the last 30 days. Notably, 19.1% of respondents reported using alcohol between 10 and 30 days within the last month, similar to 2011 Emory respondents (18.1%).

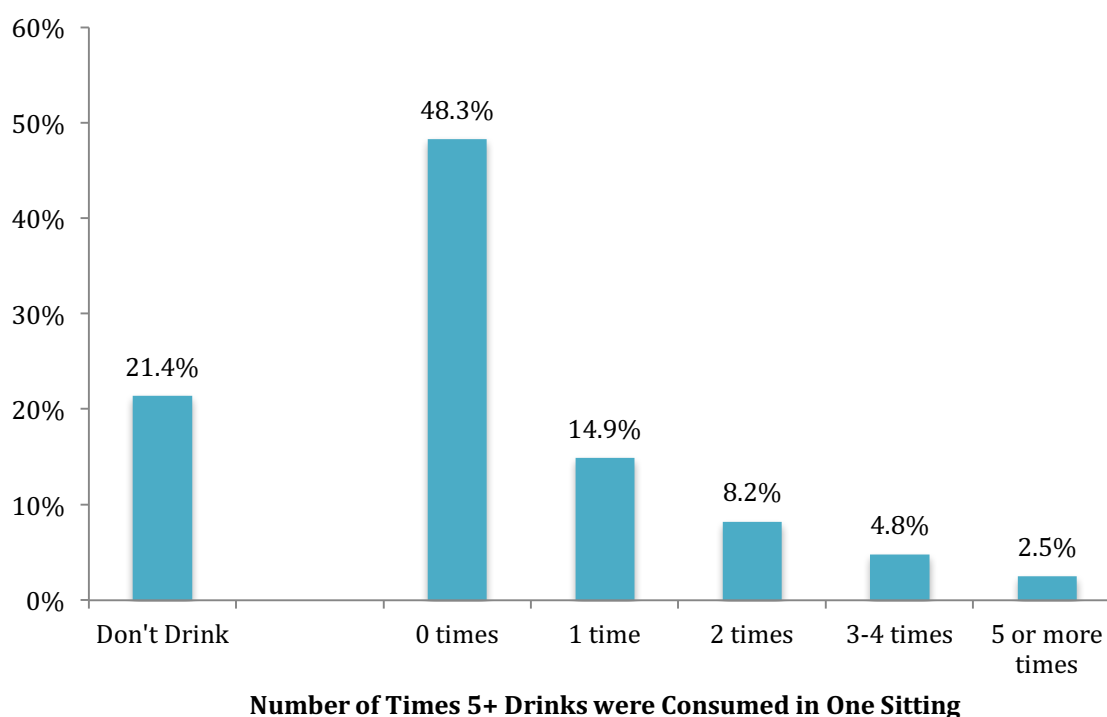
Figure 6. Frequency of Alcohol Use in Last 30 Days, 2014 Emory Respondents



17.7% of 2014 Emory respondents report they have never used alcohol.

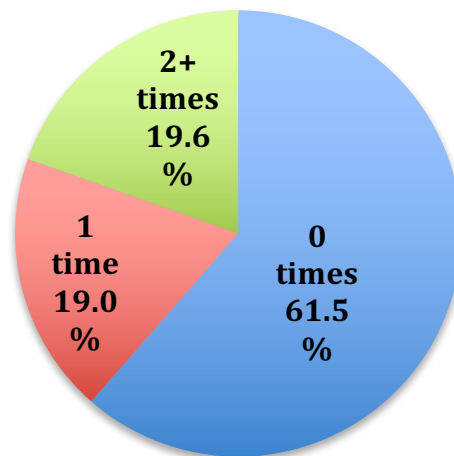
The National Institute on Alcohol Abuse and Alcoholism (2014) defines binge drinking (or high-risk drinking) as a pattern of drinking that brings a person's blood alcohol concentration to 0.08 grams percent or above. Heavy episodic drinking is defined differently by gender. For females, heavy episodic drinking is defined as consumed 3-4 or more drinks in one sitting. For males, it is defined as consuming 5 or more drinks in one sitting, or about two hours. Heavy episodic drinking was measured by how often respondents consumed five or more drinks in one sitting in the last two weeks. See Figure 7A for heavy episodic drinking frequencies among 2014 Emory respondents.

Figure 7A. Frequency of Heavy Episodic Drinking in the Last Two Weeks, 2014 Emory Respondents



Focusing on risky drinking behavior, 15.5% of respondents reported having 5+ drinks *two or more* times in the past two weeks. See Figure 7B for heavy episodic drinking frequencies only among those who drink alcohol.

Figure 7B. Frequency of Heavy Episodic Drinking in the Last Two Weeks, 2014 Emory Respondents who Drink



Of those who drink, 38.6% have consumed 5+ drinks *at least once* in the past two weeks.

The number of drinks consumed when the respondent last partied or socialized was used to measure most recent alcohol consumption. Number of hours respondents spent drinking on this occasion was also measured.

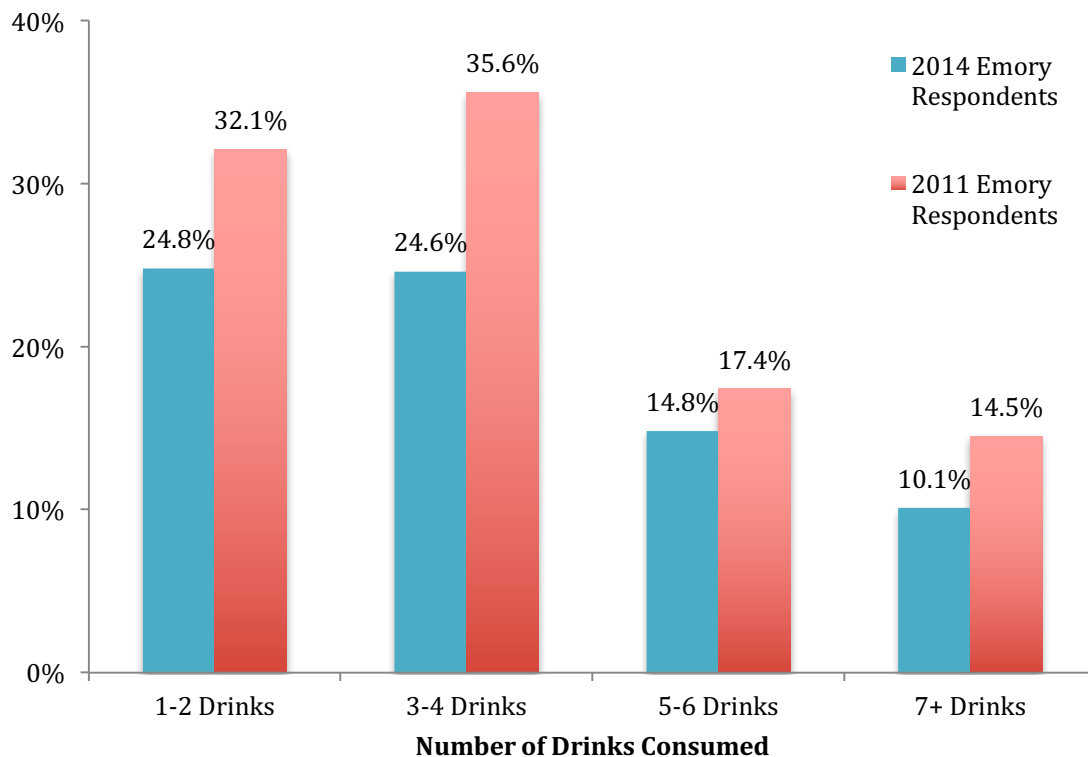
About one quarter (25.8%) of respondents did not drink any alcohol the last time they partied/socialized, while another one quarter (24.9%) consumed 5+ drinks the last time they partied/socialized.

Among respondents who consumed any alcohol the last time they partied/socialized, the mean number of drinks consumed was 4.0 (SD=2.7) and the mean number of hours drinking was 3.7 (SD=1.8).

A significant positive association was found between number of drinks consumed and the hours spent drinking at last time partied/socialized ($r=.617$, $p<.001$). However, only 38.1% of the variance in drinks consumed is explained by the hours spent drinking.

Figure 11 shows alcohol consumption of 2014 and 2011 Emory respondents who reported drinking any alcohol.

Figure 8. Number of Drinks Consumed When Last Partied/Socialized, 2014 v. 2011 Emory Respondents



Alcohol use rates were compared across various demographic groups. Table 13 shows the proportion of each group that engaged or did not engage in heavy episodic drinking last time they partied/socialized, and whether or not the difference is statistically significant.

International student respondents were significantly less likely to report consuming 5+ alcoholic drinks the last time they partied/socialized, compared to non-international students.

Undergraduate respondents were significantly more likely than graduate/professional student respondents to report consuming 5+ drinks the last time they partied/socialized.

Transfer student status, Oxford continuee status, and holding an officer or captain position in a student organization were not associated with heavy episodic drinking behavior.

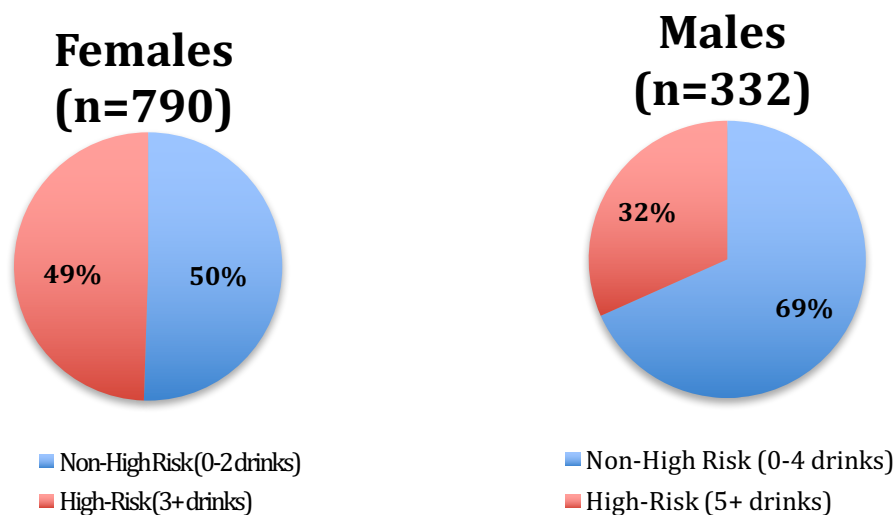
Table 13. Consumption of 5+ Drinks Last Time Partied/Socialized By Demographic, 2014 Emory Respondents Who Drink

Demographic Characteristic	5+ Drinks Last Time Partied/Socialized % (n)	X ²	p-value
Transfer Student			
Yes	24.9% (42)	.002	.962
No	25.0% (239)		
International Student			
Yes	15.7% (24)	8.123	.004*
No	26.4% (257)		
Oxford Continuee			
Yes	26.3% (25)	.128	.721
No	24.7% (255)		
School Status			
Undergraduate	29.1% (148)	9.209	.002*
Graduate/Prof.	21.2% (131)		
Officer of student org.			
Yes	27.1% (88)	1.221	.269
No	23.9% (191)		

*p<.05, thus difference is significant across groups

Figure 9 shows high-risk drinking by sex.

Figure 9. Sex Comparison of High-Risk Drinking During Last Time Partied/Socialized, 2014 Emory Respondents



Almost half of female respondents reported high-risk drinking during the last time they partied or socialized.

Respondents reported drinking and driving behavior. Table 14 shows comparisons of drinking and driving behavior across NCHA respondent groups. Drinking and driving has lowered slightly from 2011 to 2014 among Emory respondents.

Table 14. Drinking and Driving Behavior in Last 30 Days, Across NCHA Respondent Groups

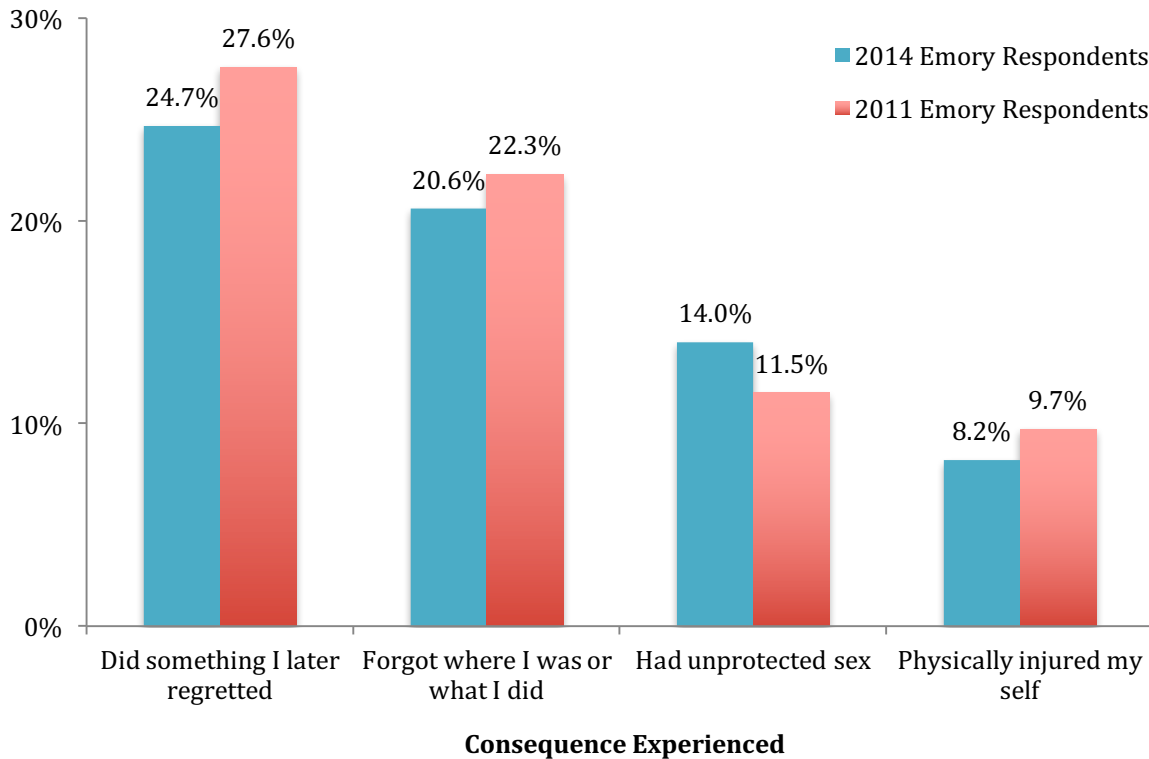
Drinking and Driving Behavior	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
Drove after drinking any alcohol			
Yes	23% (262)	26.6% (416)	14.5%
No or N/A*	76.9% (875)	73.4% (1,145)	85.5%
Drove after having 5+ drinks			
Yes	0.7% (8)	1.5% (23)	1.3%
No or N/A*	99.3% (1,129)	98.5% (1,533)	98.7%

*N/A includes respondents who reported "N/A – don't drive" or "N/A – don't drink"

Consequences of Alcohol Use

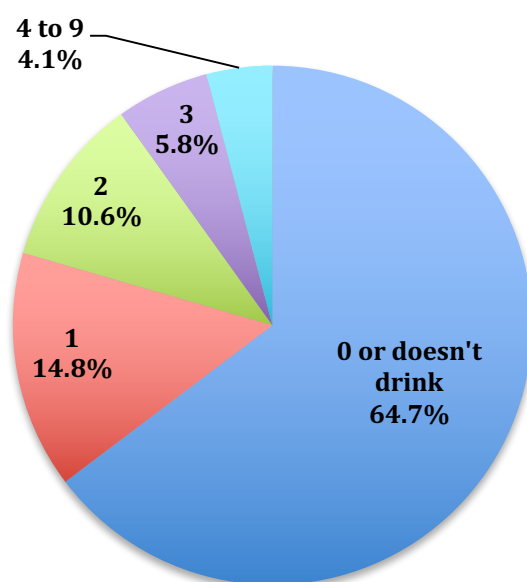
Respondents reported consequences resulting from drinking by answering, “Within the last 12 months, have you experienced any of the following when drinking alcohol...” followed by nine answer options. Figure 10 shows the top four most commonly reported consequences, comparing 2014 and 2011 Emory respondents.

Figure 10. Most Common Consequences as a Result of Drinking in Last 12 Months, 2014 v. 2011 Emory Respondents



46.1% of respondents reported one or more negative consequences as a result of drinking during the last 12 months. See Figure 11 for additional information on number of experienced consequences.

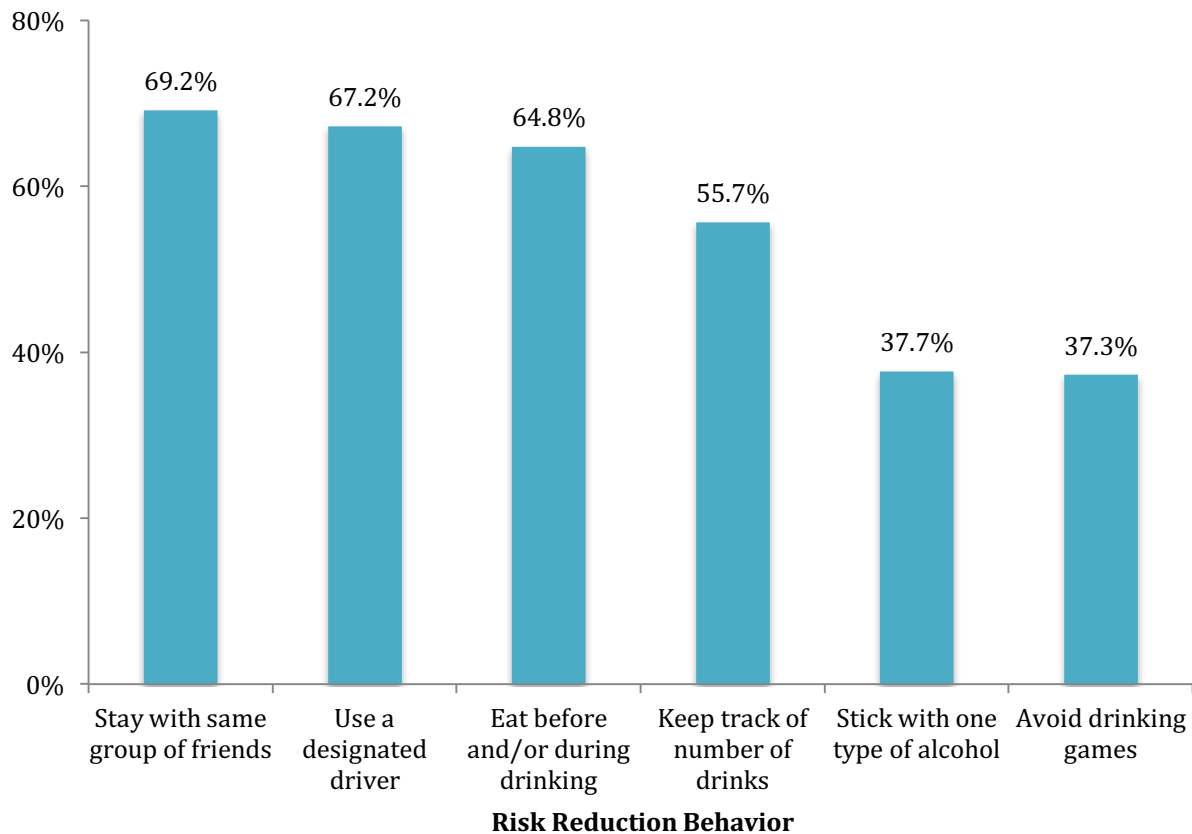
Figure 11. Number of Consequences Experienced as a Result of Drinking in Last 12 Months, 2014
Emory Respondents



Alcohol Risk Reduction Behavior

Eleven different factors were assessed that measured engagement in reducing risks of negative consequences from drinking. Figure 12 shows the most common risk reduction behaviors among those who drink. Percentages include respondents who reported doing the behavior “always” or “most of the time.”

Figure 12. Most Common Risk Reduction Behaviors Relating to Drinking, 2014 Emory Respondents

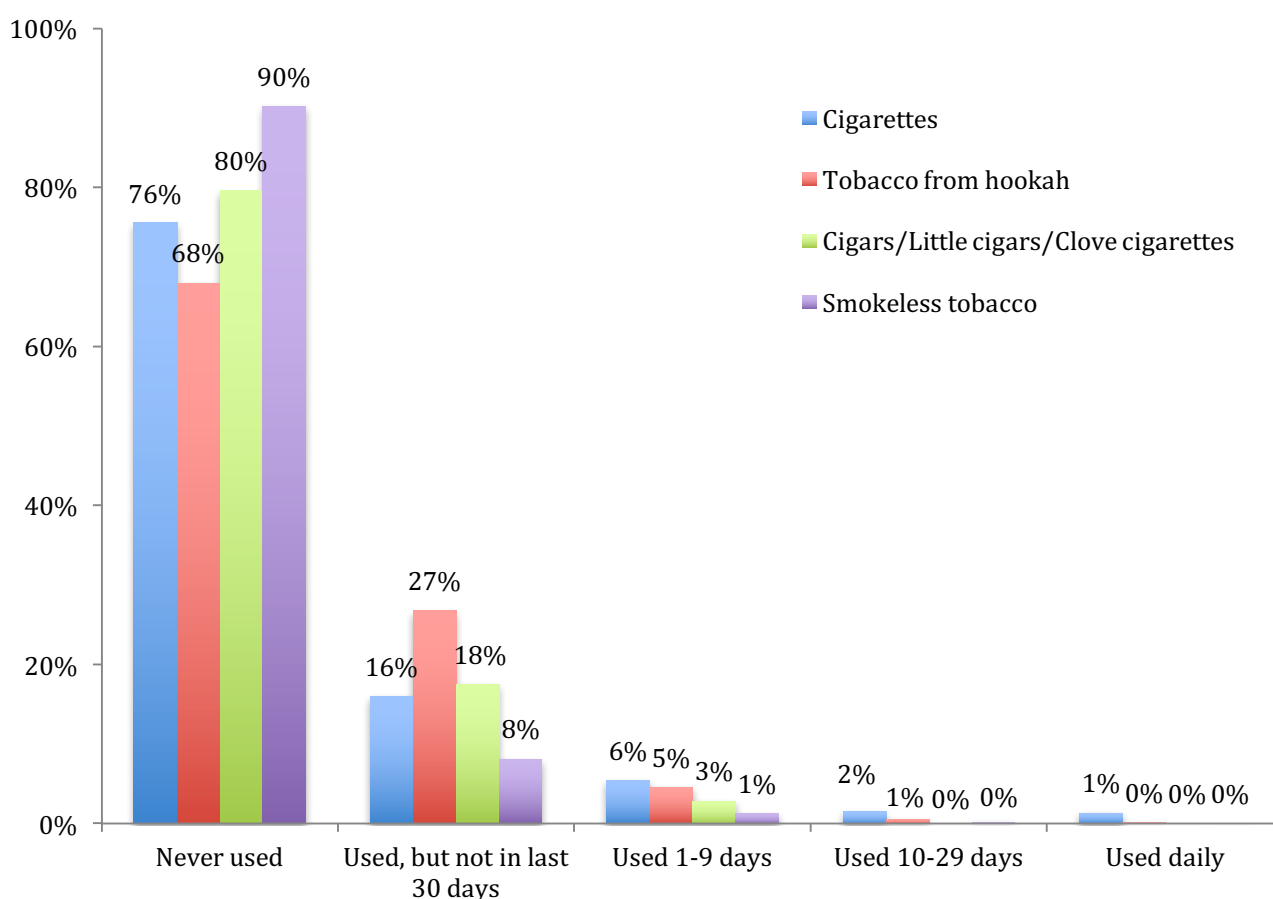


Tobacco Use

Figure 13 shows the number of days various forms of tobacco were used by respondents in the past month. Current findings mirror 2011 data, indicating no major change in type of tobacco usage between 2014 and 2011 respondents.

Seventy-five percent of 2014 Emory respondents reported they never used cigarettes and 16% have used cigarettes, but not in the last 30 days. Eight and a half percent of respondents reported they have used cigarettes in the last 30 days, of which only 1.5% reported daily use of cigarettes. This is similar to 2011 Emory respondents, of whom 1.5% reported daily use.

Figure 13. Tobacco Use in the Last 30 Days, 2014 Emory Respondents



92% of Emory University respondents have not used cigarettes in the past 30 days.

Smoking Across Demographics and Behaviors

Frequency of smoking was found to be significantly greater among males, with 11.5% (n=38) of males and 7.2% (n=57) of females reporting use in the last 30 days ($X^2=11.527$, $p=.117$).

Chi-square tests analyzing differences between undergraduate and graduate/professional students, Oxford continuees and non-Oxford continuees, and transfer and non-transfer students were not able to be conducted due to multiple cell counts summing to less than five respondents in each test.

In order to determine if there is an association between frequency of alcohol use and frequency of smoking, a correlation test was conducted. There was a significant positive association between frequency of alcohol use and frequency of smoking over the last 30 days ($r_s=0.339$, $p<.001$).

A small positive association was found between frequency of cigarette use and reported disability ($r_s=0.12$, $p<.001$).

Tobacco Knowledge & Services

Respondents were asked to indicate if they have ever received general information on tobacco use from Emory. More than half (57.4%) of 2014 Emory respondents reported receiving information on tobacco use.

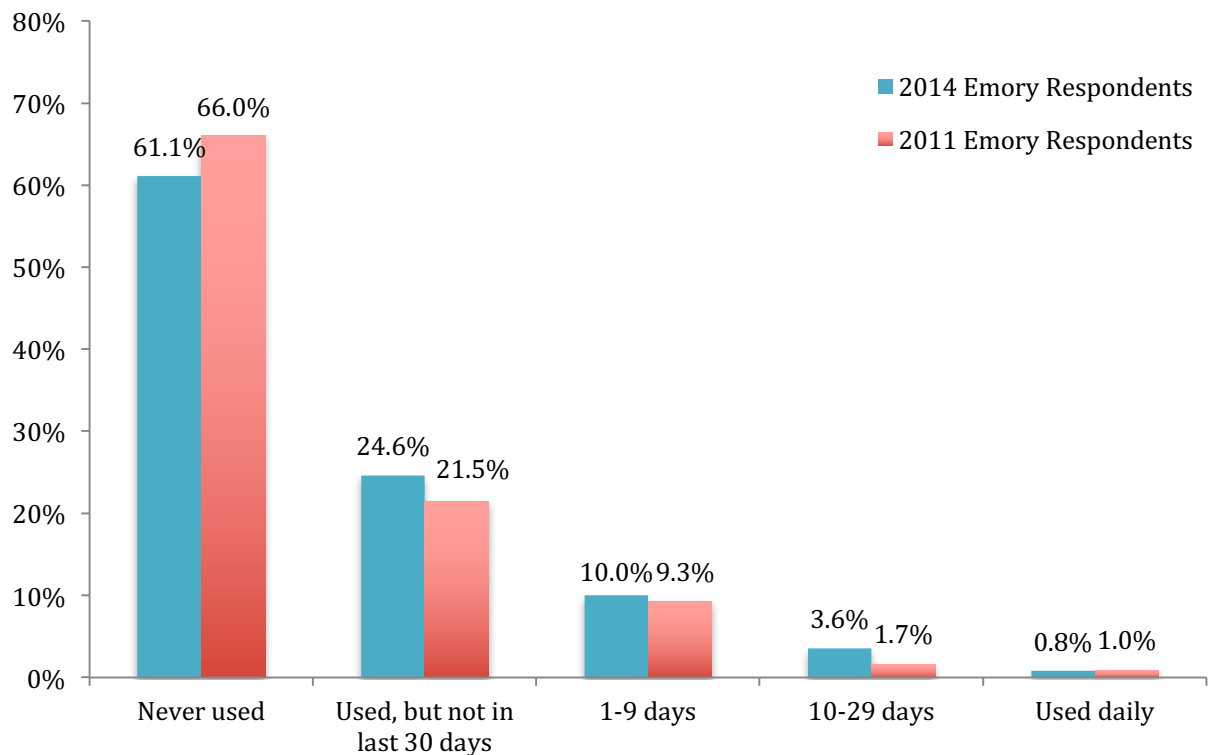
A significantly greater proportion of undergraduates reported receiving information on tobacco use compared to graduate students ($X^2=11.859$, $p=.001$), as almost 63% of undergrads have received information on tobacco use compared to only 52.4% of graduate students.

Marijuana Use

Sixty-one percent of 2014 Emory respondents reported never using marijuana and 24.6% of respondents reported using marijuana, but not in the last 30 days. Figure 14 shows the comparison of marijuana use among 2014 and 2011 respondents.

Frequency of marijuana use has remained relatively stable from 2011 to 2014, with only slight increases in the proportion of respondents who responded “used, but not in last 30 days,” “1-9 days,” and “10-29 days.” A larger decrease was seen in the proportion of respondents who have never used marijuana.

Figure 14. Marijuana Use in the Last 30 Days, 2014 v. 2011 Emory Respondents



Only 14.4% of respondents have used marijuana in the last 30 days.

Other Illicit Substance Use

Eleven categories of other illicit substances include: cocaine, methamphetamines, other amphetamines, sedatives, hallucinogens, steroids, opiates, inhalants, MDMA, other club drugs, and other illegal drugs. Marijuana is not included in this grouping.

Table 15 shows illicit substance use in the last 30 days, categorized by type of substance and year. Respondents were asked to report how many days they had used each substance in the last 30 days. Although some substances included can be prescribed for various medical conditions, purpose of use (recreational v. treatment) was not indicated. Therefore, it is unknown whether responses reflect abuse or prescriptions.

Table 15. Other Illicit Substance Use, 2014 v. 2011 Emory Respondents

Substance	Have ever used 2014 % 2011 %	Used in last 30 days 2014 % 2011 %
MDMA (Ecstasy)	6.7 4.8	0.9 1.0
Cocaine	6.3 5.3	1.5 0.9
Hallucinogens	6.1 5.4	0.8 1.0
Sedatives	5.4 4.8	1.9 1.7
Other Amphetamines	5.0 5.4	1.9 2.3
Other Illegal Drugs	3.9 4.4	0.6 0.7
Opiates	2.1 1.7	0.7 0.3
Other Club Drugs	1.8 1.3	0.5 0.1
Inhalants	1.4 1.2	0.4 0.3
Methamphetamines	1.0 1.2	0.3 0.2
Anabolic Steroids	0.9 0.6	0.3 0.2

Illicit substance use across substances remains relatively stable from 2011 to 2014, especially when looking at substances used in the last 30 days. Cocaine is the only substance showing more than a half-percent change for this time period (increasing from 0.9% in 2011 to 1.5% in 2014). However, larger increases in *lifetime* use of substances can be seen with MDMA (Ecstasy), cocaine, hallucinogens, sedatives, opiates, and other club drugs.

Table 16 compares the frequency of prescription drug abuse in last 12 months among Emory respondents and national respondents from 2011 and 2014. Respondents were asked whether or not they had taken a prescription drug that was not prescribed to them in the last 12 months by answering “Yes” or “No.” Each drug was listed as a separate item and included examples of common drug names. For example, sedatives were described as common brand prescriptions (e.g., Xanax, Valium).

Prescription drug use without a prescription has decreased in frequency in Emory respondents from 2011 to 2014, except for sedatives and erectile dysfunction drugs. Among national respondents, prescription drug use without a prescription has decreased in all categories, except for stimulants.

Table 16. Prescription Drug Use Without a Prescription in Last 12 Months, Across NCHA Respondent Groups

Prescription Drug	Emory Respondents 2014 % 2011 %	National Respondents 2014 % 2011 %
Stimulants	5.4 5.7	7.3 6.5
Sedatives	3.4 3.1	3.1 3.5
Pain Killers	3.1 4.4	4.8 7.1
Antidepressants	1.2 1.9	1.8 3.1
Erectile Dysfunction Drugs	0.8 0.5	0.5 0.9

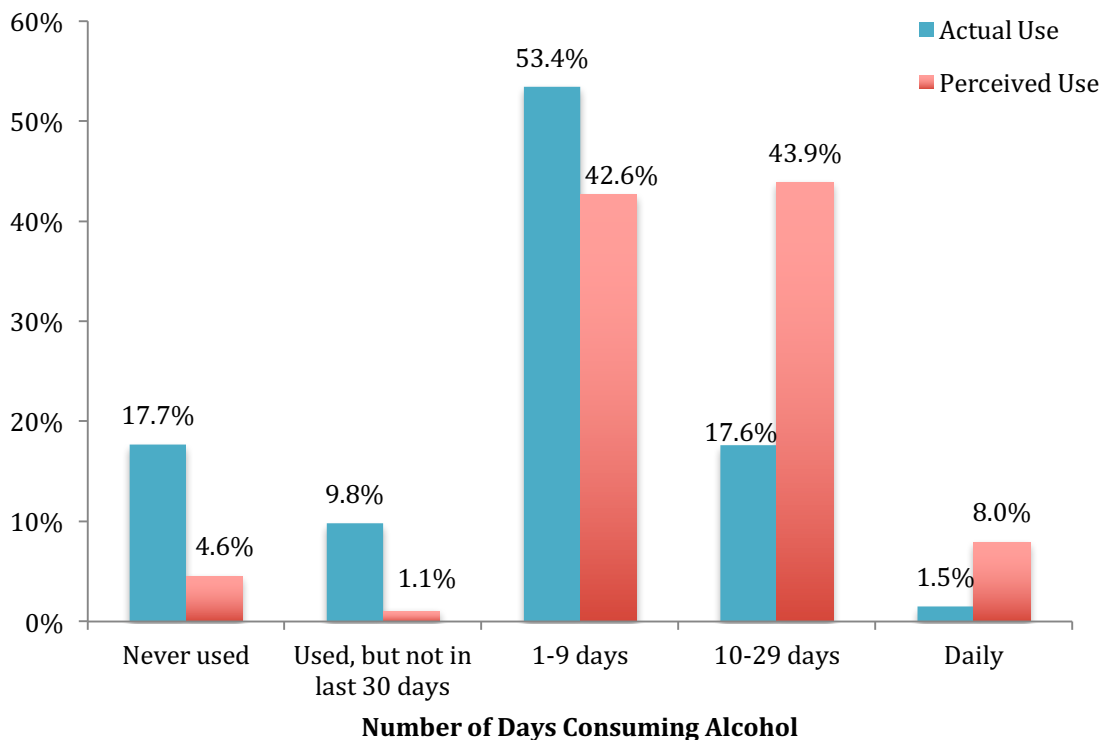
Perceptions of Substance Use

Alcohol Use

Respondents were asked to indicate how many days a typical Emory student drank alcohol in the last 30 days. They also reported how many days they drank alcohol in the last 30 days. Figure 15 shows perceptions of peer alcohol use compared to actual alcohol use among 2014 Emory respondents.

Comparing perceptions of others' use to actual use, 94.5% of respondents believe a typical Emory student consumed alcohol in the past 30 days, while 72.5% of respondents actually did consume alcohol during this time period. This 22% discrepancy is similar to the 24.4% discrepancy between actual and perceived alcohol use in 2011.

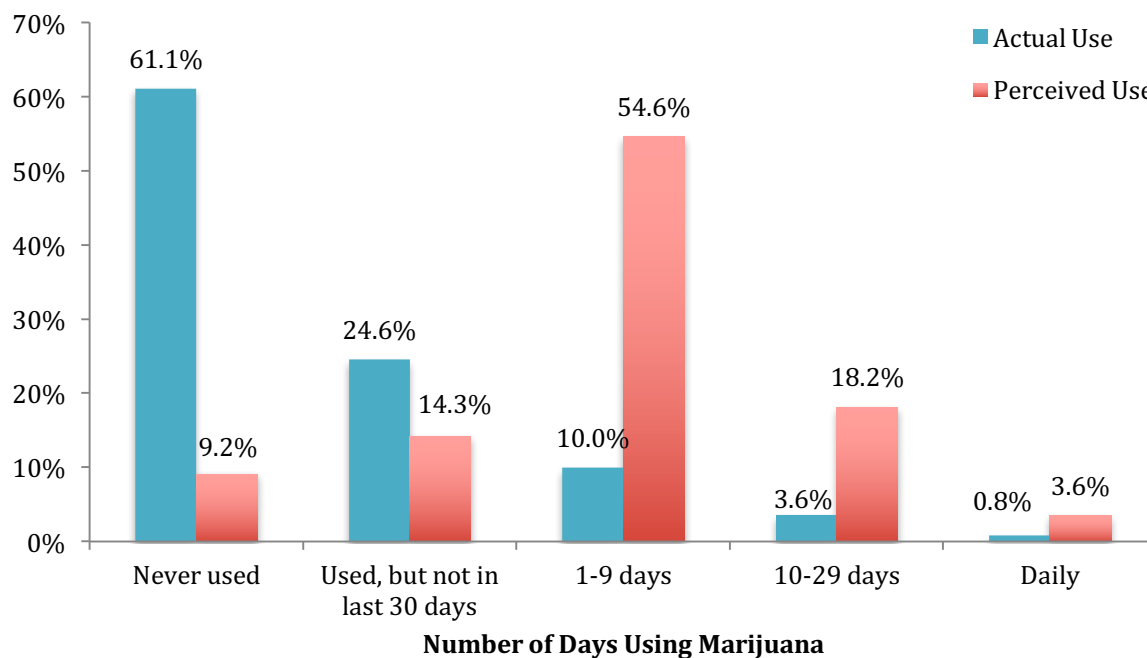
Figure 15. Actual v. Perceived Alcohol Use, 2014 Emory Respondents ($n_{\text{actual}}=1,132$; $n_{\text{perceived}}=1,118$)



Marijuana Use

Perceptions of peer marijuana use was measured by asking respondents how many days they think a typical Emory student has used marijuana in the last 30 days. Figure 16 shows a comparison of actual and perceived use of marijuana among respondents. Respondents perceived their peers use marijuana more frequently than they actually do. This is consistent with national findings.

Figure 16. Actual v. Perceived Marijuana Use in Last 30 Days, 2014 Emory Respondents
($n_{\text{actual}}=1,135$; $n_{\text{perceived}}=1,117$)



All Substance Use

Respondents were asked how often they used substances in the last 30 days and how often they believe a typical Emory student used substances in the last 30 days. Among all other substances (including cigars, smokeless tobacco, cocaine, methamphetamine, other amphetamines, sedatives, hallucinogens, anabolic steroids, opiates, inhalants, MDMA, other club drugs, and other illegal drugs) combined, there is a 57.6% discrepancy between actual and perceived use.

Overall, respondent's perception of their peers' substance use is far higher than how frequently their peers actually use substances across all substances included in the survey.

Violence and Abuse Brief

The 2014 NCHA Briefs consist of summary reports of data collected from the National College Health Assessment (NCHA) at Emory, administered during the Fall 2014 semester to undergraduates, graduates and professional students (n=1,146). Emory is one of 34 institutions to collect NCHA data during Fall 2014 in collaboration with the American College Health Association (ACHA). The 2014 national reference group comprises total respondents (n=25,841) from the 34 institutions. The Office of Health Promotion (OHP), within the Emory University Student Health and Counseling Services (EUSHCS), prepared the following materials.

The “2014 Violence and Abuse Brief” contains self-reported encounters of sexual, relationship, and physical abuse and violence experienced by NCHA respondents at Emory University. Specifics include prevalence of violence and abuse, academic impact of assault, and safety on campus. Data are presented on all respondents, across demographic characteristics as well as compared to national NCHA data from institutions around the United States.

Prevalence of Violence and Abuse

Respondents reported their experiences of physical, sexual and relationship violence and abuse within the last 12 months. Table 17 shows the prevalence of these experiences among 2014 Emory male and female respondents, all 2014 Emory respondents, and 2011 Emory respondents.

Table 17. Violence and Abuse Experiences within the Last 12 Months

Violence or Abusive Act	2014 Emory Respondents Male % Female %	2014 Emory Respondents Total %	2011 Emory Respondents Total %
A physical fight	6.3 1.5	2.9	3.4
A physical assault (not sexual)	3.3 1.6	2.1	2.4
A verbal threat	17.1 9.8	12.2	13.8
Sexual touching without their consent	3.0 10.2	8.1	5.8
Sexual penetration attempt without their consent	1.1 4.4	3.5	0.9
Sexual penetration without their consent	0.6 2.9	2.3	1.3
Stalking	1.2 3.5	3.0	4.1
An emotionally abusive intimate relationship	4.2 7.2	6.2	6.7
A physically abusive intimate relationship	0.9 0.8	0.8	1.4
A sexually abusive intimate relationship	0.6 2.1	1.7	1.4

A greater proportion of male respondents experienced physical violence (fights and assault) and verbal threats compared to females.

Female respondents experienced more sexual violence, stalking, and sexual and emotional intimate relationship abuse compared to males.

Safety on Campus

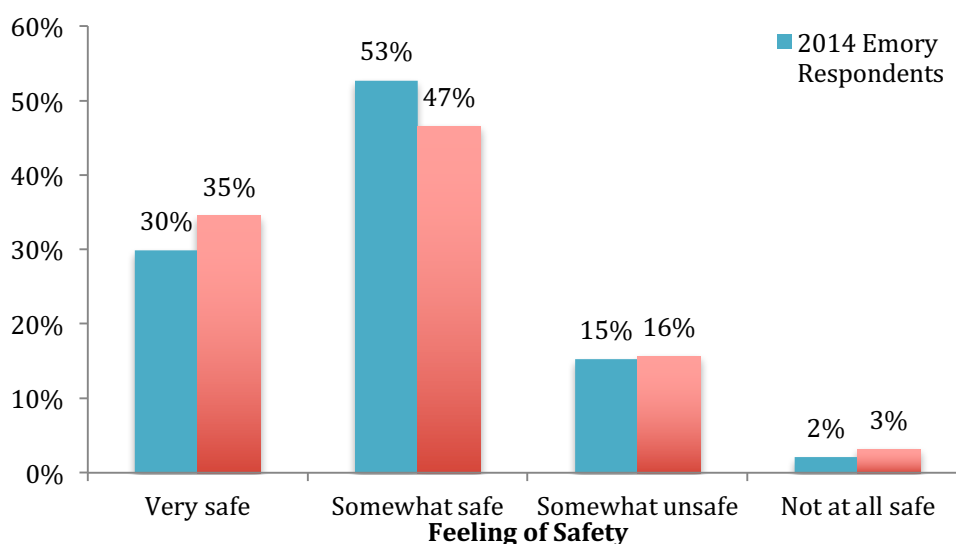
Respondents were asked to report how safe they felt on campus and in the surrounding community during the daytime and nighttime on a four-point scale from “very safe” to “not safe at all.” Table 18 shows the proportion of respondents who reporting feeling “very safe,” comparing by gender and to 2011 data.

Table 18. Feeling “Very Safe” on Campus and in the Surrounding Community

Location	2014 Emory Respondents Male % Female %	2014 Emory Respondents Total %	2011 Emory Respondents Total %
On campus (daytime)	92.8 91.8	92.0%	95.7%
On campus (nighttime)	53.8 19.9	29.9%	39.2%
In the community surrounding school (daytime)	68.9 59.5	62.0%	66.5%
In the community surrounding school (nighttime)	29.6 10.6	16.3%	19.9%

The majority of respondents reported feeling safe on campus during the day, however only 39.2% of respondents reported feeling “Very Safe” on campus during the nighttime. Overall, feelings of safety have decreased in every location compared to 2011 Emory respondents. Figure 17 shows rates of feeling safe on campus during the nighttime between 2014 Emory and 2014 national respondents.

Figure 17. Feeling of Safety on Campus During the Nighttime, 2014 Emory v. National Respondents



Sexual Health Brief

The 2014 NCHA Briefs consist of summary reports of data collected from the National College Health Assessment (NCHA) at Emory, administered during the Fall 2014 semester to undergraduates, graduates and professional students (n=1,146). Emory is one of 34 institutions to collect NCHA data during Fall 2014 in collaboration with the American College Health Association (ACHA). The 2014 national reference group comprises total respondents (n=25,841) from the 34 institutions. The Office of Health Promotion (OHP), within the Emory University Student Health and Counseling Services (EUSHCS), prepared the following materials.

The “2014 Sexual Health Brief” contains self-reported sexual health behaviors of NCHA respondents at Emory University. Specifics include sexual activity and protection, contraception, pregnancy, and sexually transmitted diseases. Data are presented on all respondents, across demographic characteristics as well as compared to national NCHA data from institutions around the United States.

Sexual Activity and Protection

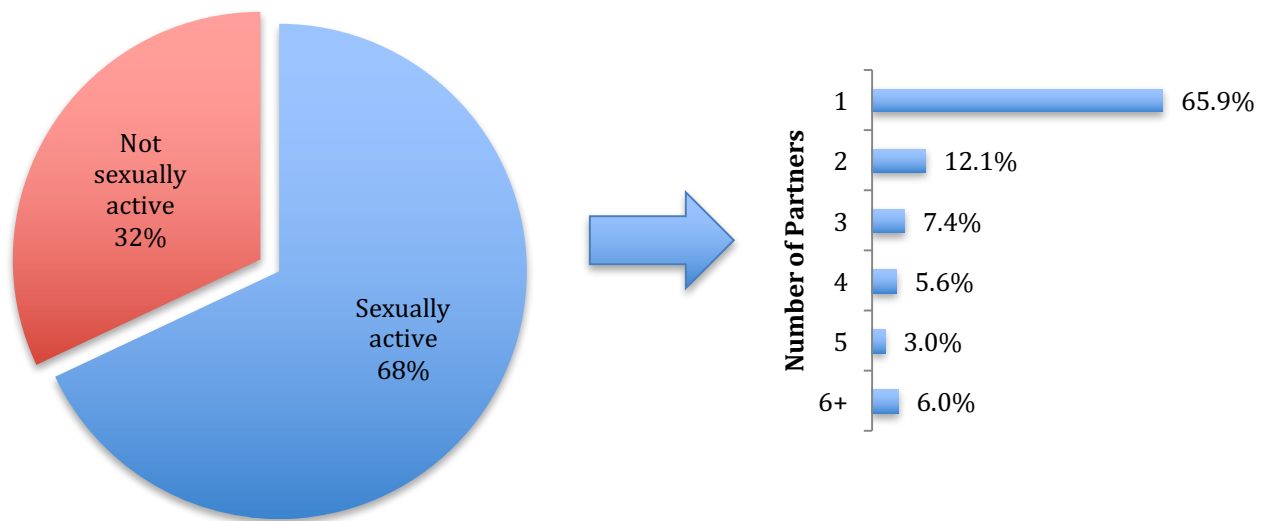
The majority of 2014 Emory respondents (68%, n=768) had *at least* 1 sexual partner in the last 12 months.

Among respondents who are sexually active, 65.9% (n=506) reported having *only* 1 partner in the last 12 months. See Figure 18 for the number of sexual partners reported among sexually active respondents.

Figure 18. Sexual Activity in the Last 12 Months, 2014 Emory Respondents

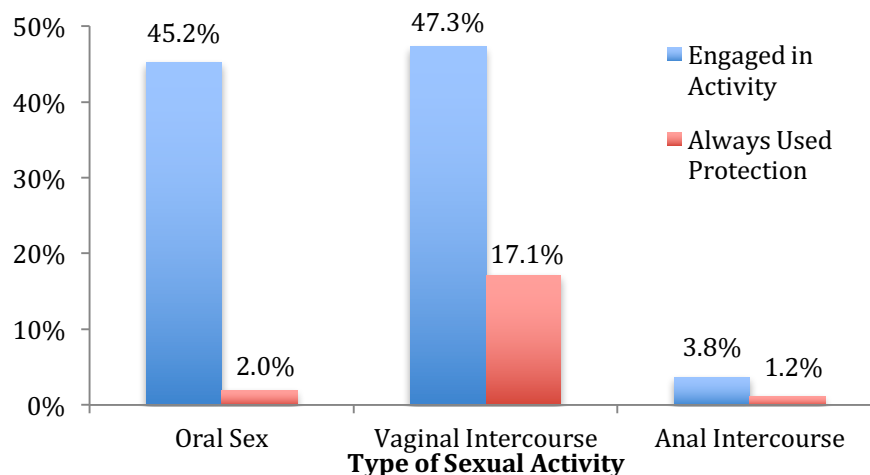
A. Proportion of Sexually Active Respondents

B. Number of Partners among Sexually Active Respondents (n=768)



Respondents reported the type of sexual activity they engaged in during the last 30 days and whether or not they used protection during that activity. Figure 19 shows a comparison of how often respondents engaged in a specific sexual activity versus how often they used protection.

Figure 19. Sexual Activity and Use of Protection in the Last 30 Days, 2014 Emory Respondents



Contraception and Pregnancy

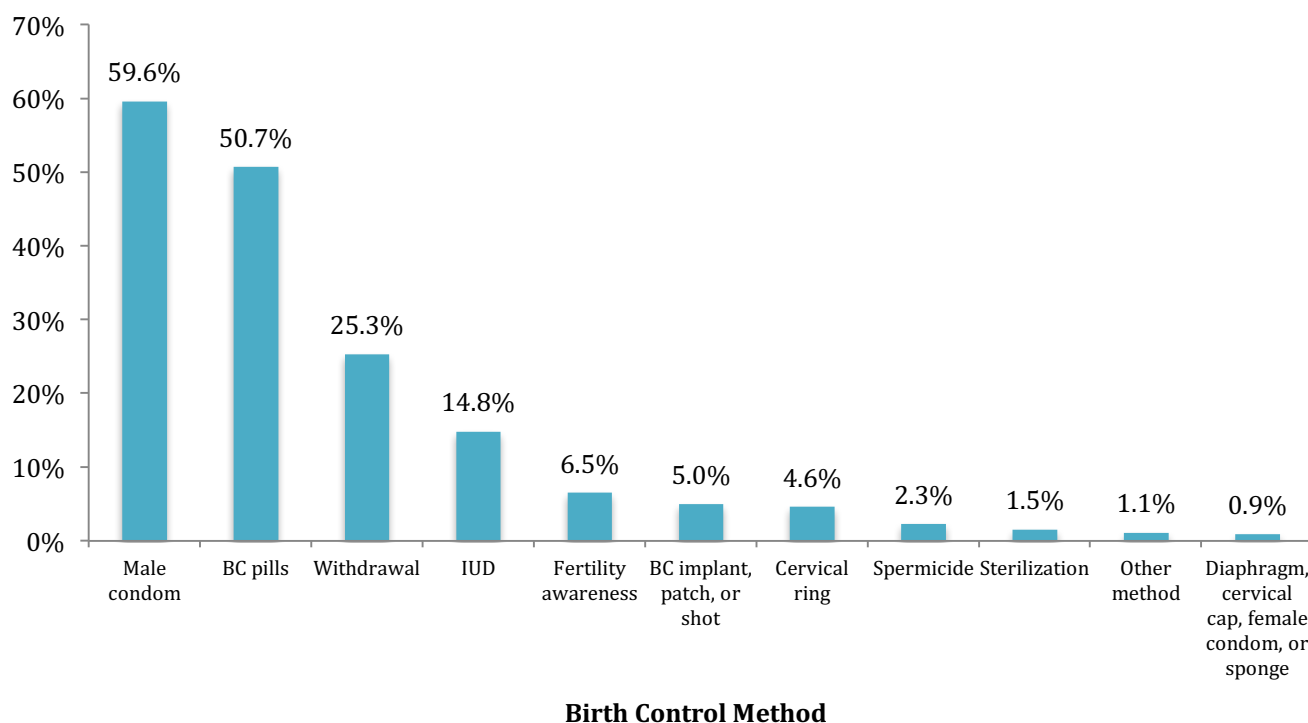
Excluding respondents who reported not having sexual intercourse, or having intercourse that could result in pregnancy, Table 19 shows contraception use among 2014 Emory respondents. Rates of contraception use at last vaginal intercourse are relatively stable across 2014 Emory, 2011 Emory, and 2014 national respondents.

Table 19. Use of Contraception During Last Vaginal Intercourse, Among Sexually Active NCHA Respondent Groups

"Used contraception?"	Emory Respondents 2014 % 2011 %	National Respondents 2014 % 2011 %
Yes, used contraception	81.1 85.6	82.5 82.7
No, did not use contraception	7.6 8.3	11.5 11.7
No, did not want to prevent pregnancy	2.1 3.1	2.5 2.6
Don't know	3.5 3.1	3.5 3.1

Among 2014 Emory respondents who reported using birth control during last time having vaginal intercourse, male condoms, birth control pills and withdrawal were the most commonly reported forms of birth control. See Figure 20 for all birth control methods used by respondents at last vaginal intercourse.

Figure 20. Birth Control Method at Last Vaginal Intercourse, 2014 Emory Respondents



Withdrawal was the #3 most commonly used method of birth control. However, this method is only 73% effective when not *always* used correctly, in comparison to the 98% effectiveness of condoms and 99% effectiveness of birth control pills, according to Planned Parenthood (2014).

Among 2014 Emory respondents who reported having vaginal intercourse in the last 12 months, 13.7% (n=99) used emergency contraception. Figure 21 shows emergency contraception rates among 2014 and 2011 Emory and national respondents.

Figure 21. Emergency Contraception Use in Last 12 Months, Across NCHA Respondent Groups

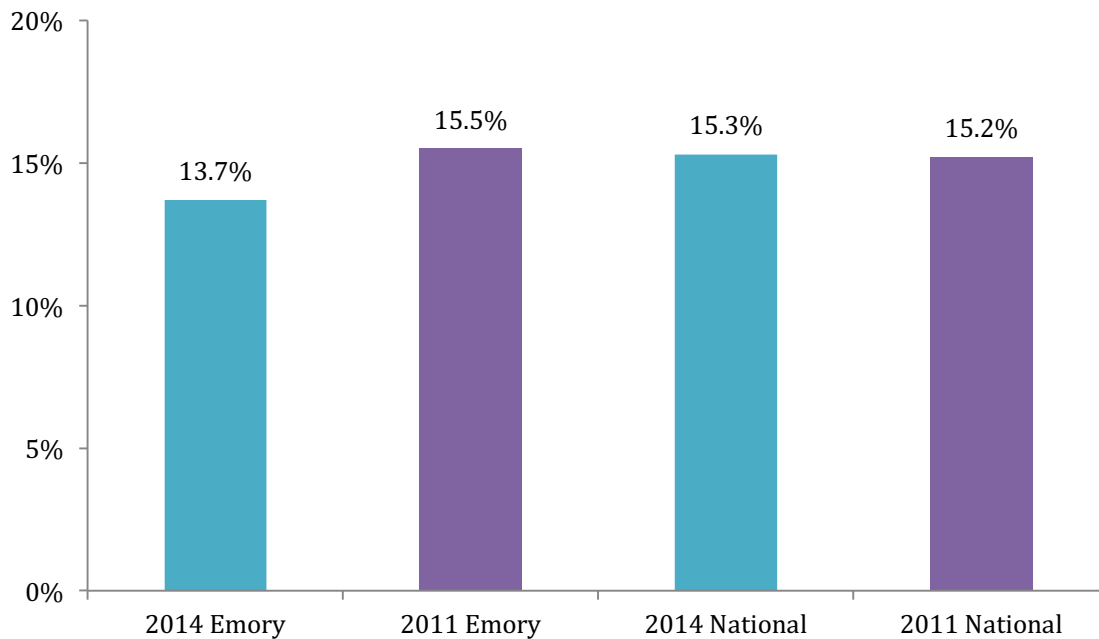


Table 20. Pregnancy in the Last 12 Months, Among 2014 Emory Respondents who Engaged in Vaginal Intercourse in the Last 12 Months

Context of Pregnancy	Emory Respondents 2014 % 2011 %	National Respondents 2014 % 2011 %
Experienced unintentional pregnancy	0.3 1.3	1.7
Experience intentional pregnancy	2.3 2.1	1.6
Total	2.6 3.4	3.4

While 2.6% of 2014 Emory respondents who engaged in vaginal intercourse in the last 12 months reported pregnancy, 27.8% of those respondents reported pregnancy (theirs or their partner's) as negatively affecting academic performance.

Only 40.5% of all 2014 Emory respondents have received information on pregnancy prevention from Emory, while 39.5% are interested in receiving information about pregnancy prevention.

Sexually Transmitted Infections

Prevalence

Prevalence of sexually transmitted infections (STIs) was measured by asking respondents whether they had been diagnosed or treated for various STIs in the last 12 months. Table 21 shows prevalence of STIs among 2011 and 2014 Emory respondents and 2014 national respondents.

Of those diagnosed with an STI, 27.3% reported the infection as negatively impacting their academic performance.

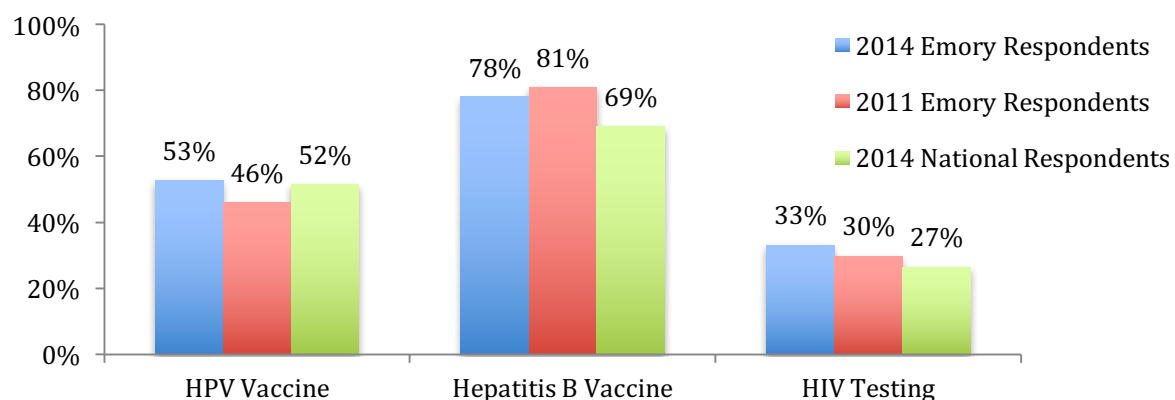
Table 21. Diagnosis or Treatment of Sexually Transmitted Infections in the Last 12 Months, 2014 Emory, 2011 Emory, and 2014 National Respondents

STI	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
Genital Warts/HPV	1.4% (16)	2.0% (31)	0.9%
Chlamydia	0.7% (8)	0.6% (9)	1.1%
Genital Herpes	0.5% (6)	0.9% (14)	0.7%
Hepatitis B or C	0.3% (3)	0.3% (5)	0.3%
Gonorrhea	0.2% (2)	0.3% (4)	0.3%
HIV	0.2% (2)	0.2% (3)	0.2%
Pelvic Inflammatory Disease (PID)	0.1% (1)	0.2% (3)	0.2%

Prevention

Respondents reported whether or not they have ever had the HPV vaccine, the Hepatitis B vaccine, or HIV testing. Figure 22 shows preventive behaviors across NCHA respondent groups.

Figure 22. History of Sexual Health Preventative Behaviors, 2014 Emory, 2011 Emory, and 2014 National Respondents



Only one-third of 2014 Emory respondents have ever been tested for HIV.

Figure 23 shows the trend in testicular self-exams among males, breast self-exams and gynecological exams among females from 2011 to 2014. From 2011 to 2014, testicular and breast self-exams have decreased, while gynecological exams have remained relatively stable.

National respondents have higher rates of testicular and breast self-exams than 2014 Emory respondents.

Testicular self-exams

- 2014 Emory: 32.5%
- 2014 national: 34.1%

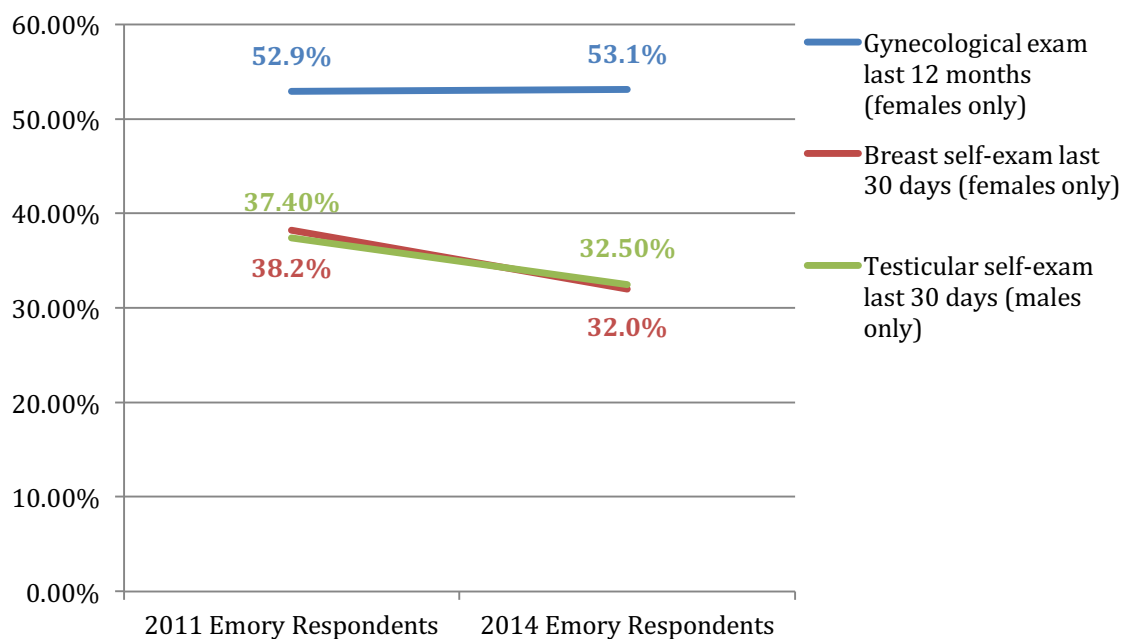
Breast self-exams

- 2014 Emory: 32.0%
- 2014 national: 35.7%

Gynecological exams

- 2014 Emory: 53.1%
- 2014 national: 43.6%

Figure 23. Testicular, Breast, and Gynecological Exams, 2014 v. 2011 Emory Respondents



Physical Health Brief

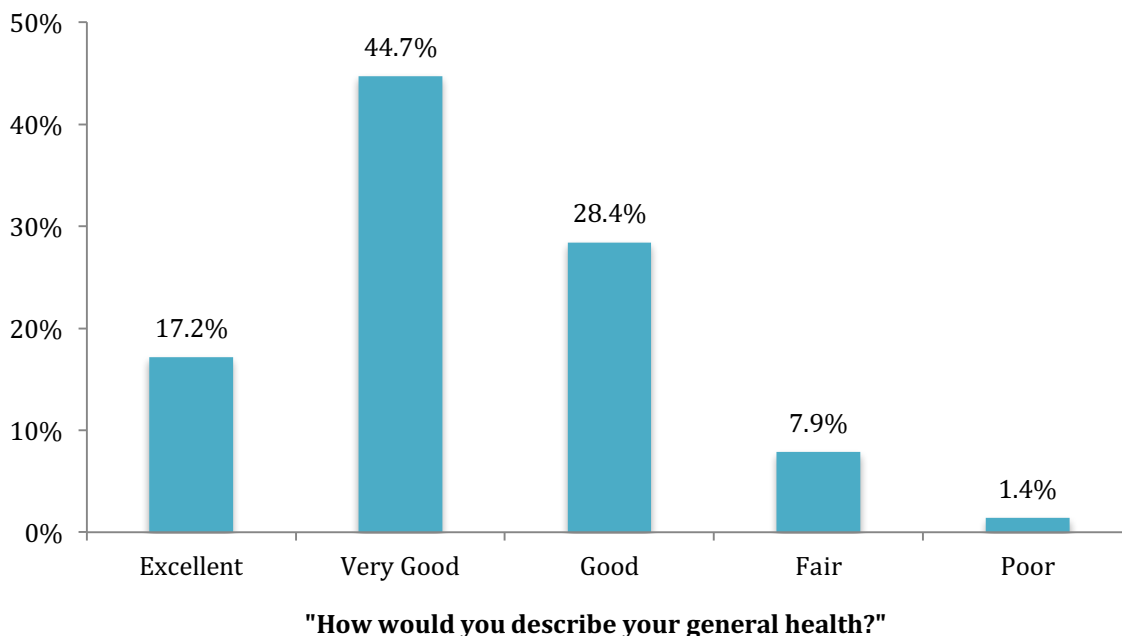
The 2014 NCHA Briefs consist of summary reports of data collected from the National College Health Assessment (NCHA) at Emory, administered during the Fall 2014 semester to undergraduates, graduates and professional students (n=1,146). Emory is one of 34 institutions to collect NCHA data during Fall 2014 in collaboration with the American College Health Association (ACHA). The 2014 national reference group comprises total respondents (n=25,841) from the 34 institutions. The Office of Health Promotion (OHP), within the Emory University Student Health and Counseling Services (EUSHCS), prepared the following materials.

The “2014 Physical Health Brief” contains self-reported illness and disability information of NCHA respondents at Emory University. Specifics include general health, chronic illness, disability, prevention behaviors, exercise, weight and nutrition. Data are presented on all respondents, across demographic characteristics as well as compared to national NCHA respondents from institutions around the United States.

General Health

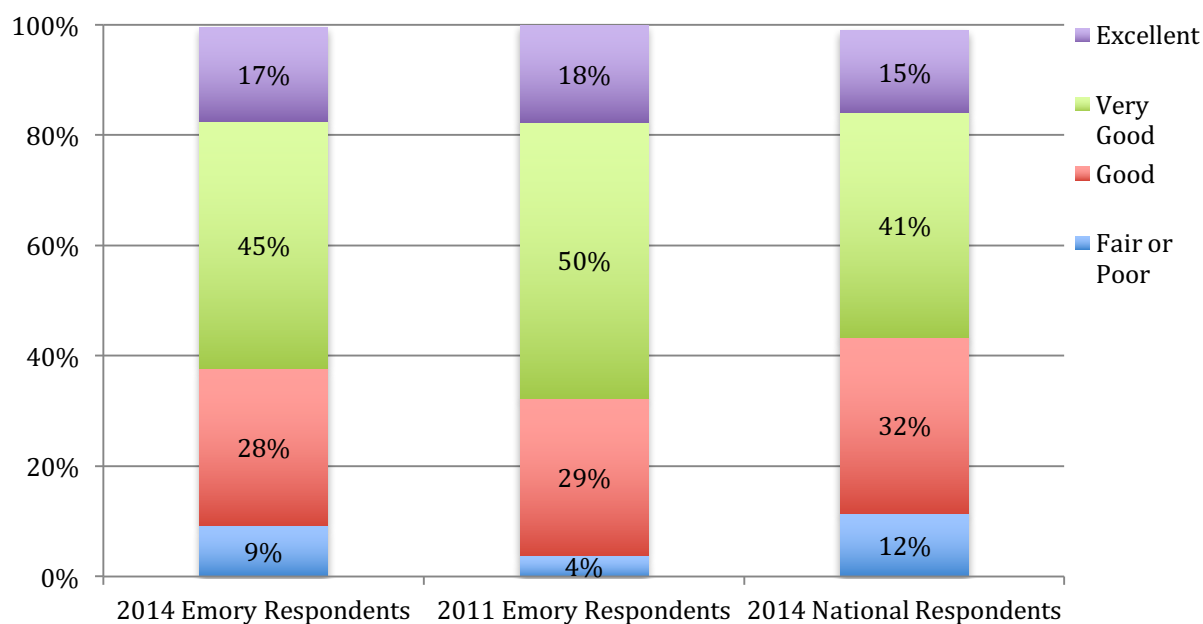
Respondents were asked to rate their health on a five-point scale from “Excellent” to “Poor.” A majority of 2014 Emory respondents reported their general health as “Excellent,” “Very Good,” or “Good,” indicating positive health status. See Figure 24 for specific responses from 2014 Emory respondents. See Figure 25 for a comparison of general health status perceptions between 2014 Emory, 2011 Emory and 2014 national respondents.

Figure 24. General Health Status Perceptions, 2014 Emory Respondents



90.3% of Emory respondents report a positive health status.

Figure 25. General Health Status Perceptions, Across NCHA Respondent Groups



Emory respondents rated their health more positively compared to national respondents.

Physical Illness

Table 22 shows the self-reported diagnosis and/or treatment of 18 physical health issues within the last 12 months for 2014 Emory, 2011 Emory, and 2014 national respondents. The mean number of illnesses reported by respondents was 0.93 (SD=1.33). Almost half (52%, n=596) of Emory respondents reported zero illnesses, 24.7% (n=283) reported only one illness, and 12.5% (n=143) reported two illnesses. The remainder, 10.9% (n=125), reported 3+ illnesses.

From 2011 to 2014, illness prevalence has remained relatively stable. Allergies, broken bones/fractures/sprains, and ear infections are the only health issues that have decreased more than 1.0%.

2014 Emory respondents reported lower prevalence of physical health issues compared to 2014 national respondents, except for Irritable Bowel Syndrome (IBS) and repetitive stress injuries.

Table 22. Prevalence of Physical Illness in Last 12 Months, Among NCHA Respondent Groups

Health Issue		2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
1. Allergies	↓	16.0 (181)	19.4 (301)	20.1
2. Sinus infection		14.0 (158)	14.1 (219)	15.7
3. Back pain		9.3 (105)	8.6 (133)	11.4
4. Urinary tract infection		8.2 (93)	8.9 (138)	9.7
5. Migraine headache		8.0 (90)	7.2 (112)	8.5
6. Strep throat		7.0 (79)	7.9 (123)	10.7
7. Asthma		7.2 (81)	7.5 (117)	8.9
8. Broken bone/ Fracture/Sprain	↓	4.3 (49)	6.8 (106)	6.4
9. Bronchitis		4.1 (46)	4.6 (72)	5.5
10. Ear infection	↓	3.2 (36)	5.2 (81)	6.2
11. High cholesterol		3.0 (34)	3.5 (54)	3.1
12. Irritable Bowel Syndrome (IBS)		2.9 (33)	2.7 (42)	2.9
13. High blood pressure		2.5 (28)	2.6 (41)	3.1
14. Repetitive stress injury		1.8 (20)	2.3 (36)	1.8
15. Mononucleosis		1.2 (14)	1.9 (29)	1.6
16. Endometriosis		0.7 (8)	0.8 (13)	0.8
17. Diabetes		0.5 (6)	0.6 (10)	1.0
18. Tuberculosis		0.2 (2)	0.5 (8)	0.3

Arrow designates a 1.0% or more decrease in prevalence from 2011 to 2014.

Disability

Among nine categories of disability, the majority (77.7%, n=891) of 2014 Emory respondents reported having no disability, while 16.5% reported only one disability, 3.8% reported two disabilities and the remainder (2.0%) reported three or more disabilities. Table 23 shows disability among 2014 Emory, 2011 Emory, and 2014 national respondents.

Table 23. Prevalence of Disability, Among NCHA Respondent Groups

Disability		2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
1. Psychiatric condition	↑	9.2 (104)	7.0 (109)	6.6
2. Chronic illness	↑	7.2 (81)	5.3 (82)	4.8
3. ADHD	↑	6.6 (75)	4.6 (72)	7.5
4. Learning disability		2.7 (30)	2.3 (36)	4.1
5. Partial sightedness/blindness		1.9 (21)	2.6 (40)	2.3
6. Other		1.3 (15)	1.4 (22)	2.1
7. Deafness/Hearing loss		1.1 (12)	1.0 (15)	2.4
8. Mobility/Dexterity disability		0.7 (8)	0.6 (10)	0.9
9. Speech or language disorder		0.9 (10)	0.6 (9)	0.9

Arrow designates a 1.0% or more increase in prevalence from 2011 to 2014.

From 2011 to 2014, there has been greater than 1.0% increase in psychiatric conditions, chronic illness, and ADHD among Emory respondents.

A greater proportion of Emory respondents reported psychiatric conditions and chronic illness compared to national respondents. For the remaining seven categories, Emory respondents reported fewer disabilities compared to national respondents.

The top 3 disabilities among 2014 Emory respondents are psychiatric conditions, chronic illness and ADHD.

Disease and Injury Prevention

Injury Prevention Behaviors

Respondents were asked about their seatbelt and helmet use during the last 12 months. Table 24 shows the proportion of respondents who *always* used a seatbelt or wore a helmet, given they engaged in the activity in the last 12 months.

Table 24. Always Engaging in Prevention Behavior in the Last 12 Months, 2014 Emory Respondents

Injury Prevention Behavior	2014 Emory Respondent % (n)
Seatbelt when riding in a car	84.9% (965)
Helmet when riding motorcycle	74.4% (96)
Helmet when riding a bicycle	43.8% (252)
Helmet when inline skating	39.8% (41)

Only 43.8% of respondents who ride a bicycle wear a helmet every time.

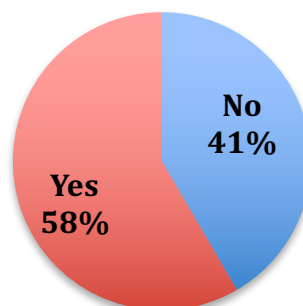
Sunscreen

The percentage of respondents reporting regular use of sunscreen during sun exposure has not changed from 2011 to 2014. See Figure 26 for proportions of sunscreen users for 2014 Emory respondents.

Females were significantly more likely than males (64.2% v. 43.8%) and graduate students were significantly more likely than undergraduate students (63.3% v. 52.1%) to use sunscreen regularly with sun exposure ($X^2=42.123$, $p<.001$; $X^2=14.484$, $p=.001$, respectively).

Among 2014 national respondents, 52.6% reported regular use of sunscreen during sun exposure, less than 2014 Emory respondents.

Figure 26. Regular Sunscreen Use During Sun Exposure, 2014 Emory Respondents



Dental Exams

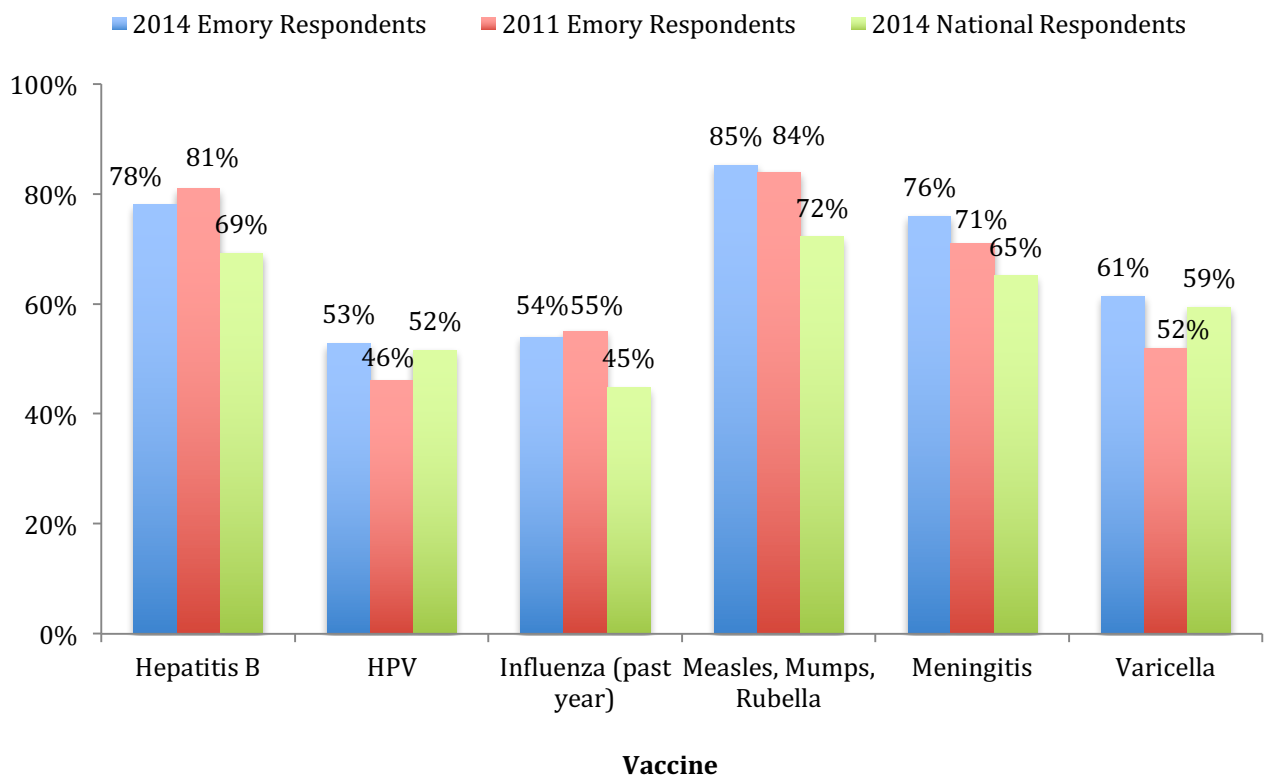
69.8% of 2014 Emory respondents reported having a dental exam and cleaning in the last 12 months, which is slightly lower than both 2011 Emory (73.2%) and 2014 national (73.4%) respondents.

Vaccinations

History of vaccinations was measured for six types of vaccines. Figure 27 shows the proportion of respondents who have received each vaccine among 2014 Emory, 2011 Emory and 2014 national respondents.

The proportion of Emory respondents who have received vaccines has increased from 2011 to 2014, with the exception of Hepatitis B and Influenza vaccines.

Figure 27. History of Vaccinations, Among NCHA Respondent Groups



From 2011 to 2014, there was a 6.8% increase in Emory respondents receiving the HPV vaccine, a 5.0% increase in having the Meningitis vaccine, and a 9.4% increase in having the Varicella vaccine.

From 2011 to 2014, the percentage of Emory respondents receiving vaccines for HPV, Influenza, Meningitis and Varicella increased.

For all six vaccines, a greater proportion of 2014 Emory respondents have received vaccines compared to 2014 national respondents.

Physical Activity and Nutrition

Exercise

Recent exercise was measured by asking respondents how often they engaged in moderate exercise, vigorous exercise, or strength training in the past week. The American College of Sports Medicine and the American Heart Association (2007) recommends moderate-intensity cardio or aerobic exercise for at least 30 minutes on 5 or more days per week or vigorous-intensity cardio or aerobic exercise for at least 20 minutes on 3 or more days per week (ACHA, 2014). Means and standard deviations for number of days engaging in exercise in the last seven days are shown in Table 25.

Table 25. Exercise in the Last Seven Days, 2014 Emory Respondents

Exercise	Days Engaged in Exercise M (SD)
Moderate exercise for at least 30 minutes	3.4 (2.1)
Vigorous exercise for at least 20 minutes	2.7 (1.8)
Strength training at least 8-12 repetitions	2.1 (1.5)

45.2% of 2014 Emory respondents are meeting the recommended guidelines for physical activity, compared to the 50.1% of 2011 Emory respondents and 43.8% of 2014 national respondents. Gender breakdown by NCHA respondent group is shown in Table 26.

Table 26. Percentage of Males and Females Meeting Recommended Guidelines for Physical Activity, Across NCHA Respondent Groups

Group	Males	Females
2014 Emory Respondents	46.4%	44.4%
2011 Emory Respondents	52.1%	49.4%
2014 National Respondents	48.2%	41.5%

Weight

Respondents were asked to categorize their weight given the descriptions “very underweight,” “slightly underweight,” “about right,” “slightly overweight,” and “very overweight.” The majority of respondents (59.1%) described their weight as “about right,” while a little under a third described their weight as slightly or very overweight. Table 27 shows weight descriptions for 2014 Emory, 2011 Emory and 2014 national respondent groups.

Table 27. Weight Description, Among NCHA Respondent Groups

Description of own weight	2014 Emory Respondents % (n)	2011 Emory Respondents % (n)	2014 National Respondents %
Very or slightly underweight	10.4% (119)	11.0% (172)	10.3%
About right	59.1% (674)	58.6% (912)	54.4%
Very or slightly overweight	30.5% (347)	30.3% (475)	35.2%

Respondents reported whether or not they engaged in specific weight-loss strategies in the last 30 days. The percentages of 2014 Emory respondents who engaged in each behavior are listed below.

- Exercised to lose weight: 52.6%
- Dieted to lose weight: 37.0%
- Vomited or took laxatives to lose weight: 3.5%
- Took diet pills to lose weight: 2.1%

Respondents also reported personal weight goals. Below shows the percentages of these responses from Emory 2014 respondents.

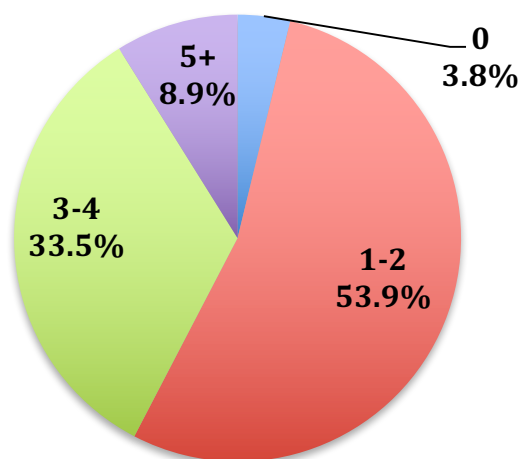
- Trying to lose weight: 46.5%
- Trying to stay the same weight: 29.2%
- Not trying to do anything about their weight: 17.7%
- Trying to gain weight: 6.5%

Almost half of all Emory respondents are trying to lose weight.

Fruit and Vegetable Intake

Figure 28 shows the reported usual intake of fruits and vegetables per day.

Figure 28. Usual Servings of Fruits and Vegetables per Day, 2014 Emory Respondents (n=1,140)



2014 and 2011 Emory respondents reported similar fruit and vegetable intake, varying less than 2.0% for each serving category.

Compared to Emory respondents, a greater proportion of national respondents reported consuming zero servings (7.7%) and 1-2 servings (61.6%) of fruit and vegetables per day. Among national respondents, 30.7% reported 3+ servings of fruits and vegetables per day, compared to 42.4% of Emory respondents. Overall, Emory respondents reported consuming more servings of fruit per day than national respondents.

Only 42.4% of Emory respondents eat three or more servings of fruits and vegetables every day.

Flourishing Brief

The 2014 NCHA Briefs consist of summary reports of data collected from the National College Health Assessment (NCHA) at Emory, administered during the Fall 2014 semester to undergraduates, graduates and professional students (n=1,146). Emory is one of 34 institutions to collect NCHA data during Fall 2014 in collaboration with the American College Health Association (ACHA). The 2014 national reference group comprises total respondents (n=25,841) from the 34 institutions. The Office of Health Promotion (OHP), within the Emory University Student Health and Counseling Services (EUSHCS), prepared the following materials.

The “2014 Flourishing Brief” contains self-reported perceptions and behaviors of NCHA respondents at Emory University. Specifics include feeling happy, interested and satisfied with life, sense of community, and relationships. Data are presented on all respondents, across demographic characteristics.

Flourishing

Flourishing is defined as “a state where individuals combine a high level of subjective well-being with an optimal level of psychological and social functioning” (Keyes 2007). It conceptualizes the idea that flourishing is not simply the absence of mental illness, but it is the presence of a positive influence, which aligns with the WHO definition of mental health (Keyes 2007).

The three major aspects of flourishing are:

- 1) Positive emotions which include positive affect and avowed quality of life,
- 2) Positive psychological functioning which includes self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, positive relations with others, and
- 3) Positive social functioning, including social acceptance, social actualization, social contribution, social coherence and social integration (Keyes 2007)

When understanding flourishing and its role in mental health, mental health should be viewed as a complete state consisting of two dimensions: the mental health continuum and the mental illness continuum (Westerhoff & Keyes, 2010). Flourishing represents having high mental health on the mental health continuum, and it is also a protective factor against mental illness on the mental illness continuum (Westerhoff & Keyes, 2010).

Flourishing is measured using the Mental Health Continuum Short Form (MHC-SF). It consists of 14 items from the Mental Health Continuum Long Form (MHC-LF) that most typically represent each facet of well-being. Of the 14 items, three items represent hedonic, emotional well-being. To represent eudaimonic well-being, six items represent psychological well-being and five items represent social well-being. To be categorized as flourishing mental health, individuals have to answer ‘every day’ or ‘almost every day’ to the one of three statements relating to hedonic well-being at a least six out of the eleven statements related to positive functioning. To be categorized as languishing, which is the opposite of flourishing, individuals must answer ‘never’ or ‘once or twice’ during the past month on one hedonic measurement and six on positive functioning. Individuals who do not qualify for flourishing or languishing well-being are categorized as having moderate mental health. The MHC-SF has high internal consistency ($> .80$), discriminant validity among adolescents across the globe (Keyes, 2005b, 2006; Keyes et al., 2008; Lamers et al., 2011; Westerhof & Keyes, 2000) and moderate one-month test-retest reliability (.57 - .71) (Robitschek & Keyes, 2006, 2009, Lamers et al., 2011).

The MHC-SF was included as an additional survey item on the 2014 NCHA because of the increasing evidence found that shows flourishing as a protective factor in individual health outcomes. Individuals who are languishing are 32 times more likely to have or develop a mental illness when compared to those who are flourishing, and those who are moderate are 19 times more likely to have or develop a mental illness when compared to individuals who are flourishing (Westerhoff and Keyes 2010). Flourishing individuals have also been shown to miss less days of school or work and to have greater academic success, making the concept of flourishing especially pertinent for college students.

The following tables describe the current state (flourishing, moderate, or languishing) of 2014 Emory NCHA respondents across classification, race/ethnicity, and GPA.

Table 28. Flourishing among 2014 Emory NCHA Respondents

2014 Emory NCHA Respondents	n (n=1,146)	%
Flourishing	599	52.3%
Moderate	501	43.7%
Languishing	46	4.0%

Table 29. Flourishing by School Year and Race/Ethnicity among 2014 Emory NCHA Respondents

Demographic	Flourishing n (%)
School Year (n=1,116)	
First	93 (59.2%)
Second	51 (38.3%)
Third	47 (40.9%)
Fourth	49 (45.4%)
Graduate or Professional School	346 (57.4%)
Race/Ethnicity (n=1,051)	
White, single race	357 (56.9%)
African American	69 (65.1%)
Asian/Pacific Islander	95 (40.6%)
Hispanic	36 (49.3%)
Native American/Native Alaskan	5 (45.5%)

Table 30. Languishing by School Year and Race/Ethnicity among 2014 Emory NCHA Respondents

Demographic	Flourishing n (%)
School Year (n=1,116)	
First	8 (5.1%)
Second	12 (9.0%)
Third	4 (3.5%)
Fourth	1 (0.9%)
Graduate or Professional School	19 (3.2%)
Race/Ethnicity (n=1,051)	
White, single race	14 (2.2%)
African American	4 (3.8%)
Asian/Pacific Islander	14 (6.0%)
Hispanic	4 (5.5%)
Native American/Native Alaskan	1 (9.1%)

Table 31. GPA Approximations among Flourishing, Moderate, and Languishing 2014 Emory NCHA Respondents

GPA	Flourishing % (n)	Moderate % (n)	Languishing % (n)
A	63.5% (380)	52.0% (255)	46.7% (21)
B	26.9% (161)	37.1% (182)	31.1% (14)
C	1.2% (7)	3.5 % (17)	8.9% (4)
D/F	0% (0)	0.2% (1)	0% (0)
No Response	8.4% (50)	7.1% (35)	13.3% (6)
Total	598	490	45

Additional Data

Due to the comprehensive nature of the 2014 Emory NCHA, additional data can be ascertained regarding specific populations or comparisons across groups. Specific populations can include: students of a particular school, first year students, student leaders, men who have sex with men (MSM), etc. The current report contains a sampling of comparisons across demographic groups, such as stress levels among graduate versus undergraduate students. Additional comparative data can be requested for any health topic covered in the report. If you are unsure if a specific health topic or population can be analyzed further, please see the contact information below in order to discuss options.

If you would like to request additional data or have questions regarding additional data, please contact the Office of Health Promotion (OHP) or Marc Cordon, at marc.cordon@emory.edu. Please allow one to two weeks for results, as time is needed for data processing.

Glossary

Chi-square test (X^2)

Inferential statistical test used to measure whether or not the difference between two independent samples is significant regarding the variables of interest. Used with categorical variables only.

Correlation (r)

Measures the strength, or magnitude, of a linear relationship between two variables. A test of correlation can also be called a test of association. Used with continuous variables only. $-1 \leq r \leq +1$; where $r=0$ is no relationship, $r=.2$ is a weak relationship, $r=.4$ is a adequate relationship and $r>.5$ is a strong relationship. Positive and negative values of r indicate the direction of the association.

External Population

The larger population that is under study.

Independent t-test (t)

Inferential statistical test used to measure whether or not the difference between two independent samples is significant regarding the variables of interest. Used with continuous variables only.

Non-Response Bias

Bias that results when respondents who were invited to participate (sample population) and respondents who actually did participate (sample) differ in meaningful ways.

Recall Bias

Systematic bias that occurs when respondents inaccurately report retrospective information because of difficulty with recollection.

Sample

Respondents who were invited to *and* participated in the assessment; the end sample from whom results are generated.

Sample Population

Respondents who were invited to participate in the assessment.

Selection Bias

Systematic bias that arises from differences between the sampling population and the sample itself; generalizability is compromised by selection bias and random sampling can protect against selection bias.

Social Desirability

Bias that occurs when respondents inaccurately report information due to pressure from perceived social norms regarding a specific topic.

Source Population

Specific population from which respondents are sampled.

References

- American College Health Association. American College Health Association-National College Health Assessment II: Reference Group Data Report Fall 2011. Hanover, MD: American College Health Association; 2012.
- American College Health Association. American College Health Association-National College Health Assessment II: Institutional Data Report Fall 2014 Emory University. Hanover, MD: American College Health Association; 2015.
- CDC. (2014). Fact Sheets - Binge Drinking. Retrieved from <http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm>
- Keyes, C.L.M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73(3), 539–548.
- Keyes, C.L.M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, 76(3), 395–402.
- Keyes, C.L.M. (2007) Promoting and protecting mental health as Flourishing: a complementary strategy for improving national mental health. *American Psychologist*. DOI:10.1037/0003-066X.62.2.95
- Lamers, S., Westerhof, G., Bohlmeijer, E., ten Klooster, P., & Keyes, C. (2010). Evaluating the psychometric properties of the mental health Continuum-Short Form (MHC-SF). *J. Clin. Psychol.*, 67(1), 99-110. doi:10.1002/jclp.20741
- Robitschek, C., & Keyes, C. (2008). Keyes's model of mental health with personal growth initiative as a parsimonious predictor. *Journal Of Counseling Psychology*, 56(2), 321-329. doi:10.1037/a0013954
- Planned Parenthood. (2014). Birth Control Methods. Retrieved from <http://www.plannedparenthood.org/health-info/birth-control>
- Weiss, NA. (2008). *Introductory Statistics*. 8th ed. Pearson Education Inc., Boston, MA.
- Westerhof, G.J. & Keyes, C.L. (2009). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development* 17; 110-119. Doi: 10.1007/s10804-009-9082-y