KEY FINDINGS: DIFFERENCES BY ACADEMICS

INTRODUCTION

This report uses data from the 2022 administration of the College Prescription Drug Study (CPDS) to examine non-medical prescription drug use among college students. The CPDS surveyed students at 15 U.S. colleges and universities; 6,510 students completed the survey overall. Of this sample, 4,967 (76.3%) participants were undergraduate students, 1,538 (23.6%) were graduate or professional students. Students were asked several demographic questions at the beginning and end of the survey to help determine the representativeness of the sample and assess differences by academic experience. Academic questions analyzed in this research brief include class rank, self-reported grade point average (GPA), academic major, and current living situation. This report summarizes differences in lifetime prescription drug misuse, past-year misuse, and misuse with alcohol.

Aggregate Data

**Lifetime Prescription Drug Misuse**

Of the 6,510 student responses, 6.8% of respondents reported that they had ever misused pain medications, 7.8% had ever misused prescription sedatives and 14.5% had ever misused prescription stimulants.

<table>
<thead>
<tr>
<th>Drug Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Medications</td>
<td>6.8%</td>
</tr>
<tr>
<td>Sedatives</td>
<td>7.8%</td>
</tr>
<tr>
<td>Stimulants</td>
<td>14.5%</td>
</tr>
</tbody>
</table>

**Past Year Prescription Drug Misuse**

In the past year, only 1.5% of students had used a pain medication for nonmedical reasons, 1.8% had misused prescription sedative, and 4.5% had misused a prescription stimulant. Among only the students who reported ever misusing, 36.7% reported misusing pain medications in the past year, 43.3% misused sedatives, and 56.2% misused prescription stimulants.

<table>
<thead>
<tr>
<th>Drug Type</th>
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</tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>Sedatives</td>
<td>1.8%</td>
</tr>
<tr>
<td>Stimulants</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

**Prescription Drug Misuse with Alcohol**

Among students who reported ever misusing a prescription drug, 36.7% of students have misused a pain medication while drinking alcohol, 43.3% have misused prescription sedative with alcohol, and 56.3% have misused a prescription stimulant with alcohol.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Pain Medications</td>
<td>36.7%</td>
</tr>
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<td>Sedatives</td>
<td>43.3%</td>
</tr>
<tr>
<td>Stimulants</td>
<td>56.3%</td>
</tr>
</tbody>
</table>
### Key Demographics

<table>
<thead>
<tr>
<th>Class Rank</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-year undergraduate</td>
<td>21.1%</td>
<td>1,374</td>
</tr>
<tr>
<td>Second-year undergraduate</td>
<td>17.6%</td>
<td>1,148</td>
</tr>
<tr>
<td>Third-year undergraduate</td>
<td>18.2%</td>
<td>1,186</td>
</tr>
<tr>
<td>Fourth-year undergraduate</td>
<td>15.1%</td>
<td>980</td>
</tr>
<tr>
<td>Fifth+ year undergraduate</td>
<td>4.3%</td>
<td>279</td>
</tr>
<tr>
<td>Graduate student (Master’s)</td>
<td>11.2%</td>
<td>728</td>
</tr>
<tr>
<td>Graduate student (Doctoral)</td>
<td>8.5%</td>
<td>554</td>
</tr>
<tr>
<td>Graduate student (Professional)</td>
<td>3.0%</td>
<td>193</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-Reported Cumulative GPA</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00-1.99</td>
<td>0.5%</td>
<td>39</td>
</tr>
<tr>
<td>2.00-2.99</td>
<td>11.7%</td>
<td>656</td>
</tr>
<tr>
<td>3.00-3.99</td>
<td>73.7%</td>
<td>4,125</td>
</tr>
<tr>
<td>4.00-higher</td>
<td>14.1%</td>
<td>790</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Major</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Humanities</td>
<td>14.7%</td>
<td>864</td>
</tr>
<tr>
<td>Business</td>
<td>14.8%</td>
<td>870</td>
</tr>
<tr>
<td>Education</td>
<td>11.5%</td>
<td>677</td>
</tr>
<tr>
<td>Health or Medicine</td>
<td>13.5%</td>
<td>791</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>16.2%</td>
<td>953</td>
</tr>
<tr>
<td>STEM</td>
<td>25.3%</td>
<td>1,487</td>
</tr>
<tr>
<td>Vocational</td>
<td>1.9%</td>
<td>110</td>
</tr>
<tr>
<td>Other</td>
<td>2.0%</td>
<td>120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Living Situation</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus housing</td>
<td>26.9%</td>
<td>1,305</td>
</tr>
<tr>
<td>Off-campus housing</td>
<td>73.1%</td>
<td>3,541</td>
</tr>
</tbody>
</table>

*Note. Students were asked to select the broad category that their academic major or field of study falls within. These broad categories were not defined for students.*
Lifetime Prescription Drug Misuse
Among all participants, 6.8% reported that they had ever used pain medications for non-medical reasons, 7.8% reported ever using a prescription sedative for non-medical reasons, and 14.5% reported ever using prescription stimulants for non-medical reasons. These aggregate data were stratified by key academic variables.

By Class Rank
Figure 1 shows differences between lifetime prescription misuse within each class rank. Students who were enrolled in their fifth+ year of undergraduate reported that highest within-group percentages for each prescription drug class. Over a quarter of the students who were in their fifth+ year reported ever misusing a prescription stimulant and approximately 15% reported misusing a pain medication or a prescription sedative in their lifetime. For all class ranks, prescription stimulants were the most likely to be misused, with professional graduate students and fourth and fifth+ year undergraduate students reporting the highest within-group proportions.

By Self-Reported Cumulative GPA
Figure 2 shows differences in reported lifetime prescription drug misuse by self-reported cumulative grade point average (GPA). For pain medications and prescription stimulants, the proportion of students who had ever misused was higher for lower cumulative GPAs. However, the category for the lowest self-reported GPA (0.00-1.99) had the lowest percentage of students who ever used a prescription sedative for nonmedical reasons. For prescription stimulants, there is a clear inverse relationship between GPA and prescription stimulant misuse.

Figure 1. Percentage of students by class rank who have ever misused a prescription drug

Figure 3. Percentage of students by cumulative GPA who have ever misused a prescription drug
By Academic Major
Across all academic majors, students were more likely to use a prescription stimulant for nonmedical reasons at some point in their lifetime. Students who are enrolled in a vocational major had the highest within-group percentages of ever misusing prescription pain medications (22.7%) or prescription stimulants (34.3%). Students who are enrolled in an education major were the least likely to report ever misusing any class of prescription drug.

![Figure 3. Percentage of students by academic major who have ever misused a prescription drug](image)

- Arts & Humanities (n = 864):
  - Stimulants: 7.4%
  - Sedatives: 9.0%
  - Pain Medications: 15.7%
- Business (n = 870):
  - Stimulants: 7.8%
  - Sedatives: 8.3%
  - Pain Medications: 16.6%
- Education (n = 677):
  - Stimulants: 4.6%
  - Sedatives: 1.5%
  - Pain Medications: 10.7%
- Health or Medicine (n = 791):
  - Stimulants: 5.6%
  - Sedatives: 7.9%
  - Pain Medications: 14.1%
- Social Sciences (n = 953):
  - Stimulants: 5.9%
  - Sedatives: 7.7%
  - Pain Medications: 14.3%
- STEM (n = 1,487):
  - Stimulants: 7.6%
  - Sedatives: 7.6%
  - Pain Medications: 12.3%
- Vocational (n = 110):
  - Stimulants: 12.6%
  - Sedatives: 12.6%
  - Pain Medications: 22.7%
- Other (n = 120):
  - Stimulants: 8.3%
  - Sedatives: 9.3%
  - Pain Medications: 16.2%

By Current Living Situation
Figure 4 shows the percentage of students who reported ever misusing a prescription drug by their current living situation. Students living on-campus includes residence halls, university-owned housing, or on-campus fraternity/sorority housing, while off-campus includes off-campus fraternity/sorority housing, residence within walking distance of campus, and residence outside of walking distance. A higher proportion of students living off-campus have ever misused prescription drugs than students living on-campus for all drug classes.

![Figure 4. Percentage of students by current living situation who have ever misused a prescription drug](image)

- On-campus (n = 1,305):
  - Pain Medications: 3.6%
  - Sedatives: 3.9%
  - Stimulants: 7.4%
- Off-campus (n = 3,541):
  - Pain Medications: 7.4%
  - Sedatives: 8.7%
  - Stimulants: 16.1%
Past-year Prescription Drug Misuse
For students who report ever using a prescription drug for nonmedical reasons, we inquired about nonmedical use within the past 12 months. For prescription pain medications, 1.5% of students reported using for nonmedical reasons in the past year, equating to 36.7% of the students who have ever used a pain medication for nonmedical reasons. For prescription sedatives, 1.8% of students reported misusing in the past year, roughly 43.3% of the students who ever misused a prescription sedative. Lastly, 4.5% of students reported using a prescription stimulant in the past year, equating to 56.3% of the students who reported having ever misused.

By Class Rank
Similar to lifetime prescription drug misuse, students who were enrolled in their fifth+ year of undergraduate had the highest within-group percentages for prescription drug misuse in the past 12 months. The within-group percentage for prescription stimulant misuse in the past 12 months increased steadily with each additional year of undergraduate enrollment. For graduate students, professional students report the highest proportion of students misusing any prescription drug in the past 12 months.

By Self-Reported Cumulative GPA
Similar to lifetime prescription drug misuse, the category for lowest cumulative GPA had over twice the proportion of students who misused prescription stimulants in the past 12 months than the next highest GPA category. Across all prescription drug classes, student self-reported GPA was inversely associated with prescription drug misuse in the past 12 months with prescription stimulants having the most pronounced relationship.
By Academic Major
Although students enrolled in a vocational major were the most likely to report misusing a prescription drug in their lifetime across all drug classes, Figure 7 shows differences for past-year misuse. Nearly 7% of business students reported misusing a prescription stimulant in the past year, followed by vocational students (6.4%), and arts & humanities students (4.9%). Students enrolled in social sciences, vocational, or health or medicine report higher percentages for pain medication misuse in the past 12 months.

By Current Living Situation
Past-year prescription drug misuse by current living situation is similar to lifetime prescription drug misuse. Students who live off-campus represent the majority of students who report misusing prescription drugs in the past 12 months across all drug classes.
Prescription Drug Misuse with Alcohol
For students who reported ever using a prescription medication for nonmedical reasons, we inquired about the misuse occurring with alcohol intake. Overall, 37.7% of the students who reported ever misusing a pain medication had misused while drinking alcohol, 43.3% of the students who ever misused a prescription sedative had misused while drinking alcohol, and 56.3% of students who ever misused a prescription stimulant had misused while drinking alcohol.

By Class Rank
Among students who had ever reported misusing a prescription drug, the percentages of those who misused concurrently with alcohol are stratified by class rank. Among those students who had ever misused a prescription drug, over half of the students who were enrolled in their fourth year or fifth+ year of undergraduate and all graduate students reported misusing prescription stimulants with alcohol. Students who enrolled in their fifth+ year of undergraduate were most likely to misuse prescription sedatives or prescription pain medications with alcohol.

By Self-Reported Cumulative GPA
Among students who ever misused a prescription drug, over half of the students who had a GPA below 2.99 misused a prescription stimulant with alcohol. Further, students with a self-reported cumulative GPA between 2.00-2.99 were the most likely to report misusing prescription drugs with alcohol.

Figure 9. Percentage of students who ever misused a prescription drug with alcohol by class rank

Figure 10. Percentage of students who ever misused a prescription drug with alcohol by cumulative GPA
By Academic Major
Among students who had ever reported misusing a prescription drug, 80% of students enrolled in vocational major misused a prescription sedative with alcohol, followed by 55.6% of students with another academic major not listed. Interestingly, for education students who had ever misused a prescription pain medication, over half of them had misused with alcohol. Similarly, for students who have an Arts & Humanities major and reported ever misusing a prescription stimulant, 58.8% reported misusing with alcohol.

Figure 11. Percentage of students who ever misused a prescription drug with alcohol by academic major

By Current Living Situation
Among students who had ever reported misusing a prescription drug, 49.8% of students living off-campus had misused a prescription stimulant with alcohol, 42.5% had misused a prescription sedative with alcohol, and 32.4% had misused a prescription pain medication with alcohol. These percentages are nearly double of those students who had ever misused a prescription drug and living on-campus.

Figure 12. Percentage of students who ever misused a prescription drug with alcohol by current living situation
ADDITIONAL IMPLICATIONS

By Class Rank
Students who were enrolled in their fifth+ year of undergraduate made up 4.3% of the sample yet made up 9.8% of the students who reported ever misusing a pain medication, 8.3% of the students who ever misused a prescription sedative, and 7.7% of the students who ever misused a prescription stimulant. This overrepresentation of fifth+ year students was also seen in past-year prescription drug misuse. Students enrolled in their fifth+ year of undergraduate consisted of 12.2% of the students who reported misusing a prescription pain medication in the past year, 8.5% of the students who misused a prescription sedative in the past year, but 8.2% of the students who misused a prescription stimulant in the past year. Students enrolled in the fourth year of undergraduate made up 15.1% of the sample, yet they made up 22.2% of the students who had ever misused a prescription stimulant and 22.3% of the students who misused a prescription stimulant in the past 12 months.

Interestingly, despite making up 21.1% of the sample, students enrolled in their first year of undergraduate only made up 13.2% of the students who ever misused a prescription pain medication, 10.9% of the students who ever misused a prescription sedative, and 10.6% of the students who ever misused a prescription stimulant.

Lastly, for students who had ever misused a prescription drug, first-year undergraduate students were the least likely to report misusing a prescription drug with alcohol, while fourth-year undergraduate students reported heightened risk.

By Self-Reported Cumulative GPA
For lifetime prescription drug misuse, no cumulative GPA category or range was overrepresented in the sample. However, despite representing 73.7% of the sample, students with a GPA between 3.00-3.99 represented 80.3% of the students who misused a pain medication in the past year.

By Academic Major
Despite only making up 1.9% of the sample, students who were enrolled in a vocational major made up 6.4% of the students who ever misused a prescription pain medication, 2.9% of the students who ever misused a prescription sedative, and 4.2% of the students who ever misused a prescription stimulant. Students enrolled in business or arts & humanities major made up similar proportions of the sample (14.8% and 14.7% respectively) yet represented slightly higher proportion of students who ever misused pain medications (17.5% and 16.5%), prescription sedatives (16.0% and 17.1%), and prescription stimulants (17.1% and 16.1%). Similarly, business students made up 19.8% of the students who misused pain medication in the past year and 21.6% of the students who misused a prescription stimulant in past year. On the other hand, education students made up 11.5% of the sample, but only 2.6% of the students who had ever misused pain medication, 6.9% of the students who ever misused prescription sedative, and 8.7% of the students who ever misused a prescription stimulant, with similar representation of past-year prescription drug use.

Despite making up 25.3% of the sample, students enrolled in STEM majors represented a higher proportion of students misusing pain medication with alcohol. In fact, over 35% of the students who misused prescription pain medications with alcohol were STEM students. Similarly, students enrolled in arts & humanities majors consisted of 20.5% of the students who misused prescription stimulants with alcohol, despite making up only 14.7% of the sample.
By Current Living Situation
Students living off-campus were more likely to report prescription drug misuse overall. Although students living off-campus made up 73.1% of the sample, they made up 84.7% of the students who had ever misused pain medications, 86.0% of the students who ever misused prescription sedatives, and 85.5% of the students who ever misused prescription stimulants. Similar rates are seen for past-year prescription drug misuse. Students who lived off-campus made up 78.7% of the students who misused prescription pain medications in the past year, 84.8% of the students who misused prescription sedatives in the past year, and 84.3% of the students who misused prescription stimulant in the past year.

Similarly, among the students who had ever misused prescription pain medication, students living off-campus represented 91% of the students who misused with alcohol. For students who reported ever misusing prescription sedative and living off-campus, 93% had misused with alcohol. Lastly, for students who ever misused prescription stimulants and lived off-campus, 92.2% had misused with alcohol.

MORE INFORMATION
The College Prescription Drug Study (CPDS) is a multi-institutional survey of undergraduate, graduate, and professional students. The purpose of the CPDS is to gain a more thorough understanding of the non-medical use of prescription drugs among college students. Results provide a better understanding of the current state of non-medical use of prescription drugs on college campuses, including information on the types of prescription drugs misused, attainment of drugs, reasons for use and consequences of use. During spring 2022, the CPDS was administered to random samples of students attending institutions across the United States via an online anonymous survey.

SUGGESTED CITATION

ACKNOWLEDGEMENTS
We would like to acknowledge Dr. Tessa Miracle for her leadership and contribution to the 2022 College Prescription Drug Study as the former principal investigator.