

Tracking Substance Use and Mental Health in Adolescents

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ADVANCE Study Abstract

Background: There is an abundance of studies surrounding the mental health and substance use of adults, however, minors – specifically high-schoolers– are underrepresented in this research. Politicians have emphasized a 'mental health crisis in America.' If true, further investigation is needed on the well-being of American teenagers.

Objectives: The purpose of this research is to find out the attitudes, behaviors, and factors contributing to mental health and substance use.

Methods: The ADVANCE study collects school-based data from partnered high schools around Southern California. Surveys are sent out twice a year to a sample size of about 3000 students during their time in high school.

Results: Data displayed was collected from one high school in Southern California. 296 valid responses were collected in Fall 2022 and 277 valid responses were collected in Spring 2023.

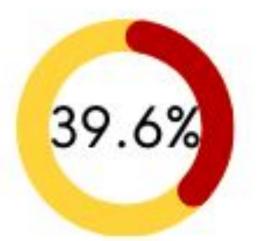
Conclusions: Substance use increases as students approach their senior year. The amount of students with anxiety and depression symptoms lowers as the effects of the pandemic waver off.

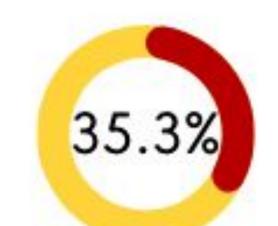
Results: Mental Health

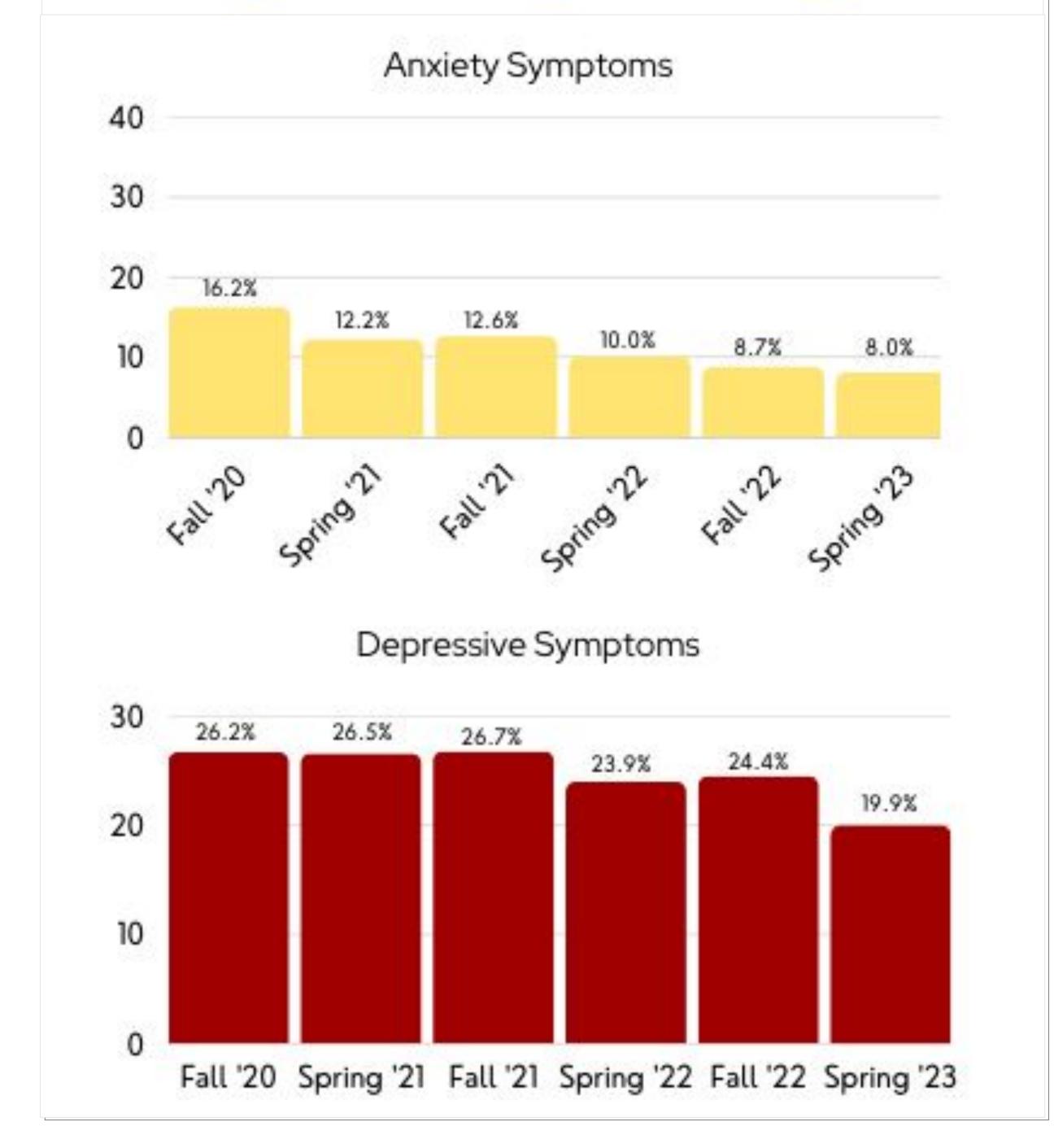
In Spring 2023, students who screened positive* for significant levels of...

OCD Symptoms ADHD Symptoms Sleep Problems







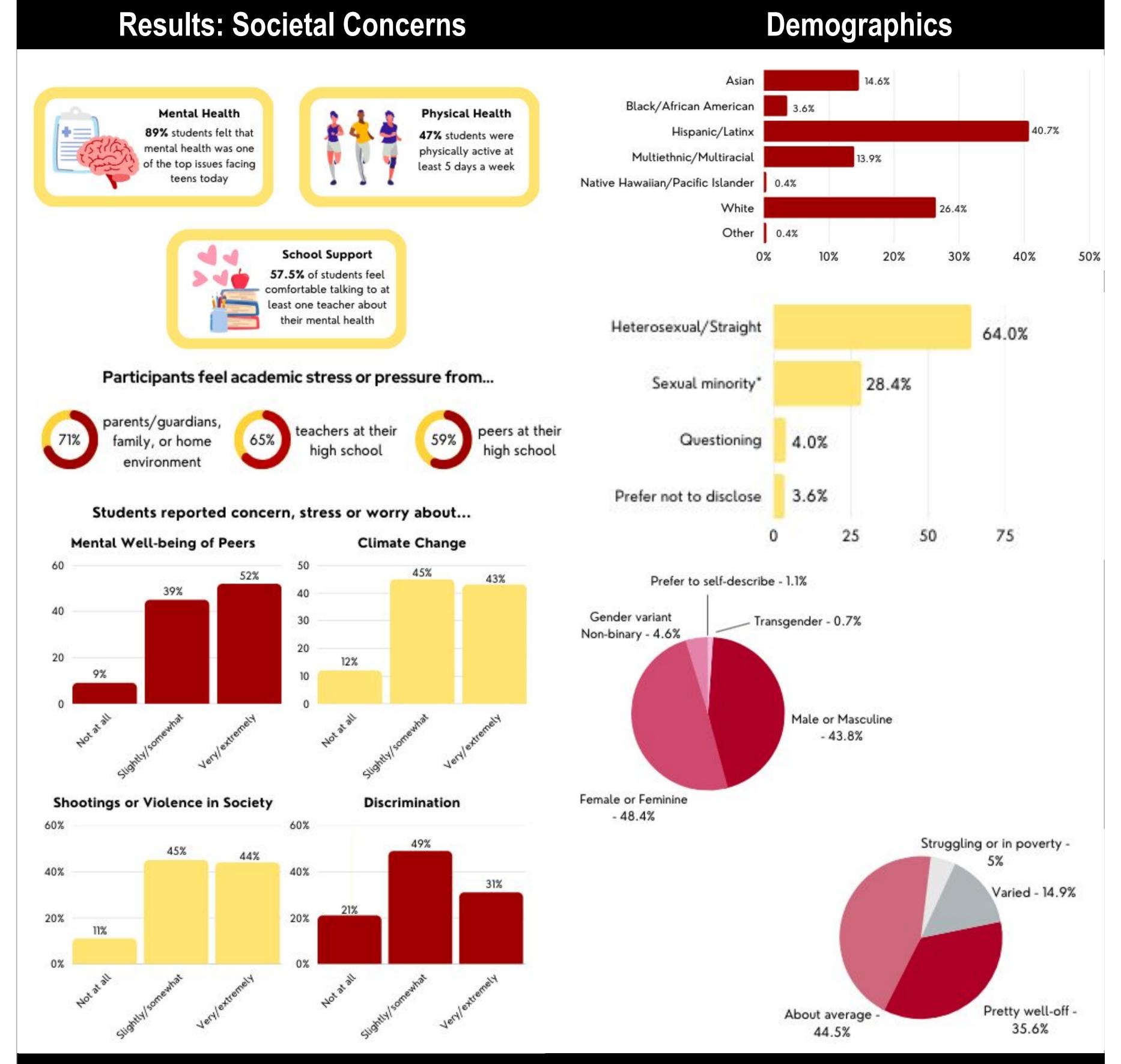


Methods

Measures: The demographics (gender identity, race/ethnic identity, sexuality) of the participants are recorded. The study examines the prevalence of symptoms of conditions such as OCD and ADHD, as well as other problems: lack of sleep, depression, and anxiety. Marijuana, nicotine³, and alcohol use are surveyed as well; participants are asked to specify their devices, dosages, or products. Stressors like discrimination², shootings¹, and violence are contributing factors to mental health and substance use.

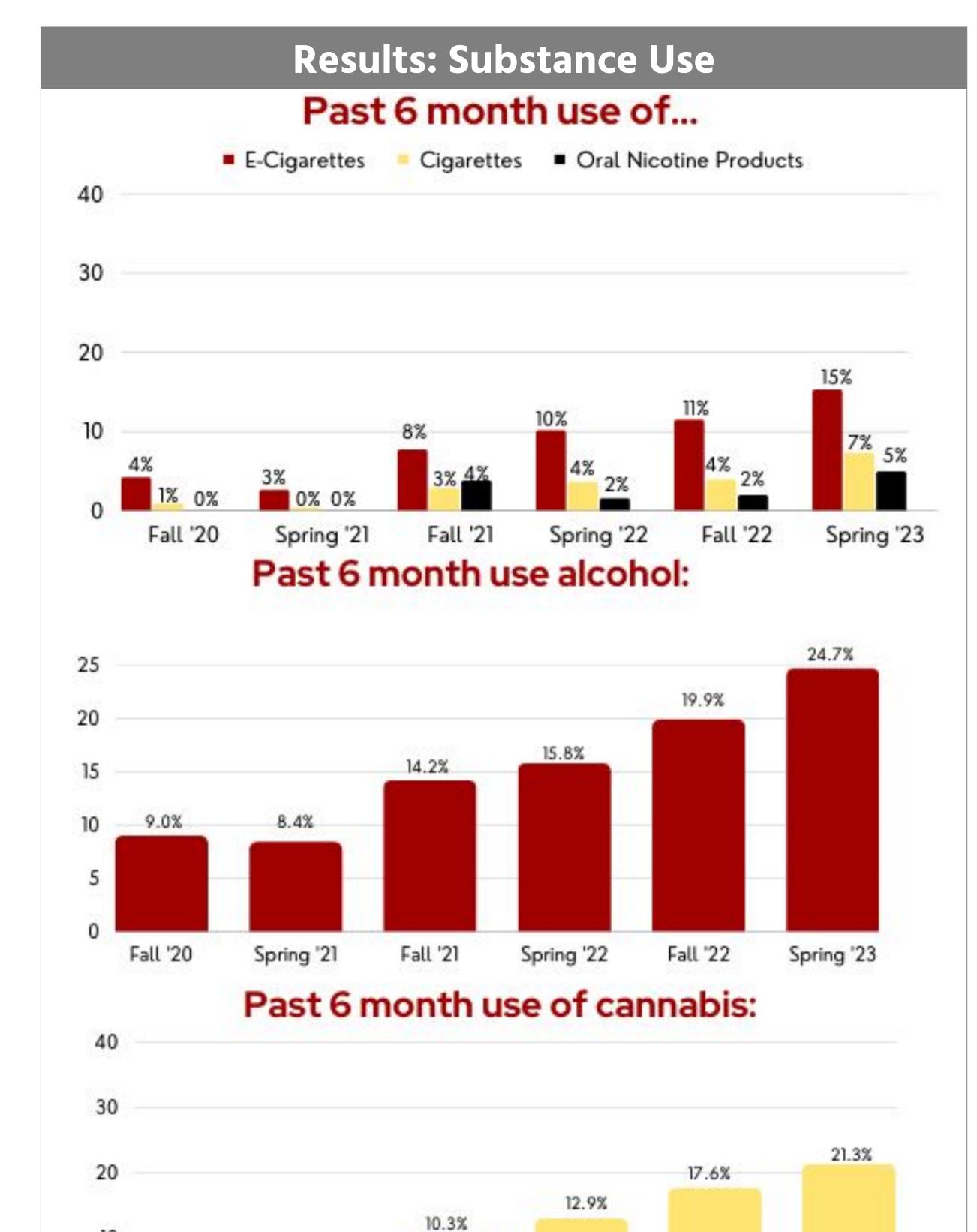
Procedures: Data collectors went on-site and administered surveys by laptop. Absent students received remote service.

Analysis: 23.9% of students at this school have vaped nicotine and 29% of the participants have used marijuana. 89% of students felt that mental health was one of the top issues facing teenagers today. Only 57.5% of students felt comfortable talking to at least one teacher about their mental health. 47% of students were reported to be physically active at least 5 days a week.



References

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- 2. Leventhal, A. M., Cho, J., Andrabi, N., & Barrington-Trimis, J. (2018). Association of Reported Concern About Increasing Societal Discrimination With Adverse Behavioral Health Outcomes in Late Adolescence. *JAMA pediatrics*, 172(10), 924–933. https://doi.org/10.1001/jamapediatrics.2018.2022
- 3. Harlow, A. F., Vogel, E. A., Tackett, A. P., Cho, J., Han, D. H., Wong, M., Cockburn, M. G., Sussman, S. Y., Unger, J. B., Leventhal, A. M., & Barrington-Trimis, J. L. (2022). Adolescent Use of Flavored Non-Tobacco Oral Nicotine Products. *Pediatrics*, 150(3), e2022056586. https://doi.org/10.1542/peds.2022-056586



Summary

Spring '22

Spring '23

1. 8-16.2% of students were screened positive for significant levels of anxiety symptoms and 19.9-26.7% was the figure for depression.

Fall '21

- 2. More than a third of students screened positive for significant levels of ADHD and sleep problems.
- 3. 23.9% of students reported seeing a school counselor or psychologist this past year; 15.1% reported seeing a therapist outside of the school setting.
- 4. By Spring 2023, 24.7% of students had drunk alcohol, 21.3% used marijuana, and 15% had used e-cigarettes in the past 6 months.
- 5. Students that identified as a man or a sexual minority were more likely to use cannabis.
- 6. Reported concerns and stress were academic stress, social media, the mental well-being of peers, climate change, shootings or violence in society, and discrimination.

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4.1%

3.3%

Spring '21