



# Health Literacy and Treatment Utilization Among College Students in San Diego

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## Introduction

- Health literacy is “The degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions”<sup>1</sup>
- Treatment utilization is the amount and inclination of an individual to seek out healthcare services
- Nearly 80 million Americans have limited or below limited levels of health literacy.<sup>2</sup>
- Poor health literacy is associated with adverse health outcomes.<sup>3</sup>
- Individuals with low health literacy are associated with higher healthcare spending, and are more likely to use costly emergency services.<sup>4,5</sup>
- Research on health literacy in college students is limited

## Objective

To assess the relationship between health literacy and treatment utilization behaviors and perceptions among college students in San Diego.

## Methods

- Study Design: Cross Sectional
- Participants: n=72
  - San Diego college students
- Time: Spring Quarter 2020
- Recruitment: Mass email, Facebook
- Data Collection: Online surveys administered
  - Data collection occurred for 3 weeks
- Survey content: self-reported health literacy and self-reported treatment utilization perceptions and behaviors

## Results

Table 1: Demographics of Participants (n=72)

Characteristic	N (%)
<b>Age</b>	
18-20	24 (33.30%)
21-23	44 (61.10%)
24-26	3 (4.20%)
27 or older	1 (1.40%)
<b>Gender</b>	
Female	56 (77.80%)
Male	15 (20.80%)
Nonbinary	1 (1.40%)
<b>Year in College</b>	
1	8 (11.10%)
2	8 (11.10%)
3	21 (29.20%)
4	29 (40.30%)
5+	3 (4.20%)
Graduate	3 (4.20%)
<b>Institution</b>	
UCSD	56 (77.80%)
SDSU	7 (9.70%)
USD	1 (1.40%)
CSUSM	2 (2.80%)
Community College	6 (8.30%)

“What do you think treatment utilization is?”



“In your own words, how do you think the ability to understand health information might affect an individual's ability to seek out treatment for health concerns?”

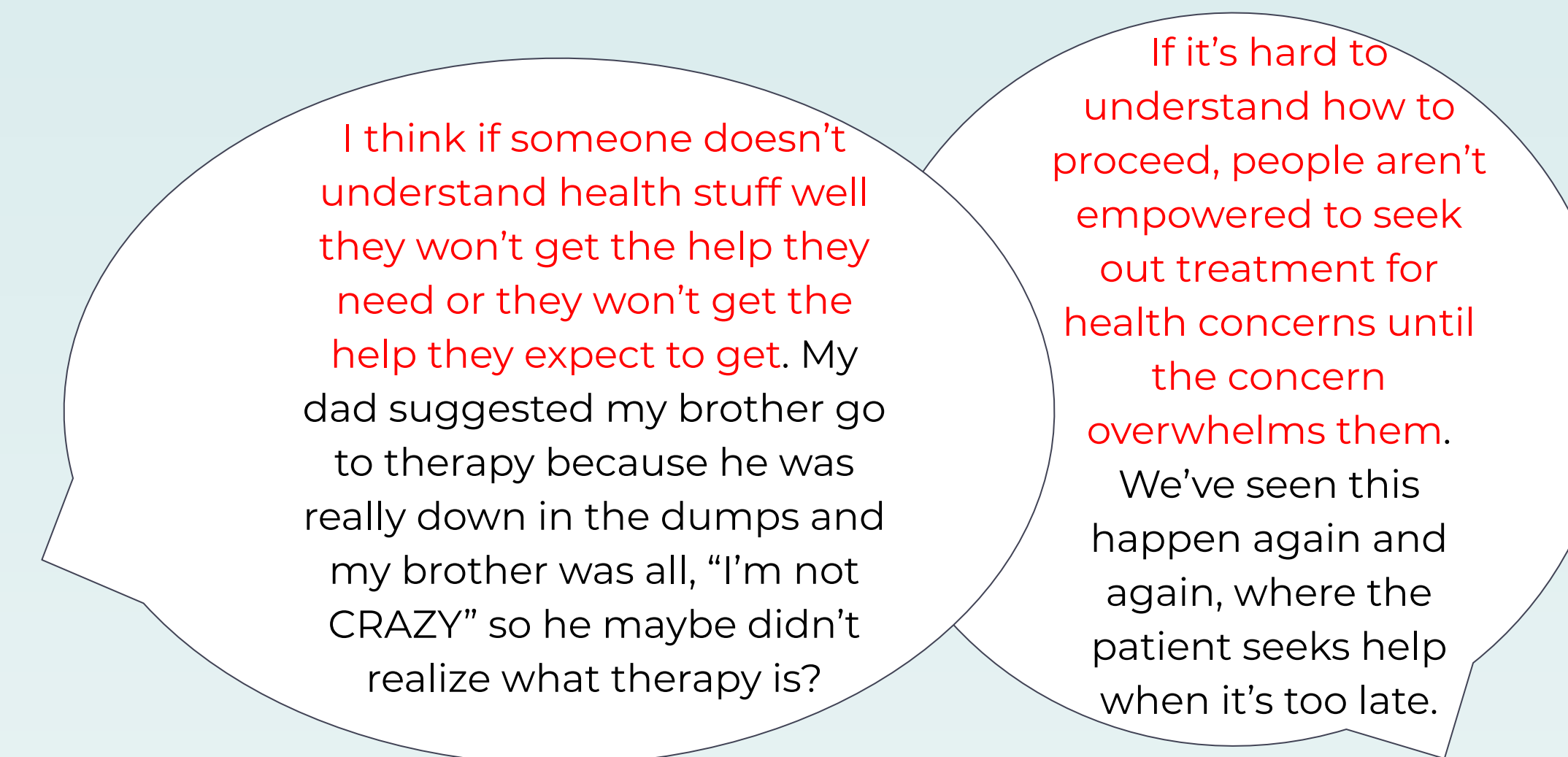


Figure 2: Student's self-reported rating of health information knowledge

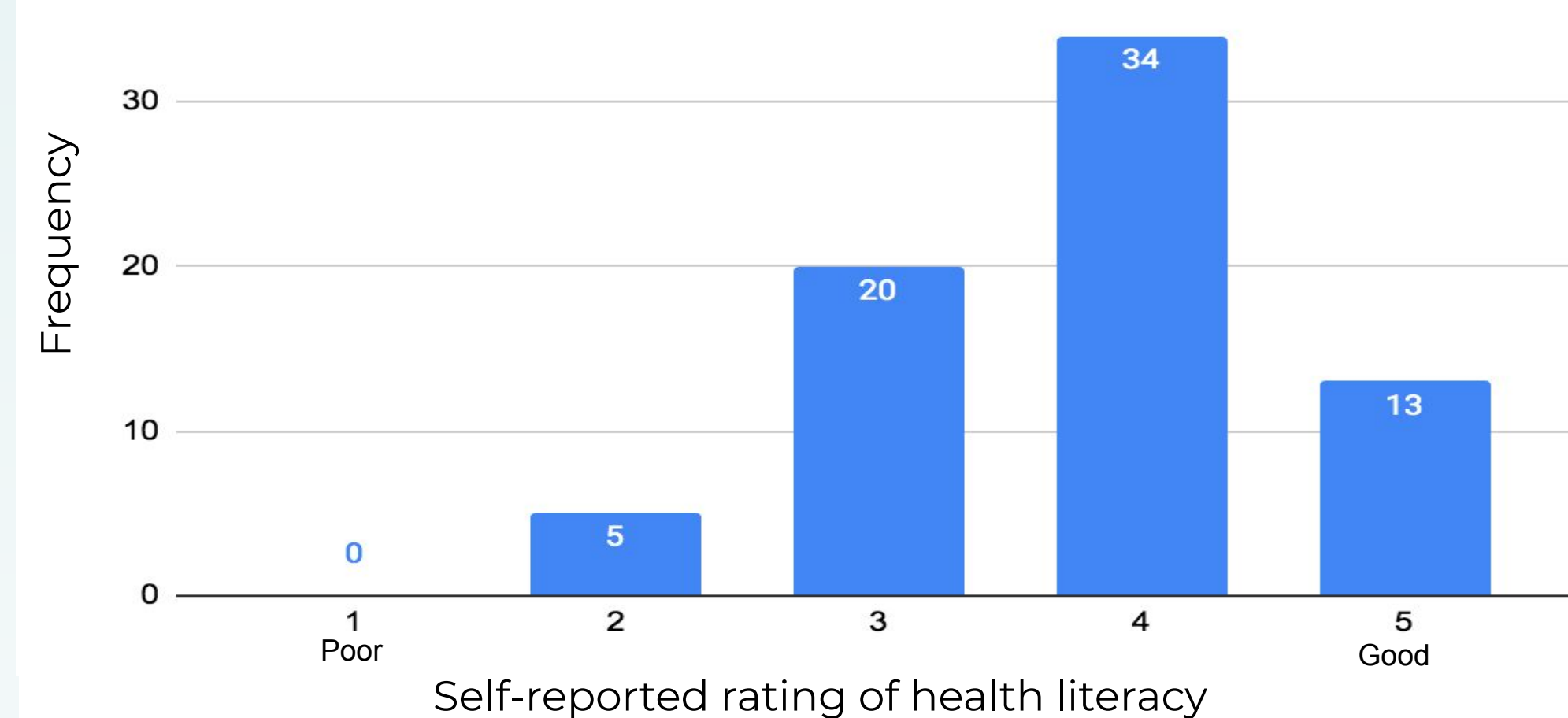
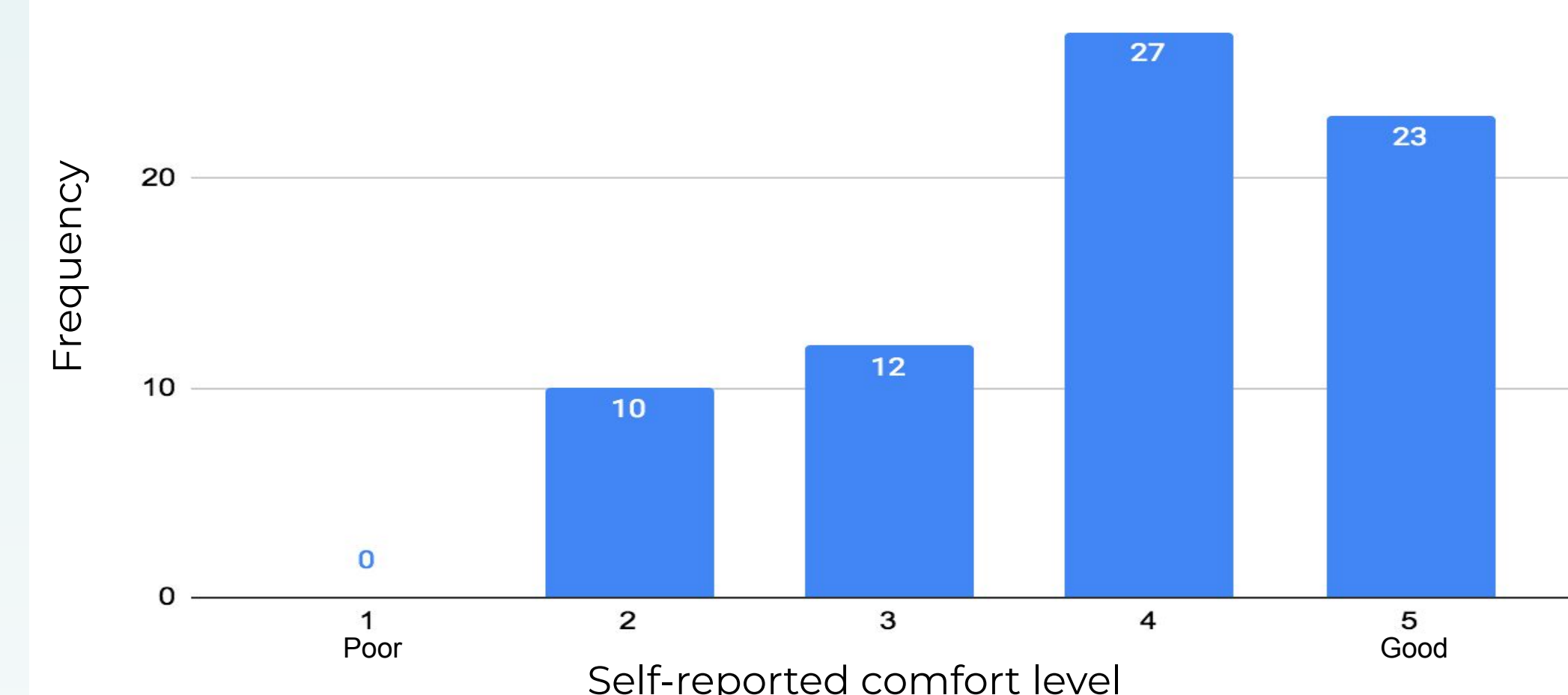


Figure 3: Student's self-reported rating of comfort level with treatment seeking



There was **no association** between self-reported rating of health literacy and comfort seeking treatment (p>0.05).

## Conclusion

- Health literacy was not correlated with treatment utilization
  - Those who rated themselves as more health literate (e.i. higher rating of knowledge) were not more comfortable utilizing treatment than those who rated themselves less health literate
- Even though there was no statistically significant correlation, our qualitative data and the distribution of the data does suggest some kind of relationship between health literacy and treatment utilization.
- Some individuals did not know what treatment utilization is or conflated it with treatment adherence

## Limitations

- Data collection time was short (3 weeks)
- Sample size was small
- Potential biases in study include:
  - All participants are college students, which in itself confers some degree of literacy
  - Survey was sent to Public Health students who are likely a more health literate population

## Policy Implications

Create campus health initiatives to further educate and empower students to utilize their health resources and get regularly screened.

## Acknowledgements

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## References

1. Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq. (2010).
2. Berkman, N. D., Sheridan, S. L., Donahue, K. E., Halpern, D. J., & Crotty, K. (2011, Jul). Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med*, 155(2), 97-107.
3. Volandes, A. E., & Paasche-Orlow, M. K. (2007). Health literacy, health inequality and a just healthcare system. *The American Journal of Bioethics*, 7(11), 5-10.
4. Hardie, N. A., Kyanko, K., Busch, S., Losasso, A. T., & Levin, R. A. (2011). Health literacy and health care spending and utilization in a consumer-driven health plan. *J Health Commun*, 16 Suppl 3, 308-321
5. Cho, Y. I., Lee, S. Y., Arozullah, A. M., & Crittenden, K. S. (2008, Apr). Effects of health literacy on health status and health service utilization amongst the elderly. *Soc Sci Med*, 66(8), 1809-1816