



## Introduction

- Electric scooters are prevalent in college because they are cheap, convenient, and recreational means of transport to commute students throughout the campus.
- The influx of e-scooter use leads to increasing trends of physical injuries and hospital admissions among those aged 18 to 34 years by 185% and 354%, respectively.<sup>1</sup>
- Head injuries are prevalent among electric scooter induced injuries (in 2018, 4,707 of 14,651 e-scooter injuries involved head injuries)<sup>1</sup>
- Helmet use for e-scooter riders is not required by law in California.<sup>2</sup>

## Objectives

1. To identify the barriers to helmet use among UCSD student e-scooter riders
2. To examine injuries associated with e-scooter use

## Methods

- Anonymous online survey created by Google Form
- Exposure: Reasons for helmet non-use among UCSD student e-scooter riders
- Outcome: Injuries from not wearing helmets among UCSD student e-scooter riders
- Survey posted on UCSD Facebook page and UCSD public health department sent an email announcement to encourage current UCSD students to participate
- Identified UCSD students' common barriers for not wearing helmets while riding e-scooters and examined any injuries

## Results

Participants Demographics (N=32)	
<b>UCSD Students</b>	
Undergraduate, 1st-5th year or more	79% (N=25)
Graduate	13% (N=4)
Recent Graduate	6% (N=2)
<b>Non-UCSD Students</b>	
3% (N=1)	
<b>Gender Identity</b>	
Female	68% (N=21)
Male	29% (N=10)
Gender Variant/Non conforming	3% (N= 1)
<b>Age Range</b>	
17-20	23%(N=7)
21-24	61%(N=5)
25-28	16%(N=19)
<b>Live in on-campus during 2019/2020 before Spring 2020</b>	
Yes	23%(N=7)
No	77%(N=24)
<b>Number of times riding an e-scooter prior to Spring 2020</b>	
None	58%(N=18)
1 to 2 times	19%(N=6)
3 to 5 times	10%(N=3)
More than 10 times	13%(N=4)

Table 1: Participants Demographics

Figure 1: The reasons why UCSD e-scooter users not wearing helmets during the rides (N=13)

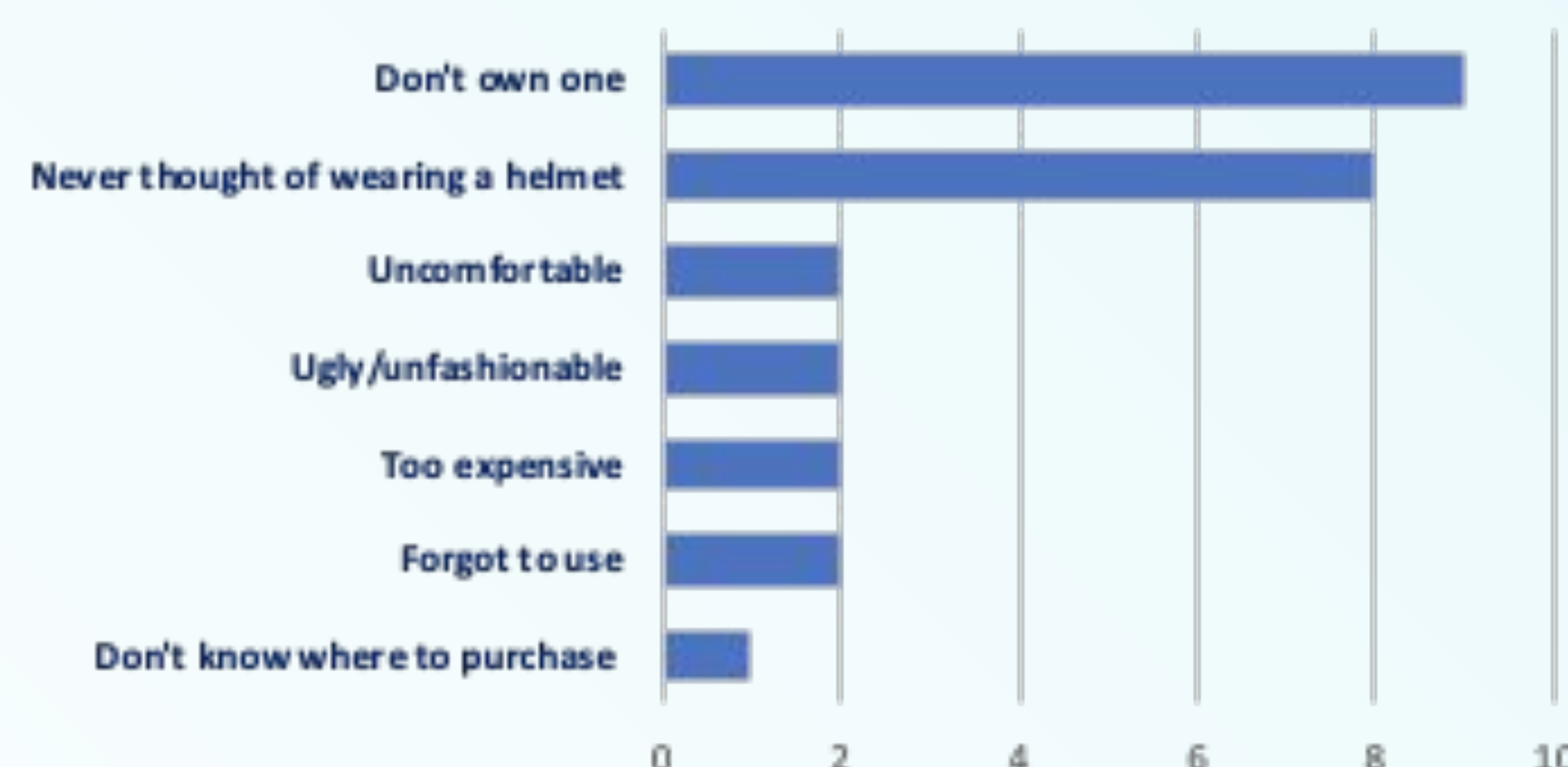


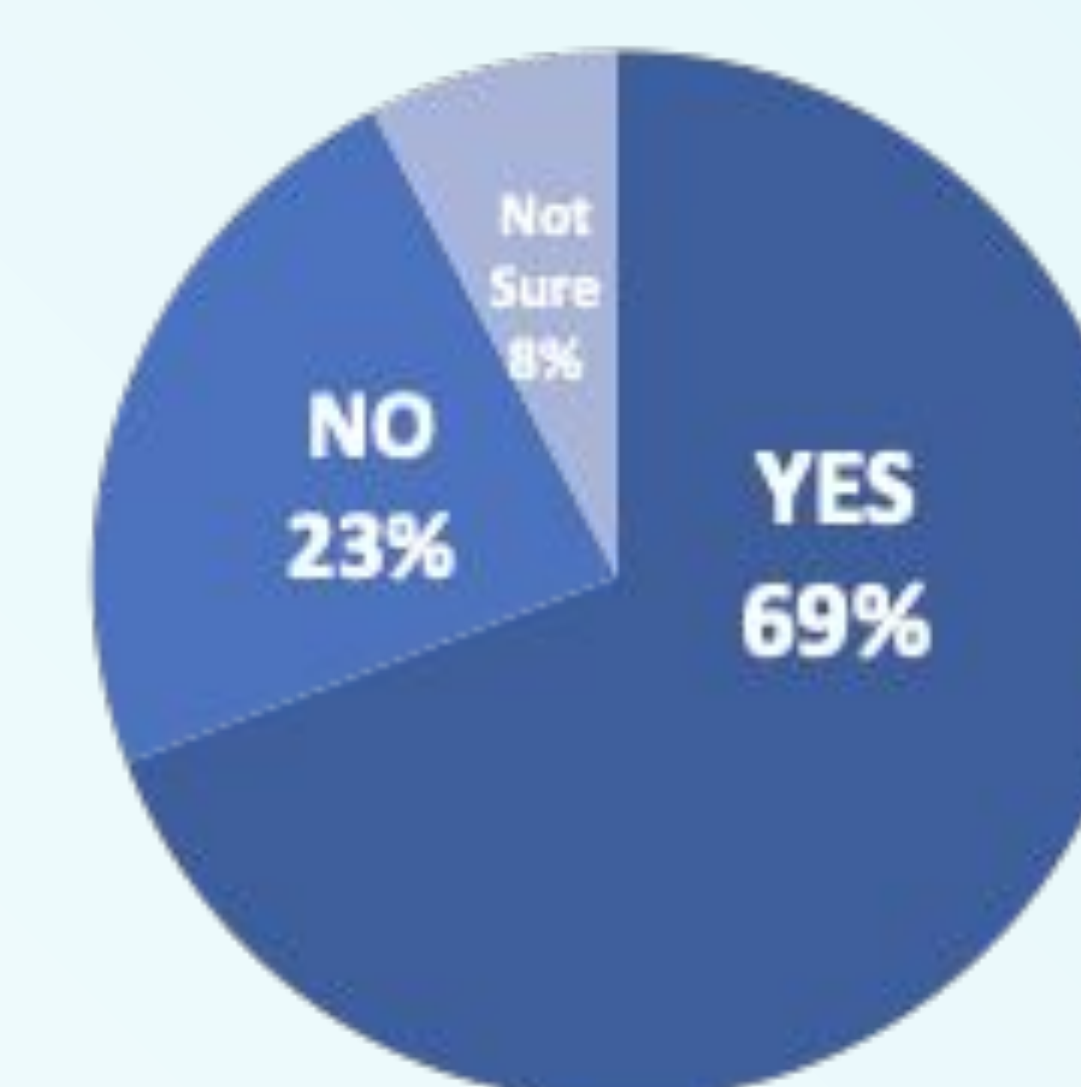
Figure 2: The times of participants wearing helmets during the last 10 times of ride (N=13)



Figure 3: Whether participants have been injured from riding e-scooters on campus (N=13)



Figure 4: The decisions on future helmets use of e-scooter riders while using e-scooters next time (N=13)



## Conclusions

- Improving safety awareness can increase the likelihood of UCSD students wearing a helmet
- Arms/hands/palms are the most vulnerable areas to e-scooter injuries.

## Policy Implications

- Policies and regulations on e-scooter use are needed to include enforcement on helmet use, speed limit, and mandatory safety training courses.
- UCSD bookstore selling helmets, safety gloves, and elbow pads at affordable prices
- College announcements for helmet use when riding an e-scooter or e-bike around the campus at the beginning of each quarter

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## References

1. Namiri, N. K. (2020, April 1). Electric Scooter Injuries and Hospital Admissions in the United States, 2014-2018. Retrieved from <https://jamanetwork.com/journals/jamasurgery/article-abstract/2758159>
2. Chiland, Elijah. "California Removes Helmet Requirement for Electric Scooters." *Curbed LA*, Curbed LA, 21 Sept. 2018, [la.curbed.com/2018/9/21/17884220/bird-lime-scooters-rules-helmets-california](http://la.curbed.com/2018/9/21/17884220/bird-lime-scooters-rules-helmets-california).