

The Tooth About UCSD:

Exploring Dental Perceptions and Oral Hygiene Behaviors Among UCSD Students

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Background

- Poor oral health linked to diabetes, cardiovascular disease, and Alzheimer's disease¹⁻²
- Half of young adults have untreated dental caries³
 - ~30% of them skip dental visits because of the cost
- Why College Students?
 - More likely to experience stress and financial difficulties
 - 25% of undergraduate students have not had an annual checkup with their dentist⁵
 - Those without insurance more likely to avoid dental care⁶
- A good oral hygiene routine and consistency with dental visits are key in maintaining dental health
- A prior study surveyed why students have poor dental care and found it was mostly due to costs and lack of time.⁷
 - Our's also examines how dental insurance plays a role

Objectives

- To understand the knowledge, attitudes, and perceptions (KAP) undergraduate college students have towards dentistry
- Examine how KAP affect the **oral hygiene behaviors**

Methods

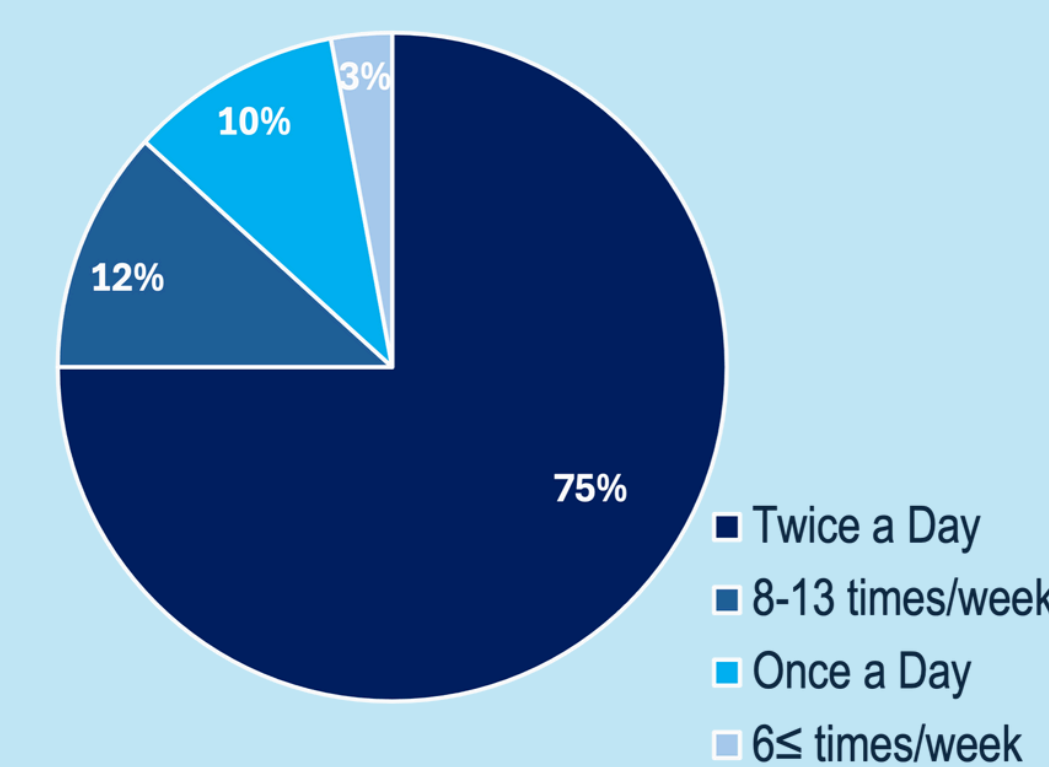
- Cross sectional study
- Categorical independent and dependent variables
 - Exposure: Dental perceptions, knowledge, and access
 - Outcome: Oral hygiene behavior and dental care
- Primary data collected at UCSD using an online Google Form survey throughout April to May of 2025
- Convenience sampling: survey distributed through social media and UCSD affiliated organizations
- Sample: from undergraduate students at UCSD (N = 68)
- Demographics collected and analyzed using frequency statistics (age, race/ethnicity, academic standing, transfer students, type of insurance)
- Statistical analysis with SPSS v.29: Chi-squared test
 - Associations between exposure and outcome

Results

Table 1. Demographics of Participants (N = 68)

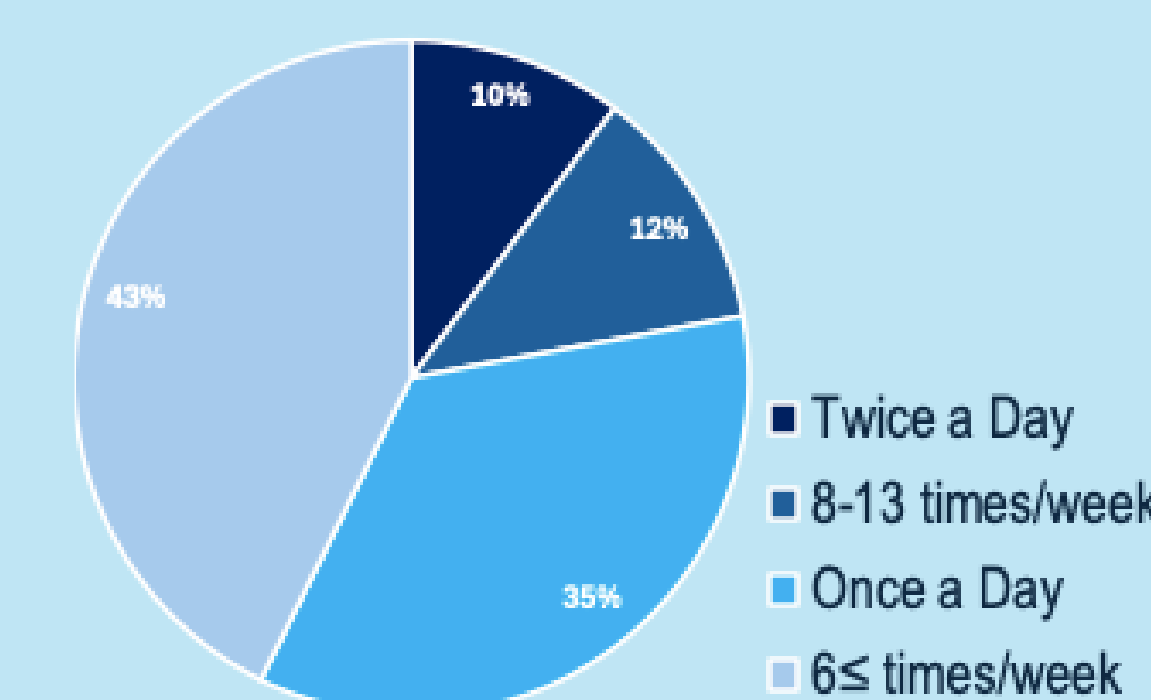
Characteristic	n (%)
Age Range:	
18-20 years	28 (54.4)
21-23 years	37 (41.2)
24-26 years	2 (2.9)
27-29 years	1 (1.9)
Race/Ethnicity:	
White	18 (26.5)
Black or African American	3 (4.4)
American Indian or Alaska Native	3 (4.4)
Asian	21 (30.9)
Hispanic or Latino	21 (30.9)
Middle Eastern or North African	13 (19.1)
Academic Standing:	
Freshmen	9 (13.2)
Sophomore	9 (13.2)
Junior	14 (20.6)
Senior	36 (52.9)
Transfer Student	
Yes	17 (25)
No	51 (75)
Type of Insurance	
HMO	8 (11.8)
PPO	16 (23.8)
Both HMO and PPO	3 (4.4)
No Dental Insurance	2 (2.9)
Unsure of Coverage	39 (57.4)

Figure 1. Self-Reported Tooth Brushing Frequency



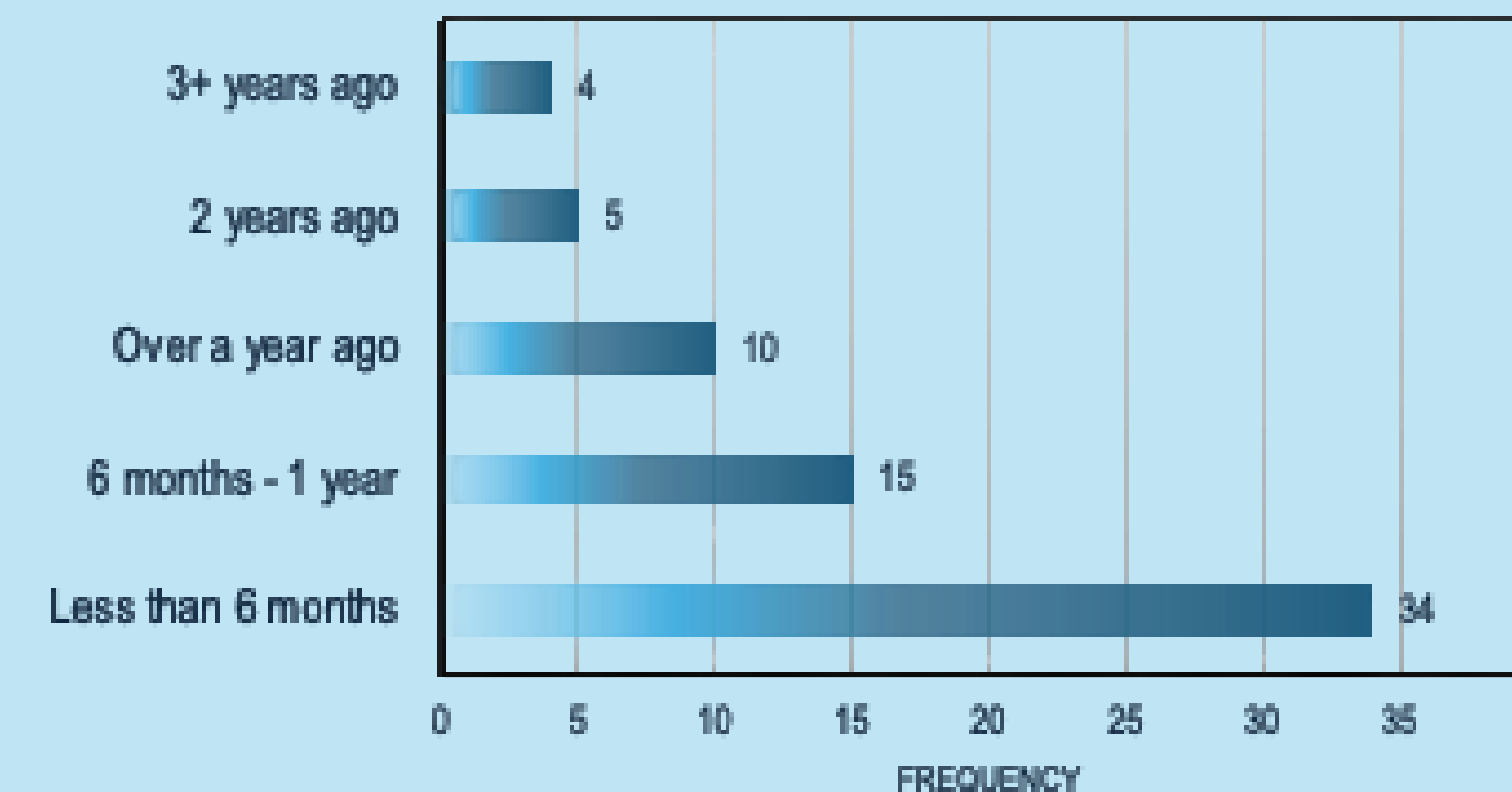
In Fig 1, Tooth brushing habits of UCSD undergraduates shown through percentages of participants per frequency

Figure 2. Self-Reported Flossing Frequency



In Fig 2, Relative distribution of flossing habits among UCSD undergraduates. Majority of participants selected less than 6 times a week

Figure 3. Last Dentist Visit Reported



In Fig 3, Depiction of the time elapsed since UCSD undergraduates have been to the dentist. Ranges from less than 6 months to more than 3 years ago

Table 2. Associations Between Dental Knowledge and Dental Hygiene Practices

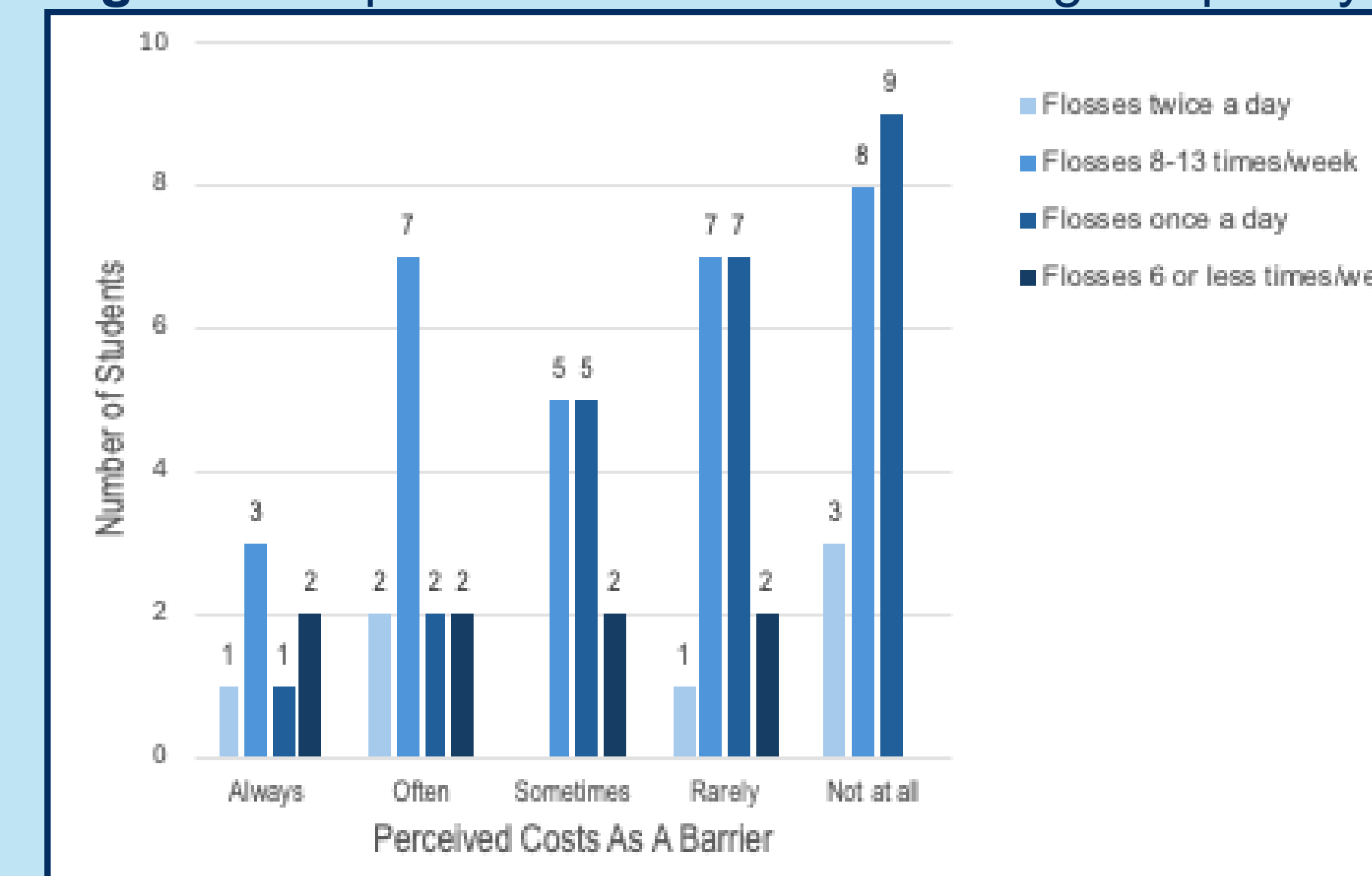
Relationships	Chi-square (χ ²)	p-value
Relationship 1: Dental insurance coverage knowledge (INSCOV) vs floss frequency (FLOSS)	14.756	0.022
Relationship 2: Dental hygiene knowledge (KNOWL) vs treatment proactiveness (COMPL)	25.184	0.014
Relationship 3: Hygiene advice sources (SEEKDC) vs teeth brushing frequency (BRUSH)	128.340	0.001
Relationship 4: Hygiene advice sources (SEEKDC) vs treatment proactiveness (COMPL)	151.129	0.008

Based on Chi Square analysis, the relationship between measured dental knowledge and oral hygiene knowledge is statistically significant

Supplemental Findings: Highlighting the Relationship between Dental Perceptions and Oral Hygiene Behaviors

- 50% (n = 34) of students reported their last dental visit was over 6 months ago; 62% (21 of 34) of these students stated that they were never afraid of going to the dentist
- 59% (n = 39) of students reported that dental care was too costly to maintain; 44% (17 of 39) of these students floss less than 6 times a week
- Among students who reported that their last dental visit was 3+ years ago (n = 4), all stated that dental care was too costly to maintain

Figure 4. Impact Access has on Flossing Frequency



Although there is no statistically significant association between flossing frequency and dental costs as a barrier (p = 0.549), those who have no concerns affording dental care also flosses at least 1-2 times a day

Conclusions

- Knowledge** showed to have strongest impact on oral hygiene
- Over half** did not know their insurance type, indicating potential gaps in knowledge regarding insurance and access
- Majority** brush twice a day, but **most** did not floss daily, and **half** have not visited the dentist in 6 months
 - Highlights how college students can maintain some basic oral hygiene but fall short in flossing and consistent visits
- Over 3/4** who reported they have not been diagnosed with dental treatment also stated they were somewhat knowledgeable on oral hygiene practices
 - Students who are **knowledgeable** on or aware of their dental insurance tend to maintain better oral hygiene behaviors
- However**, results on perceptions/attitudes **did not show to directly affect** behavior like tooth brushing
 - The tooth brushing habit may be well established in early childhood and less influenced by current opinion or feelings
- A prior study in Washington State showed university students with insurance used preventive dental care services more often⁷
 - The prior study, aligns with the presented data; Students who understood their insurance coverage practiced better preventive oral care
- Based on the study's findings, **more dental research** needs to be conducted on young adult populations
 - More research being done on their behaviors and KAPs toward dentistry can help reduce the prevalence of oral disease often found in adult to elderly populations

Policy Implications

- UC SHIP** and the dental benefits can be promoted through promotional graphics or infographics via circulation to increase awareness and visually highlight these benefits.
- Student Health Services** should work together with the UCSD Pre-Dental Society and local dental professionals to organize workshops or pop-up events to teach proper oral hygiene practices.
 - Health related workshops or pop-up events should provide free dental hygiene kits to students who want to establish regular oral hygiene practices.

References

