



Is Mask-ne Real?

Jamie Lu, Cindy Wang, Katie Liu



1.

Background

What even is mask-ne and why do we care?

Mask-ne

- ◎ Mask-related acne
 - Nose, cheek, chin, neck areas
- ◎ Acne mechanica
- ◎ Creates warm, humid environment
- ◎ Microbial imbalance

In Hubei, China from January to February 2020, from a sample of 700 first-line workers*

97.0%

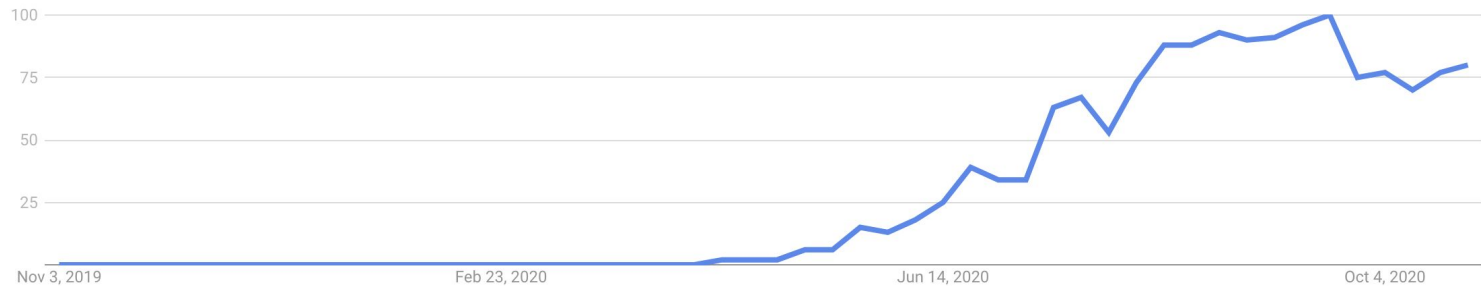
Experienced skin damage
from enhanced
infection-prevention
measures

Commonly Affected Areas

- Nasal bridge
- Cheek
- Forehead
- Hands

*Journal of the American Academy of Dermatology

And keyword searches for **maskne** on Google increased*



*Data Source: Google Trends

A decorative network diagram in the top-left corner, consisting of interconnected nodes and lines, rendered in a light blue and grey color scheme.

2.

Our Questions & Methodology



Questions

How frequently are Harvard students wearing masks?
What types of masks?

Have students experienced changes in their skin during the pandemic? Are they due to the pandemic?

Are there correlations between mask usage frequency, habits, and/or material with worsening skin condition?

Methodology

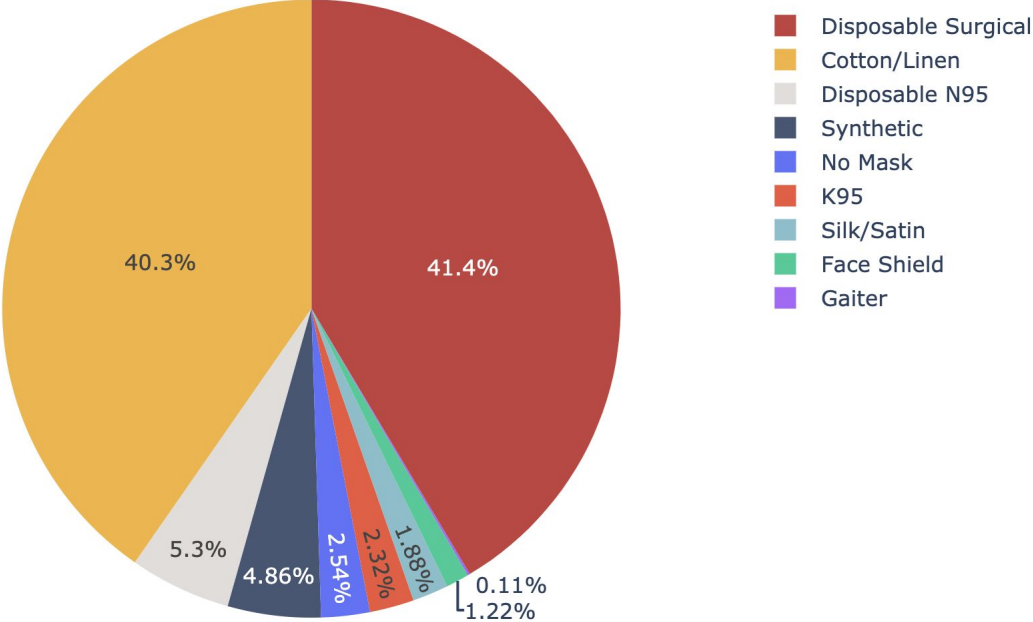
- ◎ Survey Harvard undergraduate population
 - Mask usage frequency
 - Mask types
 - Changes in skin condition during pandemic times
 - Attributing factors
- ◎ Google Trends
- ◎ Python pandas and numpy to analyze/visualize

A decorative network diagram in the top-left corner, consisting of various sized circles (nodes) connected by thin lines (edges). Some nodes are solid grey, while others are hollow with a grey outline. The network is dense and irregular.

3. Findings



Types of Masks Used by Harvard Students



A background pattern of interconnected nodes and lines, resembling a network or molecular structure, in shades of light blue and grey.

54.7%

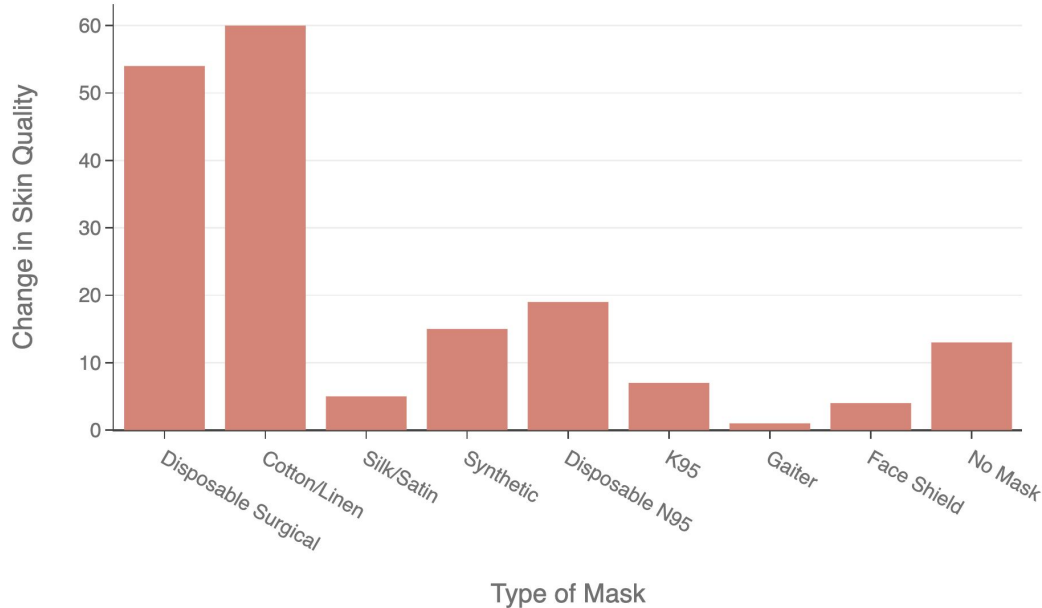
Experienced changes in their skin over the span of
the pandemic

59.1%

Attribute changes to their skin condition to masks

Mask Types

Change in Skin vs. Type of Mask Worn



Takeaways:

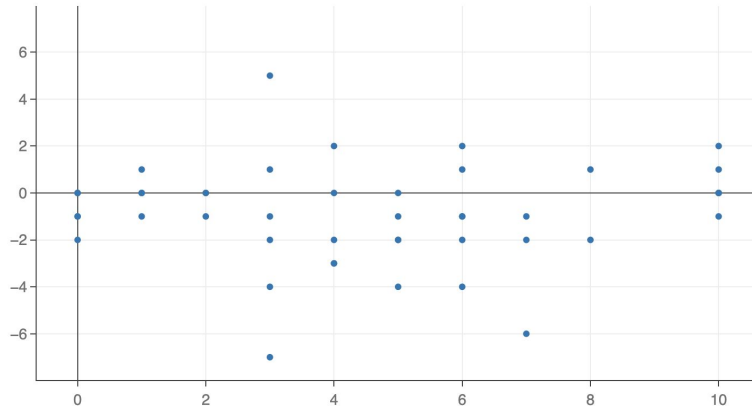
- ⊙ Little conclusive findings

Limitations:

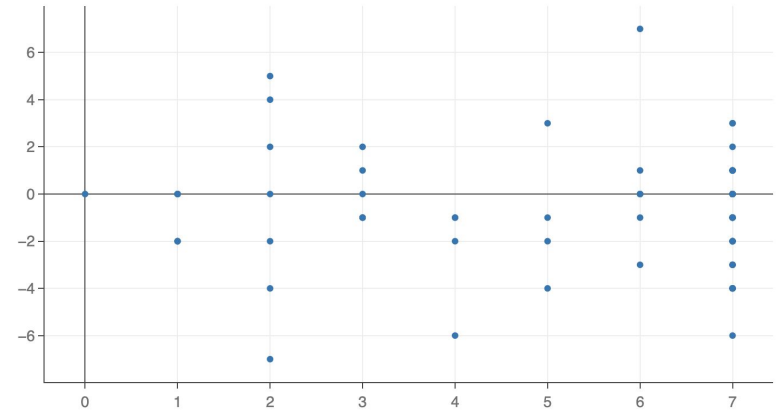
- ⊙ Too few examples of masks other than disposable and cotton/linen

Mask Usage/Habits

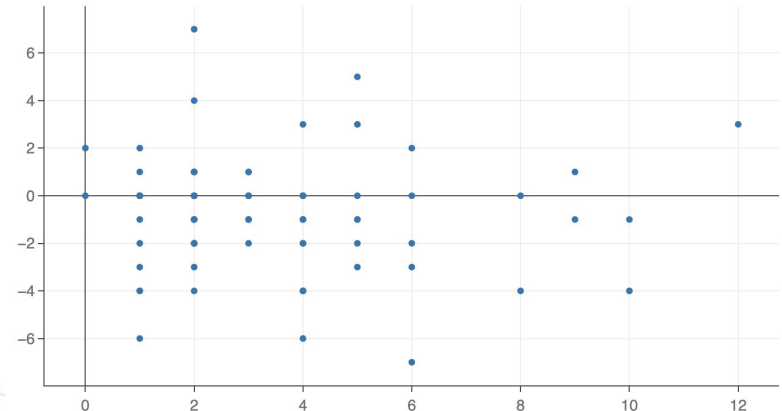
Frequency of Washing Masks vs Change in Skin Condition Through COVID-19



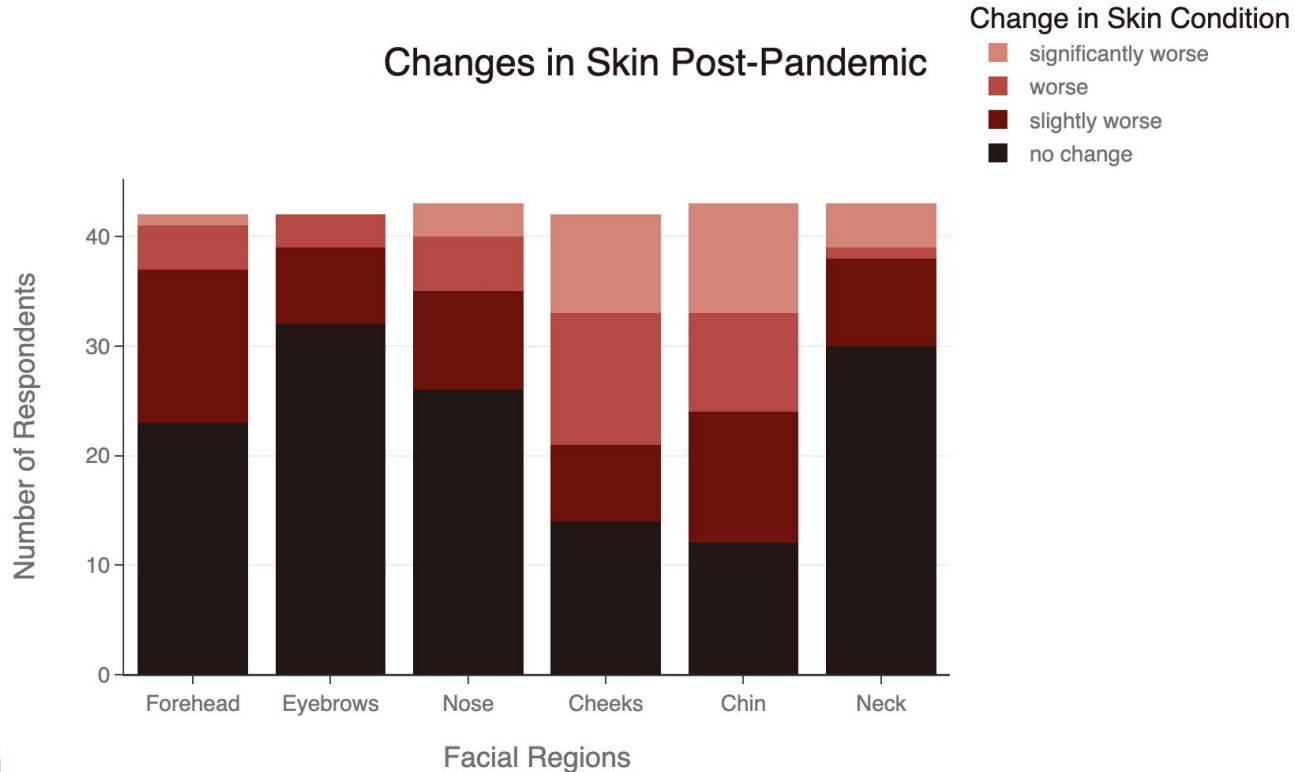
Mask Usage (d/wk) vs Change in Skin Condition



Mask Usage (h/d) vs Change in Skin Condition



Facial Skin Condition Change Areas



A decorative network diagram in the top-left corner, consisting of various sized nodes (some solid grey, some hollow white) connected by thin grey lines, forming a complex web-like structure.

4. Conclusions

Conclusions

- ◎ Increased acne in mask regions:
 - Cheek, chin, nose area
- ◎ Type of mask and frequency of usage has limited observed effect

Limitations

- ◎ Dataset was limited
 - Only 81 responses from survey
- ◎ Response formats not best suited to quantitative analysis
- ◎ Confounding variables

A decorative network diagram in the top-left corner, consisting of various sized nodes (some solid grey, some hollow white) connected by thin grey lines, forming a complex web structure.

5.

Next steps

Ways to extend/improve

Quantitative

- ◎ Relaunch survey with better-designed questions

Analytical

- ◎ Analyze data for possible correlations with actual statistical methods

Future Directions and Aspirations

- ◎ Create model to analyze differences in skin condition between pictures



References

Coronavirus: Tips to Avoid “Maskne” Skin Irritation.

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-tips-to-avoid-maskne-skin-irritation>. Accessed 1 Nov. 2020.

Lan, Jiajia, et al. “Skin Damage among Health Care Workers Managing Coronavirus Disease-2019.”

Journal of the American Academy of Dermatology, vol. 82, no. 5, May 2020, pp. 1215–16.
www.jaad.org, doi:10.1016/j.jaad.2020.03.014.

Rubin, Courtney. “Maskne Is the New Acne, and Here’s What Is Causing It.” The New York Times, 17

June 2020. NYTimes.com, <https://www.nytimes.com/article/maskne-acne.html>.

“The Struggle with Maskne Is Very Real.” Health Essentials from Cleveland Clinic, 13 July 2020,

<https://health.clevelandclinic.org/the-struggle-with-maskne-is-very-real/>.



A decorative network diagram in the top-left corner, consisting of interconnected nodes and lines. Some nodes are highlighted with orange circles, and some are solid orange dots.

Thank you :)

A decorative network diagram in the bottom-right corner, similar to the one in the top-left, with interconnected nodes and lines, some highlighted with orange circles and some as solid orange dots.