



Staff at Increased Risk for Computer Vision Syndrome compared to Faculty at an Osteopathic Medical School with an Electronic Content Delivery Model

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Background

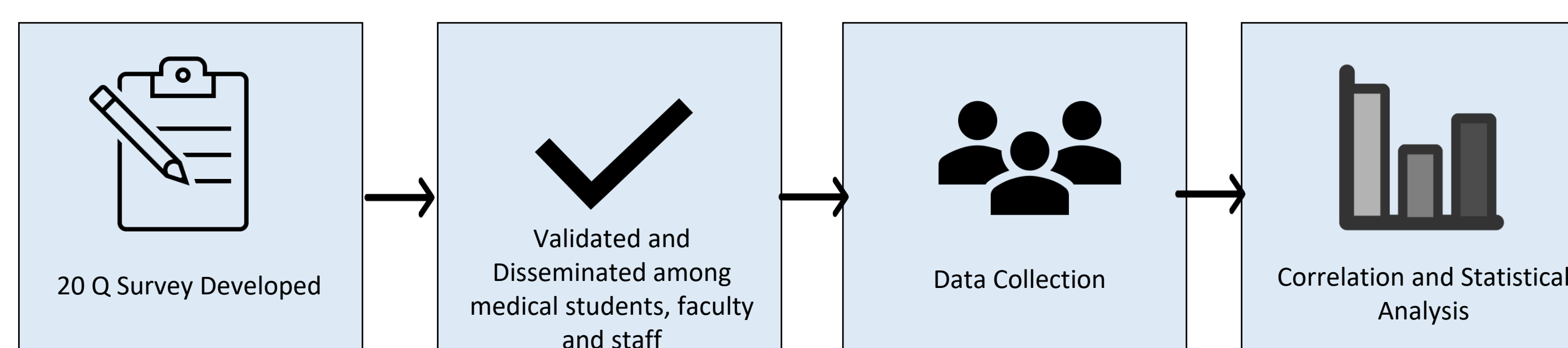
Computer Vision Syndrome (CVS) is an eye-related group of disorders that are the result of prolonged digital device screen usage. Following the COVID-19 pandemic, online and virtual work has become much more popular among students, faculty and staff at various institutions. Noorda-COM is a new medical school, whose curriculum consists of a series of faculty pre-recorded, short video lectures that the students engage with using digital devices. Understanding the prevalence and impact that both the evolving virtual trends and a digital device-centered model have on the Noorda-COM community can greatly aid in future outreach efforts and prevention strategies for both current and future cohorts.

Purpose

The purpose of this study is to understand the overall prevalence of Computer Vision Syndrome (CVS) among students, faculty and staff at Noorda-COM as well as to identify populations at higher risk of CVS. In addition, we aim to promote awareness of CVS.

Methods

- An online survey was developed, which comprised of 20 questions related to eye conditions, use of digital formats, computer vision syndrome, an open-end comment section, and demographics section.
- The survey was disseminated to faculty, staff hired during or before spring of 2023, and students from the class of 2025 and 2026.
- Results were compiled and positive CVS participants were categorized based on the presence of 6 or more CVS-related symptoms.
- Correlations were made and significance was calculated using a chi-squared test.



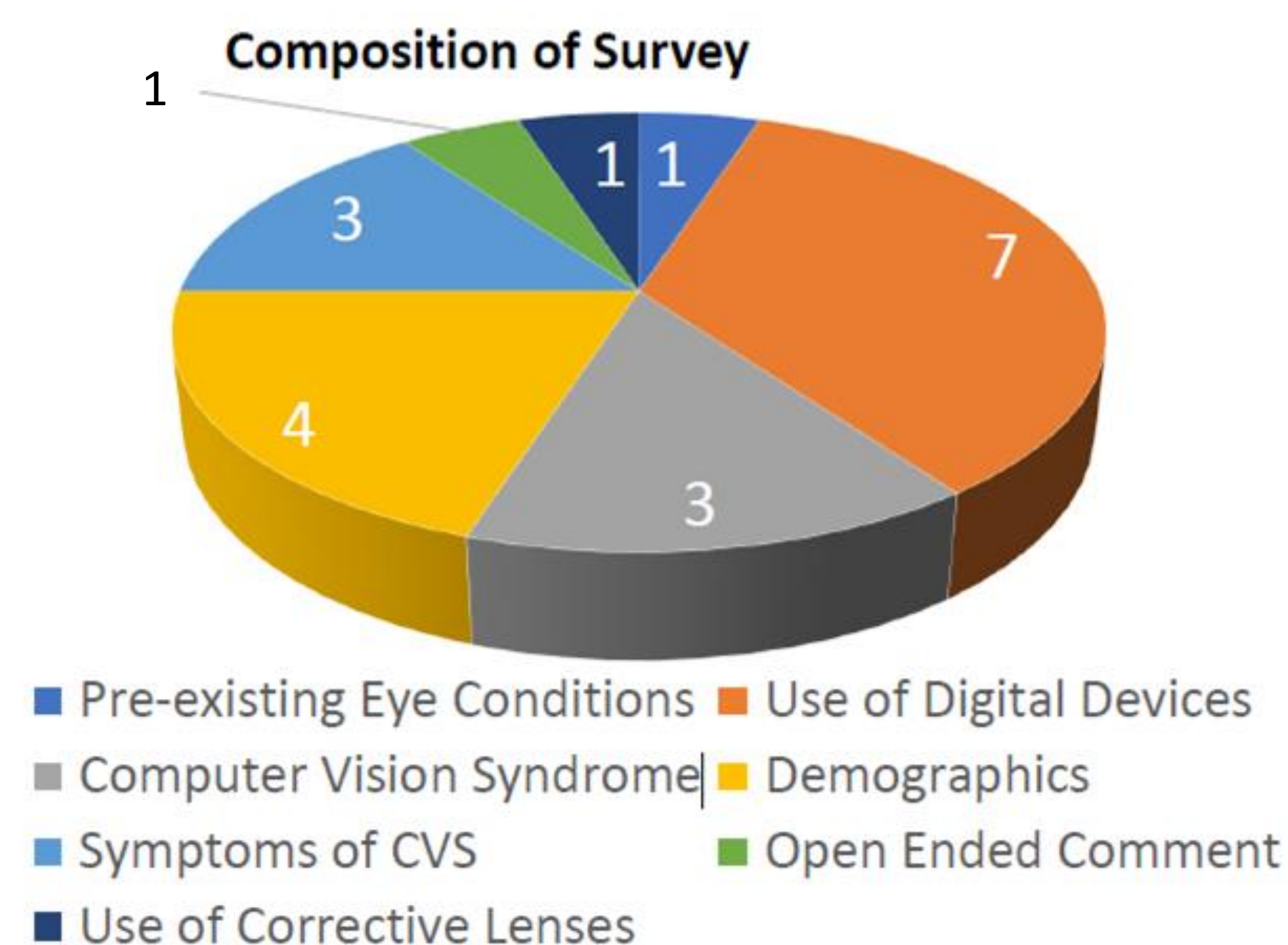
Is Your Vision 20-20-20?

- Every 20 minutes
- Look at something 20 feet away
- Hold your gaze for 20 seconds
- Remember to blink!

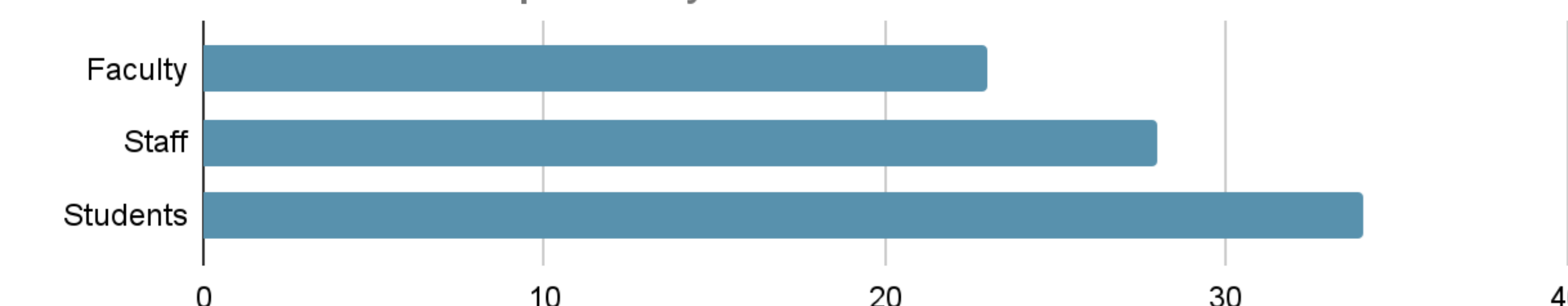
Do You Experience Computer Vision Syndrome?



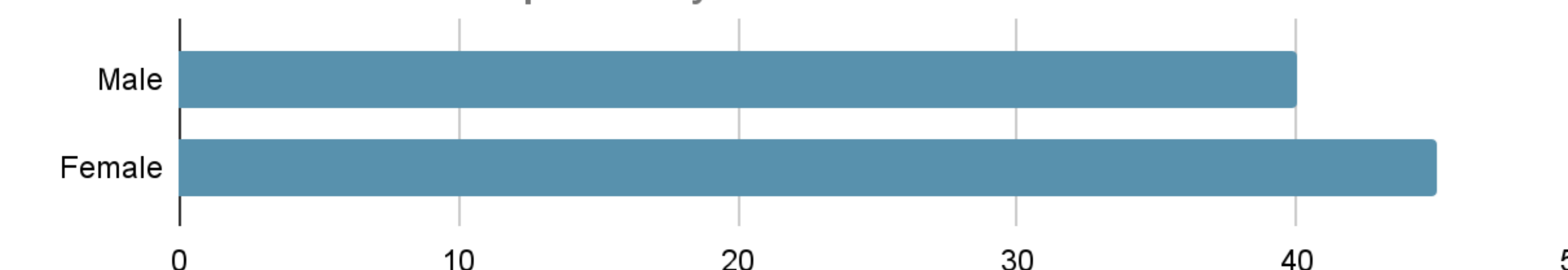
Results (Cont.):



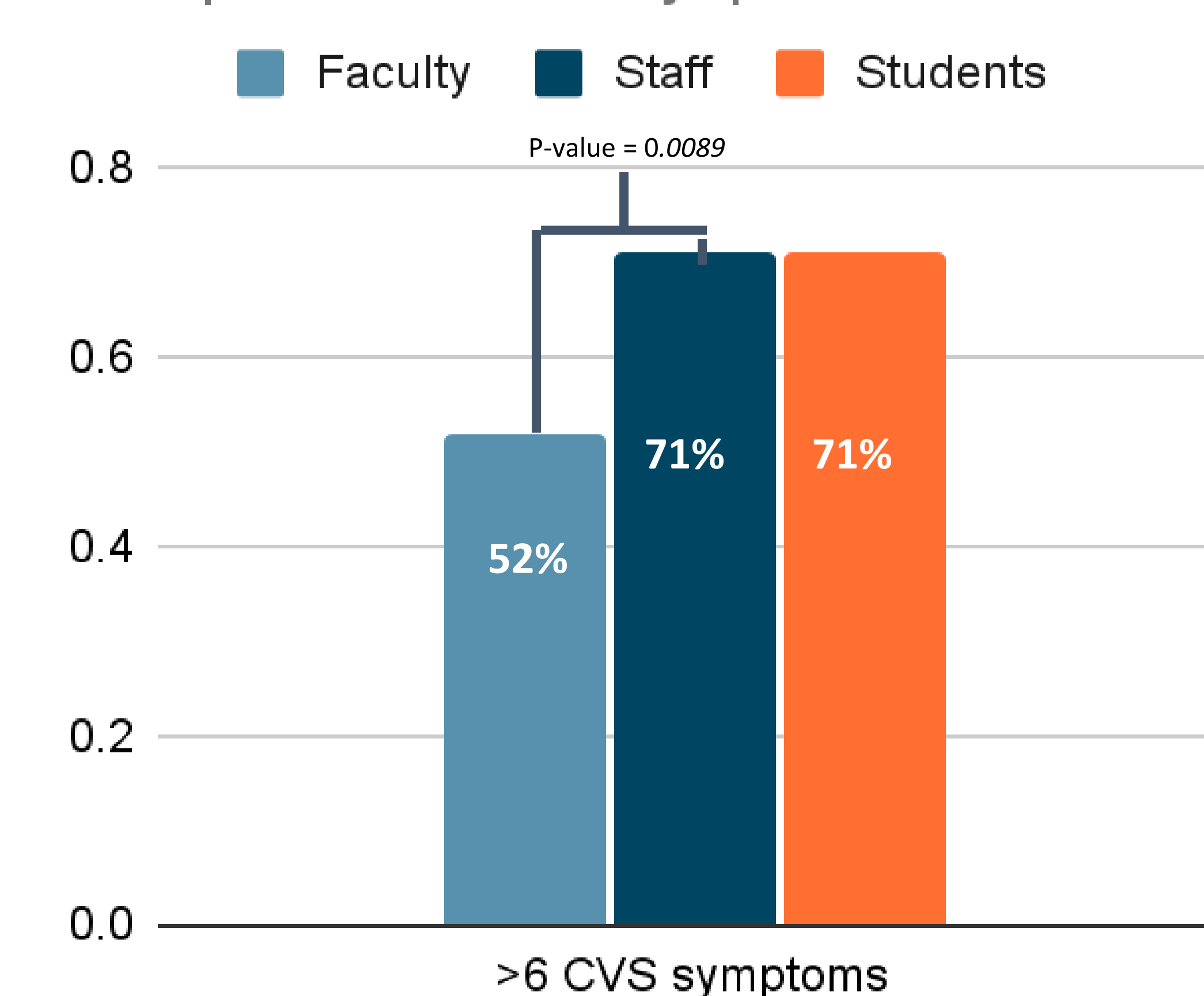
Distribution of Participants by Role



Distribution of Participants by Gender



Participants with >6 CVS Symptoms



* Denotes modifications

Fig 1. Break down of the total number of survey questions (n=20) by category after modification following beta-tester experiences.

Sample survey questions

- Q5: Do you have a preexisting eye condition (i.e. cataracts, glaucoma, presbyopia near-sighted*, far-sighted*, etc.) that is affecting your eye health?
- Q6: What type of corrective lenses do you most commonly wear while studying/working on your computer? (select all that apply)
- Q7: How knowledgeable are you about Computer Vision Syndrome (CVS) or digital eye strain?
- Q17: How often do you take breaks (Scheduled or Unscheduled)* from your computer screen?
- Q20: How would you rate the duration of your symptoms overall?



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