Knowledge and Practices of Computer-Based Office Workers in Preventing Screen Time-Induced Eye Disorders in Galle District, Sri Lanka

Introduction

Office workers who use screens for extended periods of time are more likely to develop Computer Vision Syndrome (CVS) and Digital Eye Strain (DES), which can lead to blurred vision, dry eyes, and weariness. Ergonomic modifications and other preventive measures are still neglected despite knowledge .

This study evaluates knowledge and practices among computer-based workers in Galle, Sri Lanka, to improve workplace eye health strategies.

Objectives

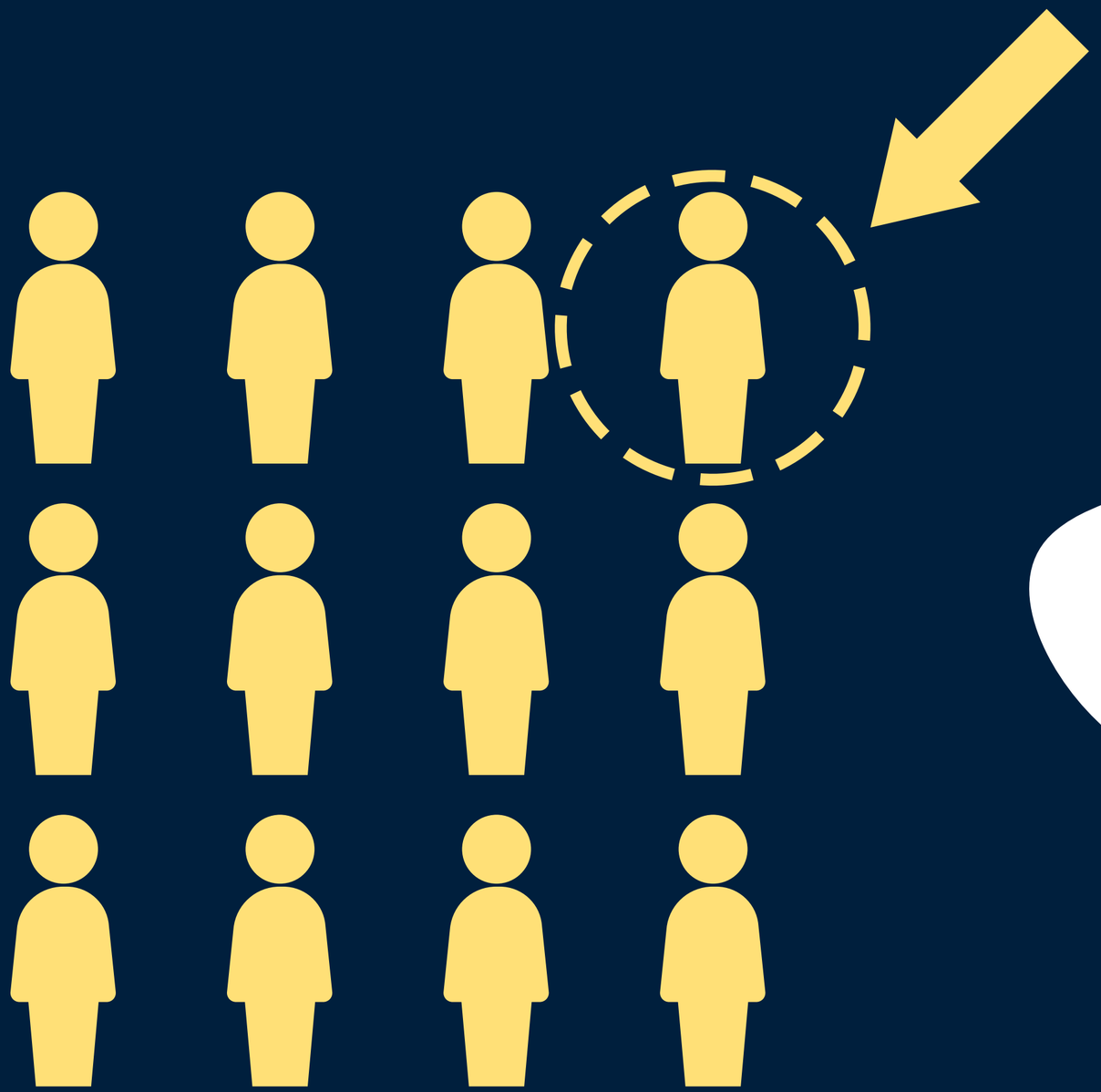
1. To assess the level of knowledge among office workers about screen time-induced eye disorders.

2. To describe the common practices among computer-based office workers in preventing screen time-induced eye disorders among computer based office workers

3. To describe the association between the level of knowledge & preventive practices among computer based office workers in preventing screen time-induced eye disorders among computer based office workers

Data Description

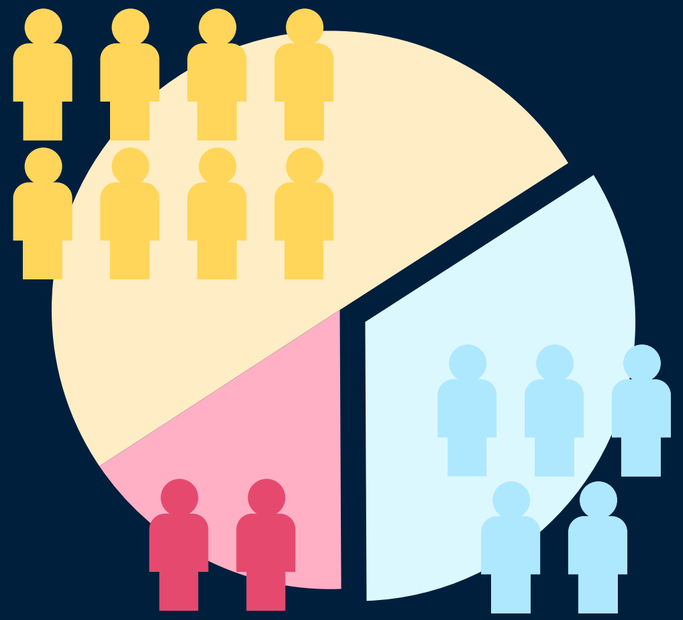
Data was collected via self-administered questionnaires from **225 office workers** in Galle, Sri Lanka. The survey covered demographics, knowledge of digital eye strain, preventive practices, symptoms, and vision care. Responses were analyzed to evaluate awareness, behavior patterns, and knowledge-practice gaps regarding screen-related eye health.
shorten more



The original study design targeted a sample of 225 computer-based office workers in Galle, Sri Lanka. However, the client-provided dataset contained complete responses from only 80 participants, which formed the basis for our statistical analysis

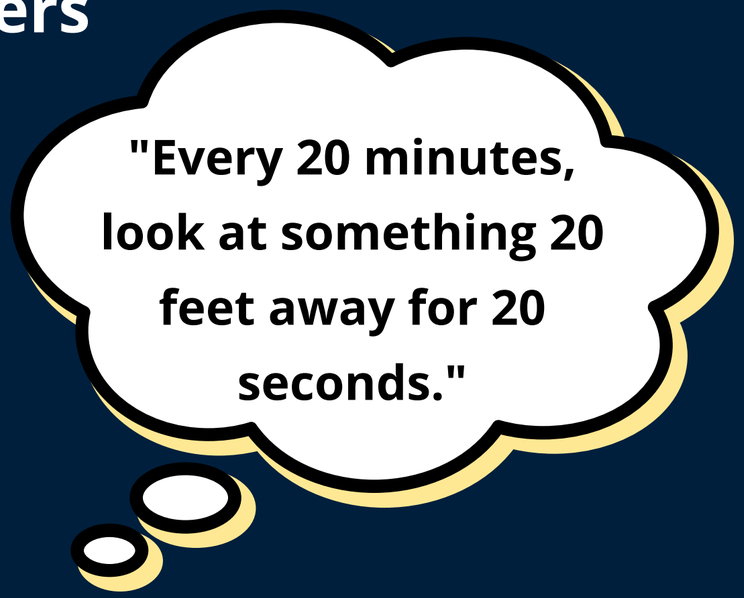
Demographic variables

1. Age
2. Gender
3. Ethnicity
4. Religion
5. Marital Status
6. Education Level
7. Job Role
8. Job experience



Variables under awareness of screen induced eye disorder

1. Awareness of screen time-induced eye disorders
2. Awareness of symptoms of eye disorders
3. Knowledge of recommended screen break duration
4. Awareness of the 20-20-20 rule
5. Knowledge of correct screen-to-eye distance



To better understand employees' overall awareness, we created a composite Knowledge Score (0-5 scale) combining above five variables.

Variables under preventing screen time-induced eye disorders

1. Taking regular screen breaks
3. Screen time without breaks
4. Adjust brightness/contrast
5. Maintain proper posture
6. Conscious blinking
7. Follow 20-20-20 rule
8. Clean screen to reduce glare
9. Position screen to avoid glare
10. Adjust sitting posture

To comprehensively assess preventive behaviors, we developed a Preventive Practices Score (0–9 scale)

Proposed Statistical Analysis

1 **To assess the level of knowledge among office workers about screen time-induced eye disorders.**

- **A scoring system will evaluate workers' knowledge of screen-induced eye disorders using questionnaire responses.**
- **Total scores will categorize knowledge as Low (0-2), Moderate (3-4), or High (5-6).**
- **Descriptive statistics and chi-square tests will analyze distributions and demographic associations**

Proposed Statistical Analysis

2 **To describe the common practices among computer based office workers in preventing screen time-induced eye disorders**

- **A scoring system will assess workers' preventive practices through questionnaire responses on screen breaks, ergonomic adjustments, and protective measures.**
- **Total scores will categorize as Poor (0-2), Fair (3-4), or Good (5-6)**
- **Descriptive statistics and chi-square tests will analyze distributions and demographic associations**

Proposed Statistical Analysis

3 **To describe the association between the level of knowledge & preventive practices.**

- **To examine the relationship between workers' knowledge and preventive practices, the study will employ correlation analysis to compare knowledge scores (from Objective 1) with practice scores (from Objective 2)**