

# "Blinking Behaviour and Ocular Discomfort: Comparing Hard Copy and Soft Copy Reading Among Students"

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## Abstract:

**Purpose:** The purpose of the study is to compare the blinking rate between reading from hard copy and soft copy materials among students of a private University.

**Method:** A prospective cross-sectional study was conducted among 19–24-year-old students with normal vision and baseline blink rates of 8–21/min, excluding those with ocular pathology or abnormal blinking. Participants randomly read either hard or soft copy material for 15–20 minutes, with blink rates recorded via mobile camera. Pre- and post-reading questionnaires assessed reading habits and ocular symptoms.

**Results:** A total of 27 participants were included in the pilot study. The findings revealed no significant difference in blink rates between the two reading conditions. The mean blink rates recorded were  $12.048 \pm 5.8120$  blinks per minute for hard copy reading and  $12.181 \pm 5.5312$  blinks per minute for soft copy reading. However, when analyzing the relationship between blink rate and ocular symptoms, a significant ( $p < 0.05$ ) correlation was found.

**Conclusion:** There was no statistically significant difference in the average complete blink rate between soft copy and hard copy reading conditions. However, soft copy reading was associated with a higher incidence of ocular symptoms, which may be attributed to an increased proportion of incomplete blinks during the task.

**Key Words:** Blink Rate, Hard Copy, Soft Copy, Ocular Symptoms