

# Prevalence of general binocular dysfunctions in a population of university students.

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## Author information

### **Abstract**

#### **PURPOSE:**

Although some authors report that the prevalence of general binocular dysfunctions (nonstrabismic) for nonpresbyopes in the clinical population is greater than any condition except refractive error, limited research is available to support this statement. This clinical study determined the presence and clinical implications of these conditions in a population of university students with heavy near visual demands.

#### **METHODS:**

From a group of second year students who were given a thorough eye examination, 65 students were selected. The criteria for selection were the absence of significant uncorrected refractive error, healthy eyes, and no strabismus or amblyopia.

#### **RESULTS:**

32.3% of the subjects showed general binocular dysfunctions. In 10.8% of the cases, accommodative excess was present. 7.7% had convergence insufficiency with accommodative excess. 6.2% showed accommodative insufficiency. 3.1% had basic exophoria. Convergence excess with accommodative insufficiency, basic esophoria, and fusional vergence dysfunction all showed the same prevalence of 1.5%.

#### **CONCLUSIONS:**

Accommodative and nonstrabismic binocular vision problems are prevalent in this population. Accommodative excess is the most common condition. Because these dysfunctions may have a negative effect on performance, appropriate vision evaluation for this population is important.