

**ABSTRACT****RISK FACTOR OF VISUAL ACUITY DECREASE AT 4TH AND 5TH GRADE STUDENTS IN MUHAMMADIYAH 1 GRESIK ELEMENTARY SCHOOL****Indana Zulfa, Sulistiawati, Siti Nurul Hidayati**

**Objective:** *The decrease of visual acuity is a symptom of refraction abnormality. This study was conducted because of the many risk factors that potentially leads to decrease of visual acuity. This research aims to see the correlation between risk factors (sex, reading distance, reading length, the distance of watching television, the distance of using gadget, the usage time of gadget, and parents) and decrease of visual acuity in 4th and 5th grade students in Muhammadiyah 1 Gresik Elementary School.*

**Method:** *This is an analytical observational assessment regarding patients' sex, reading distance, reading length, the distance of watching television, the distance of using gadget, the usage time of gadget, and parents. This is a cross sectional study in which samples were collected using total sampling method. The samples were 115 students from 4th and 5th grade of Muhammadiyah 1 Gresik Elementary School. Datas were analyzed using chi square test.*

**Result:** *The decrease of visual acuity was found in 65 respondents (56,5%). Based on the analytical results, there were no statistical correlation between sex ( $p=0,108$ ), reading distance ( $p=0,993$ ), reading length ( $p=0,719$ ), the distance of watching television ( $p=1$ ), the distance of using gadget ( $p=0,475$ ), the usage time of gadget ( $p=0,912$ ), and parents ( $p=0,284$ )*

**Conclusion:** *There were no significant correlation between sex, reading distance, reading length, the distance of watching television, the distance of using gadget, the usage time of gadget, parents and the decrease of visual acuity in 4th and 5th grade students of Muhammadiyah 1 Gresik Elementary School.*

**Keywords:** *risk factor, visual acuity*