

Benjamin Ludwig
The Effects of Age and Gender on Spatial Reasoning

The purpose of my experiment was to see if age and gender affected a person's spatial reasoning. This project interested me because it applied to the learning capabilities of students like myself. I believed that if a person's age increased, their spatial reasoning would increase and that if a person's gender was male, they would have greater spatial reasoning. To determine my hypotheses, I gave a test consisting of five questions to two groups of test subjects. One group consisted of thirty 8th graders (ages 13 to 14) while the other group consisted of thirty-six 2nd graders (ages 7 to 8). Each question on the test had two photographs of Lego formations which were either the exact same formation just photographed from different angles or slightly different. The subjects then had to verify if they were the same or different and then record their answer on a test slip. After receiving my results, I discovered that as age progressed, spatial reasoning increased, although I found that the male's average score compared to the female's average score was almost identical as age progressed. I discovered that males were slightly more dominant in spatial reasoning (only by 4%) in each grade level. My first hypothesis was supported by my data, in the 8th graders being able to receive a higher average score on a more difficult test. My second hypothesis was supported but not strongly (only by 4% in each grade level).