

Now You See It, Now You Don't! Test Your Peripheral Vision

Smith, Averi (School: Keyser High School)

This experiment is to determine if teenage females detect motion, shape, text, or color first in their peripheral vision. Three teenage females were tested with a vision protractor to determine whether they would see motion, shape, text, or color first on the left and right sides of their peripheral vision. This project is of interest to the experimenter, teenage females, forensic scientists, criminals, doctors, and ordinary people. To conduct the experiment, a vision protractor was made to measure the peripheral vision in degrees for each participant. Three different vision test cards with a different shape, color, and text on each were made. Each participant held the vision protractor at their nose while looking at a pushpin directly in front of them at 90 degrees. A volunteer started one of the vision test cards at 90 degrees and slowly moved through the degrees and the participant then notified the experimenter when they could detect motion, shape, text, or color. This was repeated 3 times for each of the vision test cards for both the left and the right side of each participant. Data was recorded and analyzed to show that the average teenage female tested detected motion at 5 degrees, color at 31 degrees, shape at 54 degrees, and text at 81 degrees. The experiment supported the hypothesis that female teenagers would detect motion first, then color, then shape, and lastly text. If this experiment were to be expanded, it would include different age and gender groups. Other changes could include changing the size of the vision test cards to make them larger or smaller and experiment with lighting.

Awards Won:

