Lessons Learned from an Eye-Tracking Study on Human Postures

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Eye-tracking has been used in many scientific fields, such as behavioral sciences, education, marketing, and sports. Visualization usually plays an important role in the analysis of eye tracking data. After a brief glance at the underlying R software, we will focus in this presentation on a study on human postures where participants from a treatment group (those with yoga experience) and a control group (those with no or only little yoga experience) were asked to look at images of 22 different human postures and assess the stability of each posture while wearing eye-tracking equipment. The core question for the part of the analysis presented here was whether viewing patterns of the postures for participants from the treatment group differ from those from the control group. We answered this question at the group level (treatment vs. control), for individual participants within each group, and with respect to individual body parts viewed by the participants from both groups. This is joint work with Joanna Coltrin, Chunyang Li, Eric McKinney, Sarah Schwartz, and Breanna Studenka.