

9/2/20

Update to *Intra- and inter-subject variability in pattern reversal visual evoked potentials in a pediatric population determined by principal component analysis*.

**Additional sex comparison:** Significant differences were noted between male and female subjects. To further explore this difference, PC scores will be plotted as a function of weight, height, and head circumference to assess for the possibility of a non-neural explanation for this difference.

**Additional age comparison:** female and male subjects will be separated to determine if there is a correlation between PC scores and age when subjects are separated by sex. This is to help determine if the sex difference could be related to hormonal differences given that puberty occurs later in boys than girls on average.

**Subgroup analysis:**

Control subjects will exclude subjects with a personal history of migraine or chronic headache, a family history of migraine or chronic headache, or personal history of concussion because these conditions have been associated with alterations in VEP response. I will repeat the sex comparison analysis on this narrower scope control group to ensure subjects with personal or family history of migraine do not account for differences in age I observed.

*Personal history of migraine:* 5 subjects reported a personal history of migraine, with one of those subjects also reporting chronic headache. All subjects are female. Given the differences noted between male and female subjects, these 5 subjects will be compared to female subjects.

*Family history of migraine:* All of the 15 subjects reporting a family history of migraine are female. Thus, this group will only be compared to the female cohort.

*Personal history of concussion:* 22 female subjects and 20 male subjects reported prior history of concussion. To determine if differences in VEP are in the history of concussion group compared to the control group, male and female subjects will be separated and compared to their sex-matched cohort.