Haptic Object Exploration

Classification by EPs

Object Classification

Given Object Classification

Here we try to predict the **given object** (after selecting only the trials that belong to a particular family). Figure 1 shows classification accuracy for given object classification based on EPs. We have build three different classifiers based on presence/absence, duration and number of occurrences of the different EPs on each trial.
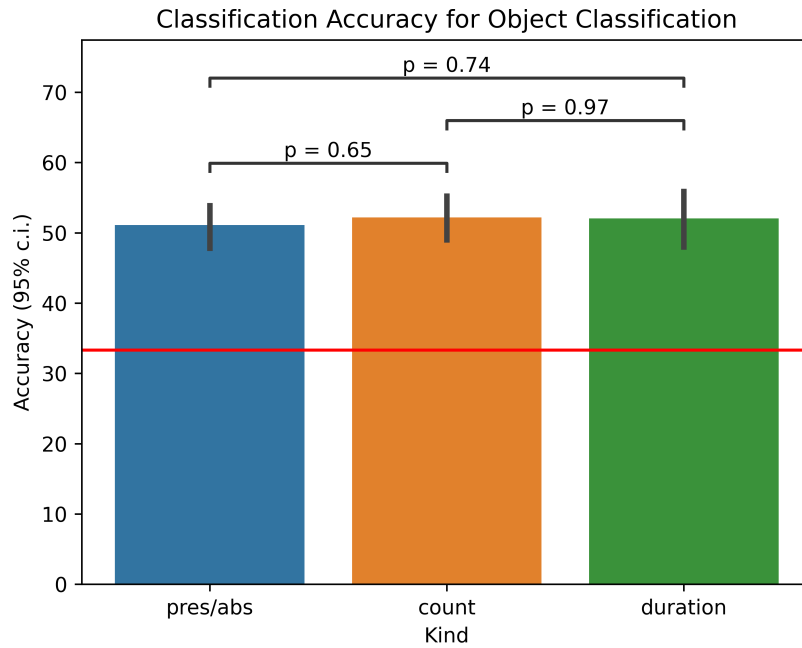

Figure 1: Classification accuracy for object classification (given object)

Asked Object Classification

Since it remains unclear that the classification of given object is really informative, we have tried also classification of **asked object**.

As we can see in Figure 2, the accuracy in this case is near chance level.
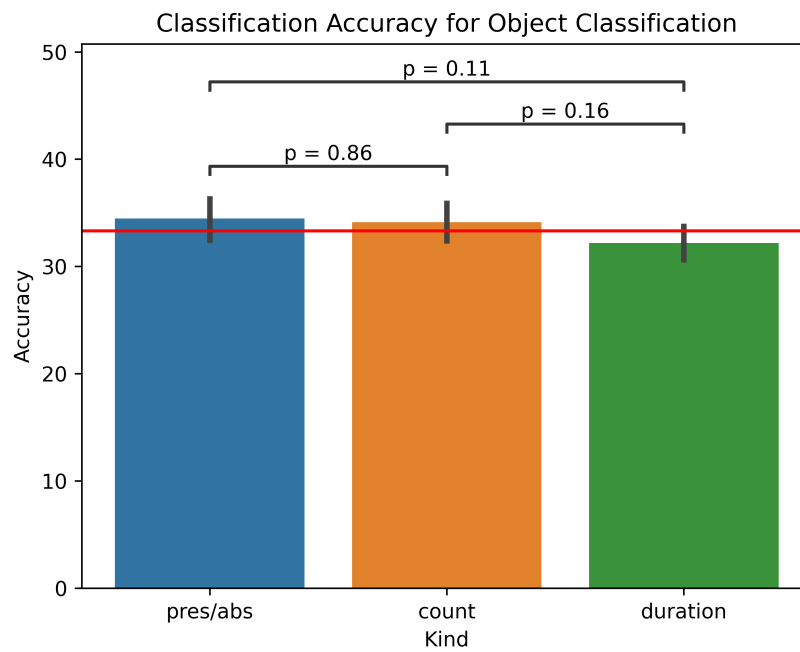
Figure 2: Classification accuracy for object classification (asked object)

Object Classification conclussions

We can conclude in this case that the EPs performed are somehow related to the object that subject is handling and not at all related with the object we are asking the question.

Family Classification