

LING82100: reporting a sign test

The following adapts the “preferential looking” experiment example given in the slides:

Nine parent-child dyads participated in the study. Of these, 7 showed a looking-time preference for their mother’s voice; 1 showed a preference for the female confederate’s voice. This was non-significant at $\alpha = .01$ (sign test, two-tailed $p = .070$, 95% CI: .003, .527).

Or, in R:

```
> binom.test(1, 8, .5)
```

```
Exact binomial test
```

```
data: 1 and 8
```

```
number of successes = 1, number of trials = 8, p-value = 0.07031
```

```
alternative hypothesis: true probability of success is not equal to 0.5
```

```
95 percent confidence interval:
```

```
0.003159724 0.526509671
```

```
sample estimates:
```

```
probability of success
```

```
0.125
```