Summary Stats

Kristen Johnson

2025-02-23

Summary Statistics for P2_H8

ALL Gestures by Participant ID

```
## # A tibble: 10 x 2
##    participant_id gesture_all
##             <int>       <int>
##  1             30          10
##  2             35          60
##  3             46          46
##  4             93          38
##  5             94          74
##  6             99          18
##  7            117         141
##  8            132         134
##  9            135          57
## 10            150         111
```

Total number of gestures among all observations of all participants:

```
## [1] 689
```

Mean and Standard deviation of ALL gestures

```
## # A tibble: 1 x 2
##   mean_gesture sd_gesture
##          <dbl>      <dbl>
## 1         68.9       45.9
```

A Data Frame of only iconic gestures. Summary Stats to follow.

```
##      trans.ID                 time line  key p_utts p_form p_lrb p_obj p_gloss
## 1       <NA>                  <NA>  482 <NA>   <NA>   <NA>  <NA>  <NA>    <NA>
## 2       <NA>                  <NA> 1083 <NA>   <NA>   <NA>  <NA>  <NA>    <NA>
## 3 132.08H.P3                  <NA>  285 <NA>   <NA>   <NA>  <NA>  <NA>    <NA>
## 4 132.08H.P3                  <NA>  320 <NA>   <NA>   <NA>  <NA>  <NA>    <NA>
## 5 135.08H.P3 1904-01-01 00:02:25    66 <NA>   <NA>   <NA>  <NA>  <NA>    <NA>
## 6 135.08H.P3 1904-01-01 00:02:34    72 <NA>   <NA>   <NA>  <NA>  <NA>    <NA>
##   p_orient p_mspd                             c_utts
## 1     <NA>   <NA>                   what's that noise?
## 2     <NA>   <NA>                    hey, it goes ###
## 3     <NA>   <NA>                           A spider.
## 4     <NA>   <NA>                            A swing.
## 5     <NA>   <NA>                     Yeah, she goes --
```

```
## 6     <NA>   <NA> Yeah, and then she bats it around on the floor.
##          c_form c_lrb                        c_obj
## 1       iconic      h                        <NA>
## 2       iconic      r                        <NA>
## 3       iconic      L                        <NA>
## 4 point - iconic L - WB picture of swing in book
## 5       iconic      B                        <NA>
## 6       iconic      B                        <NA>
##                            c_gloss   c_orient
## 1                   whisking noise       <NA>
## 2                 necklace flying  trace path
## 3                           spider trace.shape
## 4 picture of swing in book - swing  trace.path
## 5                 Cat catching bugs       <NA>
## 6                  Cat batting bug       <NA>
##                                                    c_mspd context
## 1                 rocks head back and forth to rhythm of whisking    <NA>
## 2                                     pushes hand through the air    <NA>
## 3               C wiggles all her fingers as if it were a spider    <NA>
## 4                     C moves L hand and H in a swinging motion    <NA>
## 5 C raises both arms and swats at the air with her hands over and over.    <NA>
## 6    C bats imaginary bug between her hands near the floor of the room.    <NA>
##   Parent.DXT Child.DXT participant_id session C_wpu c_pret
## 1      <NA>     <NA>            117       8     3      0
## 2      <NA>     <NA>            117       8     4      0
## 3      <NA>     <NA>            132       8     2      0
## 4      <NA>     <NA>            132       8     2      0
## 5      <NA>     <NA>            135       8     4      0
## 6      <NA>     <NA>            135       8    10      0
```

Number of iconic gestures per participant ID

```
## # A tibble: 7 x 2
##   participant_id iconic_count
##            <int>        <int>
## 1             35            3
## 2             93            1
## 3             94            3
## 4            117            2
## 5            132            2
## 6            135            3
## 7            150            2
```

Total number of iconic gestures across all participants:

```
## [1] 16
```

Summary statistics of iconic gestures across participants

```
## # A tibble: 1 x 2
##   mean_iconic sd_iconic
##         <dbl>     <dbl>
## 1        2.29     0.756
```

Instances of Pretend Play by Participant ID:

```
## # A tibble: 10 x 2
##    participant_id count_p_combined
##             <int>            <int>
##  1             30                0
##  2             35               86
##  3             46                2
##  4             93               26
##  5             94               81
##  6             99                0
##  7            117                1
##  8            132               51
##  9            135              153
## 10            150               58
```

Total number of instances of pretend play:

```
## [1] 458
```

Descriptive statistics of all instances of pretend play:

```
## # A tibble: 1 x 2
##   mean_pp sd_pp
##     <dbl> <dbl>
## 1    45.8  50.6
```

Average words per utterance by Participant ID

```
## # A tibble: 10 x 4
##    participant_id total_words total_utts avg_c_wpu
##             <int>       <int>      <int>     <dbl>
##  1             30         716        334      2.14
##  2             35        2783        620      4.49
##  3             46         722        502      1.44
##  4             93        2629        692      3.80
##  5             94        2153        688      3.13
##  6             99         519        165      3.15
##  7            117        1806        667      2.71
##  8            132        1393        580      2.40
##  9            135        1915        653      2.93
## 10            150        2683        798      3.36
```

Adding in Standard Deviation to the above table

```
## # A tibble: 10 x 5
##    participant_id total_words total_utts avg_c_wpu sd_c_wpu
##             <int>       <int>      <int>     <dbl>    <dbl>
##  1             30         716        334      2.14     1.60
##  2             35        2783        620      4.49     3.15
##  3             46         722        502      1.44    0.758
##  4             93        2629        692      3.80     2.95
##  5             94        2153        688      3.13     2.27
##  6             99         519        165      3.15     2.09
##  7            117        1806        667      2.71     2.05
##  8            132        1393        580      2.40     2.12
```

```
##  9              135          1915          653        2.93      2.44
## 10              150          2683          798        3.36      2.88
```

Mean of Means in Above table

```
## # A tibble: 1 x 3
##   c_total_words mean_c_wpu sd_c_wpu
##           <int>      <dbl>    <dbl>
## 1          17319       2.95    0.858
```

Mean of Avg Words per Utternace by total number of words over total number of utternaces

```
## [1] 3.038954
```

count of instances when gesture and pretend play occur simulatneously