Inclusion Criteria

### 1. Number of Children in Each Group

The table below provides information on the number of participants in each group.

Table : Table 1: Number of participants in each group

| Group | Number of Participants (n) |
| --- | --- |
| Compensated | 17 |
| Dyslexia | 28 |
| TD | 23 |

### 2. Trials Where Participants Fixated on All Four Interest Areas (IAs)

The first inclusion criteria indicates that the participant must have looked at all four interest areas. Table 2 provides information on the number of trials that each participant (per group) fixated on all four IAs.

| Group | ID | Number of Trials Participants Fixated on All IAs | Number of Trials Participants DID NOT Fixate on All IAs |
| --- | --- | --- | --- |
| Compensated | c194005 | 13 | 5 |
| Compensated | c194010 | 18 | 0 |
| Compensated | c194017 | 11 | 7 |
| Compensated | c194018 | 16 | 2 |
| Compensated | c194019 | 18 | 0 |
| Compensated | c194020 | 18 | 0 |
| Compensated | c194022 | 18 | 0 |
| Compensated | c194026 | 12 | 6 |
| Compensated | c194027 | 18 | 0 |
| Compensated | c194028 | 18 | 0 |
| Compensated | c194029 | 17 | 1 |
| Compensated | c194031 | 18 | 0 |
| Compensated | c194035 | 18 | 0 |
| Compensated | c194038 | 18 | 0 |
| Compensated | c194039 | 18 | 0 |
| Compensated | c194045 | 18 | 0 |
| Compensated | c194047 | 17 | 1 |
| Dyslexia | c194001 | 17 | 1 |
| Dyslexia | c194002 | 15 | 3 |
| Dyslexia | c194003 | 18 | 0 |
| Dyslexia | c194004 | 18 | 0 |
| Dyslexia | c194006 | 16 | 2 |
| Dyslexia | c194007 | 14 | 4 |
| Dyslexia | c194008 | 18 | 0 |
| Dyslexia | c194009 | 12 | 6 |
| Dyslexia | c194011 | 16 | 2 |
| Dyslexia | c194013 | 18 | 0 |
| Dyslexia | c194014 | 12 | 6 |
| Dyslexia | c194016 | 18 | 0 |
| Dyslexia | c194021 | 18 | 0 |
| Dyslexia | c194023 | 18 | 0 |
| Dyslexia | c194030 | 17 | 1 |
| Dyslexia | c194032 | 17 | 1 |
| Dyslexia | c194033 | 18 | 0 |
| Dyslexia | c194034 | 18 | 0 |
| Dyslexia | c194036 | 18 | 0 |
| Dyslexia | c194040 | 17 | 1 |
| Dyslexia | c194041 | 18 | 0 |
| Dyslexia | c194042 | 18 | 0 |
| Dyslexia | c194043 | 16 | 2 |
| Dyslexia | c194046 | 18 | 0 |
| Dyslexia | c194049 | 18 | 0 |
| Dyslexia | c194055 | 17 | 1 |
| Dyslexia | c194057 | 18 | 0 |
| Dyslexia | c194058 | 18 | 0 |
| TD | c141097 | 14 | 4 |
| TD | c143113 | 18 | 0 |
| TD | c143114 | 17 | 1 |
| TD | c143278 | 17 | 1 |
| TD | c171014 | 18 | 0 |
| TD | c171064 | 17 | 1 |
| TD | c171071 | 18 | 0 |
| TD | c171080 | 15 | 3 |
| TD | c171082 | 10 | 8 |
| TD | c171113 | 16 | 2 |
| TD | c171129 | 18 | 0 |
| TD | c171133 | 18 | 0 |
| TD | c171141 | 18 | 0 |
| TD | c171144 | 17 | 1 |
| TD | c191018 | 14 | 4 |
| TD | c191020 | 17 | 1 |
| TD | c191021 | 16 | 2 |
| TD | c191025 | 18 | 0 |
| TD | c191031 | 16 | 2 |
| TD | c191034 | 12 | 6 |
| TD | c191035 | 18 | 0 |
| TD | c191036 | 18 | 0 |
| TD | c191060 | 16 | 2 |

### 3. Accuracy of Trials per Participant

The second inclusion criteria indicates that the participant must have been accurate in at least 12 trials (that is, they selected either the high- or low-probability orthographic nonword over the illegal or unpronounceable foil on at least 12 trials). Table 2 provides information on the number of trials that each participant was accurate on.

| Group | ID | Accurate | Inaccurate |
| --- | --- | --- | --- |
| Compensated | c194005 | 18 | 0 |
| Compensated | c194010 | 18 | 0 |
| Compensated | c194017 | 18 | 0 |
| Compensated | c194018 | 18 | 0 |
| Compensated | c194019 | 18 | 0 |
| Compensated | c194020 | 18 | 0 |
| Compensated | c194022 | 18 | 0 |
| Compensated | c194026 | 18 | 0 |
| Compensated | c194027 | 18 | 0 |
| Compensated | c194028 | 18 | 0 |
| Compensated | c194029 | 18 | 0 |
| Compensated | c194031 | 18 | 0 |
| Compensated | c194035 | 18 | 0 |
| Compensated | c194038 | 18 | 0 |
| Compensated | c194039 | 18 | 0 |
| Compensated | c194045 | 18 | 0 |
| Compensated | c194047 | 18 | 0 |
| Dyslexia | c194001 | 18 | 0 |
| Dyslexia | c194002 | 14 | 4 |
| Dyslexia | c194003 | 17 | 1 |
| Dyslexia | c194004 | 18 | 0 |
| Dyslexia | c194006 | 15 | 3 |
| Dyslexia | c194007 | 18 | 0 |
| Dyslexia | c194008 | 18 | 0 |
| Dyslexia | c194009 | 18 | 0 |
| Dyslexia | c194011 | 18 | 0 |
| Dyslexia | c194013 | 18 | 0 |
| Dyslexia | c194014 | 18 | 0 |
| Dyslexia | c194016 | 18 | 0 |
| Dyslexia | c194021 | 18 | 0 |
| Dyslexia | c194023 | 18 | 0 |
| Dyslexia | c194030 | 18 | 0 |
| Dyslexia | c194032 | 18 | 0 |
| Dyslexia | c194033 | 18 | 0 |
| Dyslexia | c194034 | 18 | 0 |
| Dyslexia | c194036 | 17 | 1 |
| Dyslexia | c194040 | 18 | 0 |
| Dyslexia | c194041 | 18 | 0 |
| Dyslexia | c194042 | 18 | 0 |
| Dyslexia | c194043 | 18 | 0 |
| Dyslexia | c194046 | 18 | 0 |
| Dyslexia | c194049 | 18 | 0 |
| Dyslexia | c194055 | 18 | 0 |
| Dyslexia | c194057 | 18 | 0 |
| Dyslexia | c194058 | 18 | 0 |
| TD | c141097 | 18 | 0 |
| TD | c143113 | 18 | 0 |
| TD | c143114 | 17 | 1 |
| TD | c143278 | 18 | 0 |
| TD | c171014 | 18 | 0 |
| TD | c171064 | 18 | 0 |
| TD | c171071 | 18 | 0 |
| TD | c171080 | 17 | 1 |
| TD | c171082 | 18 | 0 |
| TD | c171113 | 18 | 0 |
| TD | c171129 | 18 | 0 |
| TD | c171133 | 18 | 0 |
| TD | c171141 | 18 | 0 |
| TD | c171144 | 17 | 1 |
| TD | c191018 | 18 | 0 |
| TD | c191020 | 18 | 0 |
| TD | c191021 | 18 | 0 |
| TD | c191025 | 18 | 0 |
| TD | c191031 | 18 | 0 |
| TD | c191034 | 18 | 0 |
| TD | c191035 | 18 | 0 |
| TD | c191036 | 18 | 0 |
| TD | c191060 | 18 | 0 |

### 4. Number of “Good” Trials

A “good” trial was defined as one in which the participant (a) fixated on all four interest areas (IAs), and (b) made an accurate response on at least 12 trials — that is, they selected either the high- or low-probability orthographic nonword over the illegal or unpronounceable foil on at least 12 trials

The table below shows the number and percentage of participants excluded due to either having fewer than 12 good trials or not fixated on all four IAs, across the three groups:

Table : Participant Inclusion Based on Accuracy and Fixation Criteria

| Group | Participant ID | Number of Good Trials | Inclusion Status |
| --- | --- | --- | --- |
| TD | c141097 | 14 | Passed |
| TD | c143113 | 18 | Passed |
| TD | c143114 | 16 | Passed |
| TD | c143278 | 17 | Passed |
| TD | c171014 | 18 | Passed |
| TD | c171064 | 17 | Passed |
| TD | c171071 | 18 | Passed |
| TD | c171080 | 14 | Passed |
| TD | c171082 | 10 | Failed |
| TD | c171113 | 16 | Passed |
| TD | c171129 | 18 | Passed |
| TD | c171133 | 18 | Passed |
| TD | c171141 | 18 | Passed |
| TD | c171144 | 16 | Passed |
| TD | c191018 | 14 | Passed |
| TD | c191020 | 17 | Passed |
| TD | c191021 | 16 | Passed |
| TD | c191025 | 18 | Passed |
| TD | c191031 | 16 | Passed |
| TD | c191034 | 12 | Passed |
| TD | c191035 | 18 | Passed |
| TD | c191036 | 18 | Passed |
| TD | c191060 | 16 | Passed |
| Dyslexia | c194001 | 17 | Passed |
| Dyslexia | c194002 | 12 | Passed |
| Dyslexia | c194003 | 17 | Passed |
| Dyslexia | c194004 | 18 | Passed |
| Compensated | c194005 | 13 | Passed |
| Dyslexia | c194006 | 13 | Passed |
| Dyslexia | c194007 | 14 | Passed |
| Dyslexia | c194008 | 18 | Passed |
| Dyslexia | c194009 | 12 | Passed |
| Compensated | c194010 | 18 | Passed |
| Dyslexia | c194011 | 16 | Passed |
| Dyslexia | c194013 | 18 | Passed |
| Dyslexia | c194014 | 12 | Passed |
| Dyslexia | c194016 | 18 | Passed |
| Compensated | c194017 | 11 | Failed |
| Compensated | c194018 | 16 | Passed |
| Compensated | c194019 | 18 | Passed |
| Compensated | c194020 | 18 | Passed |
| Dyslexia | c194021 | 18 | Passed |
| Compensated | c194022 | 18 | Passed |
| Dyslexia | c194023 | 18 | Passed |
| Compensated | c194026 | 12 | Passed |
| Compensated | c194027 | 18 | Passed |
| Compensated | c194028 | 18 | Passed |
| Compensated | c194029 | 17 | Passed |
| Dyslexia | c194030 | 17 | Passed |
| Compensated | c194031 | 18 | Passed |
| Dyslexia | c194032 | 17 | Passed |
| Dyslexia | c194033 | 18 | Passed |
| Dyslexia | c194034 | 18 | Passed |
| Compensated | c194035 | 18 | Passed |
| Dyslexia | c194036 | 17 | Passed |
| Compensated | c194038 | 18 | Passed |
| Compensated | c194039 | 18 | Passed |
| Dyslexia | c194040 | 17 | Passed |
| Dyslexia | c194041 | 18 | Passed |
| Dyslexia | c194042 | 18 | Passed |
| Dyslexia | c194043 | 16 | Passed |
| Compensated | c194045 | 18 | Passed |
| Dyslexia | c194046 | 18 | Passed |
| Compensated | c194047 | 17 | Passed |
| Dyslexia | c194049 | 18 | Passed |
| Dyslexia | c194055 | 17 | Passed |
| Dyslexia | c194057 | 18 | Passed |
| Dyslexia | c194058 | 18 | Passed |

Among participants excluded, it was examined whether their exclusion was primarily due to failure to meet the fixation criterion rather than poor task performance. Specifically, participants who were accurate on at least 12 trials (i.e., selected either a high- or low-orthographic nonword), but were still excluded because they did not meet the requirement of fixating on all four interest areas (IAs) were identified.

The table below summarizes how many behaviorally accurate participants were excluded from each group:

Table : Why Did These Participants Fail Inclusion?

| Group | Participant ID | Good Trials (Both Criteria) | Accurate Trials | Passed Accuracy? | Fixated Trials | Passed Fixation? |
| --- | --- | --- | --- | --- | --- | --- |
| TD | c171082 | 10 | 18 | TRUE | 10 | FALSE |
| Compensated | c194017 | 11 | 18 | TRUE | 11 | FALSE |

Since participants c171082 and c194017 did not pass the inclusion criteria, they were removed for further analysis.

## Excluding participants

excluded\_ids <- c("c171082", "c194017")  
  
ortho\_data\_cleaned <- ortho\_data %>%  
 filter(!participant\_id %in% excluded\_ids) %>%  
 select(-trial\_correct, -fixated\_all\_four)