## ABCD other data

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Test for significant difference between the two groups on age, IQ, and gender ratio. There's no significant difference.

```
## Parsed with column specification:
## cols(
##
     .default = col_character(),
##
     `Record ID` = col_integer(),
     `Age with month` = col_double(),
##
     Age = col_integer(),
     `KBIT-2 Matrices: Standard Score` = col_integer(),
##
     `TOWRE-2 Sight Word Efficiency: Standard Score` = col_integer(),
     `TOWRE-2 Phonemic Decoding Efficiency: Standard Score` = col_integer(),
##
     `TOWRE-2 Total Word Reading Efficiency Index: Standard Score` = col_integer(),
##
##
     `WRMT-3 Word ID: Standard Score` = col_integer(),
     `WRMT-3 Word Attack: Standard Score` = col_integer(),
     `WRMT-3 Basic Skills: Standard Score` = col_integer(),
##
     `WAIS-4 DS Forward: Standard Score` = col_integer(),
##
     `WAIS-4 DS Backward: Standard Score` = col_integer(),
##
     `WAIS-4 DS Total: Standard Score` = col_integer(),
     `CTOPP-2 Elision: Standard Score` = col_integer(),
##
##
     `CTOPP-2 Blending Words: Standard Score` = col_integer(),
     `CTOPP-2 Non-Word Repetition: Standard Score` = col_integer(),
##
##
    CTOPP_TOTAL = col_double(),
     `GORT-5 Rate: Standard Score` = col_integer(),
##
##
     `GORT-5 Accuracy: Standard Score` = col_integer(),
##
     `GORT-5 Fluency: Standard Score` = col_integer()
     # ... with 11 more columns
##
## )
## See spec(...) for full column specifications.
##
   Wilcoxon rank sum test with continuity correction
##
##
## data: ABCD$`Age with month`[ABCD$Group == "DD"] and ABCD$`Age with month`[ABCD$Group == "TYP"]
## W = 156.5, p-value = 0.2614
## alternative hypothesis: true location shift is not equal to 0
##
  Wilcoxon rank sum test with continuity correction
##
##
## data: ABCD$`KBIT-2 Matrices: Standard Score`[ABCD$Group == "DD"] and ABCD$`KBIT-2 Matrices: Standar
## W = 67, p-value = 0.1071
## alternative hypothesis: true location shift is not equal to 0
##
  Wilcoxon rank sum test with continuity correction
```

##

```
## data: as.numeric(ABCD$Sex)[ABCD$Group == "DD"] and as.numeric(ABCD$Sex)[ABCD$Group == "TYP"] ## W = 108, p-value = 0.4444 ## alternative hypothesis: true location shift is not equal to 0
```

## Other measurements that are significantly different

Mirror\_delta\_completion\_time, CTOPP, TOWRE, WRMT, GORT

```
##
## Wilcoxon rank sum test with continuity correction
##
## data: ABCD$Mirror_delta_on[ABCD$Group == "DD"] and ABCD$Mirror_delta_on[ABCD$Group == "TYP"]
## W = 131, p-value = 0.0232
## alternative hypothesis: true location shift is not equal to 0
##
##
   Wilcoxon rank sum test with continuity correction
## data: ABCD$CTOPP_TOTAL[ABCD$Group == "DD"] and ABCD$CTOPP_TOTAL[ABCD$Group == "TYP"]
## W = 2, p-value = 0.0004967
\#\# alternative hypothesis: true location shift is not equal to 0
##
## Wilcoxon rank sum test with continuity correction
##
## data: ABCD$`TOWRE-2 Total Word Reading Efficiency Index: Standard Score`[ABCD$Group == and ABCD$`T
## W = 3.5, p-value = 1.916e-05
## alternative hypothesis: true location shift is not equal to 0
## Wilcoxon rank sum test with continuity correction
##
## data: ABCD$`WRMT-3 Basic Skills: Standard Score`[ABCD$Group == "DD"] and ABCD$`WRMT-3 Basic Skills:
## W = 0, p-value = 9.491e-06
\#\# alternative hypothesis: true location shift is not equal to 0
##
   Wilcoxon rank sum test with continuity correction
## data: ABCD$`WRMT-3 Word Attack: Standard Score`[ABCD$Group == "DD"] and ABCD$`WRMT-3 Word Attack: S
## W = 0, p-value = 8.951e-06
## alternative hypothesis: true location shift is not equal to 0
## Wilcoxon rank sum test with continuity correction
## data: ABCD$`GORT-5 ORI: Standard Score`[ABCD$Group == "DD"] and ABCD$`GORT-5 ORI: Standard Score`[A
## W = 10, p-value = 0.002432
\#\# alternative hypothesis: true location shift is not equal to 0
```

## Other measurements that are not significantly different

Rotary\_delta, Mirror\_delta\_error, WAIS

```
##
## Wilcoxon rank sum test
##
## data: ABCD$Rotary_Delta[ABCD$Group == "DD"] and ABCD$Rotary_Delta[ABCD$Group == "TYP"]
## W = 76, p-value = 0.7199
## alternative hypothesis: true location shift is not equal to 0
   Wilcoxon rank sum test with continuity correction
##
## data: ABCD$Mirror_delta_off1[ABCD$Group == "DD"] and ABCD$Mirror_delta_off1[ABCD$Group == "TYP"]
## W = 120, p-value = 0.08312
## alternative hypothesis: true location shift is not equal to 0
##
## Wilcoxon rank sum test with continuity correction
## data: ABCD$`WAIS-4 DS Total: Standard Score`[ABCD$Group == "DD"] and ABCD$`WAIS-4 DS Total: Standard
## W = 25, p-value = 0.04213
\#\# alternative hypothesis: true location shift is not equal to 0
```

## Test for correlation

```
##
   Spearman's rank correlation rho
## data: ABCD$VSL_RT_SLOPE[ABCD$Group == "DD"] and ABCD$Mirror_delta_on[ABCD$Group == "DD"]
## S = 110, p-value = 0.7861
## alternative hypothesis: true rho is greater than 0
## sample estimates:
         rho
## -0.3095238
##
   Spearman's rank correlation rho
##
## data: ABCD$VSL RT SLOPE[ABCD$Group == "DD"] and ABCD$Mirror delta off1[ABCD$Group == "DD"]
## S = 90, p-value = 0.441
## alternative hypothesis: true rho is less than 0
## sample estimates:
           rho
## -0.07142857
##
   Spearman's rank correlation rho
## data: ABCD$VSL_ACC[ABCD$Group == "DD"] and ABCD$Mirror_delta_on[ABCD$Group == "DD"]
## S = 30.027, p-value = 0.04288
## alternative hypothesis: true rho is greater than 0
## sample estimates:
```

```
##
         rho
## 0.6425305
## Spearman's rank correlation rho
##
## data: ABCD$VSL ACC[ABCD$Group == "DD"] and ABCD$Mirror delta off1[ABCD$Group == "DD"]
## S = 119.64, p-value = 0.1474
## alternative hypothesis: true rho is less than 0
## sample estimates:
##
         rho
## -0.4243126
##
##
  Spearman's rank correlation rho
## data: ABCD$TSL_ACC[ABCD$Group == "DD"] and ABCD$Mirror_delta_on[ABCD$Group == "DD"]
## S = 28.505, p-value = 0.1316
## alternative hypothesis: true rho is greater than 0
## sample estimates:
        rho
## 0.4909903
##
##
   Spearman's rank correlation rho
##
## data: ABCD$TSL ACC[ABCD$Group == "DD"] and ABCD$Mirror delta off1[ABCD$Group == "DD"]
## S = 25.449, p-value = 0.8974
## alternative hypothesis: true rho is less than 0
## sample estimates:
##
         rho
## 0.5455447
##
  Spearman's rank correlation rho
## data: ABCD$VSL_ACC[ABCD$Group == "TYP"] and ABCD$Mirror_delta_on[ABCD$Group == "TYP"]
## S = 1331, p-value = 0.5013
## alternative hypothesis: true rho is greater than 0
## sample estimates:
##
## -0.0007555767
##
## Spearman's rank correlation rho
##
## data: ABCD$VSL_ACC[ABCD$Group == "TYP"] and ABCD$Mirror_delta_off1[ABCD$Group == "TYP"]
## S = 1400.8, p-value = 0.4118
## alternative hypothesis: true rho is less than 0
## sample estimates:
           rho
## -0.05324811
##
## Spearman's rank correlation rho
##
## data: ABCD$TSL_ACC[ABCD$Group == "TYP"] and ABCD$Mirror_delta_on[ABCD$Group == "TYP"]
```

```
## S = 1629.8, p-value = 0.5991
## alternative hypothesis: true rho is greater than 0
## sample estimates:
##
           rho
## -0.05832534
##
## Spearman's rank correlation rho
## data: ABCD$TSL_ACC[ABCD$Group == "TYP"] and ABCD$Mirror_delta_off1[ABCD$Group == "TYP"]
## S = 1647.3, p-value = 0.382
## alternative hypothesis: true rho is less than 0
## sample estimates:
##
           rho
## -0.06970708
## Parsed with column specification:
## cols(
##
    KBIT = col_integer(),
##
     `TOWRE Reading Efficiency` = col_integer(),
     `WRMT-3 Basic Skills` = col_integer(),
##
##
    `WAIS-4 DS` = col_integer(),
    CTOPP TOTAL = col double(),
     `GORT-5 ORI` = col_integer(),
##
##
    Rotary_Delta = col_double(),
##
    Mirror_percent = col_double(),
    Mirror delta off1 = col double(),
##
    VSL_ACC = col_double(),
    VSL_RT_SLOPE = col_double(),
##
##
    TSL_ACC = col_double(),
##
    TSL_RT_SLOPE = col_double()
## )
## Parsed with column specification:
## cols(
##
     `KBIT-2 Matrices: Standard Score` = col_integer(),
     `TOWRE-2 Total Word Reading Efficiency Index: Standard Score` = col_integer(),
##
     `WRMT-3 Basic Skills: Standard Score` = col_integer(),
##
    `WAIS-4 DS Total: Standard Score` = col_integer(),
    CTOPP_TOTAL = col_double(),
##
     `GORT-5 ORI: Standard Score` = col_integer(),
##
    Rotary Delta = col double(),
##
    Mirror_percent = col_double(),
##
    Mirror delta err = col double(),
##
##
    VSL_ACC = col_double(),
##
    TSL_ACC = col_double()
## )
```



