

School Id Variance

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## Analysis of variance for Malawi
## Oral fluency measure: orf
## ANOVA for Grade 1, Phase 2016.
##      Df Sum Sq Mean Sq F value Pr(>F)
## school_id      84   224.8    2.676   1.125  0.218
## Residuals     753  1790.9    2.378
## ANOVA for Grade 1, Phase 2017.
##      Df Sum Sq Mean Sq F value Pr(>F)
## school_id      85   177.3    2.085   1.053  0.357
## Residuals     770  1524.6    1.980
## ANOVA for Grade 1, Phase 2018.
##      Df Sum Sq Mean Sq F value Pr(>F)
## school_id      85    642    7.553   1.399 0.0135 *
## Residuals     774   4180    5.400
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2016.
##      Df Sum Sq Mean Sq F value    Pr(>F)
## school_id      84   2726   32.45   2.079 2.86e-07 ***
## Residuals     761  11876   15.61
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Only one school for Grade 2, Phase 2017.
## Only one school for Grade 2, Phase 2018.
## Only one school for Grade 3, Phase 2016.
## ANOVA for Grade 3, Phase 2017.
##      Df Sum Sq Mean Sq F value    Pr(>F)
## school_id      86   9256  107.63   1.923 3.79e-06 ***
## Residuals     773  43257   55.96
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 3, Phase 2018.
##      Df Sum Sq Mean Sq F value    Pr(>F)
## school_id      85   7879   92.70   1.804 3.29e-05 ***
## Residuals     774  39762   51.37
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Analysis of variance for DRC
## Oral fluency measure: orf
## ANOVA for Grade 6, Phase 1.
##      Df Sum Sq Mean Sq F value Pr(>F)
## school_id     141 334783  2374.3   7.796 <2e-16 ***
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## Residuals    1644 500690    304.6
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 6, Phase 6.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   140 323730   2312.4    5.717 <2e-16 ***
## Residuals   1562 631750    404.4
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 4, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   143  87983    615.3    5.103 <2e-16 ***
## Residuals   1690 203768    120.6
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 4, Phase 6.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   143  80451    562.6    3.511 <2e-16 ***
## Residuals   1581 253363    160.3
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Analysis of variance for Egypt
## Oral fluency measure: orf
## ANOVA for Grade 2, Phase 4.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   194 255838   1318.8    4.748 <2e-16 ***
## Residuals   1717 476882    277.7
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Only one school for Grade 2, Phase 14.
## Analysis of variance for Kenya
## Oral fluency measure: orf
## ANOVA for Grade 2, Phase 6.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   211 1196215    5669    7.168 <2e-16 ***
## Residuals   1900 1502750     791
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   219 537684   2455.2    5.664 <2e-16 ***
## Residuals   1967 852645    433.5
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   209 1221487    5844    8.304 <2e-16 ***
## Residuals   1859 1308328     704
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 6.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   211 901092    4271    8.984 <2e-16 ***
## Residuals   1898 902189     475

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## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   218 116482   534.3    4.7 <2e-16 ***
## Residuals  1971 224069   113.7
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   209 664327   3179    7.397 <2e-16 ***
## Residuals  1883 809169    430
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Oral fluency measure: k_orf
## ANOVA for Grade 2, Phase 6.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   211 301985  1431.2    5.072 <2e-16 ***
## Residuals  1900 536089   282.2
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   219 204589   934.2    4.202 <2e-16 ***
## Residuals  1965 436822   222.3
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   209 306611  1467.0    5.245 <2e-16 ***
## Residuals  1859 519939   279.7
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 6.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   211 267077  1265.8    6.211 <2e-16 ***
## Residuals  1898 386826   203.8
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   218  43419   199.17    3.264 <2e-16 ***
## Residuals  1970 120204    61.02
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   209 201949   966.3    5.131 <2e-16 ***
## Residuals  1883 354630   188.3
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Analysis of variance for Kenya
## Oral fluency measure: e_orf_a
## ANOVA for Grade 1, Phase 1.

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##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  202 721041    3570   13.01 <2e-16 ***
## Residuals  2212 606801     274
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  186 877560    4718   9.967 <2e-16 ***
## Residuals  1900 899368     473
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  202 1361260    6739  12.31 <2e-16 ***
## Residuals  2224 1217316     547
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  186 1204688    6477   9.914 <2e-16 ***
## Residuals  1900 1241253     653
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Oral fluency measure: k_orf
## ANOVA for Grade 1, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  202 148452    734.9   7.773 <2e-16 ***
## Residuals  2212 209150     94.6
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  202 224382   1110.8   6.117 <2e-16 ***
## Residuals  2030 368620    181.6
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 1.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  202 319804   1583.2   7.846 <2e-16 ***
## Residuals  2224 448740    201.8
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  202 287992   1425.7   6.742 <2e-16 ***
## Residuals  2077 439230    211.5
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Analysis of variance for DRC
## Oral fluency measure: mt_orf
## ANOVA for Grade 3, Phase 11.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id  103   8552    83.03   3.179 <2e-16 ***
## Residuals  913  23848    26.12

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## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 3, Phase 12.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id   86   9363   108.88     2.8 9.06e-14 ***
## Residuals  767  29829    38.89
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 3, Phase 10.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id   49   3080    62.85   4.829 <2e-16 ***
## Residuals  425   5531    13.01
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 5, Phase 11.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id  104  87610   842.4   3.454 <2e-16 ***
## Residuals  902 219986   243.9
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 5, Phase 12.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id   87  85255   979.9   3.142 <2e-16 ***
## Residuals  748 233260   311.8
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 5, Phase 10.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id   50  62168  1243.4   4.096 5.15e-16 ***
## Residuals  431 130825   303.5
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 777, Phase 11.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id    7  11260  1608.5   3.91 0.00117 **
## Residuals   71  29206   411.4
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Only one school for Grade 777, Phase 12.
## ANOVA for Grade 777, Phase 10.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id    3   2292   764.1   3.138 0.0358 *
## Residuals   40   9739   243.5
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Analysis of variance for Philippines
## Oral fluency measure: ph_orf
## ANOVA for Grade 1, Phase 2014.
##           Df Sum Sq Mean Sq F value    Pr(>F)
## school_id  159 235602  1481.8   8.489 <2e-16 ***
## Residuals 1474 257293   174.6
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 1, Phase 2015.

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##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   155 239563   1545.6    7.275 <2e-16 ***
## Residuals  1391 295519    212.5
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2014.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   159 385806   2426.5    6.595 <2e-16 ***
## Residuals  1472 541578    367.9
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## ANOVA for Grade 2, Phase 2015.
##           Df Sum Sq Mean Sq F value Pr(>F)
## school_id   155 368088   2374.8    6.687 <2e-16 ***
## Residuals  1395 495389    355.1
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

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