\*\*\* Mistyped as the second Supplementary material C in dissertation

1. Normality of random effects  
   ranefs <- ranef(AIM\_With\_WVSDer)$B\_COUNTRY\_ALPHA %>% unlist()  
   qqnorm(ranefs); qqline(ranefs) # Q-Q plot  
   A graph with a line

   Description automatically generated  
   shapiro.test(ranefs)  
   Shapiro-Wilk normality test  
   data: ranefs  
   W = 0.88759, p-value = 2.033e-11
2. Simulation-based scaled residuals  
   library(DHARMa)  
   sim\_resid <- simulateResiduals(AIM\_With\_WVSDer)  
   plot(sim\_resid)  
   A graph of a plot

   Description automatically generated with medium confidence  
     
   testDispersion(sim\_resid)  
   A graph of a number of different values

   Description automatically generated with medium confidence
3. Group-level influence  
   infl <- influence(AIM\_With\_WVSDer, group = "B\_COUNTRY\_ALPHA")

plot(infl, which = "cook")  
A graph with blue dots

Description automatically generated

dfbetas(infl)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (Intercept) | Sex | Age | Free Will | Prejudice | Ext. IDV-COLL |
| ARM | -0.09708 | -0.01488 | 0.01414 | 0.02443 | 0.09485 | 0.07289 |
| BGD | 0.09083 | 0.25249 | 0.07278 | 0.02204 | 0.03754 | -0.13492 |
| BOL | 0.06948 | -0.20490 | 0.04590 | 0.07040 | -0.02997 | -0.02092 |
| BRA | 0.23970 | 0.12515 | 0.09447 | 0.04897 | 0.08053 | 0.06018 |
| CHL | 0.22141 | 0.09830 | -0.18797 | 0.06411 | -0.22685 | 0.19911 |
| CHN | -0.27095 | 0.12248 | 0.25966 | 0.30947 | -0.34797 | -0.15354 |
| COL | -0.00453 | 0.03127 | -0.22411 | 0.21727 | -0.05331 | 0.00130 |
| CYP | -0.12795 | -0.23614 | 0.20114 | -0.01295 | 0.07503 | -0.09416 |
| CZE | -0.15511 | 0.01996 | -0.05815 | -0.35609 | -0.17033 | -0.27834 |
| DEU | -0.25097 | -0.00737 | -0.15403 | 0.00387 | 0.10818 | -0.54682 |
| ECU | -0.11677 | -0.09604 | -0.08652 | -0.10115 | 0.11576 | 0.04466 |
| ETH | 0.15196 | -0.33283 | 0.12249 | -0.05401 | -0.18457 | -0.15543 |
| GRC | 0.00707 | -0.00533 | 0.16801 | -0.15010 | -0.01708 | 0.01011 |
| HKG | -0.27186 | -0.21871 | 0.24964 | -0.04800 | 0.00705 | -0.25944 |
| IDN | -0.23798 | 0.08295 | 0.02338 | 0.00436 | 0.10501 | 0.29967 |
| IND | 0.27902 | 0.01064 | 0.20721 | 0.30696 | 0.04094 | -0.10551 |
| IRQ | -0.20838 | 0.16592 | 0.00017 | -0.04695 | -0.22725 | 0.06601 |
| JOR | -0.02772 | -0.10795 | -0.17788 | 0.05153 | 0.16998 | 0.02223 |
| KAZ | -0.06095 | 0.12287 | -0.14414 | -0.06479 | -0.11624 | 0.02522 |
| KEN | -0.14356 | 0.15025 | -0.01953 | 0.03510 | -0.01297 | 0.18693 |
| KGZ | -0.10005 | 0.28541 | -0.18584 | -0.05616 | 0.21974 | 0.08206 |
| LBY | -0.32366 | -0.43266 | -0.25060 | 0.02395 | 0.07577 | 0.24637 |
| MAC | 0.17260 | 0.03931 | 0.41287 | 0.15383 | 0.01338 | 0.10198 |
| MEX | 0.10733 | 0.13811 | -0.12010 | 0.07356 | -0.25076 | 0.01829 |
| NGA | -0.07312 | -0.26963 | -0.05949 | 0.11206 | 0.16229 | 0.24264 |
| NIC | 0.05262 | 0.02470 | -0.15970 | -0.12333 | 0.03699 | -0.00992 |
| PAK | 0.14822 | -0.12461 | 0.06622 | 0.21915 | 0.14639 | -0.17794 |
| PER | 0.09923 | -0.05531 | -0.11147 | -0.03034 | 0.22813 | -0.05160 |
| ROU | 0.21008 | 0.04239 | 0.04581 | 0.12498 | 0.05958 | 0.15593 |
| RUS | 0.13698 | 0.03044 | -0.11882 | -0.05271 | 0.02533 | 0.09885 |
| SGP | -0.05044 | 0.23728 | -0.14874 | -0.30506 | -0.09318 | -0.02434 |
| SRB | 0.12958 | -0.04432 | 0.15784 | 0.00487 | -0.10026 | 0.07052 |
| SVK | -0.15632 | -0.01450 | 0.09159 | -0.29082 | -0.06258 | -0.19572 |
| THA | 0.20067 | 0.08487 | 0.10263 | 0.28196 | -0.53517 | -0.13459 |
| TUN | -0.09927 | 0.09387 | 0.06716 | -0.05819 | 0.19431 | 0.02111 |
| TUR | 0.17364 | 0.03720 | -0.04775 | -0.24292 | -0.09914 | 0.13145 |
| TWN | -0.07923 | -0.16554 | 0.28030 | -0.02489 | 0.29386 | -0.03624 |
| UKR | 0.09461 | 0.10875 | 0.10225 | -0.14310 | -0.12227 | 0.11598 |
| URY | 0.06528 | -0.08745 | -0.30020 | 0.22519 | 0.03641 | 0.08572 |
| VEN | -0.12458 | 0.30723 | -0.18497 | -0.31166 | 0.07212 | 0.02446 |
| VNM | 0.22133 | -0.02142 | -0.04602 | 0.16842 | 0.20623 | -0.01015 |
| ZWE | 0.02832 | -0.19715 | 0.03186 | -0.08644 | -0.03618 | -0.01153 |

1. Individual-level influence

library(HLMdiag)

cooksd <- cooks.distance(AIM\_With\_WVSDer)  
plot(cooksd)  
  
A graph with numbers and dots

Description automatically generated

1. Correlation of Fixed Effects

(Intr) Sex Age Free Will Prejudice

Sex -0.057

Age 0.003 -0.007

Free Will 0.004 -0.004 0.005

Prejudice -0.001 0.003 -0.020 0.005

ext. IDV-COL 0.004 -0.004 -0.004 0.002 0.001

1. Correlation of random effects, using | instead of || operator in model formula

Groups Name Corr

Country

Sex 0.14

Age 0.13 -0.21

Free Will 0.38 -0.21 0.22

Prejudice -0.12 -0.32 -0.12 -0.07