

Excel HW 6 Revised

DIF Analysis

Conduct a DIF analysis using data “dn211dif.csv” (a 10-item test with N = 200) between Group 1 and Group 2. Use the 2PL model. Identify DIF items.

If you have an access to IPTPRO, then try Steps 1 – 3.

If you only have an access to Excel, try Steps 2 – 3.

Step 1: Use IRTPRO. You can run a DIF analysis (Option “Test all items, anchor all items”). Set Group 2 as the reference group.

Step 2: Graphically show DIF (two ICCs) either using IRTPRO-GRAPH or Excel. For Excel only users, let me give you the item parameters for one of the DIF items from IRTPRO (Item 3). (For IRTPRO users, verify you get the same for Item 3.)

	a	b
Group 1	1.65	0.27
Group 2	1.11	-0.27

Step 3: Using Excel, calculate Raju’s area. Using the same criterion as HSR Ch8 HW#2, conduct a significance test.

Hint: You can have IRTPRO draw two ICC’s. In IRTPRO-Graph, to Tools – Options, and select Superimpose groups (DIF).

