

UNIVERSIDADE
SÃO FRANCISCO

Da TCT à TRI usando o Modelo de Rasch: GfRI

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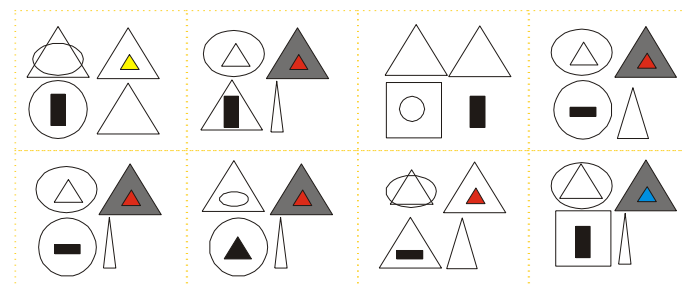
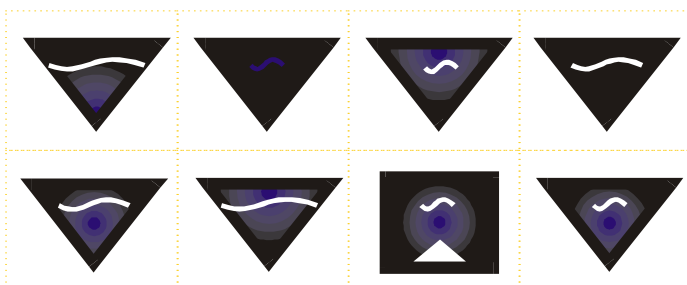
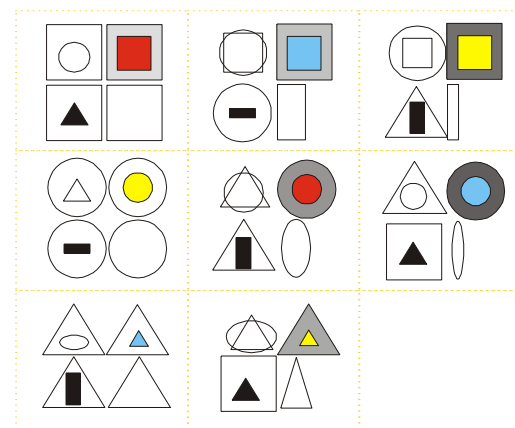
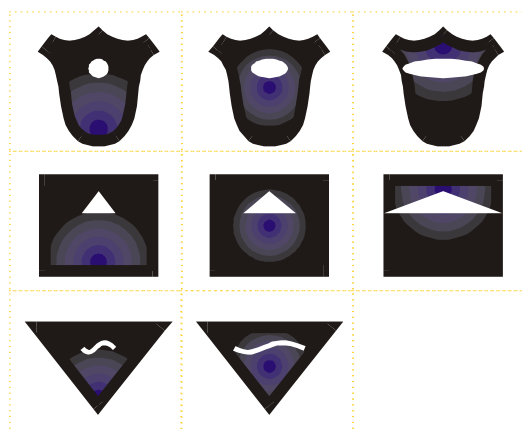
Workshop ministrado na Universidade do Minho, Instituto de
Educação e Psicologia, Braga, Janeiro, 2008

Exemplo GfRI

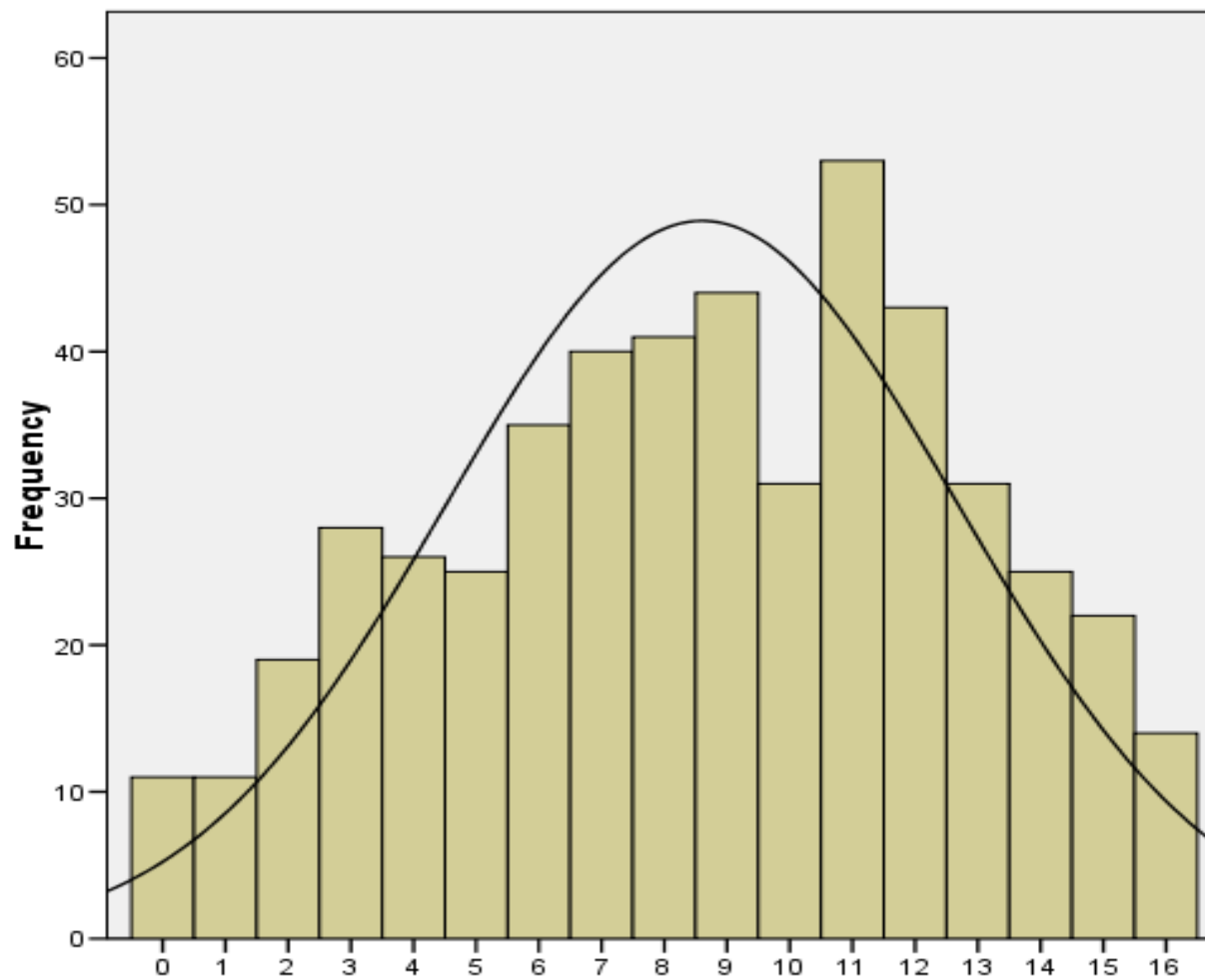
Teste de medida do raciocínio GfRI

16 Itens de raciocínio analógico com figuras geométricas arranjadas em matrizes com oito alternativas de resposta

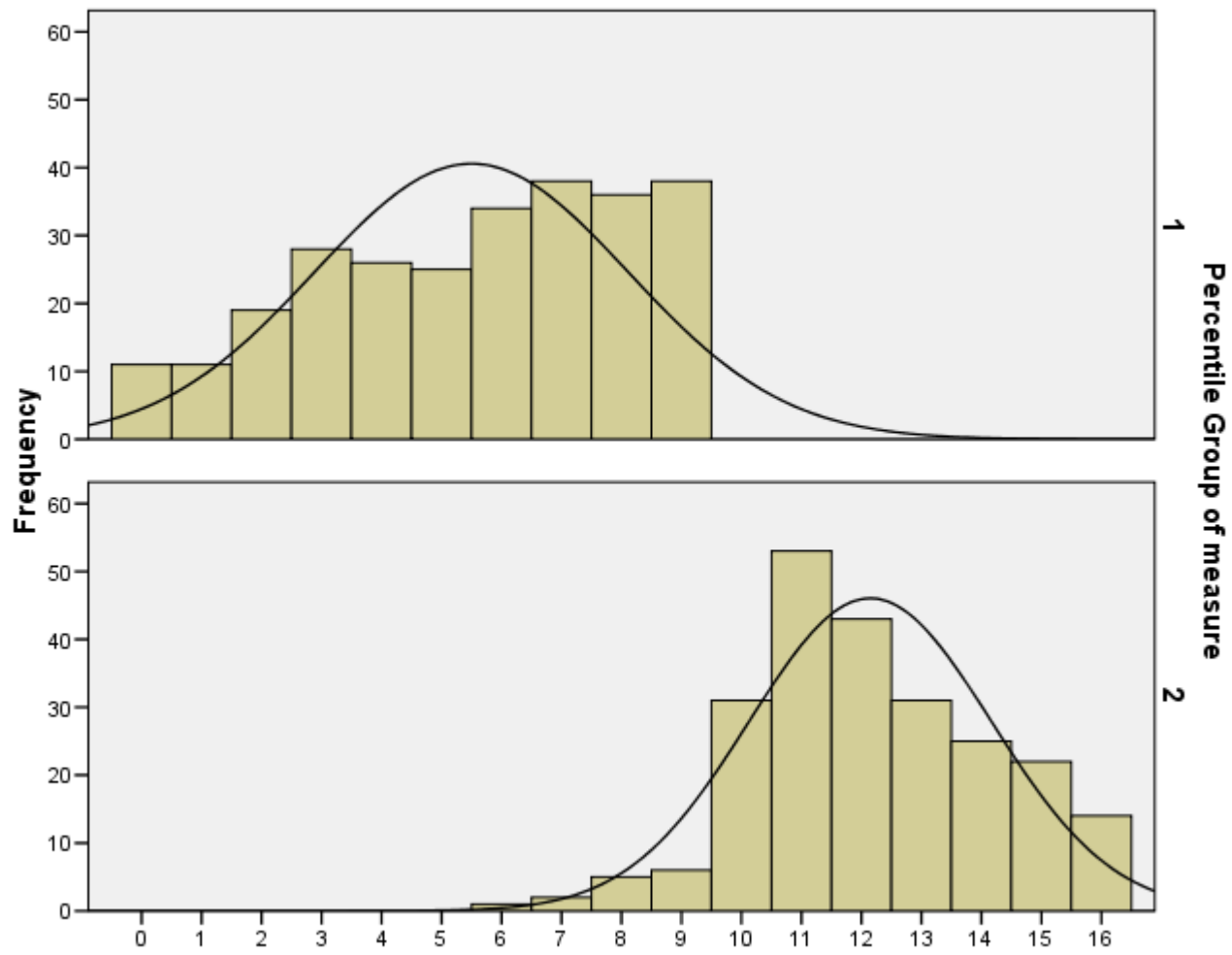
Banco de dados com 499 universitários que responderam ao teste.



Análise clássica



Mean =8,60
Std. Dev. =4,07
N =499



Item Statistics

	Mean		Std. Deviation		N	
	Percentile Group of measure		Percentile Group of measure		Percentile Group of measure	
	1	2	1	2	1	2
i1	,57	,92	,496	,269	225	192
i2	,63	,99	,484	,102	225	192
i3	,34	,86	,474	,349	225	192
i4	,38	,79	,487	,411	225	192
i5	,58	,99	,494	,102	225	192
i6	,40	,84	,492	,369	225	192
i7	,48	,90	,501	,306	225	192
i8	,25	,79	,436	,407	225	192
i9	,50	,85	,501	,354	225	192
i10	,35	,76	,478	,431	225	192
i11	,26	,78	,438	,418	225	192
i12	,16	,60	,363	,491	225	192
i13	,16	,54	,363	,500	225	192
i14	,32	,71	,468	,456	225	192
i15	,15	,59	,359	,493	225	192
i16	,17	,59	,379	,493	225	192

Item-Total Statistics

	Scale Mean if Item Deleted		Scale Variance if Item Deleted		Corrected Item-Total Correlation		Squared Multiple Correlation		Cronbach's Alpha if Item Deleted	
	Percentile Group of measure		Percentile Group of measure		Percentile Group of measure		Percentile Group of measure		Percentile Group of measure	
	1	2	1	2	1	2	1	2	1	2
i1	5,14	11,56	5,789	3,190	,248	,059	,137	.	,507	,273
i2	5,08	11,49	5,517	3,298	,386	,028	,228	.	,477	,279
i3	5,37	11,63	6,127	3,115	,118	,067	,104	.	,534	,270
i4	5,32	11,70	6,104	3,112	,119	,026	,082	.	,534	,286
i5	5,12	11,49	5,529	3,277	,368	,085	,201	.	,480	,274
i6	5,30	11,65	5,631	3,162	,323	,016	,162	.	,490	,287
i7	5,22	11,59	5,879	3,186	,205	,036	,116	.	,516	,279
i8	5,45	11,69	6,026	2,978	,193	,124	,069	.	,519	,250
i9	5,21	11,63	5,809	3,103	,235	,073	,119	.	,510	,269
i10	5,36	11,73	5,927	3,089	,203	,030	,135	.	,517	,286
i11	5,45	11,71	6,106	3,202	,152	-,039	,097	.	,527	,310
i12	5,55	11,89	6,490	2,919	,003	,095	,075	.	,549	,261
i13	5,55	11,94	6,293	2,808	,111	,156	,105	.	,533	,232
i14	5,39	11,78	6,211	3,002	,085	,069	,049	.	,540	,271
i15	5,56	11,90	6,462	2,638	,020	,273	,067	.	,546	,175
i16	5,53	11,90	6,187	2,837	,157	,143	,067	.	,526	,238



Scale Statistics

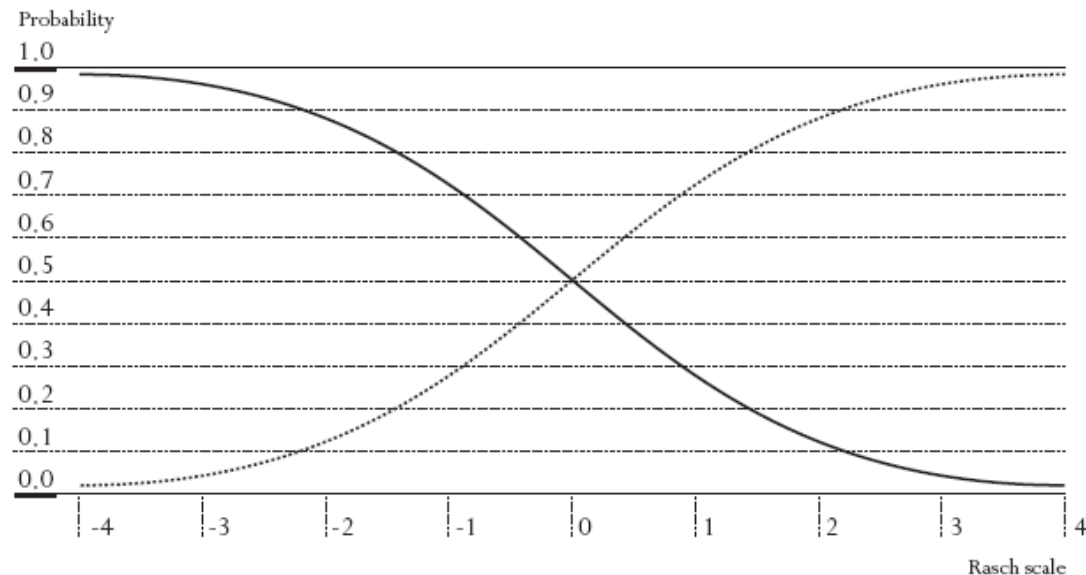
Percentile Group of measure	Mean	Variance	Std. Deviation	N of Items
1	5,71	6,628	2,574	16
2	12,48	3,319	1,822	16

Reliability Statistics

Percentile Group of measure	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
1	,536	,516	16
2	,279	,260	16

Transição da psicometria clássica para TRI

- Como a TRI supera essas limitações ? Como podemos entender melhor a TRI a partir do que já sabemos sobre a análise clássica?
- Considere o índice de dificuldade
 - Dependente da amostra: Alta habilidade > Alta probabilidade de acerto, baixa habilidade > baixa probabilidade de acerto
 - $ID = \text{Dificuldade do Item} + \text{Habilidade da Amostra}$
- E se calculássemos vários ID's, em razão dos diferentes níveis de habilidade? Bingo: CCI!
- $ID1 = \text{Dif} + \text{Hab1}$
- $ID2 = \text{Dif} + \text{Hab2} \dots$

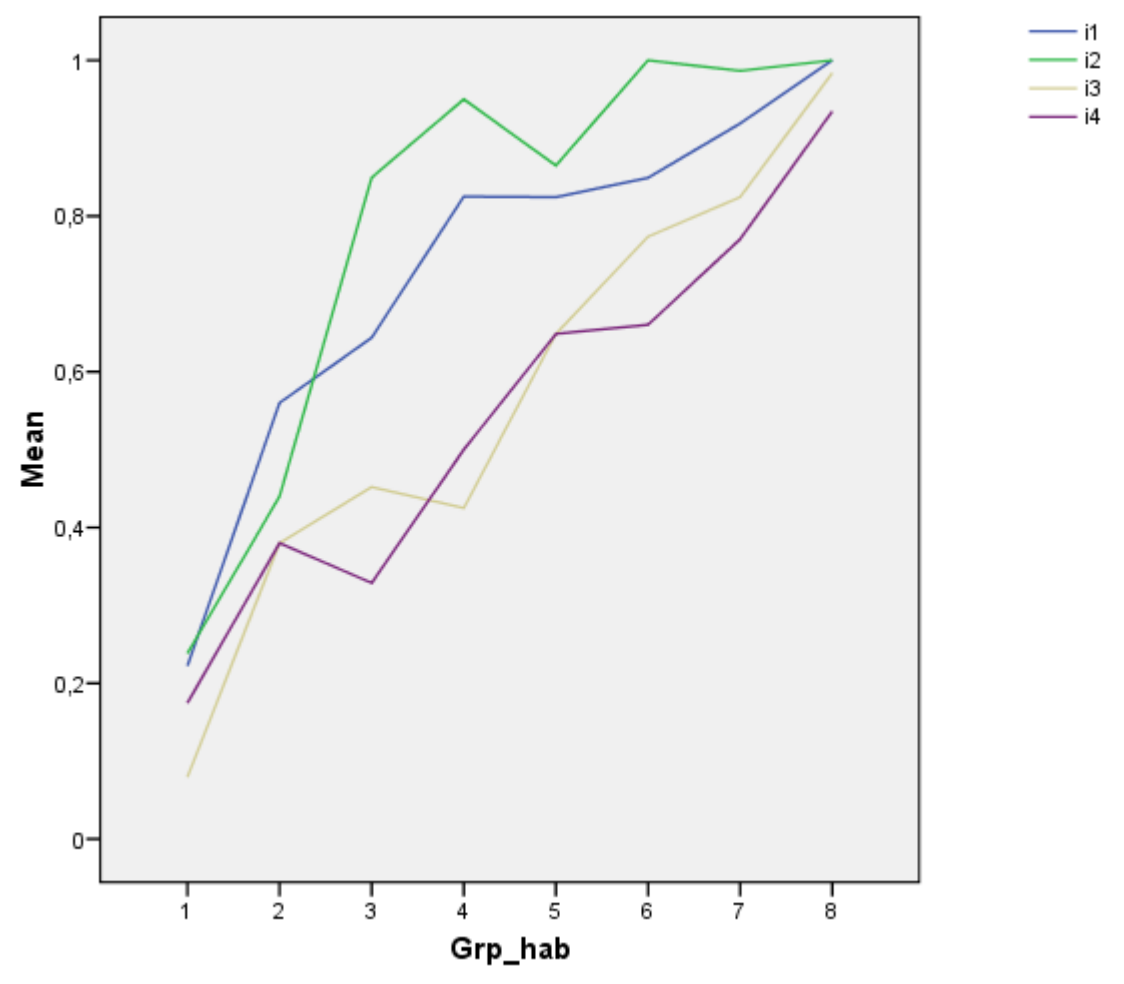


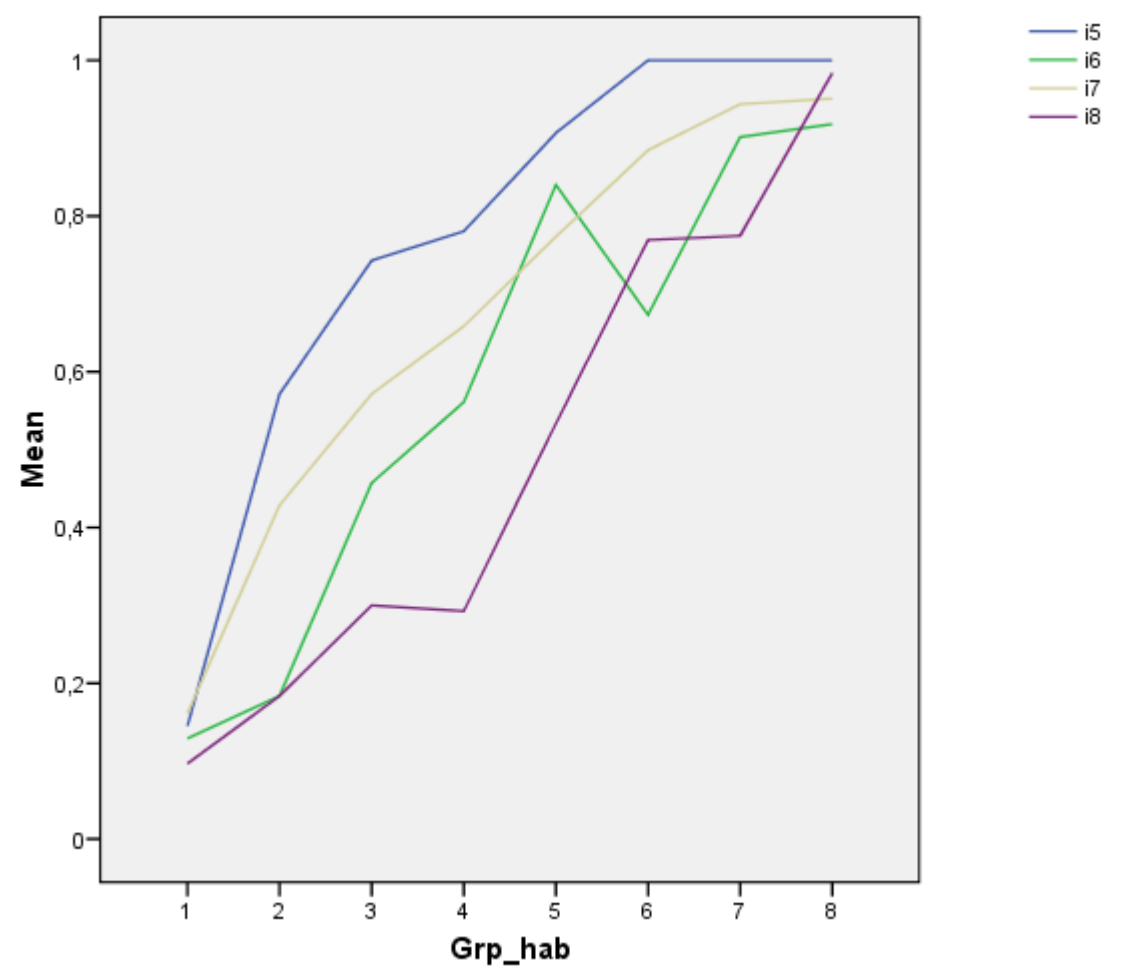


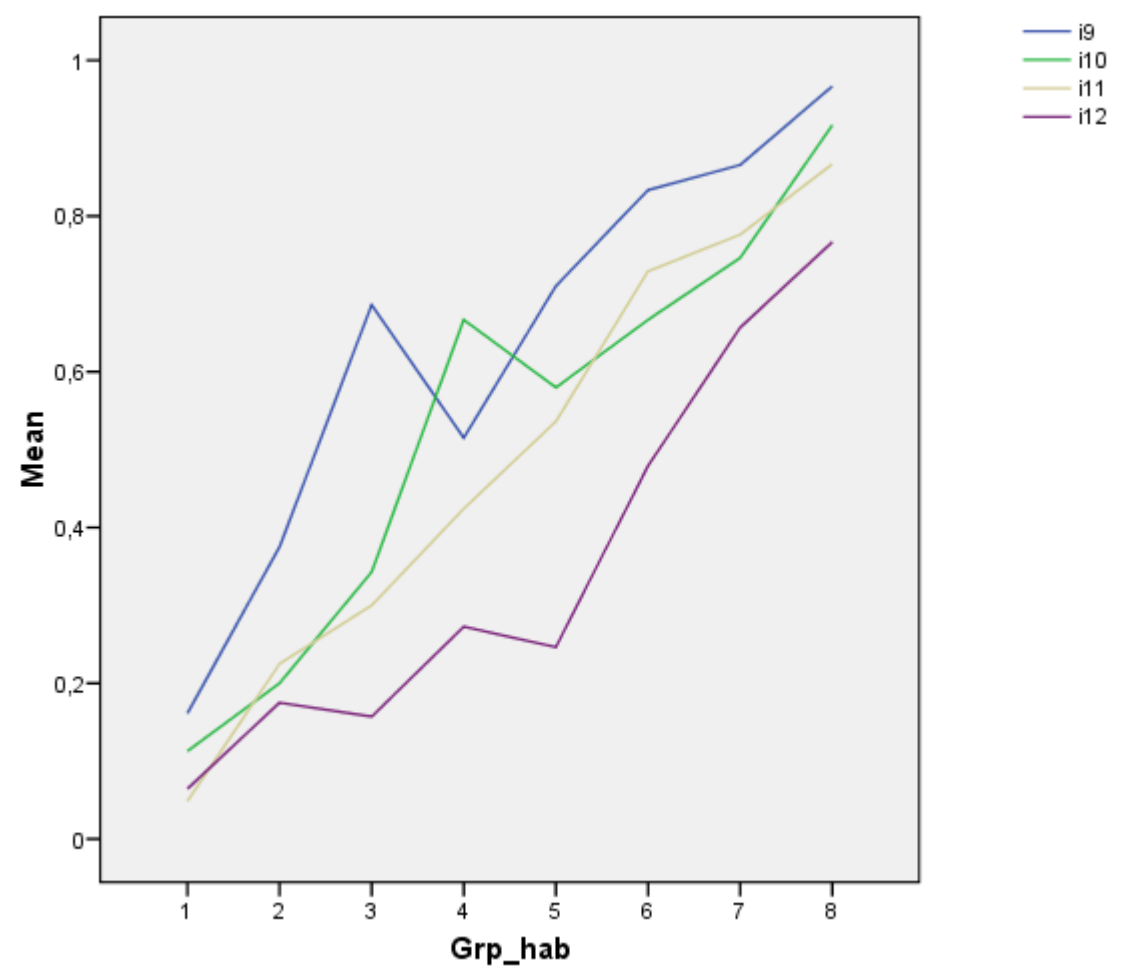
Report

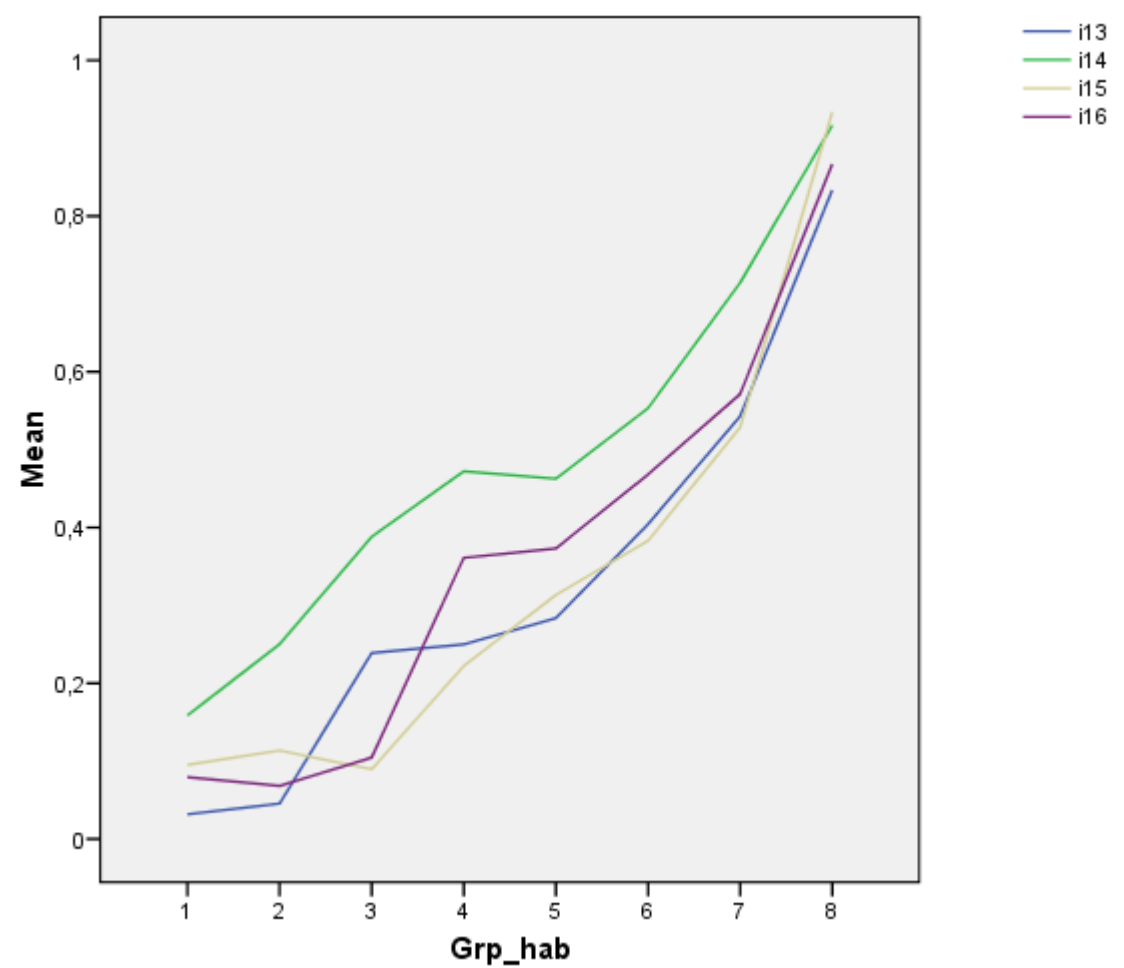
Score used for estimation (TOTALSCORE=N)

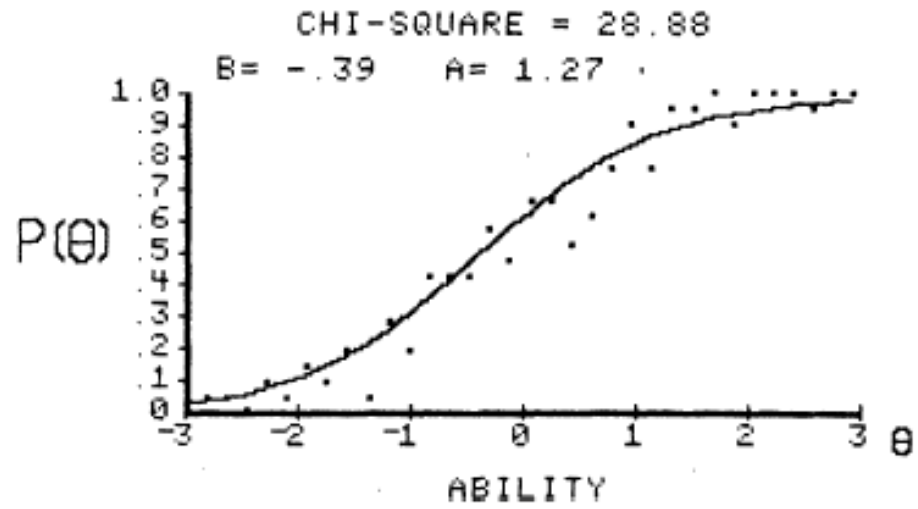
Grp_hab	Mean	N	Std. Deviation
1	1,9275	69	1,10239
2	4,4902	51	,50488
3	6,5333	75	,50225
4	8,0000	41	,00000
5	9,4133	75	,49575
6	11,0000	53	,00000
7	12,4189	74	,49675
8	14,8197	61	,78546
Total	8,6012	499	4,07008











A15 A15H41 Location = 0,092 Residual = -0,739 Chi Sq Prob = 0,581

