

The inspiration

Original paper inspiration for this research:

<https://pubmed.ncbi.nlm.nih.gov/33164091/>

Another approach:

https://papersdb.cs.ualberta.ca/~papersdb/view_publication.php?pub_id=151

A pdf of other researchers presentation on this topic:

<https://docs.google.com/document/d/1eJQH0y2qQPsMOEsFPUjXKzejAdyj1EBIOrmkwOnIsCk/edit?usp=sharing>

Dichotomous IRT

List of videos for idea:

<https://www.youtube.com/watch?v=SrdbllMYq8M&list=PLJNUIJnEIUzDmrlPunMyF3tVlHb65wNb>

Paper:

Overview:

<https://files.eric.ed.gov/fulltext/EJ1133065.pdf>

Old Fundamental:

https://www.academia.edu/30496631/Fundamentals_of_Item_Response_Theory?auto=download

Book:

https://drive.google.com/file/d/1O5i7RMMJiRm_-zWcmMIRlCdXhWr7-ABk/view?usp=sharing

Polytomous IRT

Polytomous IRT based CAT Overview:

<https://files.eric.ed.gov/fulltext/EJ1148445.pdf>

Polytomous IRT based CAT Measuring Psychological Traits:

<https://dergipark.org.tr/en/download/article-file/2555524>

PCM(Partial Credit Model)

<https://journals.sagepub.com/doi/full/10.1177/0013164419892667>

GRM(graded response model example for the CES-D scale)

<https://journals.sagepub.com/doi/full/10.1177/0013164419892667>

ANIMATION for the models

gpcm <https://www.geogebra.org/m/XSadex4n>
grm <https://www.geogebra.org/m/MntEF9sW>

Item Selection in Polytomous CAT:

<http://www.iacat.org/sites/default/files/biblio/ve03027.pdf>

A related but outdated software called FireStar for simulation:

FireStar Repo:

<https://rdrr.io/github/choi-phd/Firestar/man/Firestar.html>

FireStar User Manual:

https://www.researchgate.net/profile/Seung-Choi-8/publication/40689097_Firestar_Computerized_Adaptive_Testing_CAT_Simulation_Program_for_Polytomous_IRT_Models/links/02bfe513e8bb87a274000000/Firestar-Computerized-Adaptive-Testing-CAT-Simulation-Program-for-Polytomous-IRT-Models.pdf?origin=publication_list

The packages we used:

Mirt:

<https://cran.r-project.org/web/packages/mirt/index.html>

CatR:

<https://cran.r-project.org/web/packages/catR/index.html>

Video for Multidimensional IRT:

<https://www.youtube.com/watch?v=mpt4xEUfV80&list=PLPxHgAQNdRRpkVjGw4lWfI7mQdQMR45cW&index=10>