

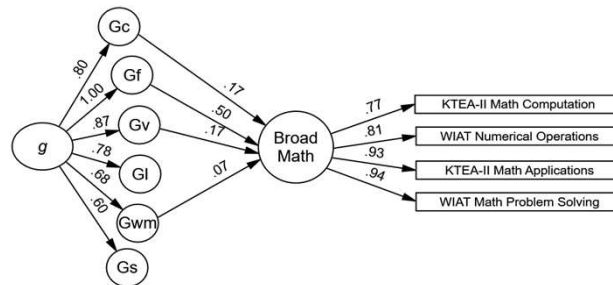
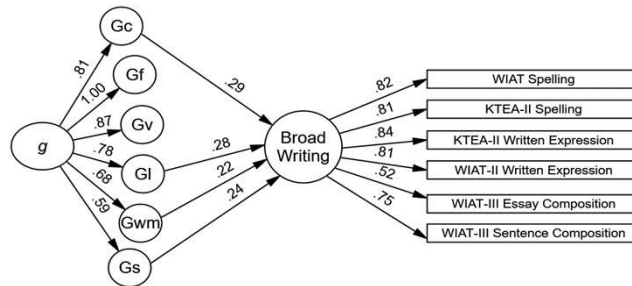
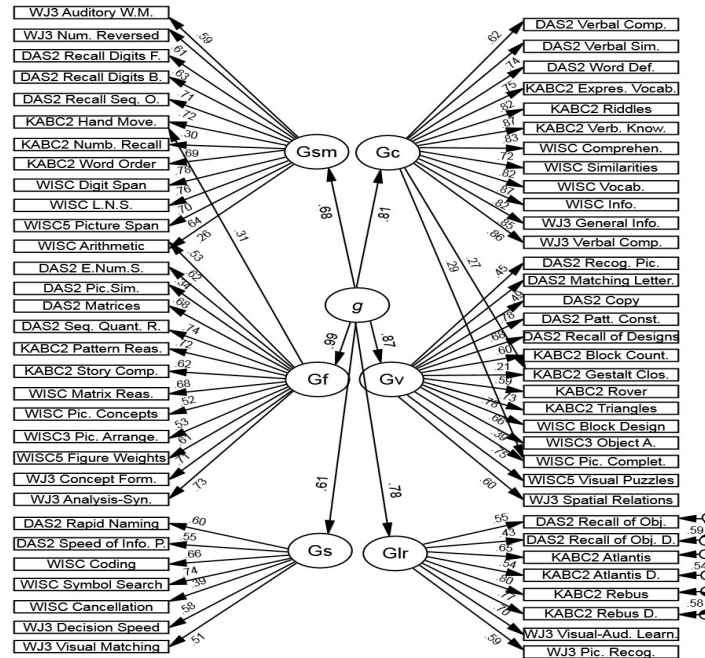
Jacqueline Caemmerer, Matthew Reynolds, Timothy Keith, Eunice Blemahdoo, Natalie Charamut
 University of Connecticut, University of Kansas, University of Texas at Austin

Background

- Planned missingness designs minimize the time, financial, and participant fatigue demands of completing many measures
 - Often all participants complete a linking test and one or more other tests. Incomplete data for the other tests is distributed across participants
- ## Sample
- 3,927 children ages 6 – 18 from 7 standardization and linking samples collected by Pearson Assessments
 - 6 intelligence tests and 3 achievement tests

	KABC2	WJ3	WISC3	WISC4	WISC5	DAS2	KTEA2	WIAT2	WIAT3
KABC2 XBA	347	89	123	58	-	-	-	-	-
KABC2/ KTEA2	2,223	-	-	-	-	-	2,223	-	-
WISC4/ DAS2	-	-	-	202	-	202	-	-	-
DAS2/ WIAT2	-	-	-	-	-	370	-	370	-
WISC4/ WIAT2	-	-	-	532	-	-	-	532	-
WISC5/ WIAT3	-	-	-	-	181	-	-	181	181
WISC5/ KABC2	88	-	-	-	88	-	-	-	-
Total	2,658	89	123	792	269	572	2,223	1,083	181

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Procedures & Findings

- Data resembled a planned missingness design because participants did not complete all tests
- But there was no single linking test and missingness was not planned prior to data collection (exception is KABC XBA)
- Samples were "linked" to each other through the same tests being used in other samples
- 79 and 87 missing data patterns in the broad math and broad writing models respectively
- 68% completed KABC2 and KTEA2, 30% WISC3,4,5, 28% WIAT 2,3, 14% DAS2, 2% WJ3
- Missing data was handled with maximum likelihood estimation
- Model fit was acceptable to good and results were consistent with prior research
 - RMSEA = 0.02, SRMR = 0.09, CFI = 0.96, TLI = 0.95 in writing and 0.96 = math models
- Replicability: Monte Carlo simulations with the 3 most common missing data patterns did not successfully run
- Replicability: re-analyzed models using subsets of tests. 75% of significant paths were very similar (range β s difference = 0.00 – 0.14)
- Linking the tests and samples allowed us to include a wide breadth of tests and indicators of each latent construct