The Effect of Brief Anxiety Interventions on Reported Anxiety and Math Test Performance

Ganley, Conlon, McGraw, Barroso, & Geer, 2021

Supplementary Materials

Table of Contents

Figure S1. Histogram of Math Test Scores

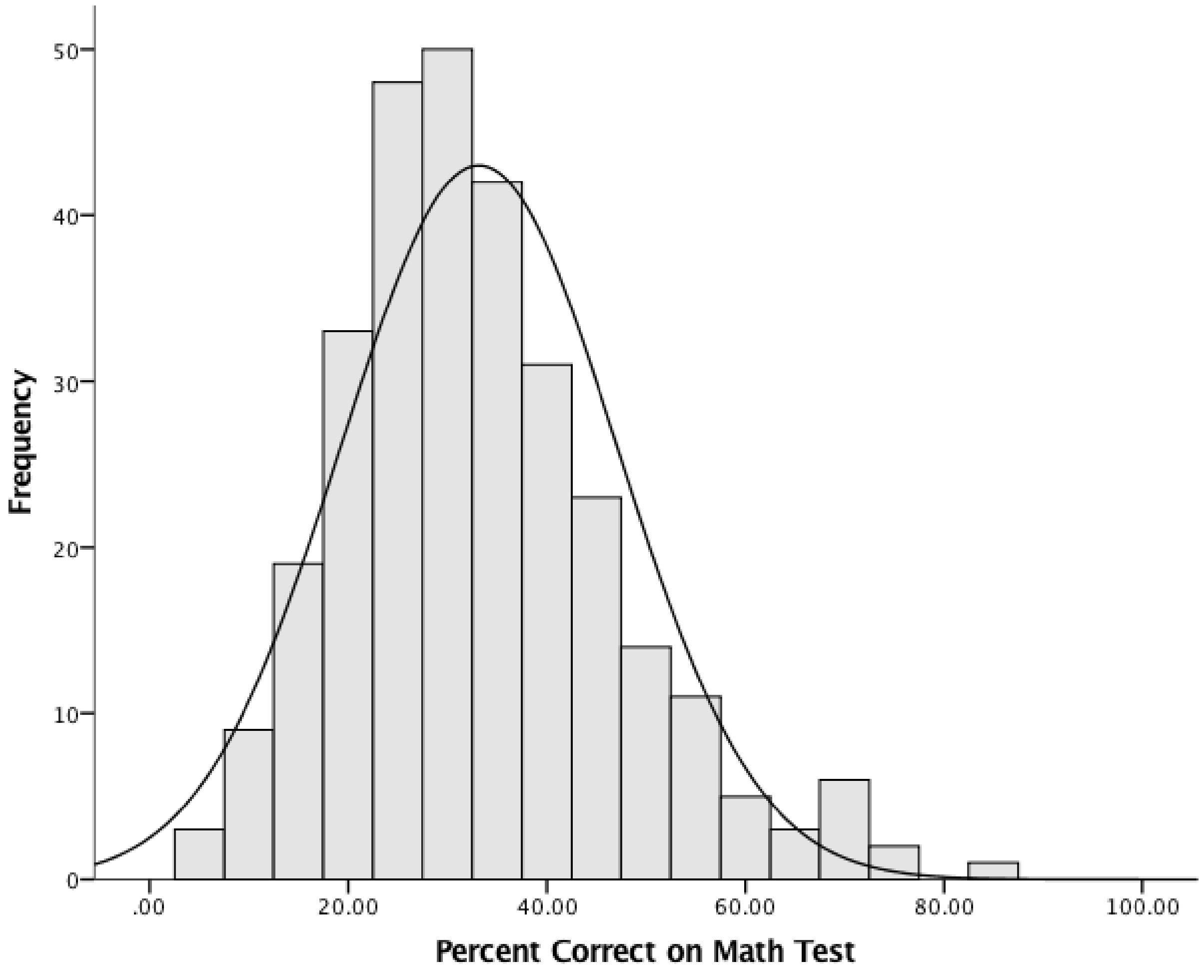

Table S1. Results from Regression Analyses Predicting Math and Test Anxiety from Condition

Condition	Math Anxiety	Test Anxiety
Challenge	.39 (.15)**	.27 (.10)**
Excitement	.20 (.15)	.14 (.10)
Writing	.09 (.15)	.11 (.10)
Look Ahead	.25 (.15)	.16 (.10)
R^2	.03	.03

Note. ** *p* < .01

Table S2. Descriptive Statistics and Correlations among Key Variables for Math Test Subscales

Variable	Descriptive Statistics					Correlations		
	Mean	SD	Scale	Skew	Kurtosis	Number Score	Algebra Score	Geometry Score
Math Anxiety	2.31	0.80	1-5	.71	-.10	-.23***	-.14*	-.22***
Test Anxiety	2.31	0.53	1-4	.31	-.22	-.26***	-.12*	-.16**
State Anxiety	3.98	1.31	1-7	.12	-.64	-.24***	-.11*	-.14*
Number Score	37.33	16.61	0-100	.52	.27	1		
Algebra Score	25.27	20.70	0-100	.66	05	.23***	1	
Geometry Score	31.58	22.59	0-100	.36	-.23	.33***	.28***	1

Note. *** $p < .001$; ** $p < .01$, * $p < .05$

Table S3. Mean Math Performance by Condition for Math Test Subscales

Condition	*n*	Number Subscale		Algebra Subscale		Geometry Subscale	
		Mean	SD	Mean	SD	Mean	SD
Reappraisal as challenge (Jamieson et al., 2010)	59	36.83	16.92	26.78	20.88	34.75	25.01
Reappraisal as excitement (Brooks, 2014)	63	35.35	16.17	27.94	17.05	29.76	20.01
Expressive writing (Ramirez & Beilock, 2011)	63	36.65	15.49	23.49	20.80	30.56	21.74
Look ahead (Mavilidi et al., 2014)	58	38.56	16.80	22.76	22.93	31.03	24.02
Control	57	39.55	17.98	25.26	21.88	32.02	22.54

Table S4. Standardized Regression Coefficients for Regression Analyses Predicting Math Test Scores – Number Subscale

Variable	Math Anxiety Only			Test Anxiety Only			Both Math and Test Anxiety		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Challenge	-.07	-.02	-.01	-.07	-.01	.001	-.07	-.002	.02
Excitement	-.10	-.08	-.08	-.10	-.08	-.07	-.10	-.07	-.06
Writing	-.07	-.06	-.06	-.07	-.05	-.04	-.07	-.05	-.04
Look Ahead	-.02	.01	.00	-.02	.01	.01	-.02	.01	.02
Math Anxiety		-.23***	-.22					-.13	-.06
Test Anxiety					-.26**	-.34**		-.19**	-.32*
Challenge x Math Anxiety			-.06						-.10
Excitement x Math Anxiety			-.03						-.03
Writing x Math Anxiety			.03						-.03
Look Ahead x Math Anxiety			.04						-.02
Challenge x Test Anxiety						.02			.07
Excitement x Test Anxiety						-.04			-.03
Writing x Test Anxiety						.09			.11
Look Ahead x Test Anxiety						.12			.13
R^2 change		.05***	.007		.07***	.02		.08***	.02
R^2	.008	.06**	.07*	.008	.07***	.09**	.008	.08***	.11**

Note. *** *p* < .001, ** *p* < .01, * *p* < .05

Table S5. Standardized Regression Coefficients for Regression Analyses Predicting Math Test Scores – Algebra Subscale

Variable	Math Anxiety Only			Test Anxiety Only			Both Math and Test Anxiety		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Challenge	.03	.06	.08	.03	.06	.06	.03	.07	.08
Excitement	.05	.07	.08	.05	.07	.08	.05	.07	.09
Writing	-.04	-.03	-.02	-.04	-.02	-.02	-.04	-.02	-.01
Look Ahead	-.05	-.03	-.03	-.05	-.03	-.03	-.05	-.03	-.02
Math Anxiety		-.15*	-.25					-.11	-.18
Test Anxiety					-.13*	-.22		-.07	-.14
Challenge x Math Anxiety			.01						-.03
Excitement x Math Anxiety			.05						.01
Writing x Math Anxiety			.05						.10
Look Ahead x Math Anxiety			.12						.10
Challenge x Test Anxiety						.06			.08
Excitement x Test Anxiety						.07			.08
Writing x Test Anxiety						-.03			-.08
Look Ahead x Test Anxiety						.09			.04
R^2 change		.02*	.008		.02*	.01		.03*	.02
R^2	.009	.03	.04	.009	.03	.04	.009	.03	.06

Note. * *p* < .05

Table S6. Standardized Regression Coefficients for Regression Analyses Predicting Math Test Scores – Geometry Subscale

Variable	Math Anxiety Only			Test Anxiety Only			Both Math and Test Anxiety		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Challenge	.05	.09	.10	.05	.08	.11	.05	.10	.13
Excitement	-.04	-.02	-.02	-.04	-.02	-.02	-.04	-.01	-.01
Writing	-.03	-.02	-.02	-.03	-.01	-.01	-.03	-.01	-.01
Look Ahead	-.02	.01	.008	-.02	.002	.00	-.02	.01	.02
Math Anxiety		-.23***	-.24					-.20**	-.18
Test Anxiety					-.17**	-.19		-.06	-.12
Challenge x Math Anxiety			-.04						.02
Excitement x Math Anxiety			-.003						-.01
Writing x Math Anxiety			.003						.01
Look Ahead x Math Anxiety			.05						-.09
Challenge x Test Anxiety						-.10			-.10
Excitement x Test Anxiety						-.01			.004
Writing x Test Anxiety						.01			-.01
Look Ahead x Test Anxiety						.16			.23*
R^2 change		.05***	.004		.03**	.04*		.06***	.04
R^2	.006	.06**	.06*	.006	$.03^{+}$	.07*	.006	.06**	.10**

Note. *** $p < .001$, ** $p < .01$, * $p < .05$