

## **Supplementary Materials**

List of occupations used for measuring interest in science and liberal arts occupations.

### Science

Engineer, Mathematician, IT specialist, astronomer, biologist, building contractor, carpenter, chemist, nurse, car mechanic, electrician, medical doctor, physicist, surgeon.

### Liberal arts

Psychologist, philosopher, child care provider, teacher, musician, school principal, social worker, archeologist, artist, linguist, anthropologist.

The occupations were categorized as science or liberal arts occupation based on whether the most likely study major that Dutch students had to follow to enter the occupation was either a science or liberal arts domain from the gender-science Implicit Association Test (IAT). For instance, in order to become an anthropologist Dutch students need to study anthropology which falls under humanities in the Netherlands and humanities is a liberal arts domain in the IAT.

## Analyses controlled for study major

**Table S1.**

*Hierarchical Regression Results for Occupational Interests (Science vs. Humanities),*

*Predicted From Gender-Science Stereotypes and Gender Similarity*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.44	.44***
Constant	-0.28***	0.05			
Science major	0.60***	0.09	.28		
Humanities major	-0.68***	0.08	-.37		
Gender-science stereotypes	0.03	0.09	.01		
Gender similarity	0.13***	0.02	.25		
Step 2				.45	.01*
Constant	-0.27***	0.05			
Science major	0.57***	0.09	.27		
Humanities major	-0.67***	0.08	-.36		
Gender-science stereotypes	0.02	0.09	.01		
Gender similarity	0.14***	0.02	.26		
Gender stereotypes * Gender similarity	0.11*	0.06	.08		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

**Table S2**

*Hierarchical Regression Results for Gender-Science Stereotypes, Predicted From*

*Occupational Interests (Science vs. Humanities) and Gender Similarity*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.06	.06***
Constant	0.24***	0.03			
Science major	0.20***	0.05	.22		
Humanities major	0.15**	0.05	.19		
Occupational interests	0.01	0.03	.02		
Gender similarity	-0.02	0.01	-.09		
Step 2				.09	.04***
Constant	0.21	0.03			
Science major	0.18***	0.05	.19		
Humanities major	0.14**	0.05	.17		
Occupational interests	-0.01	0.03	-.02		
Gender similarity	-0.02	0.01	-.09		
Occupational interests * Gender similarity	0.06***	0.02	.20		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

**Table S3**

*Hierarchical Regression Results for Gender Similarity, Predicted From Occupational Interests (Science vs. Humanities) and Gender-Science Stereotypes.*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.20	.20***
Constant	-0.03	0.11			
Science major	0.62**	0.22	.15		
Humanities major	0.04	0.19	.01		
Occupational interests	0.69***	0.11	.36		
Gender-Science stereotypes	-0.32	0.21	-.08		
Step 2				.21	.01*
Constant	-0.01	0.11			
Science major	0.53**	0.22	.13		
Humanities major	0.06	0.19	.02		
Occupational interests	0.68***	0.11	.36		
Gender-Science stereotypes	-0.34	0.21	-.08		
Occupational interests * Gender stereotypes	0.47*	0.23	.10		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

### Analyses as proposed by Greenwald et al. (2006) to test for pure multiplicative model

For each regression in Table S5 to Table S7 the following tests should be passed.

Test 1. The  $R^2$  in Step 1 of the regression should account for substantial variance in the criterion, and in Step 1 the estimate  $B$  of the interaction term should have a positive value.

Test 2. The estimate  $B$  of the interaction term should also be positive in Step 2.

Test 3. The increment in  $R^2$  on Step 2 should not be statistically significant.

Test 4. Neither  $B$  estimates of the single predictors should differ significantly from zero (positively or negatively) in Step 2.

**Table S4**

*Hierarchical Regression Results for Occupational Interests (Science vs. Humanities),*

*Predicted From Gender-Science Stereotypes and Gender Similarity*

Variable	$B$	$SE\ B$	$\beta$	$R^2$	$\Delta R^2$
Step 1				.03	.03***
Constant	-0.36***	0.04			
Gender stereotypes * Gender similarity	0.24	0.07	.18		
Step 2				.22	.19***
Constant	-0.36***	0.04			
Gender-science stereotypes	0.02	0.10	.01		
Gender similarity	0.23***	0.02	.44		
Gender stereotypes * Gender similarity	0.26***	0.06	.19		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

Note. Test 3 and 4 of Greenwald et al. 2006 steps not passed, because of significant increment in step 2  $R^2$  and significant predictor gender similarity in step 2.

**Table S5**

*Hierarchical Regression Results for Gender-Science Stereotypes, Predicted From*

*Occupational Interests (Science vs. Humanities) and Gender Similarity*

Variable	$B$	$SE\ B$	$\beta$	$R^2$	$\Delta R^2$
Step 1				.04	.04***
Constant	0.29***	0.02			
Occupational interests * Gender similarity	0.06***	0.02	.20		
Step 2				.05	.01
Constant	0.29***	0.02			
Occupational interests	-0.02	0.03	-.04		
Gender similarity	-0.02	0.01	-.07		
Occupational interests * Gender similarity	0.07***	0.02	.22		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$  Note. All 4 tests of Greenwald et al. 2006 steps are passed.

**Table S6**

*Hierarchical Regression Results for Gender Similarity, Predicted From Occupational Interests (Science vs. Humanities) and Gender-Science Stereotypes.*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1				.03	.03***
Constant	0.12	0.08			
Occupational interests * Gender stereotypes	0.83***	0.25	.17		
Step 2				.20	.18***
Constant	0.12	0.08			
Occupational interests	0.79***	0.09	.42		
Gender-Science stereotypes	-0.26	0.20	-.06		
Occupational interests * Gender stereotypes	0.55*	0.23	.11		

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

*Note.* Test 3 and 4 of Greenwald et al. 2006 steps not passed, because of significant increment in step 2  $R^2$  and significant predictor occupational interests in step 2.

**Table S7***ANOVA Results and Post Hoc Comparisons Across the 5 Classes.*

Variable	Class 1 ( <i>n</i> = 32)		Class 2 ( <i>n</i> = 124)		Class 3 ( <i>n</i> = 98)		Class 4 ( <i>n</i> = 68)		Class 5 ( <i>n</i> = 59)		ANOVA		$\eta^2$	Post hoc comparisons
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (4, 376)	<i>p</i>		
Gender-science stereotypes <sup>1</sup>	0.21	0.36	0.23	0.35	0.22	0.35	0.57	0.29	0.49	0.39	17.30	< .001	.16	1, 2, 3 < 4, 5
Occupational interests <sup>2</sup>	-1.43	0.45	-0.36	0.40	-0.14	0.33	-1.41	0.34	1.01	0.39	399.06	< .001	.81	1, 4 < 2 < 3 < 5
Gender similarity <sup>3</sup>	1.16	0.58	-1.32	0.72	1.71	0.63	-1.38	0.64	1.65	0.84	431.98	< .001	.82	2, 4 < 1 < 3, 5.

<sup>1</sup> Positive scores on this variable represent associating male with science and female with humanities.<sup>2</sup> Positive scores on this variable represent more interest in science occupations, negative scores represent more interest in humanities occupations.<sup>3</sup> Positive scores on this variable represent more similarity to males, negative scores represent more similarity to females.*Note.* Post hoc comparisons indicate statistical differences between the classes 1 to 5 ( $p < .05$ ).