

# A motivational framework of social comparison

## Supplementary Material

October 11, 2020

### 1 Supplementary Figure 1: Domain Frequencies

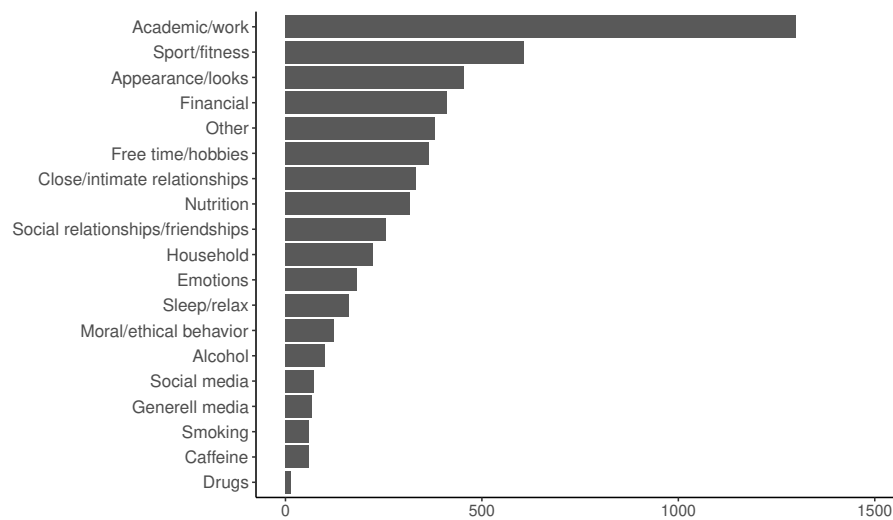


Figure 1: Social comparison frequencies in all domains

## 2 Supplementary Figure 2: Effort Investment

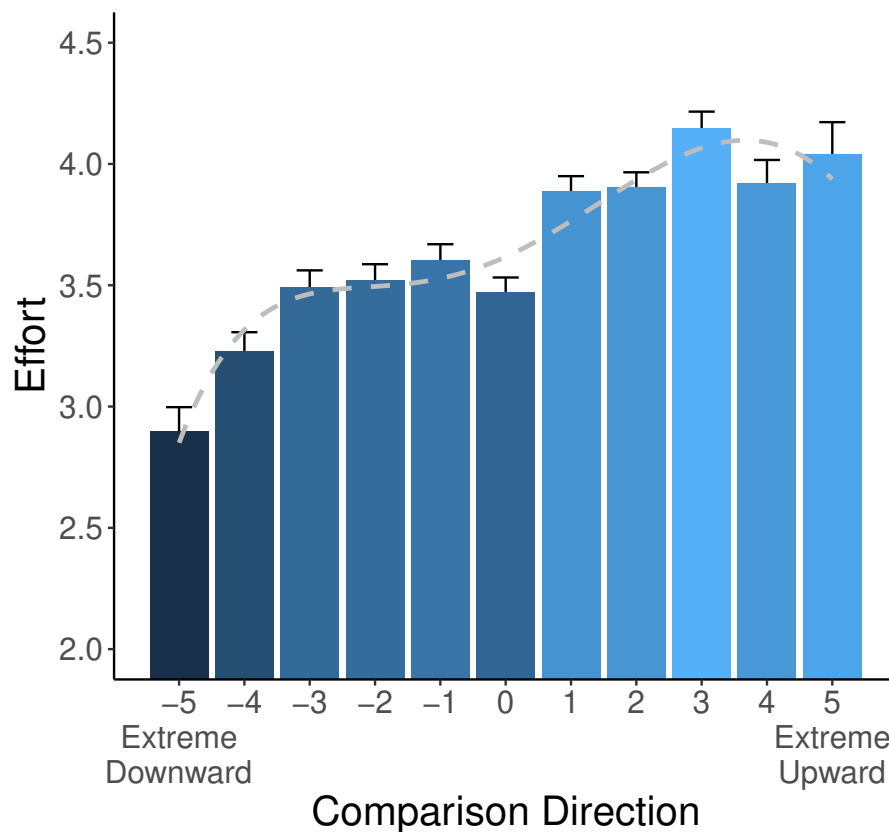


Figure 2: Effects of comparison direction on effort investment. The dotted grey line shows the estimated curve from the multilevel polynomial regression analysis.

## 3 Moderation Analyses

### 3.1 Domain Control

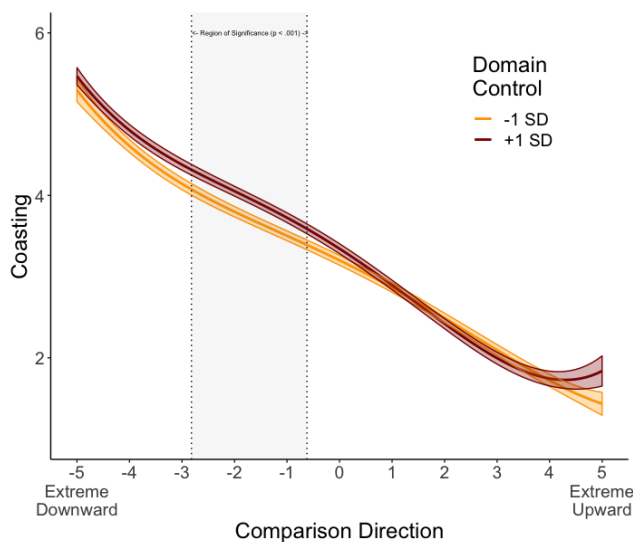


Figure 3: Coasting predicted by multilevel polynomial regression and their interaction effects with high vs. low domain control.

Table 1: Multilevel Polynomial Regression Table of 1) the Effects of Comparison Direction, Domain Control and their Interactions and 2) Deviance Model Tests comparing a Nested Base Model to the Interaction Model

	Variable	Model 1		Model 2	
		<i>B</i>	<i>p</i>	<i>B</i>	<i>p</i>
<b>Pushing</b>	(constant)	4.35	< .001	4.35	< .001
	control	0.22	< .001	0.24	< .001
	direction	0.14	< .001	0.14	< .001
	direction <sup>2</sup>	0.03	.002	0.03	.001
	direction <sup>3</sup>	0.00	.724	0.00	.508
	direction <sup>4</sup>	0.00	< .001	0.00	< .001
	direction * control			0.04	.006
	direction <sup>2</sup> * control			0.00	.941
	direction <sup>3</sup> * control			0.00	.447
	direction <sup>4</sup> * control			0.00	.633
	Deviance Model Test with: $\chi^2(4) = 23.23, p < .001$				
<b>Disengagement</b>	(constant)	1.86	< .001	1.86	< .001
	control	-0.08	< .001	-0.05	.023
	direction	0.19	< .001	0.19	< .001
	direction <sup>2</sup>	0.03	< .001	0.04	< .001
	direction <sup>3</sup>	0.00	.060	0.00	.220
	direction <sup>4</sup>	0.00	.615	0.00	.867
	direction * control			0.01	.341
	direction <sup>2</sup> * control			0.00	.570
	direction <sup>3</sup> * control			0.00	.063
	direction <sup>4</sup> * control			0.00	.708
	Deviance Model Test with: $\chi^2(4) = 10.77, p = .029$				
<b>Coasting</b>	(constant)	3.27	< .001	3.27	< .001
	control	0.04	.001	0.05	.018
	direction	-0.36	< .001	-0.37	< .001
	direction <sup>2</sup>	-0.02	.006	-0.03	.002
	direction <sup>3</sup>	0.00	.512	0.00	.747
	direction <sup>4</sup>	0.00	< .001	0.00	< .001
	direction * control				
	direction <sup>2</sup> * control			-0.01	.287
	direction <sup>3</sup> * control			0.00	.006
	direction <sup>4</sup> * control			0.00	.172
	Deviance Model Test with: $\chi^2(4) = 14.01, p = .007$				

## 3.2 Domain Importance

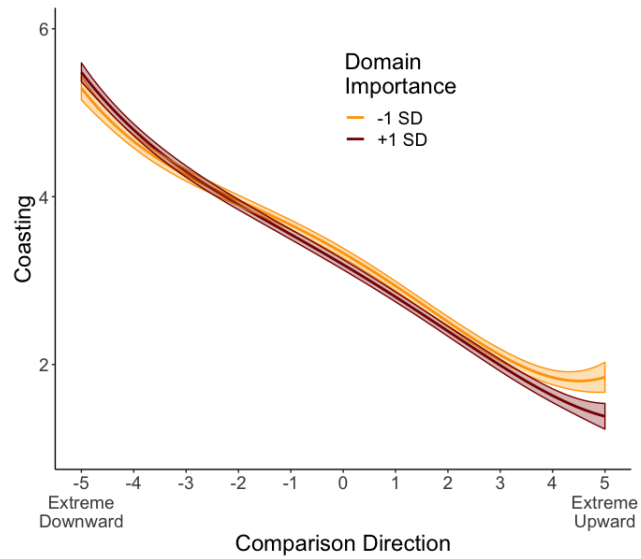


Figure 4: Coasting predicted by multilevel polynomial regression and their interaction effects with high vs. low domain importance.

Table 2: Multilevel Polynomial Regression Table of 1) the Effects of Comparison Direction, Domain Importance and their Interactions and 2) Deviance Model Tests comparing a Nested Base Model to the Interaction Model

	Variable	Model 1		Model 2	
		<i>B</i>	<i>p</i>	<i>B</i>	<i>p</i>
<b>Pushing</b>	(constant)	4.45	< .001	4.46	< .001
	importance	0.42	< .001	0.49	< .001
	direction	0.13	< .001	0.13	< .001
	direction <sup>2</sup>	0.01	.363	0.01	.501
	direction <sup>3</sup>	0.00	.445	0.00	.224
	direction <sup>4</sup>	0.00	< .001	0.00	< .001
	direction * importance			0.03	.056
	direction <sup>2</sup> * importance			-0.01	.077
	direction <sup>3</sup> * importance			0.00	.948
	direction <sup>4</sup> * importance			0.00	.579
Deviance Model Test with: $\chi^2(4) = 34.25, p < .001$					
<b>Disengagement</b>	(constant)	1.87	< .001	1.87	< .001
	importance	0.04	.001	0.00	.847
	direction	0.19	< .001	0.20	< .001
	direction <sup>2</sup>	0.03	< .001	0.04	< .001
	direction <sup>3</sup>	0.00	.032	0.00	.125
	direction <sup>4</sup>	0.00	.579	0.00	.841
	direction * importance			0.00	.865
	direction <sup>2</sup> * importance			0.01	.252
	direction <sup>3</sup> * importance			0.00	.025
	direction <sup>4</sup> * importance			0.00	.886
Deviance Model Test with: $\chi^2(4) = 31.27, p < .001$					
<b>Coasting</b>	(constant)	3.26	< .001	3.26	< .001
	importance	-0.03	.020	-0.06	.014
	direction	-0.37	< .001	-0.37	< .001
	direction <sup>2</sup>	-0.02	.010	-0.02	.010
	direction <sup>3</sup>	0.00	.424	0.00	.706
	direction <sup>4</sup>	0.00	< .001	0.00	< .001
	direction * importance			0.00	.839
	direction <sup>2</sup> * importance			0.01	.268
	direction <sup>3</sup> * importance			0.00	.201
	direction <sup>4</sup> * importance			0.00	.308
Deviance Model Test with: $\chi^2(4) = 10.62, p = .031$					

### 3.3 Active Comparison Seeking

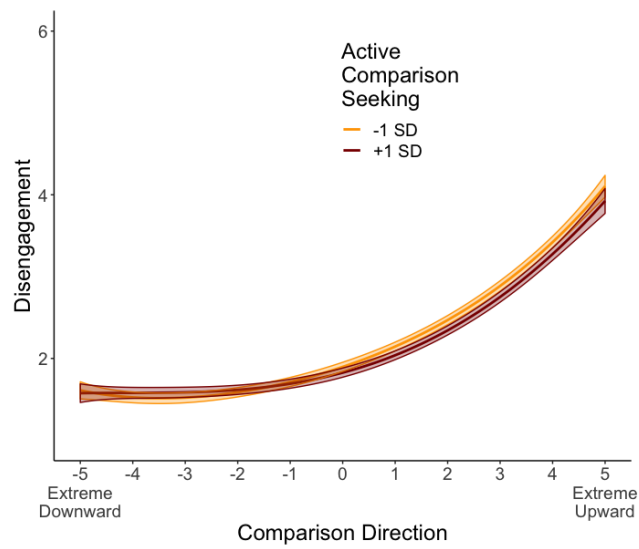


Figure 5: Multilevel Polynomial Regression Table of 1) the Effects of Comparison Direction, Active Comparison Seeking and their Interactions and 2) Deviance Model Tests comparing a Nested Base Model to the Interaction Model

Table 3: Multilevel Polynomial Regression Table: Effects of Comparison Direction, Active Comparison, and their Interaction on Pushing, Disengagement and Coasting

		Model 1		Model 2	
	Variable	<i>B</i>	<i>p</i>	<i>B</i>	<i>p</i>
<b>Pushing</b>	(constant)	4.34	< .001	4.34	< .001
	active	0.11	< .001	0.11	< .001
	direction	0.13	< .001	0.12	< .001
	direction <sup>2</sup>	0.03	.005	0.03	.004
	direction <sup>3</sup>	0.00	.335	0.00	.355
	direction <sup>4</sup>	0.00	< .001	0.00	< .001
	direction * active			0.02	.074
	direction <sup>2</sup> * active			0.00	.971
	direction <sup>3</sup> * active			0.00	.253
	direction <sup>4</sup> * active			0.00	.987
	Deviance Model Test with: $\chi^2(4) = 4.14, p = .388$				
<b>Disengagement</b>	(constant)	1.86	< .001	1.86	< .001
	active	-0.02	.034	-0.03	.129
	direction	0.19	< .001	0.19	< .001
	direction <sup>2</sup>	0.04	< .001	0.04	< .001
	direction <sup>3</sup>	0.00	.031	0.00	.046
	direction <sup>4</sup>	0.00	.727	0.00	.774
	direction * active			-0.02	.043
	direction <sup>2</sup> * active			0.00	.540
	direction <sup>3</sup> * active			0.00	.381
	direction <sup>4</sup> * active			0.00	.484
	Deviance Model Test with: $\chi^2(4) = 8.25, p = .083$				
<b>Coasting</b>	(constant)	3.27	< .001	3.27	< .001
	active	0.01	.539	0.02	.230
	direction	-0.36	< .001	-0.37	< .001
	direction <sup>2</sup>	-0.02	.005	-0.02	.005
	direction <sup>3</sup>	0.00	.391	0.00	.445
	direction <sup>4</sup>	0.00	< .001	0.00	< .001
	direction * active			0.01	.253
	direction <sup>2</sup> * active			0.00	.336
	direction <sup>3</sup> * active			0.00	.639
	direction <sup>4</sup> * active			0.00	.348
	Deviance Model Test with: $\chi^2(4) = 3.55, p = .470$				

## 4 Controlling for Domain Competence

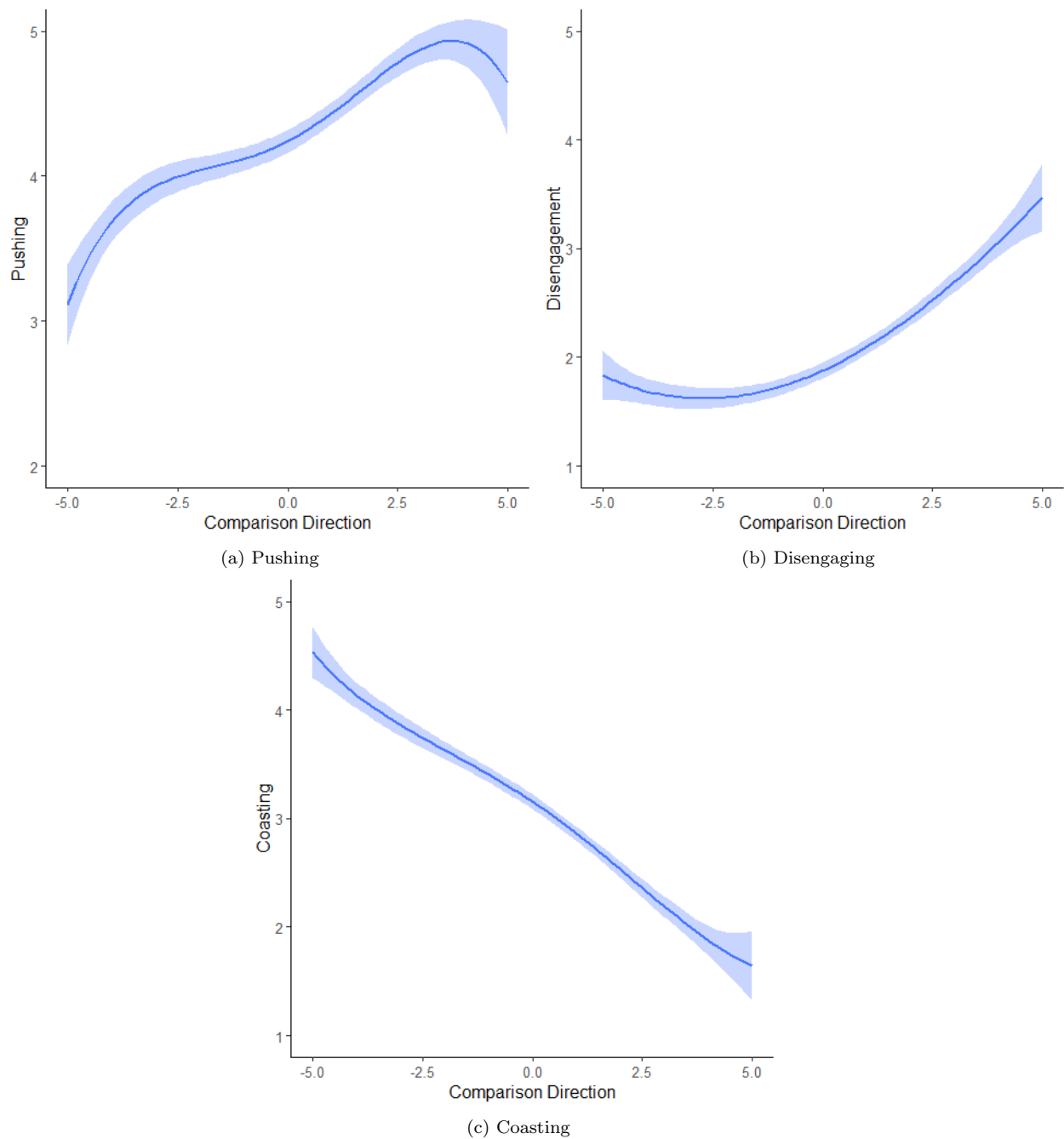


Figure 6: Estimated curves at midpoint (4) of domain competence scale (nobs = 1,382); i.e., domain competence “kept constant” at midpoint).