

Supplementary Materials: Framing attributes in similarity judgments and intertemporal choices

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Table S1
Demographics for amount similarity studies

	Study 1 (N=112)	Study 2 (N=98)
Conditions		
Cents	56 (50%)	49 (50%)
Dollars	56 (50%)	49 (50%)
Age	19.84 (18-26)	19.99 (18-38)
Gender		
Female	74 (66.1%)	70 (71.4%)
Male	38 (33.9%)	26 (26.5%)
Other	0 (0%)	2 (2%)
Race		
Asian	8 (7.1%)	8 (8.2%)
Black	7 (6.2%)	5 (5.1%)
Native American	0 (0%)	0 (0%)
White	89 (79.5%)	75 (76.5%)
Other	8 (7.1%)	10 (10.2%)
Income		
<\$25,000	10 (8.9%)	8 (8.2%)
\$25,001-\$50,000	17 (15.2%)	11 (11.2%)
\$50,001-\$75,000	18 (16.1%)	14 (14.3%)
\$75,001-\$100,000	21 (18.8%)	17 (17.3%)
>\$100,000	41 (36.6%)	40 (40.8%)
Prefer not to answer	5 (4.5%)	8 (8.2%)

Table S2
Amount similarity judgment and intertemporal choice values

	Dollars		Cents		Days		Weeks	
	Small amount	Large amount	Small amount	Large amount	Short delay	Long delay	Short delay	Long delay
1 dollar	1 dollar	100 cents	100 cents	100 cents	14 days	28 days	2 weeks	4 weeks
1 dollar	2 dollars	100 cents	200 cents	14 days	28 days	2 weeks	4 weeks	
1 dollar	3 dollars	100 cents	300 cents	14 days	28 days	2 weeks	4 weeks	
1 dollar	4 dollars	100 cents	400 cents	14 days	28 days	2 weeks	4 weeks	
1 dollar	5 dollars	100 cents	500 cents	14 days	28 days	2 weeks	4 weeks	
1 dollar	20 dollars	100 cents	2000 cents	14 days	28 days	2 weeks	4 weeks	
2 dollars	20 dollars	200 cents	2000 cents	14 days	28 days	2 weeks	4 weeks	
4 dollars	6 dollars	400 cents	600 cents	7 days	28 days	1 week	4 weeks	
4 dollars	7 dollars	400 cents	700 cents	7 days	28 days	1 week	4 weeks	
5 dollars	6 dollars	500 cents	600 cents	7 days	28 days	1 week	4 weeks	
5 dollars	7 dollars	500 cents	700 cents	7 days	28 days	1 week	4 weeks	
5 dollars	8 dollars	500 cents	800 cents	7 days	28 days	1 week	4 weeks	
5 dollars	9 dollars	500 cents	900 cents	7 days	28 days	1 week	4 weeks	
7 dollars	9 dollars	700 cents	900 cents	0 days	7 days	0 weeks	1 week	
7 dollars	10 dollars	700 cents	1000 cents	0 days	7 days	0 weeks	1 week	
7 dollars	11 dollars	700 cents	1100 cents	0 days	7 days	0 weeks	1 week	
9 dollars	12 dollars	900 cents	1200 cents	0 days	7 days	0 weeks	1 week	
10 dollars	10 dollars	1000 cents	1000 cents	0 days	7 days	0 weeks	1 week	
10 dollars	11 dollars	1000 cents	1100 cents	0 days	7 days	0 weeks	1 week	
10 dollars	12 dollars	1000 cents	1200 cents	0 days	7 days	0 weeks	1 week	
10 dollars	13 dollars	1000 cents	1300 cents	0 days	7 days	0 weeks	1 week	
10 dollars	14 dollars	1000 cents	1400 cents	0 days	7 days	0 weeks	1 week	
11 dollars	13 dollars	1100 cents	1300 cents	7 days	14 days	1 week	2 weeks	
11 dollars	14 dollars	1100 cents	1400 cents	7 days	14 days	1 week	2 weeks	
13 dollars	16 dollars	1300 cents	1600 cents	7 days	14 days	1 week	2 weeks	
15 dollars	16 dollars	1500 cents	1600 cents	7 days	14 days	1 week	2 weeks	
15 dollars	17 dollars	1500 cents	1700 cents	7 days	14 days	1 week	2 weeks	
15 dollars	18 dollars	1500 cents	1800 cents	7 days	14 days	1 week	2 weeks	
15 dollars	19 dollars	1500 cents	1900 cents	7 days	14 days	1 week	2 weeks	
17 dollars	20 dollars	1700 cents	2000 cents	14 days	21 days	2 weeks	3 weeks	
20 dollars	21 dollars	2000 cents	2100 cents	14 days	21 days	2 weeks	3 weeks	
20 dollars	22 dollars	2000 cents	2200 cents	14 days	21 days	2 weeks	3 weeks	
20 dollars	23 dollars	2000 cents	2300 cents	14 days	21 days	2 weeks	3 weeks	
20 dollars	24 dollars	2000 cents	2400 cents	14 days	21 days	2 weeks	3 weeks	

Table S3
Delay similarity judgment values

Days		Weeks	
Short delay	Long delay	Short delay	Long delay
0 days	7 days	0 weeks	1 week
0 days	70 days	0 weeks	10 weeks
7 days	7 days	1 week	1 week
7 days	14 days	1 week	2 weeks
7 days	21 days	1 week	3 weeks
14 days	21 days	2 weeks	3 weeks
14 days	28 days	2 weeks	4 weeks
21 days	28 days	3 weeks	4 weeks
21 days	35 days	3 weeks	5 weeks
28 days	35 days	4 weeks	5 weeks
28 days	42 days	4 weeks	6 weeks
35 days	42 days	5 weeks	6 weeks
35 days	49 days	5 weeks	7 weeks
42 days	49 days	6 weeks	7 weeks
42 days	56 days	6 weeks	8 weeks
49 days	56 days	7 weeks	8 weeks
49 days	63 days	7 weeks	9 weeks
56 days	63 days	8 weeks	9 weeks
56 days	70 days	8 weeks	10 weeks
63 days	70 days	9 weeks	10 weeks
63 days	77 days	9 weeks	11 weeks
63 days	84 days	9 weeks	12 weeks
70 days	77 days	10 weeks	11 weeks
70 days	84 days	10 weeks	12 weeks
70 days	91 days	10 weeks	13 weeks

Table S4
Demographics for delay similarity studies

	Study 1 (N=172)	Study 2 (N=92)	Study 3 (N=128)
Conditions			
Days	86 (50%)	46 (50%)	64 (50%)
Weeks	86 (50%)	46 (50%)	64 (50%)
Age	19.76 (17-26)	19.75 (18-25)	38.1 (21-70)
Gender			
Female	128 (74.4%)	67 (72.8%)	68 (53.1%)
Male	43 (25%)	25 (27.2%)	60 (46.9%)
Other	1 (0.6%)	0 (0%)	0 (0%)
Race			
Asian	19 (11%)	5 (5.4%)	7 (5.5%)
Black	6 (3.5%)	1 (1.1%)	7 (5.5%)
Latino/a/x*	NA (NA)	NA (NA)	4 (3.1%)
Native American	4 (2.3%)	0 (0%)	0 (0%)
White	129 (75%)	84 (91.3%)	98 (76.6%)
Multiracial*	NA (NA)	NA (NA)	12 (9.4%)
Other	13 (7.6%)	2 (2.2%)	0 (0%)
Income			
<\$25,000	15 (8.7%)	6 (6.5%)	20 (15.6%)
\$25,001-\$50,000	22 (12.8%)	7 (7.6%)	34 (26.6%)
\$50,001-\$75,000	26 (15.1%)	12 (13%)	33 (25.8%)
\$75,001-\$100,000	48 (27.9%)	14 (15.2%)	21 (16.4%)
>\$100,000	49 (28.5%)	45 (48.9%)	17 (13.3%)
Prefer not to answer	12 (7%)	8 (8.7%)	0 (0%)

Note. * Latino/a/x and Multiracial categories were not available in Studies 1 and 2.

Table S5
Bayes factors for numeracy and number line effects

Model	Amount UNL 1	Amount UNL 2	Delay UNL 1	Delay UNL 2	Delay MTurk
Numeracy Similarity					
numeracy	0.10	0.11	0.10	0.13	0.18
condition	2.83	2.97	49963.44	29.29	0.15
condition + numeracy	0.37	0.34	4072.53	6.37	0.03
condition * numeracy	0.12	0.04	592.37	1.08	0.01
Numeracy Intertemporal Choice					
numeracy	0.10	0.21	0.10	0.30	9.98
condition	20.98	1.81	0.71	0.14	0.16
condition + numeracy	2.11	0.38	0.06	0.04	1.44
condition * numeracy	0.41	0.72	0.01	0.01	0.30
Number Line Similarity					
log(numberline)	0.11	0.11	0.09	0.12	—
condition	2.83	2.97	49963.44	29.29	—
condition + log(numberline)	0.29	0.32	4053.05	3.09	—
condition * log(numberline)	0.03	0.17	469.15	0.33	—
Number Line Intertemporal Choice					
log(numberline)	0.10	0.11	0.08	0.11	—
condition	20.98	1.81	0.71	0.14	—
condition + log(numberline)	2.06	0.20	0.06	0.02	—
condition * log(numberline)	0.21	0.02	0.02	0.00	—

Note: Values represent Bayes factors for given model compared to intercept only model. Participants in the Delay MTurk study did not complete the number line task.