Supplementary Materials

Tables S1 and S2 below show the neural correlates of selecting and sharing news articles in the social cognition ROI, after removing regions that overlap with the Self-Related Processing and Subjective Valuation ROIs. All results remained robust after removing overlapping regions.

Table S1.
Neural Correlates of Selecting and Sharing News Articles, Non-Overlapping Regions

ROIs	Select > Content			Share > Content			Share > Select		
	t (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*
Social Cognition, Non-overlapping with Self or Subjective Valuation	4.81	<.001	0.063 [0.036, 0.089]	8.92	<.001	0.096 [0.075, 0.118]	2.96	.005	0.034 [0.011, 0.057]

Table S2.
Neural Activity Modulated by Preference Ratings Measuring Likelihood to Select to Read or Share, Non-Overlapping Regions

ROIs	Conditions					
	Select x Rating			Share x Rating		
	t (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*P*	*Mean parameter estimate [95% CI]*
Social Cognition, Non-overlapping with Self or Subjective Valuation	3.30	.002	0.025 [0.010, 0.041]	3.18	.003	0.035 [0.013, 0.058]

Tables S3 and S4 below show the results of selecting and sharing news articles in the sub-regions of the subjective valuation, self-related processing, and social cognition ROIs.

Table S3.
Neural Correlates of Selecting and Sharing News Articles.

	Conditions								
ROIs	Select > Content			Share > Content			Share > Select		
	t (40)	*p*	*mean parameter estimate [95% CI]*	*t* (40)	*p*	*mean parameter estimate [95% CI]*	*t* (40)	*p*	*mean parameter estimate [95% CI]*
Subjective Valuation	7.22	<.001	0.118 [0.085, 0.151]	12.69	<.001	0.158 [0.133, 0.184]	3.09	.004	0.040 [0.014, 0.067]
VMPFC	7.88	<.001	0.181 [0.134, 0.227]	13.99	<.001	0.248 [0.212, 0.284]	3.92	<.001	0.067 [0.032, 0.101]
Striatum	3.97	<.001	0.040 [0.019, 0.060]	5.54	<.001	0.047 [0.030, 0.064]	0.75	>.250	0.007 [-0.012, 0.027]
Self-Related Processing	7.26	<.001	0.143 [0.103, 0.183]	15.25	<.001	0.225 [0.195, 0.255]	5.02	<.001	0.082 [0.049, 0.115]
MPFC	7.91	<.001	0.153 [0.114, 0.192]	16.04	<.001	0.230 [0.201, 0.260]	4.43	<.001	0.077 [0.042, 0.112]
PCC	4.92	<.001	0.130 [0.077, 0.183]	9.61	<.001	0.223 [0.176, 0.270]	4.92	<.001	0.093 [0.055, 0.132]
Social Cognition	5.00	<.001	0.067 [0.040, 0.095]	9.41	<.001	0.104 [0.082, 0.127]	3.12	.003	0.037 [0.013, 0.061]
VMPFC	8.03	<.001	0.157 [0.118, 0.197]	12.93	<.001	0.223 [0.188, 0.258]	4.19	<.001	0.066 [0.034, 0.097]
MMPFC	7.18	<.001	0.127 [0.091, 0.163]	14.45	<.001	0.198 [0.170, 0.225]	4.46	<.001	0.070 [0.039, 0.102]
DMPFC	5.23	<.001	0.080 [0.049, 0.111]	8.99	<.001	0.125 [0.097, 0.153]	3.22	.003	0.045 [0.017, 0.073]
PC	2.61	.013	0.053 [0.012, 0.094]	7.21	<.001	0.128 [0.092, 0.163]	5.01	<.001	0.075 [0.044, 0.105]
rTPJ	2.73	.009	0.028 [0.007, 0.049]	4.48	<.001	0.042 [0.023, 0.062]	1.43	.161	0.014 [-0.006, 0.034]
lTPJ	4.26	<.001	0.058 [0.031, 0.086]	5.73	<.001	0.064 [0.042, 0.087]	0.53	>.250	0.006 [-0.017, 0.029]
rSTS	3.34	.002	0.037 [0.015, 0.060]	3.97	<.001	0.038 [0.019, 0.057]	0.07	>.250	0.001 [-0.021, 0.024]

Note: This table shows brain activity within sub regions of the major networks reported in the main body of the paper associated with selecting and sharing articles, compared to a control condition (recalling the article's content), and relative to one another.

Table S4.
Neural Activity Modulated by Preference Ratings Measuring Likelihood to Select or Share.

ROIs	Conditions					
	Select x Rating			Share x Rating		
	t (40)	*p*	*mean parameter estimate [95% CI]*	*t* (40)	*p*	*mean parameter estimate [95% CI]*
Subjective Valuation	6.01	<.001	0.046 [0.030, 0.062]	3.66	<.001	0.039 [0.017, 0.061]
VMPFC	6.04	<.001	0.064 [0.043, 0.086]	3.46	.001	0.048 [0.020, 0.076]
Striatum	3.97	<.001	0.024 [0.012, 0.036]	3.50	.001	0.028 [0.012, 0.044]
Self-Related Processing	5.28	<.001	0.053 [0.033, 0.073]	3.36	.002	0.058 [0.023, 0.093]
MPFC	5.38	<.001	0.057 [0.036, 0.079]	3.56	<.001	0.056 [0.024, 0.087]
PCC	3.29	.002	0.043 [0.017, 0.069]	2.72	.010	0.061 [0.016, 0.107]
Social Cognition	3.47	.001	0.027 [0.011, 0.043]	3.20	.003	0.036 [0.134, 0.059]
VMPFC	5.25	<.001	0.052 [0.032, 0.072]	3.51	.001	0.046 [0.019, 0.072]
MMPFC	5.38	<.001	0.052 [0.032, 0.071]	3.82	<.001	0.057 [0.026, 0.085]
DMPFC	4.62	<.001	0.043 [0.024, 0.062]	4.23	<.001	0.055 [0.029, 0.081]
PC	0.99	>.250	0.011 [-0.012, 0.034]	2.11	.041	0.037 [0.002, 0.072]
rTPJ	0.59	>.250	0.005 [-0.012, 0.022]	1.05	>.250	0.010 [-0.009, 0.030]
lTPJ	3.09	.004	0.022 [0.008, 0.036]	4.42	<.001	0.038 [0.020, 0.055]
rSTS	3.06	.004	0.026 [0.009, 0.042]	2.00	.052	0.021 [0, 0.043]

Note: This table shows brain activity within sub regions of the major networks reported in the main body of the paper associated with ratings of how likely participants would be to select and share the articles, respectively.

Our findings suggest that activity in all three ROIs was greater during selecting and sharing compared to the content condition. One alternative explanation for these differences might be due to the content trials being more cognitively taxing. We found that participants' reaction times were slower during the content trials than during selecting and sharing. However, all results remained robust when we ran the analyses controlling for RT (see Tables S5 and S6 below), and when considering only trials matched on RT (see Tables S7 and S8 below) suggesting that our results were not driven exclusively by difficulty across conditions.

Table S5.
Mean Reaction Time (RT) by Condition

Condition	Mean (SD) RT
Content	0.95 (0.59)[a]
Select to Read for Self	0.80 (0.47)[b]
Share with Others	0.79 (0.46)[b]

Note: Content trials (a) differed significantly from Select to Read and Share with Others trials (b), but the latter two were not significantly different from one another.

Table S6.
Neural Correlates of Selecting and Sharing News Articles, with Reaction Time (RT) as covariate

ROIs	Select > Content			Share > Content			Share > Select		
	t (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*
Subjective Valuation	6.65	<.001	0.116 [0.081, 0.151]	13.03	<.001	0.159 [0.134, 0.184]	3.13	.003	0.044 [0.015,0.072]
Self-Related Processing	6.84	<.001	0.164 [0.115, 0.212]	14.54	<.001	0.258 [0.222, 0.294]	4.86	<.001	0.095 [0.055, 0.134]
Social Cognition	4.51	<.001	0.065 [0.036, 0.094]	9.38	<.001	0.105 [0.082, 0.128]	3.23	.002	0.040 [0.015, 0.065]

We extracted the middle 50% of the distribution of trials within the sharing condition, based on RT (0.476-0.952), and subsetted the content and select to read conditions to match this range. This resulted in a subset of all 3 conditions with same range and similar distributions of RT. As Table S7 indicates, the subsetted data no longer had significantly different mean differences on RT. In other words, the subsets of trials are of comparable difficulty across conditions.

Table S7.
Mean Reaction Time (RT) by Condition, Before and After Subsetting Data

Condition	Mean RT, before subsetting (range)	Mean Difference from Content	Mean RT, after subsetting (range)	Mean Difference from Content
Content	0.951 (0.008-3.01)	--	0.670 (0.477-0.951)	--
Select to Read for Self	0.803 (0.063-2.99)	-0.148***	0.673 (0.477-0.951)	0.003 (*n.s.*)
Share with Others (combined narrowcasting & broadcasting trials)	0.794 (0.014-2.93)	-0.157***	0.663 (0.477-0.947)	0.007 (*n.s.*)

Table S8.
Neural Correlates of Selecting and Sharing News Articles, reduced dataset with comparable RTs

ROIs	Select > Content			Share > Content			Share > Select		
	t (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*
Subjective Valuation	4.92	<.001	0.131 [0.077, 0.185]	10.01	<.001	0.177 [0.141, 0.212]	2.35	.02	0.046 [0.006,0.085]
Self-Related Processing	5.18	<.001	0.179 [0.109, 0.249]	14.50	<.001	0.300 [0.258, 0.341]	4.48	<.001	0.121 [0.066, 0.175]
Social Cognition	3.29	.002	0.071 [0.027, 0.114]	8.58	<.001	0.122 [0.094, 0.152]	3.28	.002	0.052 [0.020, 0.085]

Tables S9 and S10 show the sharing conditions separated by narrowcasting and broadcasting.

Table S9.
Neural Correlates of Selecting and Sharing News Articles, Narrowcasting

ROIs	Narrowcasting > Content			Narrowcasting > Select		
	t (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*
Subjective Valuation	10.94	<.001	0.178 [0.145, 0.211]	3.46	.001	0.060 [0.025, 0.095]
Self-Related Processing	14.08	<.001	0.269 [0.230, 0.307]	5.93	<.001	0.125 [0.083, 0.168]
Social Cognition	8.90	<.001	0.123 [0.095, 0.150]	3.85	<.001	0.055 [0.026, 0.084]

Table S10.
Neural Correlates of Selecting and Sharing News Articles, Broadcasting

ROIs	Broadcasting > Content			Broadcasting > Select		
	t (40)	*p*	*Mean parameter estimate [95% CI]*	*t* (40)	*p*	*Mean parameter estimate [95% CI]*
Subjective Valuation	9.75	<.001	0.139 [0.110, 0.167]	1.47	.149	0.020 [-0.008, 0.049]
Self-Related Processing	11.21	<.001	0.182 [0.149, 0.215]	2.32	.026	0.039 [0.005, 0.072]
Social Cognition	7.09	<.001	0.086 [0.061, 0.110]	1.43	.160	0.018 [-0.008, 0.044]

Figures S1, S2, and S3 show the sagittal cuts of whole brain associations of select to read and share conditions. The numbers in the top left corner indicate x-coordinates, using standard MNI (Montreal Neurological Institute) coordinates.

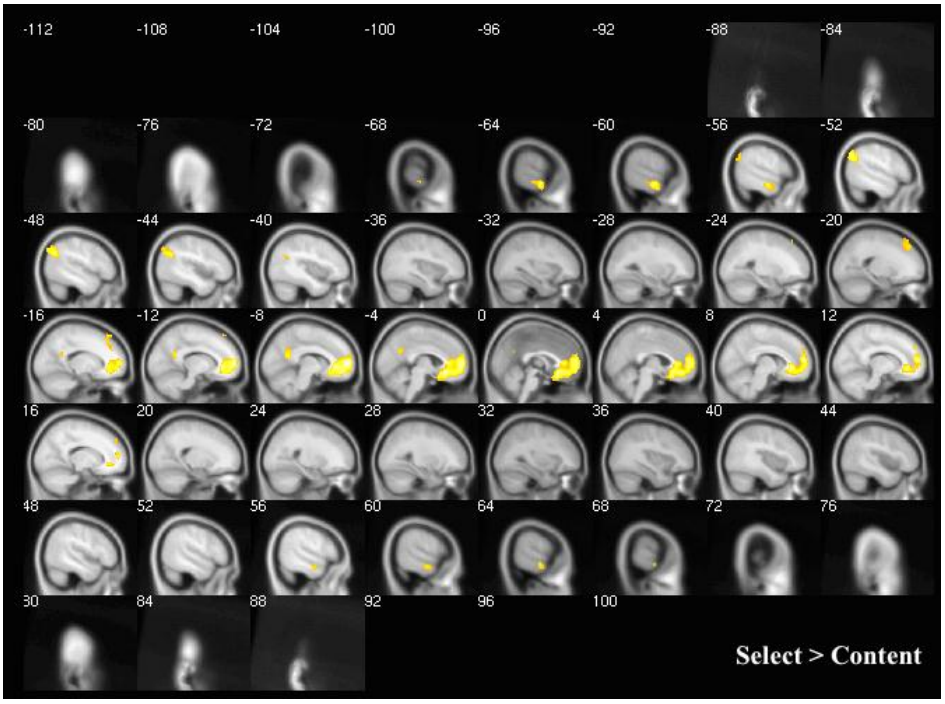

Fig. S1.
Sagittal cuts of whole brain associations of Select > Content contrast, thresholded at $p < .05$, corrected for family-wise error with a minimum cluster size of 20.

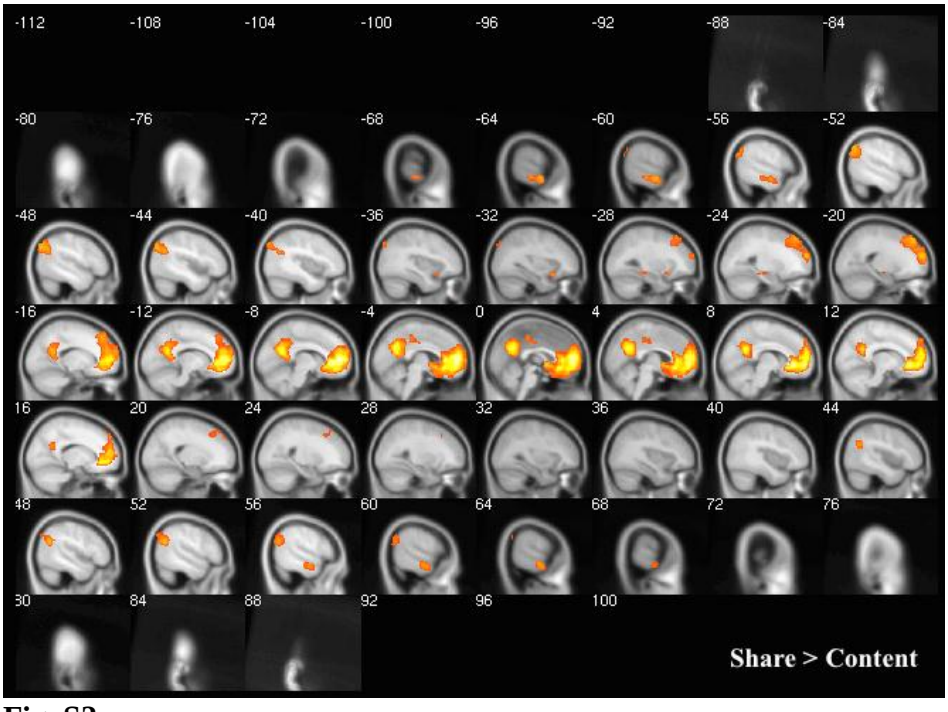

Fig. S2.
Sagittal cuts of whole brain associations of Share > Content contrast, thresholded at $p < .05$, corrected for family-wise error with a minimum cluster size of 20.

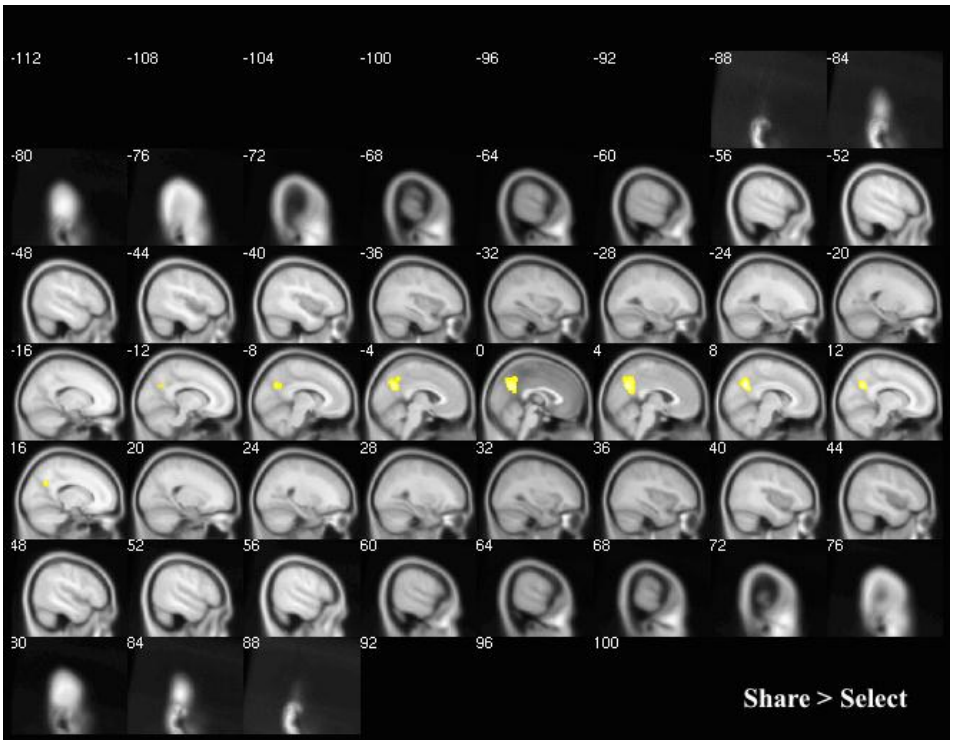

Fig. S3.
Sagittal cuts of whole brain associations of Share > Select contrast, thresholded at $p < .05$, corrected for family-wise error with a minimum cluster size of 20.