

Supplemental Materials for:

**Disentangling boredom from depression using the phenomenology and content of
involuntary autobiographical memories**

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Table S1

Self-Reported Primary Racial Group

Primary Racial Group	<i>n</i> (%)
Aboriginal (First Nations)	11 (0.18%)
Black/African	188 (3.04%)
East Asian (e.g., Chinese, Japanese, Korean)	1408 (22.76%)
Hispanic	97 (1.57%)
Middle Eastern	238 (3.85%)
Mixed	139 (2.25%)
South Asian (e.g., Pakistani, Indian)	1151 (18.60%)
Southeast Asian (e.g., Filipino, Vietnamese, Indonesian)	309 (4.99%)
West Indian/Caribbean	106 (1.71%)
White/Caucasian	2384 (38.53%)
[Decline to Answer]	100 (1.62%)
Other not listed above	56 (0.91%)

Note. Instructions for this item were as follows: “What is your primary racial group? If you identify with more than one group, please select one group that represents an important identity for you.”

Table S2

Self-Reported Ethnic Identity

Ethnic Identity	<i>n</i> (%)
Aboriginal (North America First Nations, Inuit, or Métis)	8 (0.13%)
African	69 (1.12%)
American	35 (0.57%)
Arab	75 (1.21%)
Bangladesh	29 (0.47%)
Black/African	29 (0.47%)
Black/African-American	5 (0.08%)
Black/African-Canadian	74 (1.2%)
Brazilian	2 (0.03%)
British/English	48 (0.78%)
Bulgarian	2 (0.03%)
Cambodian	10 (0.16%)
Canadian	2671 (43.17%)
Cantonese	179 (2.89%)
Chinese	576 (9.31%)
Croatian	8 (0.13%)
Czech	2 (0.03%)
Danish	1 (0.02%)
Dutch	22 (0.36%)
Egyptian	41 (0.66%)
European	42 (0.68%)
Filipino	92 (1.49%)
Finnish	2 (0.03%)
French	8 (0.13%)
French-Canadian	33 (0.53%)
German	24 (0.39%)
Greek	20 (0.32%)
Guyanese	14 (0.23%)

Hispanic	26 (0.42%)
Hongkongese	34 (0.55%)
Hungarian	5 (0.08%)
Indian (from India)	490 (7.92%)
Indonesian	14 (0.23%)
Iranian	26 (0.42%)
Iraqi	8 (0.13%)
Irish	23 (0.37%)
Israeli	5 (0.08%)
Italian	71 (1.15%)
Jamaican	29 (0.47%)
Japanese	14 (0.23%)
Latin-American	30 (0.48%)
Lithuanian	1 (0.02%)
Malaysian	9 (0.15%)
Maltese	2 (0.03%)
Mennonite	21 (0.34%)
Middle Eastern	14 (0.23%)
Norwegian	1 (0.02%)
Other not listed	197 (3.18%)
Pakistani	147 (2.38%)
Palestinian	10 (0.16%)
Persian	9 (0.15%)
Polish	27 (0.44%)
Portuguese	39 (0.63%)
Romanian	18 (0.29%)
Russian	18 (0.29%)
Scandinavian	3 (0.05%)
Scottish	28 (0.45%)
Serbian	21 (0.34%)
Slovak	2 (0.03%)

South Korean	96 (1.55%)
Spanish	10 (0.16%)
Sri Lankan	134 (2.17%)
Swedish	1 (0.02%)
Swiss	2 (0.03%)
Taiwanese	28 (0.45%)
Trinidadian	17 (0.27%)
Ukrainian	10 (0.16%)
Vietnamese	95 (1.54%)
Welsh	3 (0.05%)
West Indian/Caribbean	34 (0.55%)
Yugoslavian	7 (0.11%)
N/A	1 (0.02%)
[Decline to Answer]	286 (4.62%)

Note. Instructions for this item were as follows: “Which specific ethnic/cultural group listed below do you MOST identify with? This is not an exhaustive list - it provides responses that have been given previously by students. If your ethnicity is not accurately represented here, please specify below.”

Table S3

Self-Reported Birth Country

Birth Country	<i>n</i> (%)
Australia	6 (0.1%)
Austria	2 (0.03%)
Bangladesh	26 (0.42%)
Belarus	1 (0.02%)
Belgium	2 (0.03%)
Belize	1 (0.02%)
Bosnia and Herzegovina	2 (0.03%)
Brazil	2 (0.03%)
Bulgaria	1 (0.02%)
Burma	1 (0.02%)
Canada	4060 (65.62%)
Chile	2 (0.03%)
China	528 (8.53%)
Colombia	11 (0.18%)
Congo	1 (0.02%)
Costa Rica	1 (0.02%)
Croatia	1 (0.02%)
Cuba	2 (0.03%)
Denmark	1 (0.02%)
Dominican Republic	1 (0.02%)
Egypt	44 (0.71%)
El Salvador	3 (0.05%)
Ethiopia	9 (0.15%)
Finland	1 (0.02%)
France	8 (0.13%)
Germany	22 (0.36%)
Greece	4 (0.06%)
Hong Kong	67 (1.08%)

Hungary	1 (0.02%)
India	335 (5.41%)
Indonesia	16 (0.26%)
Iran	29 (0.47%)
Iraq	17 (0.27%)
Ireland	2 (0.03%)
Israel	4 (0.06%)
Italy	3 (0.05%)
Jamaica	17 (0.27%)
Japan	6 (0.1%)
Kenya	20 (0.32%)
Macao	1 (0.02%)
Malaysia	9 (0.15%)
Mexico	5 (0.08%)
Moldova	1 (0.02%)
Netherlands	6 (0.1%)
New Zealand	2 (0.03%)
Nicaragua	1 (0.02%)
Nigeria	42 (0.68%)
Norway	2 (0.03%)
Other African country	42 (0.68%)
Other Asian country	99 (1.6%)
Other Australasian / Oceanian country	1 (0.02%)
Other European country	10 (0.16%)
Other North American country	3 (0.05%)
Other South American country	16 (0.26%)
Other West Indian country	7 (0.11%)
Pakistan	113 (1.83%)
Panama	1 (0.02%)
Peru	3 (0.05%)
Philippines	53 (0.86%)

Poland	5 (0.08%)
Portugal	1 (0.02%)
Romani	5 (0.08%)
Romania	8 (0.13%)
Russia	16 (0.26%)
Saudi Arabia	26 (0.42%)
South Africa	6 (0.1%)
South Korea	104 (1.68%)
Spain	2 (0.03%)
Sri Lanka	19 (0.31%)
Sudan	2 (0.03%)
Sweden	1 (0.02%)
Switzerland	5 (0.08%)
Syria	9 (0.15%)
Taiwan	26 (0.42%)
Thailand	3 (0.05%)
Trinidad and Tobago	13 (0.21%)
Turkey	14 (0.23%)
UK	39 (0.63%)
Ukraine	3 (0.05%)
USA	125 (2.02%)
Venezuela	6 (0.1%)
Vietnam	21 (0.34%)
Yugoslavia	4 (0.06%)
N/A	1 (0.02%)
[Decline to Answer]	46 (0.74%)

Note. Instructions for this item were as follows: “In which country/region were you born?”

Table S4

Predicted Topic Prevalence Using Depression Symptoms and Boredom Proneness

Predictor	Topic Number	B	SE B	<i>p</i>
DASS-D	1	< .0001	0.0005	0.939
SBPS	1	0.0004	0.0003	0.186
DASS-D	2	0.0003	0.0006	0.612
SBPS	2	< .0001	0.0003	0.950
DASS-D	3	-0.0008	0.0005	0.0855
SBPS	3	-0.0001	0.0003	0.860
DASS-D	4	0.0005	0.0005	0.340
SBPS	4	0.0001	0.0003	0.726
DASS-D	5	-0.0010	0.0005	0.0341
SBPS	5	< .0001	0.0003	0.977
DASS-D	6	-0.0008	0.0004	0.0374
SBPS	6	-0.0001	0.0002	0.679
DASS-D	7	0.0001	0.0006	0.903
SBPS	7	0.0005	0.0003	0.130
DASS-D	8	0.0014	0.0006	0.0125
SBPS	8	-0.0004	0.0003	0.201
DASS-D	9	-0.0001	0.0006	0.824
SBPS	9	< .0001	0.0003	0.967
DASS-D	10	0.0009	0.0006	0.180

SBPS	10	0.0006	0.0003	0.0676
DASS-D	11	-0.0003	0.0005	0.495
SBPS	11	-0.0005	0.0003	0.0699
DASS-D	12	-0.0009	0.0005	0.103
SBPS	12	0.0001	0.0003	0.856
DASS-D	13	-0.0001	0.0006	0.914
SBPS	13	0.0003	0.0004	0.417
DASS-D	14	0.0007	0.0006	0.186
SBPS	14	-0.0011	0.0003	0.001
DASS-D	15	0.0001	0.0004	0.709
SBPS	15	0.0002	0.0002	0.290

Note. DASS-D = Depression, Anxiety, and Stress Scales – Depression Subscale; SBPS = Short Boredom Proneness Scale.

Table S5

Predicted Topic Prevalence Using Depression Symptoms, Boredom Proneness, and Recurrent

IAM Valence

Predictor	Topic Number	B	SE B	<i>p</i>
DASS-D	1	-0.0003	0.0005	0.498
SBPS	1	0.0004	0.0003	0.128
Valence	1	-0.0102	0.0015	< .001
DASS-D	2	0.0004	0.0005	0.443
SBPS	2	0.0003	0.0003	0.348
Valence	2	0.0093	0.0016	< .001
DASS-D	3	-0.0001	0.0005	0.851
SBPS	3	0.0002	0.0003	0.521
Valence	3	0.0221	0.0018	< .001
DASS-D	4	0.0002	0.0006	0.741
SBPS	4	-0.0001	0.0003	0.781
Valence	4	-0.0073	0.0019	< .001
DASS-D	5	0.0001	0.0004	0.750
SBPS	5	-0.0002	0.0002	0.482
Valence	5	0.0207	0.0014	< .001
DASS-D	6	-0.0004	0.0004	0.247
SBPS	6	< .0001	0.0002	0.971
Valence	6	0.0086	0.0011	< .001

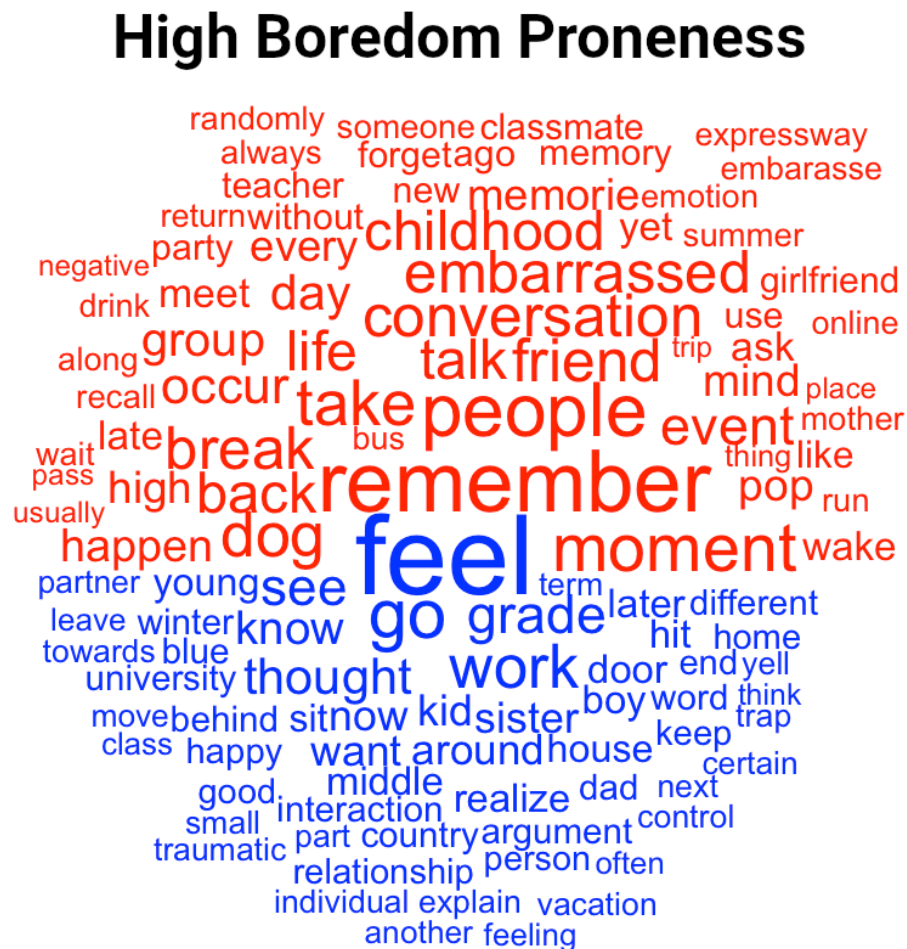
DASS-D	7	-0.0002	0.0004	0.593
SBPS	7	0.0002	0.0002	0.444
Valence	7	-0.0104	0.0014	< .001
DASS-D	8	0.0014	0.0006	0.0204
SBPS	8	-0.0008	0.0003	0.0146
Valence	8	-0.0284	0.0019	< .001
DASS-D	9	-0.0012	0.0005	0.0260
SBPS	9	< .0001	0.0003	0.880
Valence	9	-0.0139	0.0018	< .001
DASS-D	10	0.0007	0.0005	0.220
SBPS	10	0.0005	0.0003	0.106
Valence	10	-0.0095	0.0016	< .001
DASS-D	11	-0.0006	0.0004	0.185
SBPS	11	-0.0004	0.0003	0.134
Valence	11	-0.0123	0.0016	< .001
DASS-D	12	-0.0008	0.0005	0.147
SBPS	12	0.0001	0.0003	0.741
Valence	12	0.0097	0.0017	< .001
DASS-D	13	0.0002	0.0006	0.702
SBPS	13	0.0001	0.0003	0.847
Valence	13	-0.0051	0.0020	0.0119
DASS-D	14	0.0011	0.0006	0.0498

SBPS	14	-0.0006	0.0003	0.0657
Valence	14	0.0326	0.0019	< .001
DASS-D	15	-0.0005	0.0004	0.265
SBPS	15	0.0004	0.0002	0.0624
Valence	15	-0.0061	0.0012	< .001

Note. DASS-D = Depression, Anxiety, and Stress Scales – Depression Subscale; SBPS = Short Boredom Proneness Scale.

Figure S1

Word Cloud of Recurrent IAMs for Individuals with High Depression Symptoms vs. High Boredom Proneness

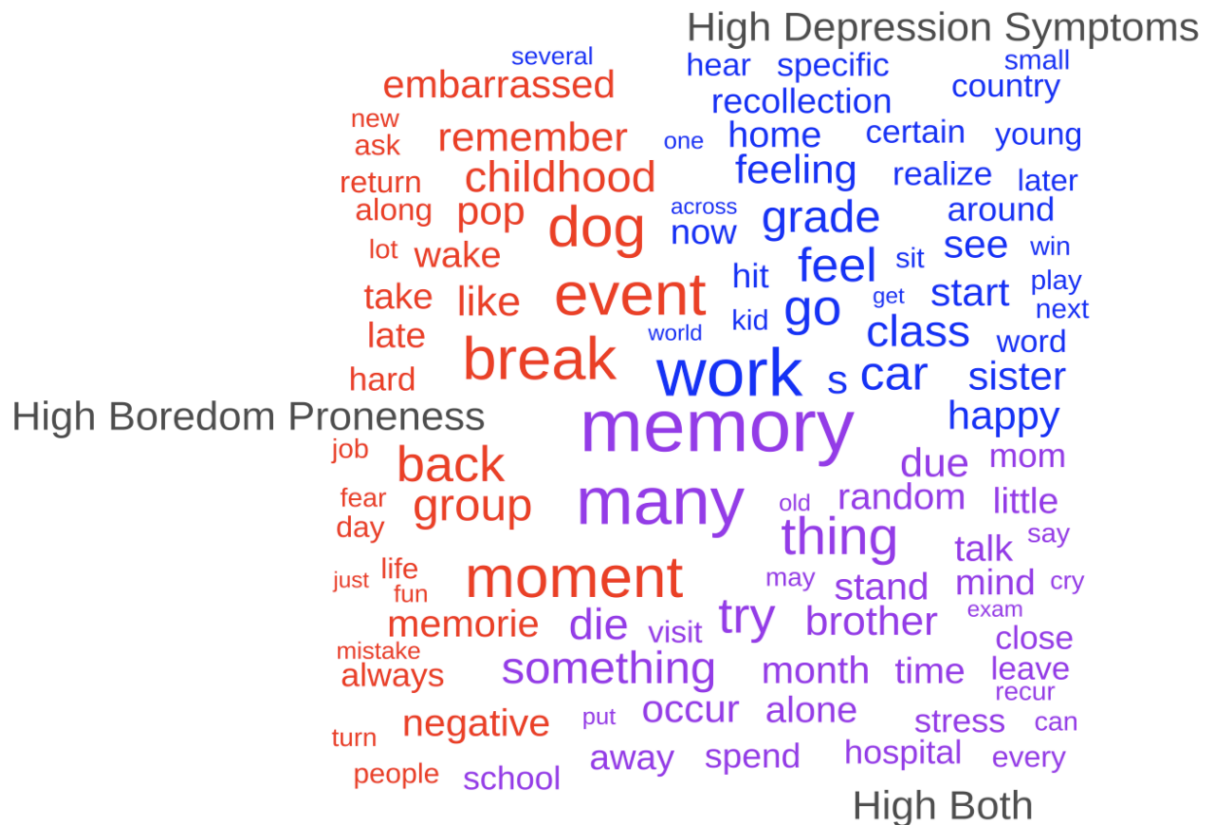


High Depression Symptoms

Note. Larger font size denotes more frequent occurrences of a term. Red font indicates greater relative occurrences of a term in the high boredom proneness group; blue font indicates greater relative occurrences of a term in the high depression symptoms group. High boredom proneness was defined as scoring within the highest tertile of boredom proneness (and *not* the highest tertile of depression symptoms); high depression symptoms was defined as scoring within the highest tertile of depression symptoms (and *not* the highest tertile of boredom proneness).

Figure S2

Word Cloud of Recurrent IAMs for Individuals with High Depression Symptoms, High Boredom Proneness, or High Scores on Both



Note. Larger font size denotes more frequent occurrences of a term. Red font indicates greater relative occurrences of a term in the high boredom proneness group; blue font indicates greater relative occurrences of a term in the high depression symptoms group; purple font indicates greater relative occurrences of a term in the high both group. High boredom proneness was defined as scoring within the highest tertile of boredom proneness (and *not* the highest tertile of depression symptoms); high depression symptoms was defined as scoring within the highest tertile of depression symptoms (and *not* the highest tertile of boredom proneness); high both was defined as scoring within the highest tertile of boredom proneness *and* the highest tertile of depression symptoms.