

Supplemental Materials:

Figure S1

Scree Plot for Appraisal Ratings PCA

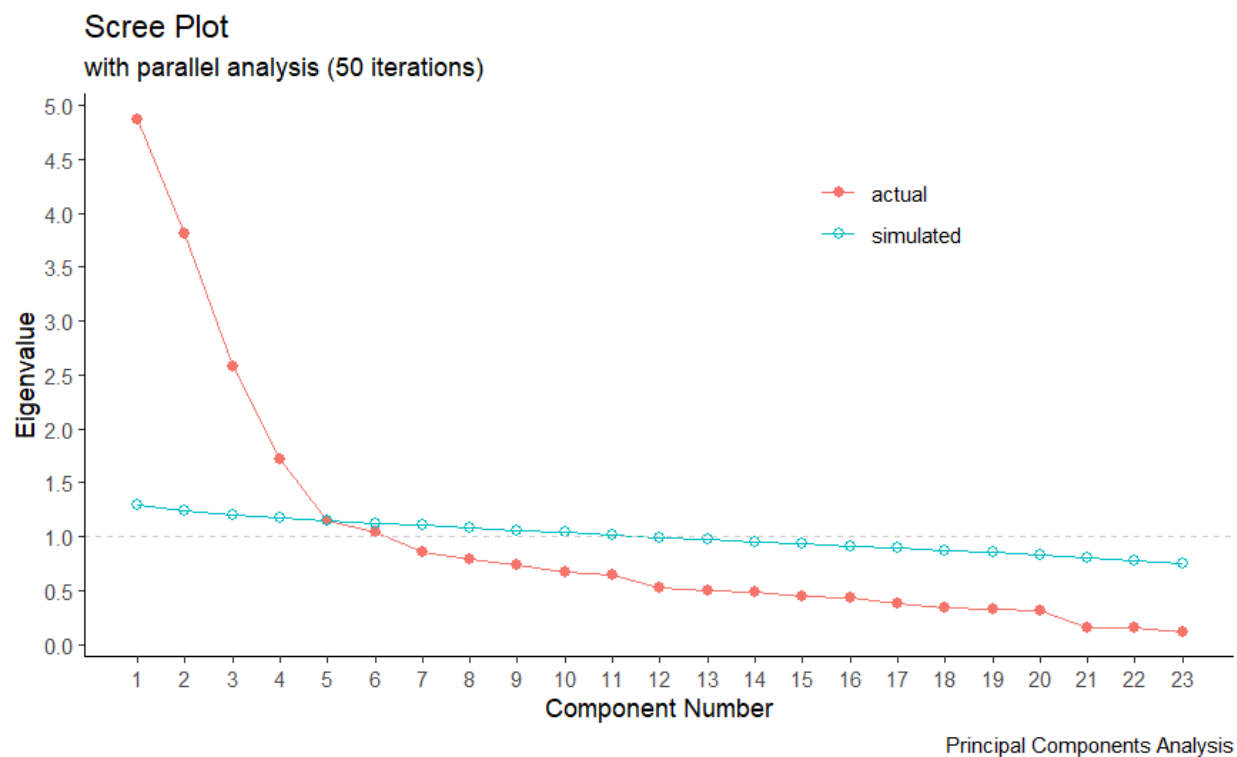


Table S1*Descriptive Statistics for Appraisal Dimensions by Age Group*

Appraisal Dimension	Older Adults (OA)	Younger Adults (YA)	OA - YA
	<i>M (SD)</i>	<i>M (SD)</i>	<i>Cohen's D</i>
Cue	.50 (.50)	.55 (.50)	-.10
Content	4.73 (1.94)	4.34 (2.00)	.20
Timing	4.56 (2.01)	4.13 (2.03)	.21
Unexpected	5.37 (1.80)	4.86 (1.77)	.29
New info	3.06 (2.01)	2.91 (1.85)	.08
Involuntary	5.39 (1.63)	5.06 (1.68)	.20
Task-unrelated	4.34 (2.20)	3.61 (2.17)	.33
Thought-unrelated	5.07 (1.96)	4.50 (2.02)	.29
Personally immoral	2.44 (2.10)	2.75 (2.01)	-.15
Socially immoral	2.29 (1.98)	2.67 (1.97)	-.19
Beneficial in time	3.59 (1.95)	2.78 (1.78)	.43
Beneficial now	3.72 (1.98)	2.86 (1.80)	.45
Value	3.71 (2.15)	3.21 (2.03)	.24
Solve problem	2.24 (1.80)	2.10 (1.55)	.08
Goal	2.23 (1.87)	2.05 (1.65)	.10
Self-relevance	3.68 (2.14)	3.22 (2.06)	.22
Self-insight	3.11 (2.12)	2.86 (1.83)	.13
Others-insight	2.46 (1.97)	2.40 (1.82)	.03
Positive emotion	4.19 (2.24)	3.37 (2.08)	.38
Negative emotion	3.18 (2.32)	3.96 (2.31)	-.34
Emotional intensity	4.78 (1.65)	4.25 (1.73)	.31
Mental image vividness	2.95 (1.08)	2.61 (1.14)	.31
Confusion	3.22 (2.10)	3.96 (1.94)	-.37

Table S2*Descriptive Statistics for Appraisal Dimensions by Thought Type*

Appraisal Dimension	déjà vu (DV)		IAM		UT		DV - IAM	DV - UT	IAM - UT
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Cohen's D</i>		
Cue	.45	.50	.59	.49	.54	.50	-.28	-.18	.09
Content	4.25	1.93	4.19	2.03	5.14	1.85	.03	-.47	-.29
Timing	4.29	2.01	4.33	2.10	4.38	1.99	-.02	-.04	-.01
Unexpected	5.32	1.69	4.74	1.90	5.25	1.76	.32	.04	-.14
New info	3.04	1.88	2.55	1.80	3.36	2.02	.27	-.16	-.35
Involuntary	5.11	1.62	5.02	1.77	5.54	1.54	.05	-.27	-.14
Task-unrelated	3.24	2.06	4.28	2.24	4.36	2.16	-.48	-.53	-.02
Thought-unrelated	4.38	2.00	4.92	1.99	5.01	2.00	-.27	-.32	-.02
Personally immoral	1.94	1.54	2.39	1.89	3.47	2.36	-.26	-.77	-.45
Socially immoral	1.90	1.48	2.29	1.85	3.28	2.29	-.23	-.72	-.43
Beneficial in time	3.35	1.67	3.34	2.04	2.81	1.94	.01	.30	.19
Beneficial now	3.39	1.67	3.42	2.07	3.01	2.02	-.02	.21	.15
Value	2.81	1.88	4.08	2.09	3.46	2.14	-.64	-.32	.19
Solve problem	2.07	1.62	2.17	1.66	2.25	1.75	-.06	-.11	-.04
Goal	2.04	1.64	2.05	1.68	2.32	1.93	-.01	-.16	-.14
Self-relevance	2.91	1.94	4.01	2.08	3.40	2.17	-.55	-.24	.19
Self-insight	2.61	1.84	2.90	1.92	3.43	2.08	-.15	-.42	-.21
Others-insight	2.27	1.79	2.58	1.91	2.42	1.97	-.17	-.08	.07
Positive emotion	4.40	1.75	3.76	2.41	3.12	2.18	.30	.65	.21
Negative emotion	2.63	1.85	3.90	2.48	4.23	2.34	-.58	-.76	-.10
Emotional intensity	3.77	1.70	5.06	1.51	4.67	1.66	-.80	-.54	.10
Mental image vividness	2.52	1.26	3.11	0.85	2.68	1.14	-.55	-.13	.18
Confusion	4.29	2.02	2.57	1.69	3.96	2.01	.92	.16	-.60

Table S3*PCA Loadings*

Appraisal Dimension	PC1	PC2	PC3	PC4	PC5
Cue	-.060	.030	-.048	.392	-.558
Content	-.041	.108	.759	.072	.019
Timing	.162	-.013	.597	.154	.275
Unexpected	.168	-.085	.745	-.081	.132
New info	.234	.636	.294	-.046	-.129
Involuntary	.046	-.075	.771	.112	.133
Task-unrelated	-.095	.051	.076	.027	.827
Thought-unrelated	-.098	-.047	.178	.018	.730
Personally immoral	-.539	.578	.221	-.072	-.083
Socially immoral	-.542	.590	.203	-.086	-.062
Beneficial in time	.759	.285	.001	.109	-.057
Beneficial now	.723	.359	.013	.124	-.032
Value	.243	.283	-.146	.528	.175
Solve problem	.258	.695	-.125	.034	.067
Goal	.232	.668	-.251	.000	.124
Self-relevance	.116	.375	-.177	.492	.160
Self-insight	.014	.653	.031	.252	.055
Others-insight	-.008	.609	-.056	.199	.026
Positive emotion	.875	.019	.074	-.006	-.031
Negative emotion	-.861	.098	-.077	.189	.058
Emotional intensity	-.233	.083	.107	.742	.089
Mental image vividness	.033	-.218	.146	.719	-.175
Confusion	-.191	.135	.490	-.328	-.117

Table S4*Hyperparameters for Age and Thought Type Models*

Classification	Features	Classifier	Kernel	C	Sigma
Age	Sentiment Features	SVM	Radial	.25	.166
	Principal Components Features			1	.042
	Combined Model			.5	.027
Thought Type	Sentiment Features	SVM	Radial	1	1.31
	Principal Components Features			.25	.201
	Combined Model			1	.118