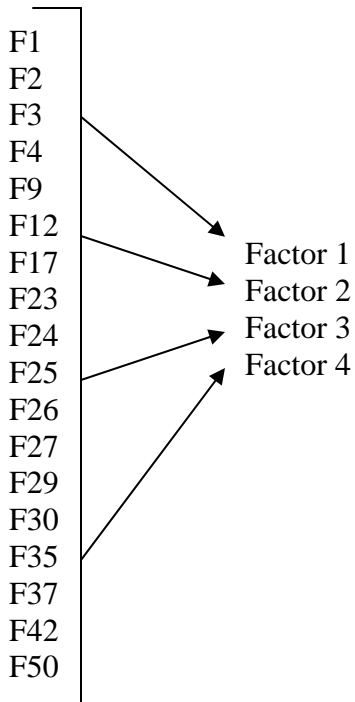


Jeff Spicer

Factor Analysis



For these items, -1=opposed to my values, 0= neutral and 7=of supreme importance.

F1. Equality (equal opportunity for all)

F2. Inner Harmony (at peace with myself)

F3. Social Power (control over others, dominance)

F4. Pleasure (gratification of desires)

F9. An Exciting Life (stimulating experiences)

F12. Wealth (material possessions, money)

F17. A World at Peace (free of war and conflict)

F23. Social Recognition (respect, approval by others)

F24. Unity with Nature (fitting into nature)

F25. A Varied Life (filled with challenge, novelty, and change)

- F26. Wisdom (a mature understanding of life)
- F27. Authority (the right to lead or command)
- F29. A World of Beauty (beauty of nature and the arts)
- F30. Social Justice (correcting injustice, care for the weak)
- F35. Broad-minded (tolerant of different ideas and beliefs)
- F37. Daring (seeking adventure, risk)
- F38. Protecting the Environment (preserving nature)
- F42. Healthy (not being sick physically or mentally)
- F46. Preserving my Public Image (protecting my "face")
- F50. Enjoying life (enjoying food, sex, leisure, etc.)

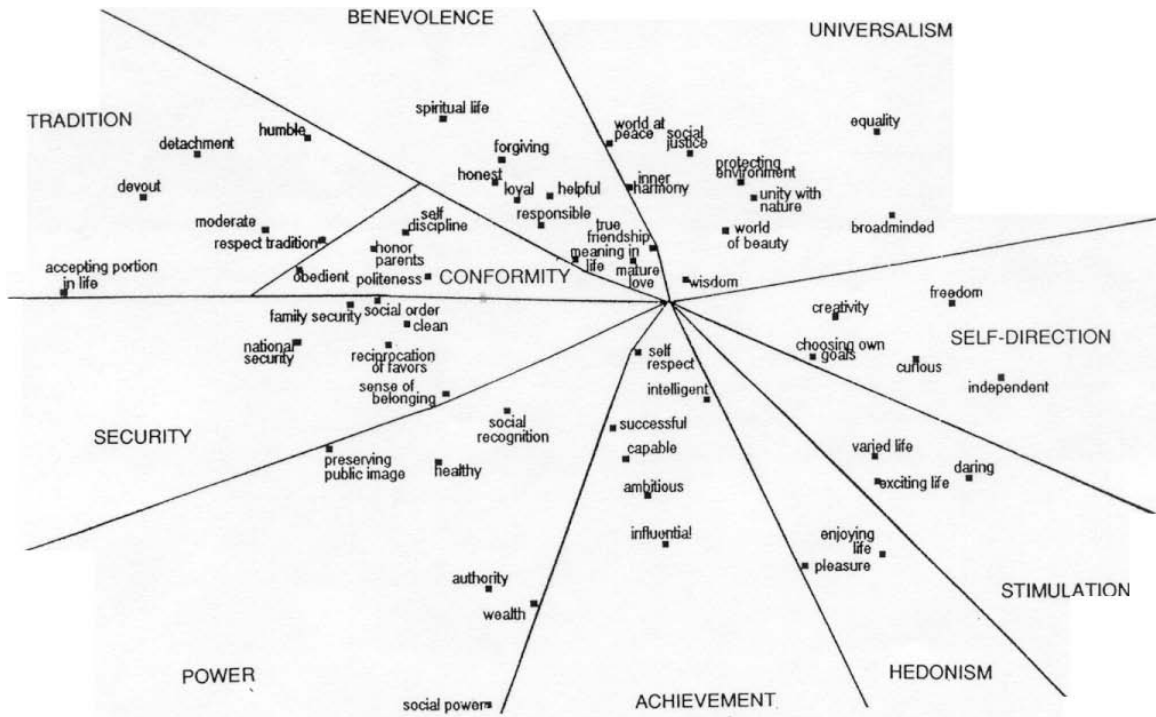


Fig. 4. Teacher samples. Individual-level value structure averaged across 15 countries: Two-dimensional smallest space analysis.

SOURCE: Schwartz, S.H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M.P. Zanna (Ed.), *Advances in Experimental Social Psychology* (pp. 1-64). San Diego CA: Academic Press, Inc.

ANALYZE --> DATA REDUCTION --> FACTOR
 DESCRIPTIVES --> STATISTICS-->√UNIVARIATE DESCRIPTIVES,
 √INITIAL SOLUTION
 --> CORRELATION MATRIX --> √COEFFICIENTS,
 √KMO & BARTLETT'S
 CONTINUE

The screenshot shows the SPSS Data Editor interface with a list of variables and two dialog boxes open for Factor Analysis.

ID	Name	Type	Width	Decimals	Label
1	ID	Numeric	4	0	
2	A1	String	53	0	A1. What is y
3	A2	String	49	0	A2. What is y
4	A3	String	72	0	A3. What is t
5	A4	String	66	0	A4. What is t
6	A5	Numeric	6	0	A5. How man
7	A6	Numeric	6	0	A6. How man
8	A7	Nu			
9	A8	Nu			
10	A9	Nu			
11	A10	Nu			
12	A11	Nu			
13	A12	Nu			
14	A13	Nu			
15	A14	Nu			
16	A15	Nu			
17	A16	Nu			
18	A17	Nu			
19	A18	Nu			
20	A19	Nu			
21	A20	Numeric	6	0	A20. During a
22	A21	Numeric	6	0	A21. Do you r
23	A22	Numeric	6	0	A22. Do you

Factor Analysis: Descriptives

- Statistics
 - Univariate descriptives
 - Initial solution
- Correlation Matrix
 - Coefficients
 - Inverse
 - Significance levels
 - Reproduced
 - Determinant
 - Anti-image
 - KMO and Bartlett's test of sphericity

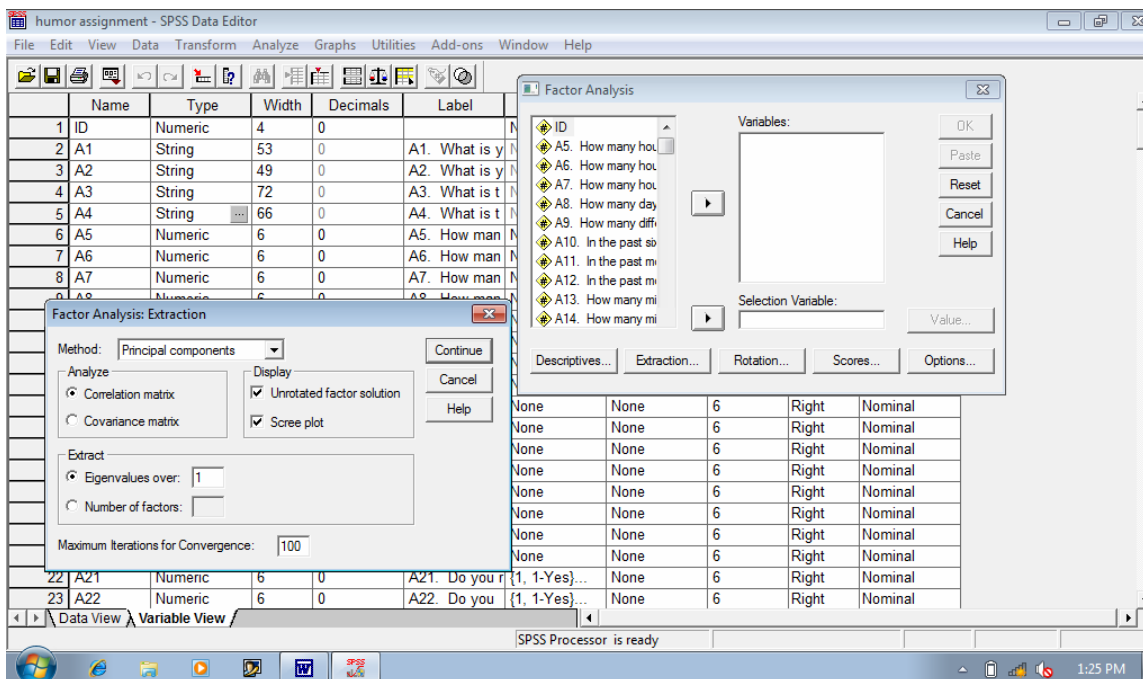
Factor Analysis

Variables: (Empty list)

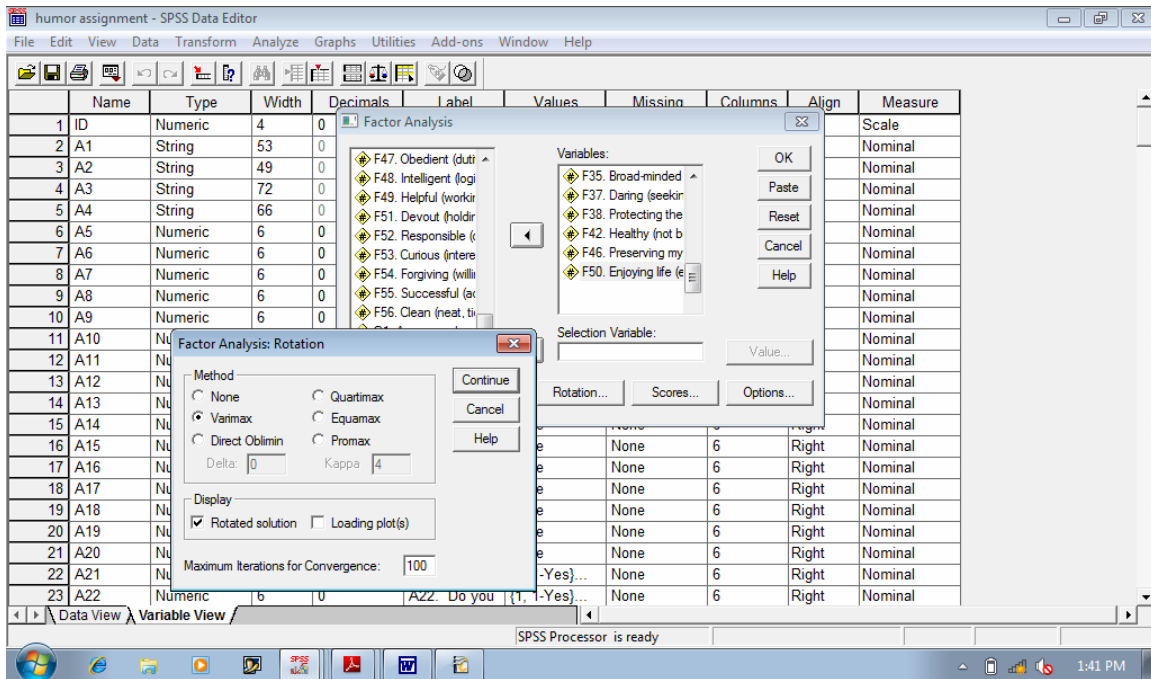
Selection Variable: (Empty)

Buttons: Descriptives..., Extraction..., Rotation..., Scores..., Options..., OK, Paste, Reset, Cancel, Help

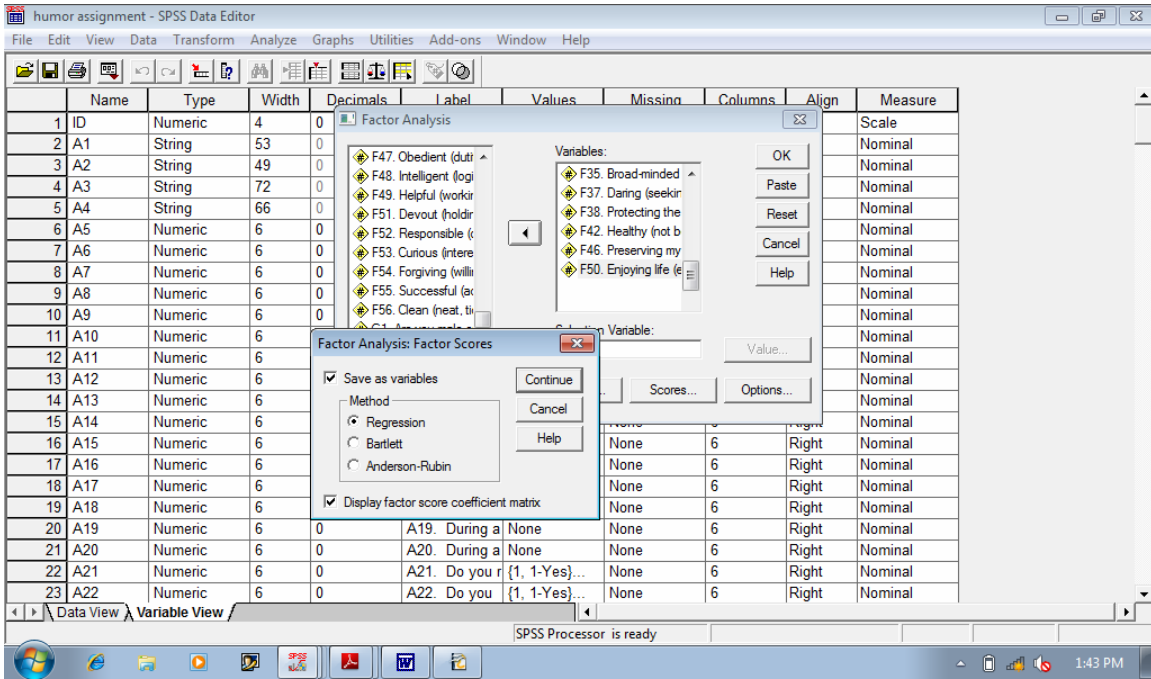
EXTRACTION --> METHOD --> PRINCIPAL COMPONENTS
 --> ANALYZE --> \checkmark CORRELATION MATRIX
 --> DISPLAY --> \checkmark UNROTATED FACTOR SOLUTION,
 \checkmark SCREE PLOT
 --> EXTRACT --> \checkmark EIGENVALUES OVER 1
 --> MAXIMUM ITERATIONS FOR CONVERGENCE 100
 CONTINUE



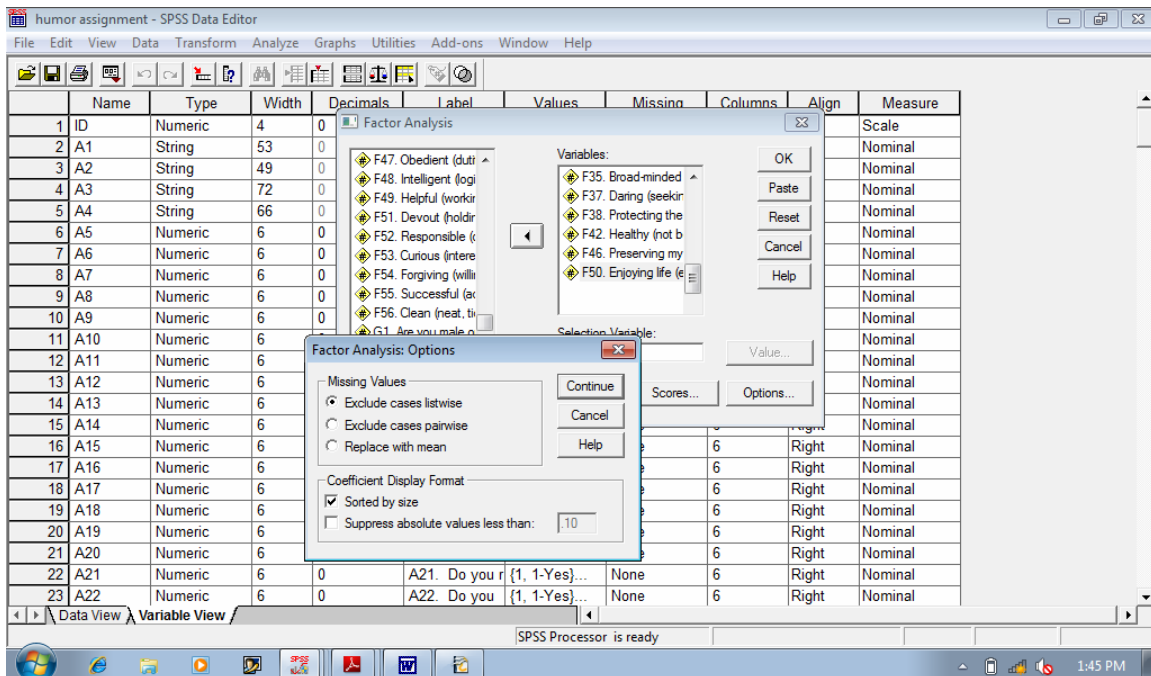
ROTATION --> METHOD --> $\sqrt{\text{VARIMAX}}$
 --> DISPLAY --> $\sqrt{\text{ROTATED SOLUTION}}$
 --> MAXIMUM ITERATIONS FOR CONVERGENCE 100
 CONTINUE



SCORES --> √SAVE AS VARIABLES-->METHOD-->√REGRESSION
-->√DISPLAY FACTOR SCORE COEFFICIENT MATRIX
CONTINUE



OPTIONS --> MISSING VALUES --> \sqrt EXCLUDE CASES LISTWISE
 --> COEFFICIENT DISPLAY FORMAT --> \sqrt SORTED BY SIZE
 CONTINUE
 OK



FACTOR

```
/VARIABLES F1 F2 F3 F4 F9 F12 F17 F23 F24 F25 F26 F27 F29 F30 F35 F37 F38 F42
  F46 F50 /MISSING LISTWISE /ANALYSIS F1 F2 F3
F4 F9 F12 F17 F23 F24 F25 F26 F27 F29 F30 F35 F37 F38 F42 F46 F50
/PRINT UNIVARIATE INITIAL CORRELATION KMO EXTRACTION ROTATION FSCORE
/FORMAT SORT
/PLOT EIGEN
/CRITERIA MINEIGEN(1) ITERATE(100)
/EXTRACTION PC
/CRITERIA ITERATE(100)
/ROTATION VARIMAX
/SAVE REG(ALL)
/METHOD=CORRELATION .
```

Factor Analysis

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
F1. Equality (equal opportunity for all)	6.04	1.483	209
F2. Inner Harmony (at peace with myself)	6.22	1.163	209
F3. Social Power (control over others, dominance)	2.97	2.439	209
F4. Pleasure (gratification of desires)	5.46	1.490	209
F9. An Exciting Life (stimulating experiences)	5.87	1.396	209
F12. Wealth (material possessions, money)	4.42	2.106	209
F17. A World at Peace (free of war and conflict)	5.66	1.621	209
F23. Social Recognition (respect, approval by others)	5.26	1.724	209
F24. Unity with Nature (fitting into nature)	4.57	2.150	209
F25. A Varied Life (filled with challenge, novelty, and change)	5.33	1.650	209
F26. Wisdom (a mature understanding of life)	6.08	1.196	209
F27. Authority (the right to lead or command)	4.49	1.979	209
F29. A World of Beauty (beauty of nature and the arts)	5.26	1.690	209
F30. Social Justice (correcting injustice, care for the weak)	5.43	1.533	209
F35. Broad-minded (tolerant of different ideas and beliefs)	5.78	1.588	209
F37. Daring (seeking adventure, risk)	5.12	1.751	209
F38. Protecting the Environment (preserving nature)	4.74	1.983	209
F42. Healthy (not being sick physically or mentally)	6.22	1.150	209
F46. Preserving my Public Image (protecting my "face")	4.69	2.015	209
F50. Enjoying life (enjoying food, sex, leisure, etc.)	6.20	1.344	209

Correlation Matrix

		F1. Equality (equal opportunity for all)	F2. Inner Harmony (at peace with myself)	F3. Social Power (control over others, dominance)	F4. Pleasure (gratification of desires)
Correlation	F1. Equality (equal opportunity for all)	1.000	.553	-.030	.288
	F2. Inner Harmony (at peace with myself)	.553	1.000	-.074	.323
	F3. Social Power (control over others, dominance)	-.030	-.074	1.000	.198
	F4. Pleasure (gratification of desires)	.288	.323	.198	1.000
	F9. An Exciting Life (stimulating experiences)	.309	.417	.123	.479
	F12. Wealth (material possessions, money)	.064	.030	.366	.366
	F17. A World at Peace (free of war and conflict)	.593	.411	-.018	.298
	F23. Social Recognition (respect, approval by others)	.231	.289	.097	.371
	F24. Unity with Nature (fitting into nature)	.130	.314	.039	.085
	F25. A Varied Life (filled with challenge, novelty, and change)	.268	.394	.117	.323
	F26. Wisdom (a mature understanding of life)	.380	.488	-.087	.284
	F27. Authority (the right to lead or command)	.208	.165	.466	.320
	F29. A World of Beauty (beauty of nature and the arts)	.311	.446	.159	.291
	F30. Social Justice (correcting injustice, care for the weak)	.380	.377	.010	.240
	F35. Broad-minded (tolerant of different ideas and beliefs)	.316	.399	-.072	.269
	F37. Daring (seeking adventure, risk)	.183	.325	.207	.261
	F38. Protecting the Environment (preserving nature)	.234	.372	.049	.187
	F42. Healthy (not being sick physically or mentally)	.449	.490	.040	.413
	F46. Preserving my Public Image (protecting my "face")	.145	.153	.201	.353
	F50. Enjoying life (enjoying food, sex, leisure, etc.)	.372	.461	.112	.489

Correlation Matrix

		F9. An Exciting Life (stimulating experiences)	F12. Wealth (material possessions, money)	F17. A World at Peace (free of war and conflict)	F23. Social Recognition (respect, approval by others)
Correlation	F1. Equality (equal opportunity for all)	.309	.064	.593	.231
	F2. Inner Harmony (at peace with myself)	.417	.030	.411	.289
	F3. Social Power (control over others, dominance)	.123	.366	-.018	.097
	F4. Pleasure (gratification of desires)	.479	.366	.298	.371
	F9. An Exciting Life (stimulating experiences)	1.000	.319	.352	.411
	F12. Wealth (material possessions, money)	.319	1.000	.091	.342
	F17. A World at Peace (free of war and conflict)	.352	.091	1.000	.302
	F23. Social Recognition (respect, approval by others)	.411	.342	.302	1.000
	F24. Unity with Nature (fitting into nature)	.242	.019	.336	.336
	F25. A Varied Life (filled with challenge, novelty, and change)	.572	.139	.335	.479
	F26. Wisdom (a mature understanding of life)	.478	.090	.470	.409
	F27. Authority (the right to lead or command)	.357	.541	.277	.341
	F29. A World of Beauty (beauty of nature and the arts)	.381	.161	.374	.314
	F30. Social Justice (correcting injustice, care for the weak)	.271	.085	.540	.280
	F35. Broad-minded (tolerant of different ideas and beliefs)	.390	.182	.362	.304
	F37. Daring (seeking adventure, risk)	.466	.220	.206	.399
	F38. Protecting the Environment (preserving nature)	.299	.090	.433	.316
	F42. Healthy (not being sick physically or mentally)	.517	.191	.526	.367
	F46. Preserving my Public Image (protecting my "face")	.293	.404	.212	.394
	F50. Enjoying life (enjoying food, sex, leisure, etc.)	.534	.240	.362	.397

Correlation Matrix

		F24. Unity with Nature (fitting into nature)	F25. A Varied Life (filled with challenge, novelty, and change)	F26. Wisdom (a mature understanding of life)	F27. Authority (the right to lead or command)
Correlation	F1. Equality (equal opportunity for all)	.130	.268	.380	.208
	F2. Inner Harmony (at peace with myself)	.314	.394	.488	.165
	F3. Social Power (control over others, dominance)	.039	.117	-.087	.466
	F4. Pleasure (gratification of desires)	.085	.323	.284	.320
	F9. An Exciting Life (stimulating experiences)	.242	.572	.478	.357
	F12. Wealth (material possessions, money)	.019	.139	.090	.541
	F17. A World at Peace (free of war and conflict)	.336	.335	.470	.277
	F23. Social Recognition (respect, approval by others)	.336	.479	.409	.341
	F24. Unity with Nature (fitting into nature)	1.000	.455	.341	.195
	F25. A Varied Life (filled with challenge, novelty, and change)	.455	1.000	.561	.360
	F26. Wisdom (a mature understanding of life)	.341	.561	1.000	.308
	F27. Authority (the right to lead or command)	.195	.360	.308	1.000
	F29. A World of Beauty (beauty of nature and the arts)	.522	.474	.406	.263
	F30. Social Justice (correcting injustice, care for the weak)	.439	.387	.421	.202
	F35. Broad-minded (tolerant of different ideas and beliefs)	.353	.414	.374	.125
	F37. Daring (seeking adventure, risk)	.302	.529	.383	.291
	F38. Protecting the Environment (preserving nature)	.706	.398	.349	.223
	F42. Healthy (not being sick physically or mentally)	.218	.408	.543	.268
	F46. Preserving my Public Image (protecting my "face")	.231	.315	.182	.327
	F50. Enjoying life (enjoying food, sex, leisure, etc.)	.246	.438	.397	.249

Correlation Matrix

		F29. A World of Beauty (beauty of nature and the arts)	F30. Social Justice (correcting injustice, care for the weak)	F35. Broad-minded (tolerant of different ideas and beliefs)	F37. Daring (seeking adventure, risk)
Correlation	F1. Equality (equal opportunity for all)	.311	.380	.316	.183
	F2. Inner Harmony (at peace with myself)	.446	.377	.399	.325
	F3. Social Power (control over others, dominance)	.159	.010	-.072	.207
	F4. Pleasure (gratification of desires)	.291	.240	.269	.261
	F9. An Exciting Life (stimulating experiences)	.381	.271	.390	.466
	F12. Wealth (material possessions, money)	.161	.085	.182	.220
	F17. A World at Peace (free of war and conflict)	.374	.540	.362	.206
	F23. Social Recognition (respect, approval by others)	.314	.280	.304	.399
	F24. Unity with Nature (fitting into nature)	.522	.439	.353	.302
	F25. A Varied Life (filled with challenge, novelty, and change)	.474	.387	.414	.529
	F26. Wisdom (a mature understanding of life)	.406	.421	.374	.383
	F27. Authority (the right to lead or command)	.263	.202	.125	.291
	F29. A World of Beauty (beauty of nature and the arts)	1.000	.553	.430	.318
	F30. Social Justice (correcting injustice, care for the weak)	.553	1.000	.298	.181
	F35. Broad-minded (tolerant of different ideas and beliefs)	.430	.298	1.000	.385
	F37. Daring (seeking adventure, risk)	.318	.181	.385	1.000
	F38. Protecting the Environment (preserving nature)	.465	.405	.444	.427
	F42. Healthy (not being sick physically or mentally)	.382	.373	.398	.312
	F46. Preserving my Public Image (protecting my "face")	.364	.291	.220	.306
	F50. Enjoying life (enjoying food, sex, leisure, etc.)	.369	.257	.440	.437

Correlation Matrix

		F38. Protecting the Environment (preserving nature)	F42. Healthy (not being sick physically or mentally)	F46. Preserving my Public Image (protecting my "face")	F50. Enjoying life (enjoying food, sex, leisure, etc.)
Correlation	F1. Equality (equal opportunity for all)	.234	.449	.145	.372
	F2. Inner Harmony (at peace with myself)	.372	.490	.153	.461
	F3. Social Power (control over others, dominance)	.049	.040	.201	.112
	F4. Pleasure (gratification of desires)	.187	.413	.353	.489
	F9. An Exciting Life (stimulating experiences)	.299	.517	.293	.534
	F12. Wealth (material possessions, money)	.090	.191	.404	.240
	F17. A World at Peace (free of war and conflict)	.433	.526	.212	.362
	F23. Social Recognition (respect, approval by others)	.316	.367	.394	.397
	F24. Unity with Nature (fitting into nature)	.706	.218	.231	.246
	F25. A Varied Life (filled with challenge, novelty, and change)	.398	.408	.315	.438
	F26. Wisdom (a mature understanding of life)	.349	.543	.182	.397
	F27. Authority (the right to lead or command)	.223	.268	.327	.249
	F29. A World of Beauty (beauty of nature and the arts)	.465	.382	.364	.369
	F30. Social Justice (correcting injustice, care for the weak)	.405	.373	.291	.257
	F35. Broad-minded (tolerant of different ideas and beliefs)	.444	.398	.220	.440
	F37. Daring (seeking adventure, risk)	.427	.312	.306	.437
	F38. Protecting the Environment (preserving nature)	1.000	.336	.378	.391
	F42. Healthy (not being sick physically or mentally)	.336	1.000	.273	.510
	F46. Preserving my Public Image (protecting my "face")	.378	.273	1.000	.389
	F50. Enjoying life (enjoying food, sex, leisure, etc.)	.391	.510	.389	1.000

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	1858.955
	df	190
	Sig.	.000

Communalities

	Initial	Extraction
F1. Equality (equal opportunity for all)	1.000	.681
F2. Inner Harmony (at peace with myself)	1.000	.583
F3. Social Power (control over others, dominance)	1.000	.578
F4. Pleasure (gratification of desires)	1.000	.534
F9. An Exciting Life (stimulating experiences)	1.000	.642
F12. Wealth (material possessions, money)	1.000	.643
F17. A World at Peace (free of war and conflict)	1.000	.696
F23. Social Recognition (respect, approval by others)	1.000	.454
F24. Unity with Nature (fitting into nature)	1.000	.787
F25. A Varied Life (filled with challenge, novelty, and change)	1.000	.616
F26. Wisdom (a mature understanding of life)	1.000	.552
F27. Authority (the right to lead or command)	1.000	.635
F29. A World of Beauty (beauty of nature and the arts)	1.000	.589
F30. Social Justice (correcting injustice, care for the weak)	1.000	.659
F35. Broad-minded (tolerant of different ideas and beliefs)	1.000	.471
F37. Daring (seeking adventure, risk)	1.000	.611
F38. Protecting the Environment (preserving nature)	1.000	.694
F42. Healthy (not being sick physically or mentally)	1.000	.612
F46. Preserving my Public Image (protecting my "face")	1.000	.441
F50. Enjoying life (enjoying food, sex, leisure, etc.)	1.000	.586

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	7.256	36.281	36.281
2	2.127	10.635	46.916
3	1.500	7.498	54.415
4	1.183	5.913	60.328
5	.929	4.643	64.970
6	.819	4.096	69.067
7	.720	3.598	72.665
8	.660	3.298	75.963
9	.595	2.975	78.938
10	.568	2.842	81.780
11	.529	2.643	84.423
12	.482	2.411	86.834
13	.438	2.192	89.026
14	.421	2.104	91.130
15	.387	1.936	93.066
16	.334	1.669	94.735
17	.295	1.474	96.209
18	.289	1.447	97.656
19	.261	1.303	98.959
20	.208	1.041	100.000

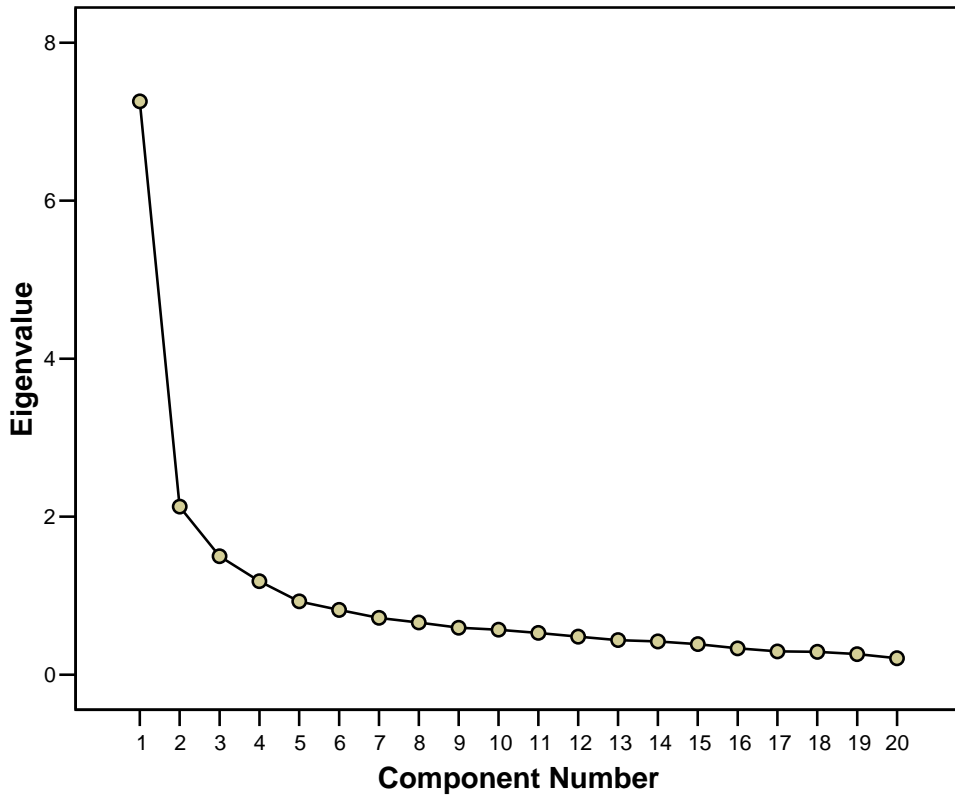
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.256	36.281	36.281	3.753	18.767	18.767
2	2.127	10.635	46.916	3.071	15.354	34.121
3	1.500	7.498	54.415	2.753	13.767	47.888
4	1.183	5.913	60.328	2.488	12.439	60.328
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix^a

	Component			
	1	2	3	4
F25. A Varied Life (filled with challenge, novelty, and change)	.723	.008	.149	-.267
F9. An Exciting Life (stimulating experiences)	.703	.157	-.213	-.280
F42. Healthy (not being sick physically or mentally)	.696	-.099	-.342	.018
F50. Enjoying life (enjoying food, sex, leisure, etc.)	.693	.076	-.204	-.242
F26. Wisdom (a mature understanding of life)	.689	-.224	-.129	-.106
F29. A World of Beauty (beauty of nature and the arts)	.680	-.109	.281	.190
F2. Inner Harmony (at peace with myself)	.648	-.330	-.233	-.026
F17. A World at Peace (free of war and conflict)	.647	-.290	-.177	.403
F38. Protecting the Environment (preserving nature)	.643	-.188	.494	.016
F23. Social Recognition (respect, approval by others)	.620	.204	.045	-.163
F35. Broad-minded (tolerant of different ideas and beliefs)	.613	-.187	.042	-.241
F30. Social Justice (correcting injustice, care for the weak)	.602	-.274	.151	.446
F37. Daring (seeking adventure, risk)	.600	.170	.167	-.441
F4. Pleasure (gratification of desires)	.562	.308	-.351	-.013
F1. Equality (equal opportunity for all)	.552	-.283	-.441	.319
F46. Preserving my Public Image (protecting my "face")	.517	.362	.187	.089
F12. Wealth (material possessions, money)	.356	.702	-.073	.136
F3. Social Power (control over others, dominance)	.164	.674	.159	.268
F27. Authority (the right to lead or command)	.498	.551	.016	.288
F24. Unity with Nature (fitting into nature)	.561	-.244	.641	.051

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Rotated Component Matrix^a

	Component			
	1	2	3	4
F9. An Exciting Life (stimulating experiences)	.712	.275	.051	.239
F37. Daring (seeking adventure, risk)	.704	-.077	.281	.175
F50. Enjoying life (enjoying food, sex, leisure, etc.)	.668	.317	.084	.181
F25. A Varied Life (filled with challenge, novelty, and change)	.642	.152	.402	.138
F35. Broad-minded (tolerant of different ideas and beliefs)	.550	.242	.325	-.062
F23. Social Recognition (respect, approval by others)	.535	.134	.232	.311
F26. Wisdom (a mature understanding of life)	.524	.460	.256	-.026
F4. Pleasure (gratification of desires)	.461	.360	-.121	.422
F1. Equality (equal opportunity for all)	.166	.807	.033	.026
F17. A World at Peace (free of war and conflict)	.123	.759	.311	.094
F42. Healthy (not being sick physically or mentally)	.484	.598	.071	.121
F2. Inner Harmony (at peace with myself)	.444	.579	.197	-.106
F30. Social Justice (correcting injustice, care for the weak)	.010	.572	.562	.125
F24. Unity with Nature (fitting into nature)	.198	.063	.862	.012
F38. Protecting the Environment (preserving nature)	.307	.146	.757	.066
F29. A World of Beauty (beauty of nature and the arts)	.245	.343	.609	.202
F12. Wealth (material possessions, money)	.211	.026	-.074	.770
F3. Social Power (control over others, dominance)	-.051	-.121	.060	.747
F27. Authority (the right to lead or command)	.162	.190	.136	.744
F46. Preserving my Public Image (protecting my "face")	.275	.074	.302	.519

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Component Transformation Matrix

Component	1	2	3	4
1	.648	.521	.459	.311
2	.097	-.387	-.289	.870
3	-.161	-.548	.819	.047
4	-.738	.527	.186	.379

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Component Score Coefficient Matrix

	Component			
	1	2	3	4
F1. Equality (equal opportunity for all)	-.115	.395	-.117	-.004
F2. Inner Harmony (at peace with myself)	.084	.180	-.045	-.123
F3. Social Power (control over others, dominance)	-.139	-.049	.048	.374
F4. Pleasure (gratification of desires)	.110	.107	-.200	.135
F9. An Exciting Life (stimulating experiences)	.267	-.025	-.137	-.002
F12. Wealth (material possessions, money)	-.013	-.014	-.092	.344
F17. A World at Peace (free of war and conflict)	-.188	.344	.047	.033
F23. Social Recognition (respect, approval by others)	.161	-.082	.010	.060
F24. Unity with Nature (fitting into nature)	-.062	-.127	.427	-.039
F25. A Varied Life (filled with challenge, novelty, and change)	.215	-.123	.084	-.047
F26. Wisdom (a mature understanding of life)	.131	.090	-.013	-.100
F27. Authority (the right to lead or command)	-.111	.058	.011	.339
F29. A World of Beauty (beauty of nature and the arts)	-.093	.051	.241	.054
F30. Social Justice (correcting injustice, care for the weak)	-.253	.237	.228	.061
F35. Broad-minded (tolerant of different ideas and beliefs)	.192	-.045	.049	-.126
F37. Daring (seeking adventure, risk)	.319	-.245	.037	-.041
F38. Protecting the Environment (preserving nature)	-.014	-.093	.339	-.029
F42. Healthy (not being sick physically or mentally)	.083	.201	-.127	-.016
F46. Preserving my Public Image (protecting my "face")	-.013	-.057	.099	.205
F50. Enjoying life (enjoying food, sex, leisure, etc.)	.238	.003	-.116	-.023

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Component Scores.

Component Score Covariance Matrix

Component	1	2	3	4
1	1.000	.000	.000	.000
2	.000	1.000	.000	.000
3	.000	.000	1.000	.000
4	.000	.000	.000	1.000

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Component Scores.

	-----Factor Loadings-----				
	Open to Experiences 1	Harmony 2	Environment- alism 3	Worldly Power 4	Communality
F9—Exciting Life	.712	.275	.051	.239	.642
F37—Daring	.704	-.077	.281	.175	.611
F50—Enjoying Life	.668	.317	.084	.181	.586
F25—Varied Life	.642	.152	.402	.138	.616
F35—Broad Minded	.550	.242	.325	-.062	.471
F23—Social Recognition	.535	.134	.232	.311	.454
F26—Wisdom	.524	.460	.256	-.026	.552
F4—Pleasure	.461	.360	-.121	.422	.534
F1—Equality	.166	.807	.033	.026	.681
F17—World at Peace	.123	.759	.311	.094	.696
F42—Healthy	.484	.598	.071	.121	.612
F2—Inner Harmony	.444	.579	.197	-.106	.583
F30—Social Justice	.010	.572	.562	.125	.659
F24—Unity with Nature	.198	.063	.862	.012	.787
F38—Protecting the Environment	.307	.146	.757	.066	.694
F29—A World of Beauty	.245	.343	.609	.202	.589
F12—Wealth	.211	.026	-.074	.770	.643
F3—Social Power	-.051	-.121	.060	.747	.578
F27—Authority	.162	.190	.136	.744	.635
F46—Preserving Public Image	.275	.074	.302	.519	.441
Eigenvalue	3.753	3.071	2.753	2.488	[12.065]
Percent of Total Variance	18.767%	15.354%	13.767%	12.439%	[60.328%]
Percent of Common Variance	31.1%	25.5%	22.8%	20.6%	100%

KMO measure of sampling adequacy = .886

Bartlett's test of sphericity: approx. chi-square = 1858.995, df = 190, p<.001

Factor Analysis Writeup

The 20 value question responses were submitted to an exploratory factor analysis, with principal components factoring, orthogonal rotation and an extraction cutoff of eigenvalue=1.0 (i.e., latent root criterion). This resulted in four factors with eigenvalues ranging from 3.753 (18.767% of total variance) to 2.488 (12.439% of total variance). The full four-factor solution explained 60% of the total variance. The measure of sampling adequacy (MSA) was .886 (i.e., “meritorious” according to Hair et al.) and the Bartlett’s test of sphericity resulted in a highly significant chi-square (1858.995, $p < .001$), indicating the appropriateness of this set of 20 items for factor analysis. Communalities ranged from a low of .441 to a high of .787, indicating a reasonable amount of shared variance for all items.

The four factors were given labels based on those items loading highly and cleanly on each factor. Factor 1 was titled “Open to Experiences” due to high loadings for responses on items measuring value constructs related to “Enjoyment of Life” and “Broad-mindedness,” notably concepts such as “excitement and daring.” Factor 2 was titled “Harmony” because of high loadings for items “World at Peace” and “Equality.” Factor 3 was titled “Environmentalism” due to high loadings for items “Unity with Nature” and “World of Beauty.” Factor 4 was titled “Worldly Power” because of high loadings for such items as “Wealth” and “Social Power.”

Items such as “Wisdom,” “Pleasure,” “Healthy,” “Inner Harmony,” and “Social Justice,” did not load very cleanly, and have relatively similar loadings from one factor to the next. For instance, under the Factors “Open to New Experiences” and “Harmony,” the item “Wisdom” earned a .524 and .460 respectively.

While these specific results make a construct of four separate values somewhat more ambiguous, the output still seems to support a four-factor structure of separate values.