PRECISE EXPONENTIAL DISTRIBUTION OF PERSONALITY EFFECTS ON WORLD VALUES

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World Values Survey Wave 6 measured 430 variables across the world. We report here a very precise exponential distribution for Personality Trait Effects on these 430 variables.

1. Measure of Personality Effects

For any given variable y, we let $x = (o_1, o_2, c_1, c_2, e_1, e_2, a_1, a_2, s_1, s_2)$ be the predictor variable and fit the linear model

$$y \sim x$$

Then we record the R^2 of the fit as the measure of influence of personality on variable y.

2. Precise Exponential Distribution

We take all the r-squared measures for all the variables, use R's histogram function to produce a density and fit the density curve with an log-linear model and obtain a precise fit with $R^2 = 0.92$. Without a doubt this is an exact exponential law

```
> mod.pers.r2<-lm(log(x) ~ t8)
> summary(mod.pers.r2)

Call:
lm(formula = log(x) ~ t8)
```

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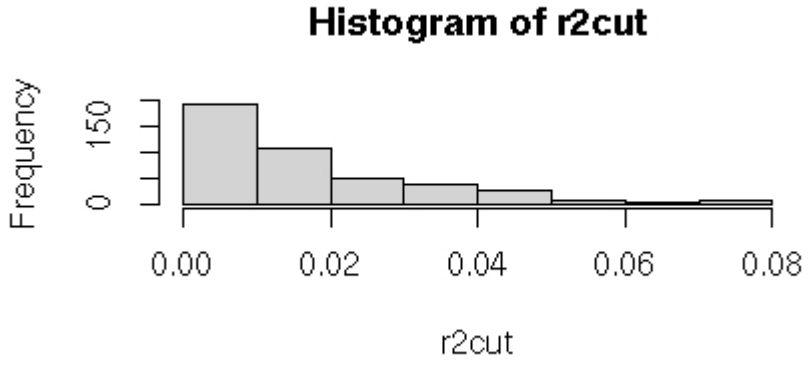
```
Residuals:
     Min       1Q   Median       3Q      Max
-0.60367 -0.23449  0.09187  0.15105  0.65498

Coefficients:
            Estimate Std. Error t value
(Intercept)  4.25263    0.33830  12.571
t8          -0.55225    0.06699  -8.243
            Pr(>|t|)
(Intercept) 1.55e-05 ***
t8          0.000172 ***
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.4342 on 6 degrees of freedom
Multiple R-squared:  0.9189,Adjusted R-squared:  0.9053
F-statistic: 67.95 on 1 and 6 DF,  p-value: 0.0001722
```

Here is the empirical histogram.



This is a discovery of a precise law of Personality Trait Influence on arbitrary Value Measurement of the Human Race. It is crucial to understand that these are independent of nation, language, culture, ethnicity and so on. The law

is stochastic but very accurate statistically since $R^2 = 0.92$ for the exponential model is extremely accurate.

Note that the exponential distribution here will have a mean that is less than $rs = 0.1$. And thus the expected influence of Personality trait will explain less than 10% of the variation for vast numbers of values but they will have an influence that is statistically significant *even when the demand if global influence independently of the localisation variables*, i.e. ethnicity, culture, language, nation and so on.

3. Dataset

	name	r.squared
1	V1	0.0000
2	V2	0.0436
3	V2A	0.0768
4	V3	0.0181
5	V4	0.0147
6	V5	0.0250
7	V6	0.0099
8	V7	0.0044
9	V8	0.0165
10	V9	0.0622
11	V10	0.0275
12	V11	0.0135
13	V12	0.0109
14	V13	0.0202
15	V14	0.0051
16	V15	0.0144
17	V16	0.0044
18	V17	0.0050
19	V18	0.0078
20	V19	0.0375
21	V20	0.0103

22	V21	0.0109
23	V22	0.0048
24	V23	0.0272
25	V24	0.0494
26	V25	0.0410
27	V26	0.0170
28	V27	0.0164
29	V28	0.0074
30	V29	0.0120
31	V30	0.0142
32	V31	0.0116
33	V32	0.0072
34	V33	0.0121
35	V34	0.0114
36	V35	0.0164
37	V36	0.0234
38	V37	0.0149
39	V38	0.0351
40	V39	0.0069
41	V40	0.0427
42	V41	0.0206
43	V42	0.0298
44	V43	0.0661
45	V44	0.0086
46	V44_ES	0.0000
47	V45	0.0377
48	V46	0.0201
49	V47	0.0168
50	V48	0.0045
51	V49	0.0385
52	V50	0.0323
53	V51	0.0450
54	V52	0.0079
55	V53	0.0258
56	V54	0.0121

57	V55	0.0093
58	V56	0.0053
59	V56_NZ	0.0000
60	V57	0.0187
61	V58	0.0171
62	V59	0.0156
63	V60	0.0114
64	V61	0.0046
65	V62	0.0098
66	V63	0.0023
67	V64	0.0041
68	V65	0.0038
69	V66	0.0087
70	V67	0.0253
71	V68	0.0145
72	V69	0.0128
73	V70	0.0285
74	V71	0.0238
75	V72	0.0329
76	V73	0.0123
77	V74	0.0255
78	V74B	0.0000
79	V75	0.0259
80	V76	0.0347
81	V77	0.0341
82	V78	0.0200
83	V79	0.0430
84	V80	0.0104
85	V81	0.0061
86	V82	0.0106
87	V83	0.0145
88	V84	0.0138
89	V85	0.0356
90	V86	0.0148
91	V87	0.0098

92	V88	0.0111
93	V89	0.0000
94	V90	0.0000
95	V91	0.0000
96	V92	0.0000
97	V93	0.0000
98	V94	0.0000
99	V95	0.0000
100	V96	0.0213
101	V97	0.0053
102	V98	0.0320
103	V99	0.0428
104	V100	0.0308
105	V101	0.0065
106	V102	0.0228
107	V103	0.0283
108	V104	0.0311
109	V105	0.0155
110	V106	0.0280
111	V107	0.0214
112	V108	0.0104
113	V109	0.0065
114	V110	0.0153
115	V111	0.0137
116	V112	0.0138
117	V113	0.0050
118	V114	0.0126
119	V115	0.0091
120	V116	0.0200
121	V117	0.0204
122	V118	0.0191
123	V119	0.0134
124	V120	0.0125
125	V121	0.0075
126	V122	0.0157

127	V123	0.0236
128	V124	0.0065
129	V125_00	0.0000
130	V125_01	0.0000
131	V125_02	0.0000
132	V125_03	0.0000
133	V125_04	0.0000
134	V125_05	0.0000
135	V125_06	0.0000
136	V125_07	0.0000
137	V125_08	0.0000
138	V125_09	0.0000
139	V125_10	0.0000
140	V125_11	0.0000
141	V125_12	0.0000
142	V125_13	0.0000
143	V125_14	0.0000
144	V125_15	0.0000
145	V125_16	0.0084
146	V125_17	0.0184
147	V126	0.0400
148	V127	0.0218
149	V128	0.0035
150	V129	0.0200
151	V130	0.0288
152	V131	0.0211
153	V132	0.0174
154	V133	0.0488
155	V134	0.0468
156	V135	0.0163
157	V136	0.0516
158	V137	0.0189
159	V138	0.0253
160	V139	0.0231
161	V140	0.0320

162	V141	0.0347
163	V142	0.0184
164	V143	0.0185
165	V144	0.0069
166	V145	0.0130
167	V146	0.0450
168	V147	0.0207
169	V148	0.0436
170	V149	0.0466
171	V150	0.0123
172	V151	0.0151
173	V152	0.0742
174	V153	0.0748
175	V154	0.0782
176	V155	0.0270
177	V156	0.0108
178	V157	0.0115
179	V158	0.0241
180	V159	0.0129
181	V160	0.0053
182	V161	0.0203
183	V162	0.0236
184	V163	0.0235
185	V164	0.0188
186	V165	0.0129
187	V166	0.0142
188	V167	0.0375
189	V168	0.0142
190	V169	0.0103
191	V160A	0.0000
192	V160B	0.0000
193	V160C	0.0000
194	V160D	0.0000
195	V160E	0.0000
196	V160F	0.0000

197	V160G	0.0000
198	V160H	0.0000
199	V160I	0.0000
200	V160J	0.0000
201	V170	0.0191
202	V171	0.0333
203	V172	0.0417
204	V173	0.0147
205	V174	0.0124
206	V175	0.0200
207	V176	0.0274
208	V177	0.0191
209	V178	0.0048
210	V179	0.0168
211	V180	0.0204
212	V181	0.0177
213	V182	0.0130
214	V183	0.0379
215	V184	0.0310
216	V185	0.0534
217	V186	0.0129
218	V187	0.0027
219	V188	0.0266
220	V189	0.0305
221	V190	0.0173
222	V191	0.0163
223	V192	0.0450
224	V193	0.0471
225	V194	0.0433
226	V195	0.0132
227	V196	0.0312
228	V197	0.0164
229	V198	0.0257
230	V199	0.0305
231	V200	0.0319

232	V201	0.0207
233	V202	0.0358
234	V203	0.0585
235	V203A	0.0000
236	V204	0.0300
237	V205	0.0157
238	V206	0.0719
239	V207	0.0309
240	V207A	0.0000
241	V208	0.0188
242	V209	0.0124
243	V210	0.0252
244	V211	0.0152
245	V212	0.0358
246	V213	0.0187
247	V214	0.0222
248	V215_01	0.0000
249	V215_02	0.0000
250	V215_03	0.0000
251	V215_04	0.0000
252	V215_05	0.0000
253	V215_06	0.0000
254	V215_07	0.0000
255	V215_08	0.0000
256	V215_10	0.0000
257	V215_11	0.0000
258	V215_12	0.0000
259	V215_13	0.0000
260	V215_14	0.0000
261	V215_15	0.0000
262	V215_16	0.0000
263	V215_17	0.0000
264	V215_18	0.0000
265	V216	0.0083
266	V217	0.0253

267	V218	0.0241
268	V219	0.0072
269	V220	0.0129
270	V221	0.0107
271	V222	0.0167
272	V223	0.0159
273	V224	0.0135
274	V218_ESMA	0.0000
275	V217_ESMA	0.0000
276	V219_ESMA	0.0000
277	V220_ESMA	0.0000
278	V221_ESMA	0.0000
279	V222_ESMA	0.0000
280	V223_ESMA	0.0000
281	V224_ESMA	0.0000
282	V225	0.0126
283	V226	0.0134
284	V227	0.0075
285	V228	0.0000
286	V228_2	0.0000
287	V228A	0.0000
288	V228B	0.0000
289	V228C	0.0000
290	V228D	0.0000
291	V228E	0.0000
292	V228F	0.0000
293	V228G	0.0000
294	V228H	0.0000
295	V228I	0.0000
296	V228J	0.0000
297	V228K	0.0000
298	V229	0.0065
299	V230	0.0000
300	V231	0.0156
301	V232	0.0202

302	V233	0.0053
303	V234	0.0084
304	V235	0.0091
305	V236	0.0000
306	V237	0.0145
307	V238	0.0143
308	V239	0.0123
309	V240	0.0046
310	V241	0.0336
311	V242	0.0340
312	V243	0.0035
313	V243_AU	0.0000
314	V244	0.0033
315	V244_AU	0.0000
316	V245	0.0022
317	V246	0.0006
318	V247	0.0071
319	V248	0.0146
320	V248_CS	0.0000
321	V249	0.0244
322	V250	0.0148
323	V251	0.0061
324	V252	0.0052
325	V253	0.0000
326	V253_CS	0.0000
327	V254	0.0316
328	V255	0.0096
329	V256	0.0510
330	V256B	0.0000
331	V256C	0.0000
332	V256_MAP	0.0000
333	V257	0.0018
334	V258	0.0007
335	V258A	0.0101
336	V260	0.0742

337	V261	0.0000
338	V262	0.0665
339	S024	0.0436
340	S025	0.0436
341	V265	0.0000
342	Y001	0.0397
343	Y002	0.0280
344	Y003	0.0000
345	MN_35A	0.0000
346	MN_163A	0.0000
347	MN_163B	0.0000
348	MN_163C	0.0000
349	MN_228L	0.0000
350	MN_228M	0.0000
351	MN_228N	0.0000
352	MN_228O	0.0000
353	MN_228P	0.0000
354	MN_228Q	0.0000
355	MN_228R	0.0000
356	MN_228S1	0.0000
357	MN_228S2	0.0000
358	MN_228S3	0.0000
359	MN_228S4	0.0000
360	MN_228S5	0.0000
361	MN_228S6	0.0000
362	MN_228S7	0.0000
363	MN_228S8	0.0000
364	MN_229A	0.0000
365	MN_229B	0.0000
366	MN_230A	0.0000
367	MN_233A	0.0000
368	MN_233B	0.0000
369	MN_234A	0.0000
370	MN_237A	0.0000
371	MN_237B1	0.0000

372	MN_237B2	0.0000
373	MN_237B3	0.0000
374	MN_237B4	0.0000
375	MN_237B5	0.0000
376	MN_237B6	0.0000
377	MN_237B7	0.0000
378	MN_237C1	0.0000
379	MN_237C2	0.0000
380	MN_237C3	0.0000
381	MN_237C4	0.0000
382	MN_237C5	0.0000
383	MN_237C6	0.0000
384	MN_249A1	0.0000
385	MN_249A2	0.0000
386	MN_249A3	0.0000
387	sacsecval	0.0580
388	secvalwgt	0.0179
389	resemaval	0.0710
390	weightb	0.0093
391	I_AUTHORITY	0.0128
392	I_NATIONALISM	0.0152
393	I_DEVOUT	0.0384
394	defiance	0.0386
395	WEIGHT1A	0.0027
396	I_RELIGIMP	0.0621
397	I_RELIGBEL	0.0173
398	I_RELIGPRAC	0.0130
399	disbelief	0.0347
400	WEIGHT2A	0.0142
401	I_NORM1	0.0401
402	I_NORM2	0.0239
403	I_NORM3	0.0445
404	relativism	0.0480
405	WEIGHT3A	0.0371
406	I_TRUSTARMY	0.0065

407	I_TRUSTPOLICE	0.0050
408	I_TRUSTCOURTS	0.0126
409	scepticism	0.0102
410	WEIGHT4A	0.0153
411	I_INDEP	0.0109
412	I_IMAGIN	0.0144
413	I_NONOBED	0.0109
414	autonomy	0.0183
415	WEIGHT1B	0.5000
416	I_WOMJOB	0.0377
417	I_WOMPOL	0.0448
418	I_WOMEDU	0.0080
419	equality	0.0344
420	WEIGHT2B	0.0013
421	I_HOMOLIB	0.0585
422	I_ABORTLIB	0.0300
423	I_DIVORLIB	0.0157
424	choice	0.0433
425	WEIGHT3B	0.0197
426	I_VOICE1	0.0304
427	I_VOICE2	0.0242
428	I_VOI2_00	0.0405
429	voice	0.0395
430	WEIGHT4B	0.0031