

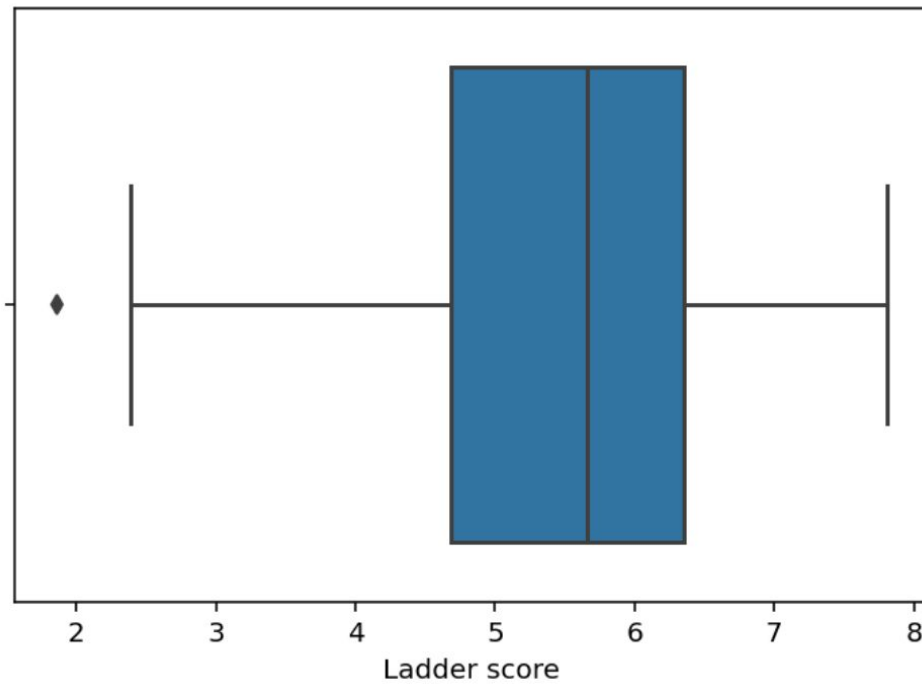
Happy People in Unhappy Countries: A 24-HOUR STUDY

By Francheska Kovacevic, Jake Stavely,
Mark Ayiah, & Victor Bulyga



Why these countries? Why these people?

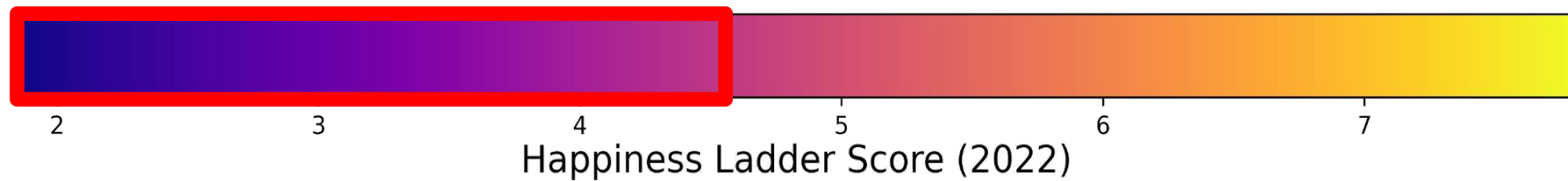
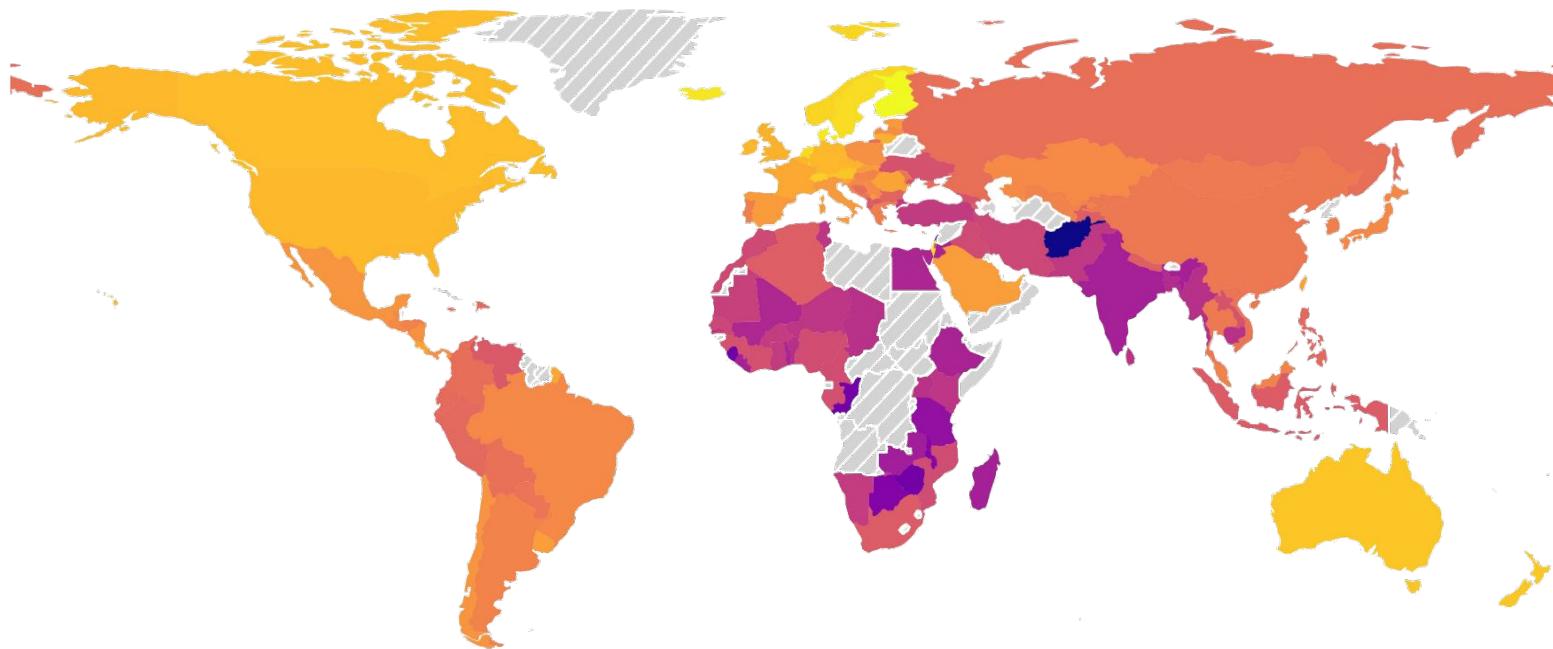
- Looked at Quartiles of the rankings in choosing the unhappy and happy countries.
- Top 25% and Bottom 25% of the data available
- Picked happy people based on self rating of “very happy” and “quite happy”



Boxplot of WHR Ladder Scores

Key Points

- Thresholds to identify “happy” and “unhappy” countries
 - Median - 5.66
 - 25th Percentile - 4.68
 - 75th Percentile - 6.35
- Designated countries with a ladder score of **less than 4.7** as *unhappy*
- Designated countries with a ladder score of **more than 6.3** as *happy*



Core Values

- GDP per capita
- Social Support
- Life Expectancy
- Generosity
- Freedom to make life choices
- Perceptions of corruption in your country/neighborhood

Narrowing it down

- Technical Variables, Core Variables, and Demographic and Socioeconomic Variables of World Value Survey Variables Report

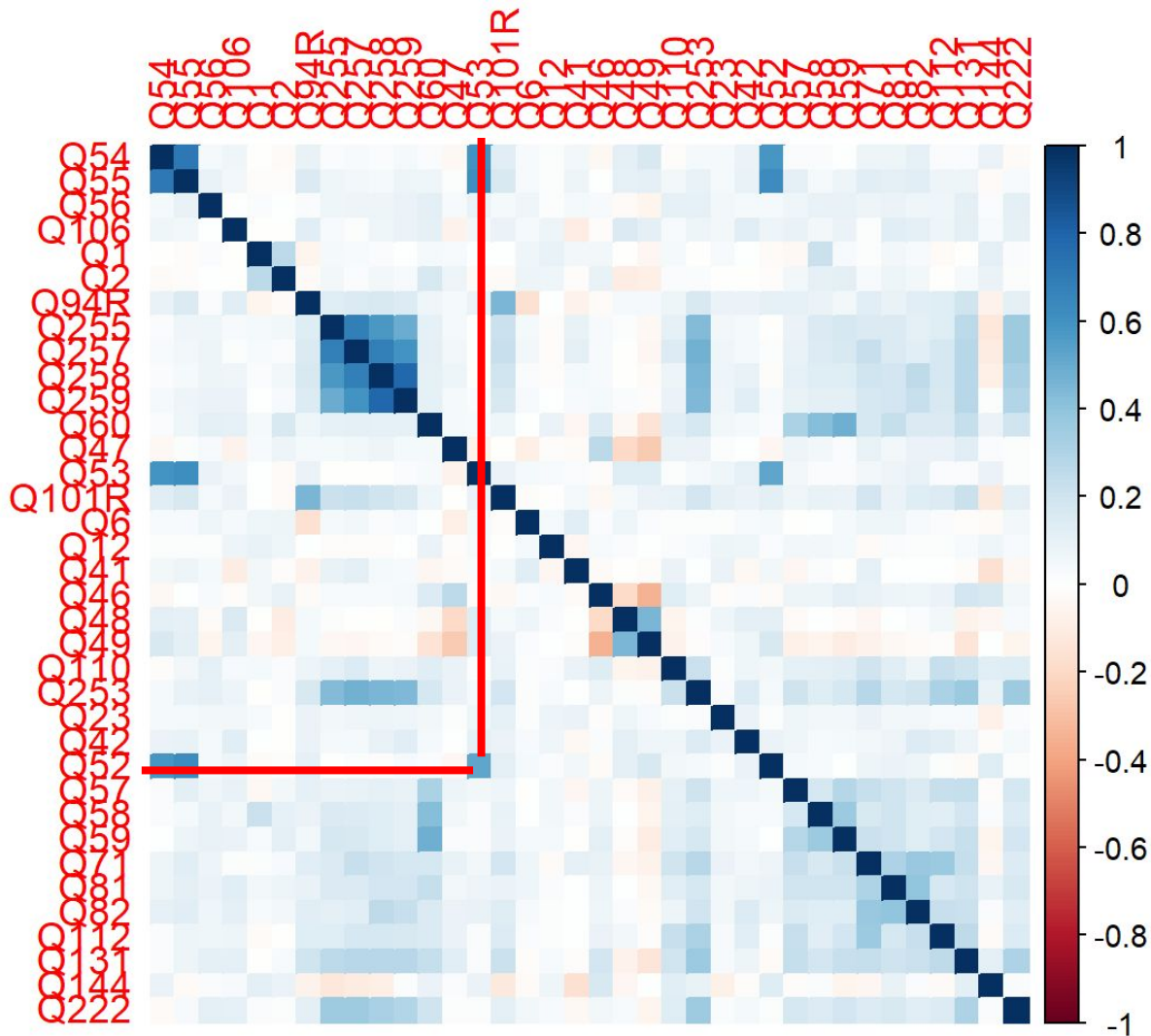
Who	GDP per capita	Social Support	Life Expectancy
Q46 Feeling of happiness	Q54 Frequency you/family (last 12 month): Gone without a cash income	Q1 (Importance of Family)	Q47 State of health (subjective)
	Q55 In the last 12 month, how often have you or your family: Gone without a safe shelter over your head	Q2 (Importance of Friends)	Q53 Frequency you/family (last 12 month): Gone without needed medicine or treatment that you needed
	Q56 Standard of living comparing with your parents	Q94R Membership: church or religious organization	
Technical:	Q106 Income equality vs larger income differences	Q255 Feel close to your village, town or city	
A_YEAR		Q257 Feel close to your country	
B_COUNTRY_ALPHA		Q258 Feel close to your continent	
D_INTERVIEW		Q259 Feel close to the world	
G_TOWNSIZE2		Q60 Trust: People you know personally	
H_URBRURAL			
Demographic	Generosity	Freedom to make life choices	Perceptions of corruption in your country/neighborhood
Q260 Sex	Q101R Membership: charitable/humanitarian organization	Q6 (Religion)	Q42 Basic kinds of attitudes concerning society
X003R Age Recoded (6 intervals)		Q12 (Children qualities: Tolerance of other people)	Q52 Frequency you/family (last 12 month): Felt unsafe from crime in your own home
Q281 Respondent-Occupational group		Q41 Work should always come first even if it means less spare time	**Q53 Frequency you/family (last 12 month): Gone without needed medicine or treatment that you needed
Q287 Social class (subjective)		Q48 How much freedom of choice and control	Q57 Most people can be trusted
		Q49 Satisfaction with your life	Q58 How much you trust: Your family
		Q110 Success: hard work vs luck	Q59 Trust: Your neighborhood
		Q253 Respect for individual human rights nowadays	Q71 Confidence: The Government
		Q23 (Neighbors: People of a different religion)	Q81 Confidence: Charitable or humanitarian organizations
			Q82 Confidence: Major regional organization (combined from country-specific)
			Q112 Perceptions of corruption in the country
			Q131 Secure in neighborhood
			Q144 Respondent was victim of a crime during the past year
			Q222 Vote in elections: National level

Before Removing Variables

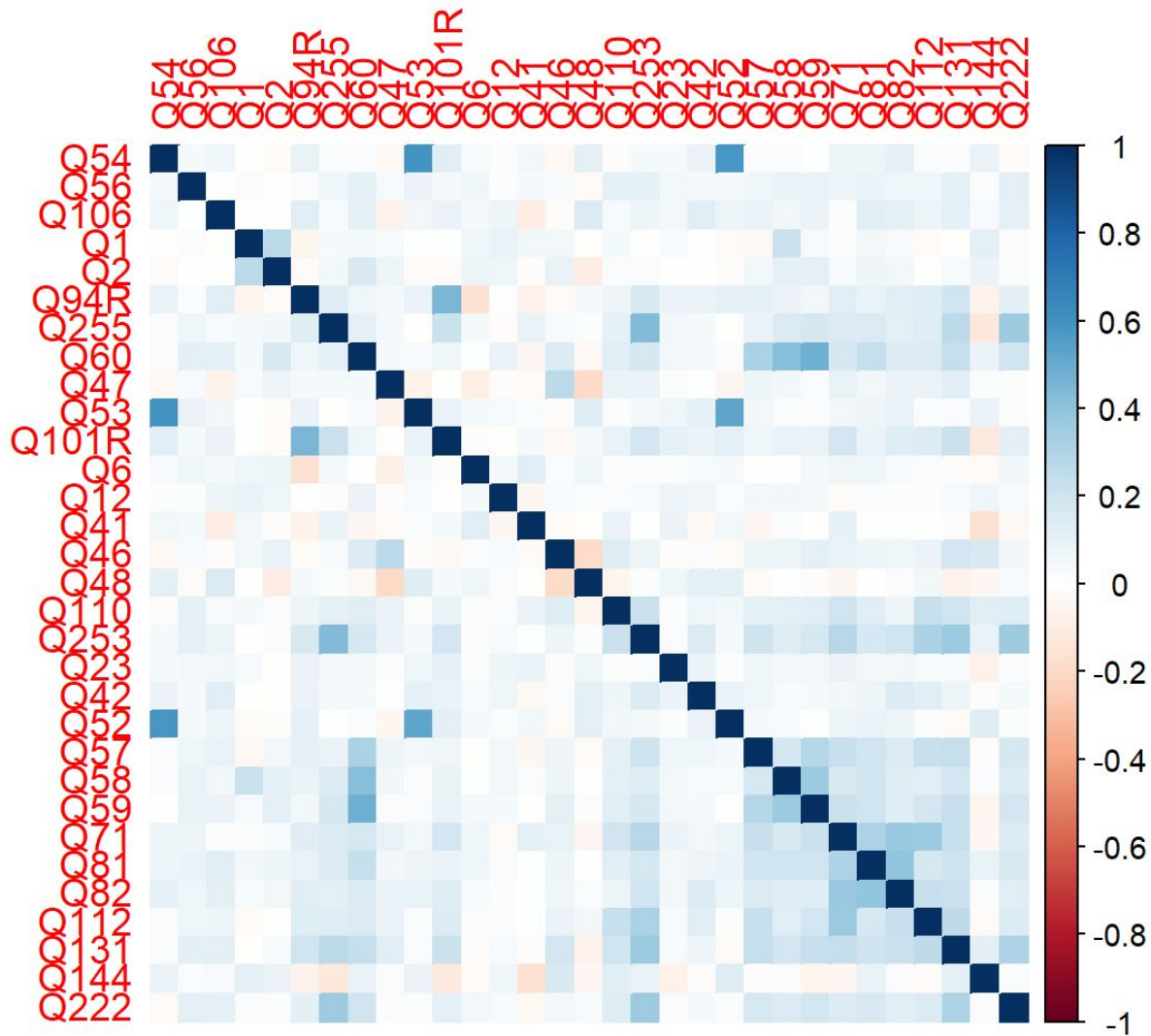
Q52 - Frequency you/family
(last 12 month): Felt unsafe
from crime in your own home

Q53 - Frequency you/family (last 12 month): Gone without needed medicine or treatment that you needed

***Darker blue = Higher correlation**



After Removing Variables



Happy Country Model

- Q55 Gone without shelter
- Q2 Importance of friends
- Q60 Trust (People close to you)
- Q47 State of Health
- Q6 Religion
- Q49 Life Satisfaction
- Q110 Success (Hard work vs. Luck)
- Q42 Societal Attitudes
- Q59 Trust (Neighborhood)
- Q112 Attitudes towards societal corruption
- Q131 Feelings of security within neighborhood
- Q144 Has been a victim of a crime in the past year

Coefficients:				
	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	1.8065629	0.0527761	34.231	< 2e-16 ***
Q54	-0.0168265	0.0090349	-1.862	0.062596 .
Q55	0.0270190	0.0119844	2.255	0.024200 *
Q56	-0.0070258	0.0050092	-1.403	0.160798
Q106	0.0009929	0.0018687	0.531	0.595224
Q1	0.0093408	0.0107521	0.869	0.385022
Q2	0.0182255	0.0083055	2.194	0.028246 *
Q94R	-0.0133596	0.0093892	-1.423	0.154825
Q255	0.0026568	0.0070631	0.376	0.706816
Q257	0.0003186	0.0077982	0.041	0.967416
Q258	-0.0060528	0.0078784	-0.768	0.442352
Q259	0.0040277	0.0065864	0.612	0.540880
Q60	0.0276760	0.0091246	3.033	0.002431 **
Q47	0.0899726	0.0064723	13.901	< 2e-16 ***
Q53	0.0035293	0.0070700	0.499	0.617661
Q101R	-0.0142869	0.0107427	-1.330	0.183597
Q6	0.0122546	0.0033783	3.627	0.000289 ***
Q12	0.0112005	0.0067047	1.671	0.094864 .
Q41	-0.0046551	0.0044232	-1.052	0.292636
Q48	-0.0045565	0.0029807	-1.529	0.126403
Q49	-0.0764964	0.0038686	-19.774	< 2e-16 ***
Q110	0.0081174	0.0021423	3.789	0.000153 ***
Q253	-0.0070391	0.0055605	-1.266	0.205595
Q23	-0.0020994	0.0083502	-0.251	0.801493
Q42	0.0136387	0.0046209	2.952	0.003175 **
Q52	-0.0017361	0.0088423	-0.196	0.844349
Q57	-0.0106055	0.0083523	-1.270	0.204220
Q58	-0.0118041	0.0097390	-1.212	0.225541
Q59	0.0239802	0.0072829	3.293	0.000998 ***
Q71	0.0107251	0.0061089	1.756	0.079200 .
Q81	-0.0018671	0.0052671	-0.354	0.722987
Q82	-0.0023108	0.0047410	-0.487	0.625988
Q112	0.0051715	0.0022379	2.311	0.020872 *
Q131	0.0474191	0.0074525	6.363	2.13e-10 ***
Q144	0.0217628	0.0020004	10.879	< 2e-16 ***
Q222	-0.0073638	0.0057765	-1.275	0.202436

Unhappy Country Model

- Q255 Feelings of closeness to village/town/city
- Q47 State of health
- Q6 Trust (People close to you)
- Q12 Frequency that you or family have gone without necessary medication
- Q48 Freedom of choice and control
- Q52 Feelings of risk of crime in one's own household
- Q71 Confidence in the government

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	0.888251	0.167028	5.318	1.29e-07	***
Q54	0.008317	0.016353	0.509	0.61113	
Q55	0.010919	0.016324	0.669	0.50371	
Q56	0.013951	0.015025	0.929	0.35336	
Q106	0.007273	0.005069	1.435	0.15168	
Q1	0.061126	0.066676	0.917	0.35949	
Q2	0.032603	0.021610	1.509	0.13170	
Q94R	0.008629	0.033825	0.255	0.79869	
Q255	0.045067	0.021142	2.132	0.03328	*
Q257	0.017105	0.020481	0.835	0.40383	
Q258	-0.004695	0.019240	-0.244	0.80726	
Q259	0.010806	0.015461	0.699	0.48477	
Q60	0.033790	0.019168	1.763	0.07823	.
Q47	0.124220	0.019644	6.323	3.83e-10	***
Q53	0.020407	0.016264	1.255	0.20987	
Q101R	-0.007997	0.026153	-0.306	0.75983	
Q6	0.096341	0.029847	3.228	0.00129	**
Q12	-0.087471	0.029459	-2.969	0.00306	**
Q41	0.006012	0.013598	0.442	0.65848	
Q48	-0.012888	0.006256	-2.060	0.03964	*
Q49	-0.007052	0.005698	-1.238	0.21611	
Q119	-0.008977	0.012754	-0.704	0.48170	
Q253	-0.032495	0.017083	-1.902	0.05744	.
Q23	0.022495	0.021802	1.032	0.30242	
Q42	-0.024883	0.019894	-1.251	0.21131	
Q52	-0.036737	0.016465	-2.231	0.02589	*
Q57	-0.024370	0.036772	-0.663	0.50765	
Q58	-0.007486	0.027418	-0.273	0.78490	
Q59	0.016298	0.019848	0.821	0.41178	
Q71	0.034125	0.014654	2.329	0.02007	*
Q81	0.003157	0.014907	0.212	0.83234	
Q82	-0.010206	0.013304	-0.767	0.44318	
Q112	0.007331	0.006699	1.094	0.27407	
Q131	-0.004658	0.019465	-0.239	0.81092	
Q144	0.019421	0.036490	0.532	0.59468	
Q222	0.004049	0.014798	0.274	0.78441	

Comparison (Happy on left, Unhappy on right)

- Gone without shelter
 - Importance of friends
 - **Trust (People close to you)**
 - **State of health**
 - Religion
 - Life Satisfaction
 - Success (Hard work vs. Luck)
 - Societal Attitudes
 - Trust (Neighborhood)
 - Attitudes towards societal corruption
 - Feelings of security within neighborhood
 - Has been a victim of a crime in the past year
- Feelings of closeness to village/town/city
 - **State of health**
 - **Trust (People close to you)**
 - Frequency that you or family have gone without necessary medication
 - Freedom of choice and control
 - Feelings of risk of crime in one's own household
 - Confidence in the government

Conclusions & Next Steps