Can differences of children's subjective well-being across countries be entirely explained by individual and family characteristics?

The primary purpose of this study is to examine how much individual level and country level factors explain children's subjective well-being. For this study, we used data from the third wave of the International Survey of Children's Well-Being (ISCWeB). ISCWeB is a worldwide research project on children's subjective well-being. The sample was composed N=43,297 12-year-olds from 27 countries. Data collection for the study took place between end of 2017 to end of 2018.

Two-level multilevel method analysis was performed using HLM 8. Level 1, individual-level factors, including gender, home environment, family relationships, peer relationships, teacher relationships, school environment, and neighborhood quality. Level 2, country-level GDP per capita, GINI index, Households and NPISHs final consumption expenditure (% of GDP), Current health expenditure (% of GDP), Public Spending on Education (% of GDP)¹; each indicator extracted from 2018 data.

A few previous studies attempted to explain whether country level factors make differences in children's subjective well-being (Bradshaw et al., 2013; Klocke et al., 2013; Lee & Yoo, 2015). The studies concluded that country variables do not explain or explain a little how children's subjective well-being varies across countries. Though we have not yet conducted a detailed analysis, according to the null model analysis results, this study also showed a little explanatory power for differences caused by country-level factors. However, it was confirmed that there was a deviation between each country.

In the further study, we will find out how much country variation is explained by individual and family characteristics, and if there is a residual, we will find out which variables are explained at the country level.

Table 1 Descriptive statistics of country variables by country

Variables ²	2018 Public	2018 GDP per	2018 Current	2018	2018 GINI
	Spending on	capita	health	Households	index
	education (%		expenditure	and NPISH3s	
	of GDP)		per capita	final	
			(current US\$)	consumption	

¹ The Gini index was provided by CIA (The World Factbook), and the other four variables were provided by World Bank,

² Data for 2018 were used in consideration of the data collection period (end of 2017 to end of 2018).

³ Non-Profit Institutions Serving Household

				expenditure		
				(% of GDP)		
Albania	10.97	5287.66	6.67	90.394	33.2	
Algeria	11.88	4640.31	6.39	59.133	27.6	
Bangladesh	11.96	1963.31	2.32	73.549	32.4	
Belgium	12.82	47544.98	10.86	74.920	27.4	
Brazil	21.37	9121.02	9.46	84.511	53.3	
Chile	9.64	15820.03	9.23	76.916	44.4	
Croatia	14.95	15132.96	6.75	78.231	29.0	
Estonia	9.57	23165.85	6.69	69.244	30.9	
Finland	15.80	49987.63	9.05	75.988	27.1	
Germany	10.40	47939.28	11.48	71.983	31.9	
Hong Kong	19.68	48537.57	NA	78.219	53.9	
Hungary	10.48	16425.21	6.58	68.941	29.6	
India	10.86	1974.38	2.86	70.112	47.9	
Indonesia	16.80	3902.66	2.87	66.001	38.2	
Israel	13.07	42406.85	7.23	74.898	34.9	
Italy	18.10	34622.17	8.68	79.069	33.9	
Malta	8.11	31785.88	8.55	61.437	28.4	
Namibia	14.31	5687.38	8.32	95.032	59.1	
Nepal	11.33	1161.53	4.53	85.208	32.8	
Norway	13.85	82792.84	9.96	65.834	27.0	
Poland	24.78	15504.51	6.31	76.504	30.9	
Romania	11.05	12494.42	5.52	80.037	31.2	
Russian Federation	NA	11211.89	5.36	68.076	37.7	
S Korea	12.03	33447.16	7.49	64.075	31.6	
South Africa	9.10	7067.72	8.09	83.321	63.0	
Spain	10.05	30379.72	9.00	76.817	34.7	
Sri Lanka	16.09	4360.58	3.64	68.860	38.5	
Wales (UK) ⁴	20.29	43203.81	9.73	83.201	35.1	
Viet Nam	15.57	3267.23	5.03	66.823	35.3	

Table 2 Null Model (Random effects One-way ANOVA Model) results

Fixed Effect	Coefficient	se		
Intercept	8.759***	.086		
Random Effect	Variance	x ²	n valua	
Kandom Effect	Component	X	p-value	
Individual-level Variables	.197	1774.720	.000	
Country-level Variables	3.796			
Intra-class Correlation Coefficient	.048			
Model Fit				

⁴ Data collection has been done only in Wales, but due to the nature of the national data, only the figures for Wales are not classified, so they are replaced by figures for the UK.

Deviance	174141.774	
N of children	43,297	
N of countries	27	

- *** p<.001 1)
- The analysis conducted using HLM 8.

 Originally, ISCWeb Wave 3 data collected from 30 countries. However, Taiwan data has not been uploaded from World Bank data. Hong Kong and Russia are excluded from the analysis due to missing values (Public Spending on education was missing in Russia; Current health expenditure per capita was missing in Hong Kong).