

Lao P.D.R.	243	294	199			215	202					188	375	187	291	208	168	
Latvia	202	181	97	93		123	166	191	131	119	86	70	84	101	83	117	71	
Lebanon	284	290	300	490	467	481	357	235	225	239	221	137	192	187	153	194	163	
Lesotho						252					244	245		272			237	
Liberia		312	324		284				312	293	334	362	357	335			350	
Libya							271			171	187	212	209	239			190	
Lithuania	195	195	95	73	165	131	138	161	155	125	106	207	88	137	98	74	83	
Luxembourg			45		87	100	111	42	191	70	125	156	127	125			98	
Madagascar	263		231			317	256	274	252	279	258	249	263	269			259	
Malawi	333	369		311		351	349	327	289	341	376	348	320	366		343	374	
Malaysia	305	291	219	213	272	193	179	296	498	197			148	165	314	268	160	
Maldives												198						
Mali	289		311	295	258	306	341	127	274	292	257	292	261	290	263	292	281	
Malta			44		130	126	102	54	227	145	109	96	101	103	116	103	86	
Mauritania		287	292	632	611	614	309	276	320	290	232	294	199	347			284	
Mauritius						146			144		127	165	242	226	177	213	183	
Mexico	288		223	227	199	184	429	147	203	181	189	186	227	185	148	174	191	
Moldova, Republic of	119	184	219	235	196	215	195	162	170	184	191	130	146	155	158	130	141	
Mongolia		199	272			252	241	201	219	191	185	186	182	161	173	243	168	
Montenegro	179			166	194	180	226	184	130	119	137	161	138	132	180		121	
Morocco					288	643	445	223	218	184	211	201	196	203	275	287	230	
Mozambique	404	403	348			325				386		331	338	366		315	343	
Myanmar							127	145	135	139	108	258	128	179	417	440	361	
Namibia		264								278		361	315	322	293	275	316	
Nepal	264	248	265	282	237	204	417	261	251	248	253	201	264	588	367	251	225	
Netherlands	39	67	69		54	46	74	66	232	108	80	65	124	62	46	64	62	
New Zealand	205	117	133		70	117	167	49	153	66	65	82	62	94	73	67	60	
Nicaragua	262	365	354	344		328	324	317	279	269	245	228	226	248	252	354	212	173
Niger	313	351	329	337	327	372	359	338	344	329	350	316	247	266			341	
Nigeria	322	300	317	277	346		542	276		269	308	314	245	874	270	270	319	
North Cyprus							80	45	387	142	147		96	185			168	
North Macedonia	186			156	151	130	146	172	126	132	157	96	104	121	159	175	90	
Norway	107		92				140		190	120	182	78	47	70	66	120	77	
Oman						823												
Pakistan	204	423	674	899	324	253	899	294	263	255	271	410	271	263	274	236	232	
Palestine, State of	308	289	323	632	606	570	596	289	276	266	277	271	258	276			267	
Panama	224	245	245	229	234	255	240	237	199	174	202	216	207	236		182	161	
Paraguay	229	240	226	208	222	154	189	211	176	182	176	198	181	206	182	179	166	
Peru	268	277	269	252	254	228	248	206	195	201	233	248	223	233	222	225	208	
Philippines	254	217	244	208	254	221	414	212	194	211	176	198	216	422	290	329	230	
Poland	106	168	133	122	129	124	114	110	77	104	102	118	128	73	91	60	88	
Portugal	139		113	114	109	61	88	83	209	123	96	62	126	153	127	117	119	
Puerto Rico	67								45								20	
Qatar			228	364	257	438	196		132									
Romania	113	117		119	96	97	103	79	61	92	82	77	101	75	108	116	83	
Russian Federation	389	563	395	363	612	330	479	278	253	230	249	242	242	319	197	211	290	
Rwanda	461		355	306		311	272	104	291	273	275	237	237	201				
Saudi Arabia	263	325	271	523	583	633	550	311	494	252	318	237	222	220	252	262	190	
Senegal	228	332	310	360	306	273	290	289	313	330	302	305	306	320	290	276	306	
Serbia	188			114	93	121	92	99	111	145	105	82	111	82	192	165	110	
Sierra Leone	315	344	342		309	300		319	316	286	278	325	324	377		306	330	
Singapore	183	158	403	181	161	139	139		184	132	129	108	133	141		139	124	
Slovak Republic	127				104	105	113	105	91	82	96	92	104	84	115	108	58	
Slovenia	167			56	95	95	107	93	147	74	60	45	38	23	20	69	57	
Somalia									223	339	371							
South Africa	233	189	325	260	260	236	475	264	231	276	293	258	249	267	314	223	232	
South Sudan									323	323	341	360						
Spain	135	121	115	121	120	93	213	110	179	156	109	119	116	123	82	72	50	
Sri Lanka	191	175	166	186	173	150	285	125	129	145		164	156	177	269	230	140	
Sudan				446	501	536	216		178									
Suriname							99											
Sweden	101	121	129	175	94	51	86	50	289	127	70	101	98	101	74	52	74	
Switzerland	129			111			66		161	28	113	118	93	60	65	60	29	
Syrian Arab Republic			472	649	670	652	641	376		371								
Taiwan Province of China	194		163		212	245	226	221	268	146	157	112	177	177	131	122	103	
Tajikistan		258	246	228	306	311	312	316	320	314	249	274	700	232	264	208	181	
Tanzania	300	292	296	264	300	302	258	266	245	300	277	275	283	270	313	276	279	
Thailand	228	157	129	125	129	104	277	109	132	128	140	91	77	203	129	77	83	
Togo	324		304			243			318	296	295	344	376	397		363	350	
Trinidad and Tobago	131		134			530	503	264	264	251	208	182	134	194	262	156	201	
Tunisia				281	560	98		105				47						
Türkiye, Republic of	202	255	255	258	210	224	429	196	452	240	174	180	228	521	307	234	182	
Turkmenistan				229		287	311	252	256	342	310	263	242	282				
Uganda	278	316	385	307	336	326	343	332	286	348	376	326	327	429	351	416	380	
Ukraine	148	133	131	146	190	166	134	134	115	91	77	78	75	67	102	97	66	
United Arab Emirates	244			611	519	451	408	175	298	267	214	319	433	331	548	183	204	
United Kingdom	57	108	75	54	66	629	824	48	109	112	133	124	90	93	74	70	36	
United States	58	89	142	83	86	102	189	93	209	83	105	87	64	87	84	78	85	
Uruguay	128	155	142	132	128	124	134	138	123	124	128	143	116	117	99	120	120	
Uzbekistan	235		222	207	234	238	259	254	267	218	209	185	185	200	173	182	156	
Venezuela	235	221	184	170	187	165	189	184	192	179	184	166	182	175	171	238	143	
Vietnam	173	166	131	135	127	148	233	166	117	124	171	124	114	339	200	117	210	
Yemen	292			635	639	692	668	277	255	265	259	296	230	302			241	
Zambia	308	341	389	336		334	341	320	337	343	374	372	361	305	324	323	322	
Zimbabwe	318	351	391	307	371	318	306	285	254	231	282	282	291	297	335	267	294	

Figure A1.1 Global trends for all countries vs. participating countries in 2020 from 2006 through 2022. Gallup World Poll (age 15-24).

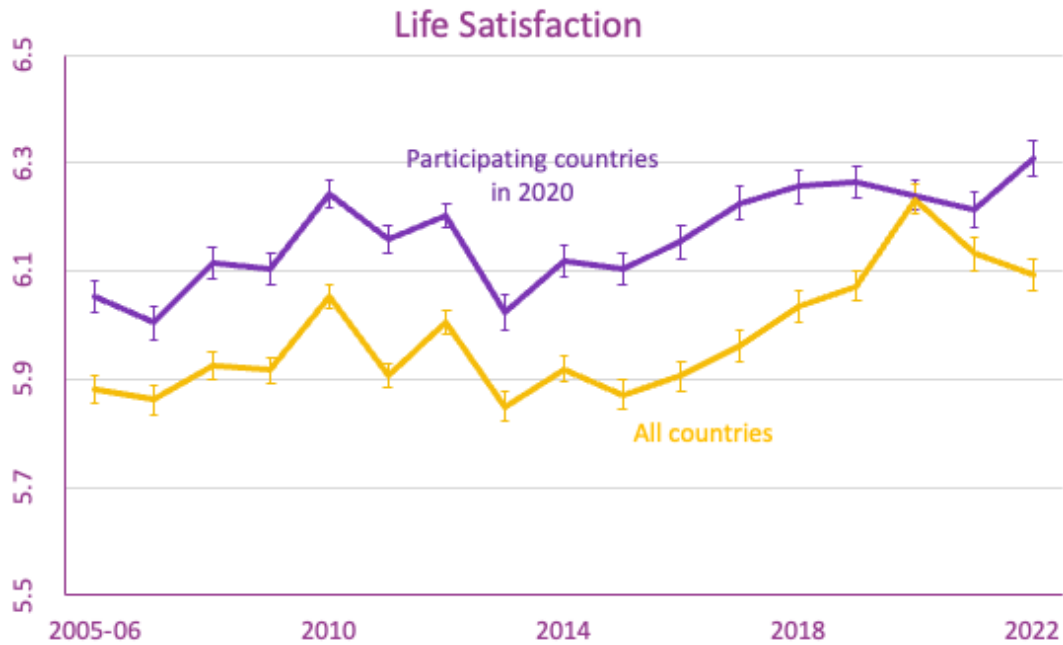


Figure A1.2A Life Satisfaction trends for Lebanon and Afghanistan in 2020 from 2006 through 2022. Gallup World Poll (age 15-24).

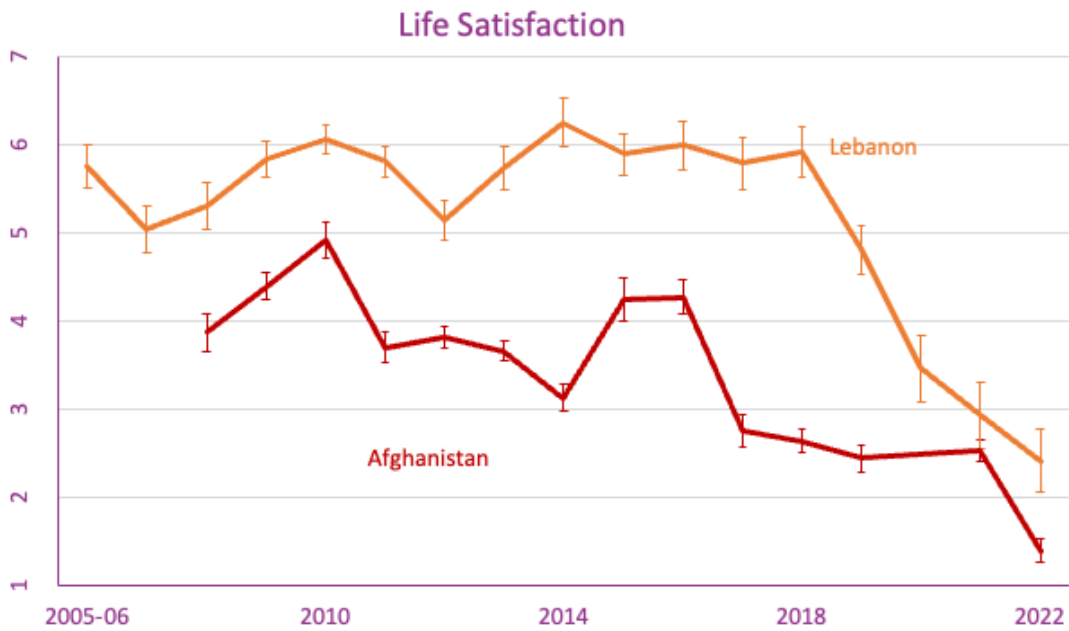


Figure A1.2B Life Satisfaction trends for Côte d'Ivoire, Mongolia, Gabon and Togo in 2020 from 2006 through 2022. Gallup World Poll (age 15-24).

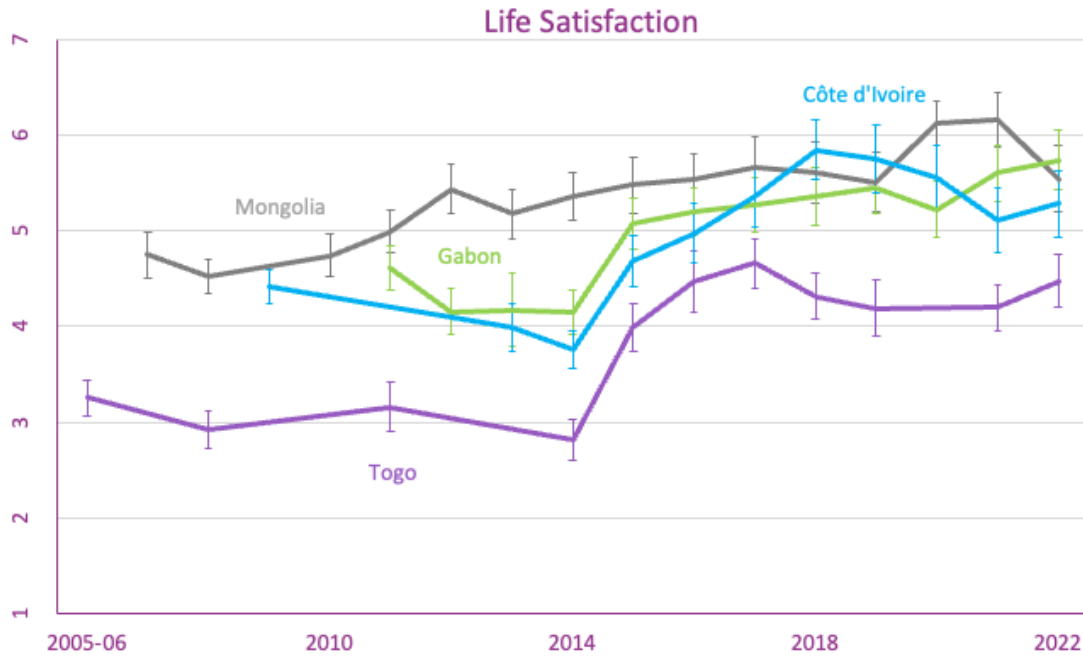


Figure A1.2C Regional levels and trends in life satisfaction from 2006 through 2022. Gallup World Poll (age 15-24)

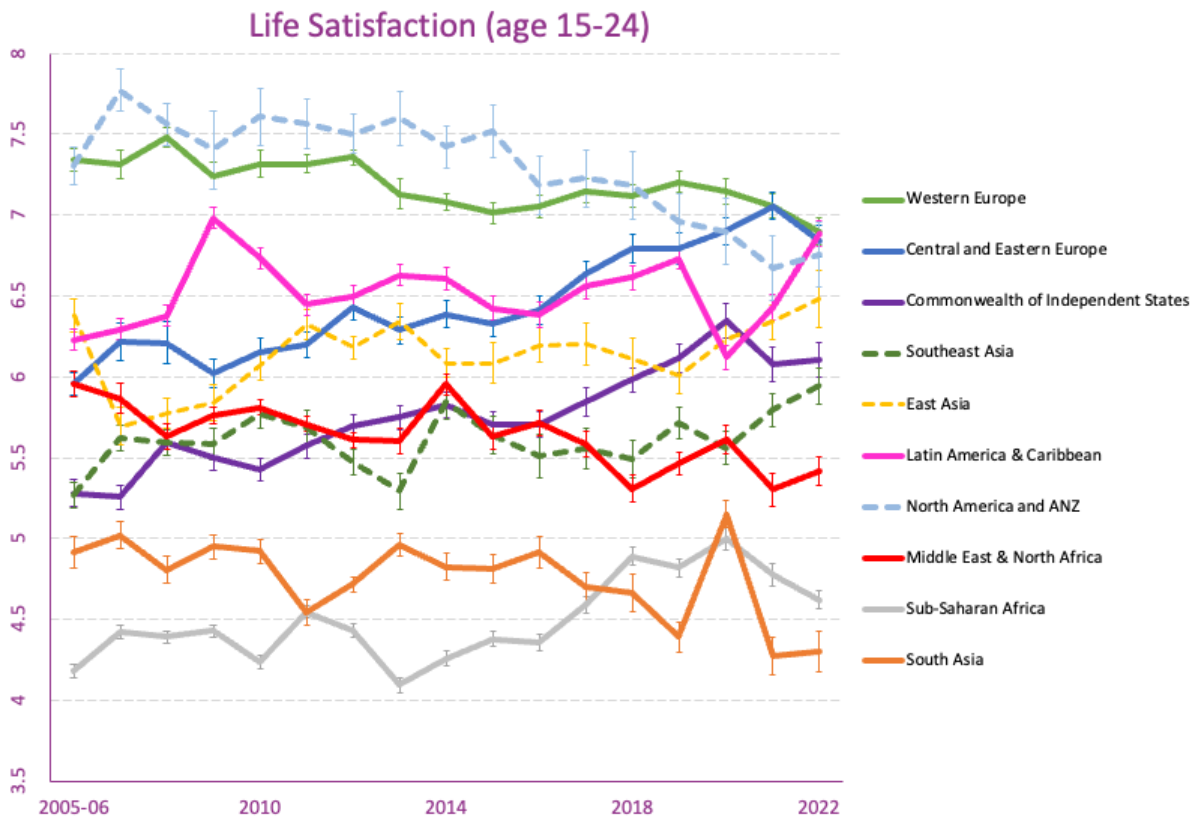
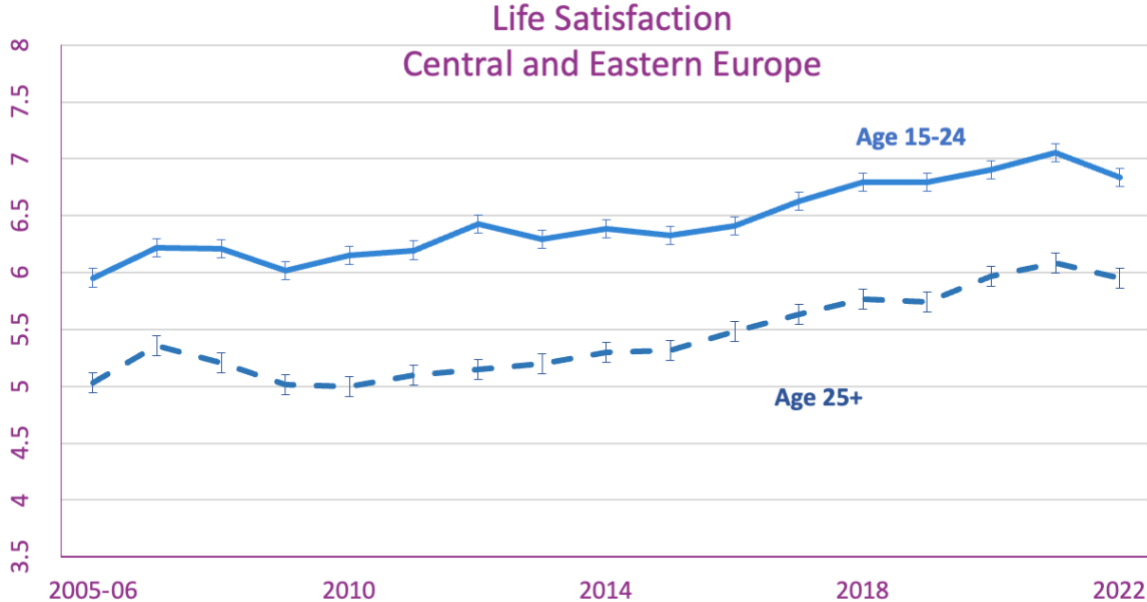
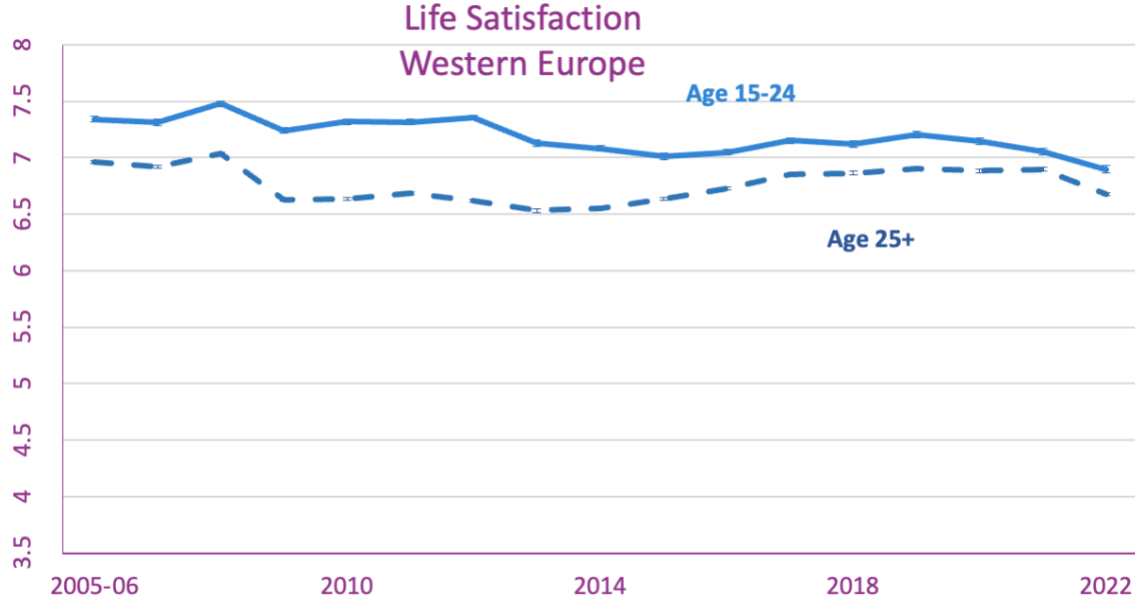
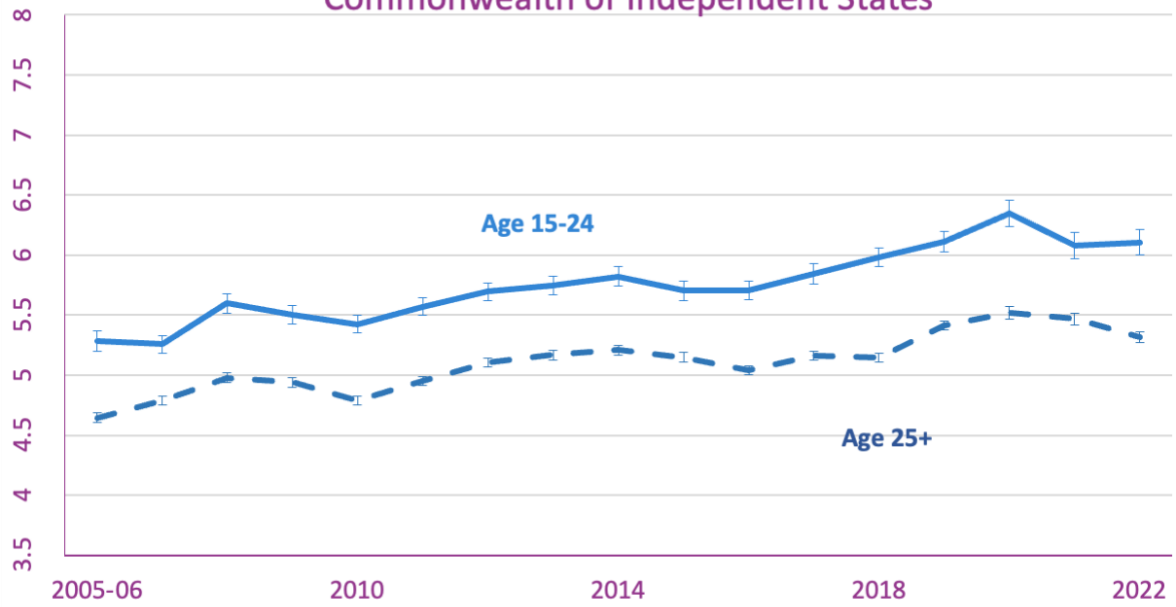


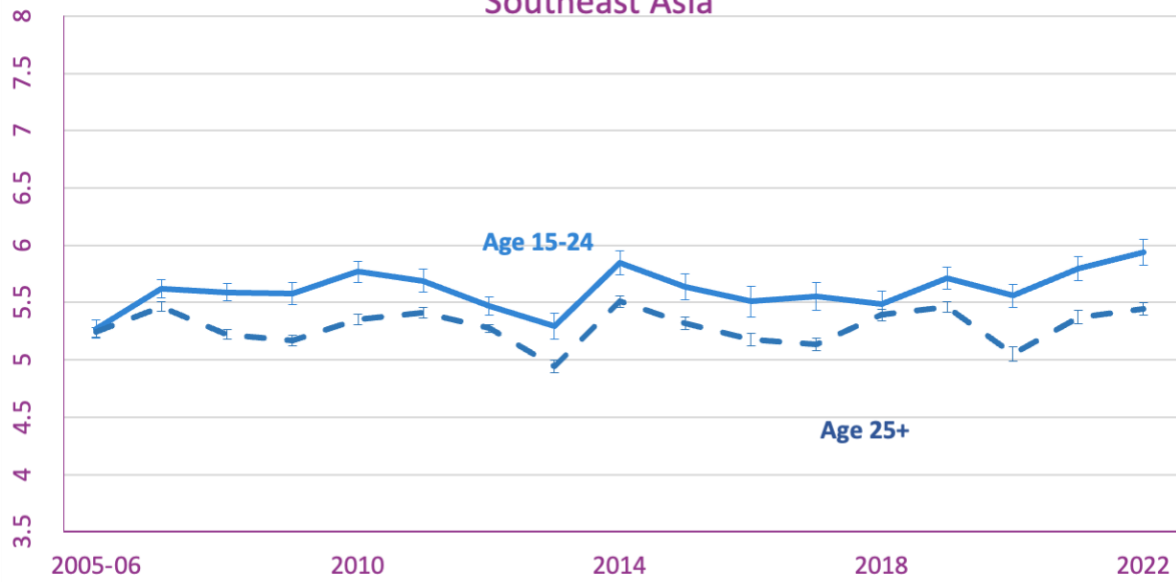
Figure A1.3 Regional levels and trends in life satisfaction from 2006 through 2022. Gallup World Poll (age 15-24 vs. age 25+)



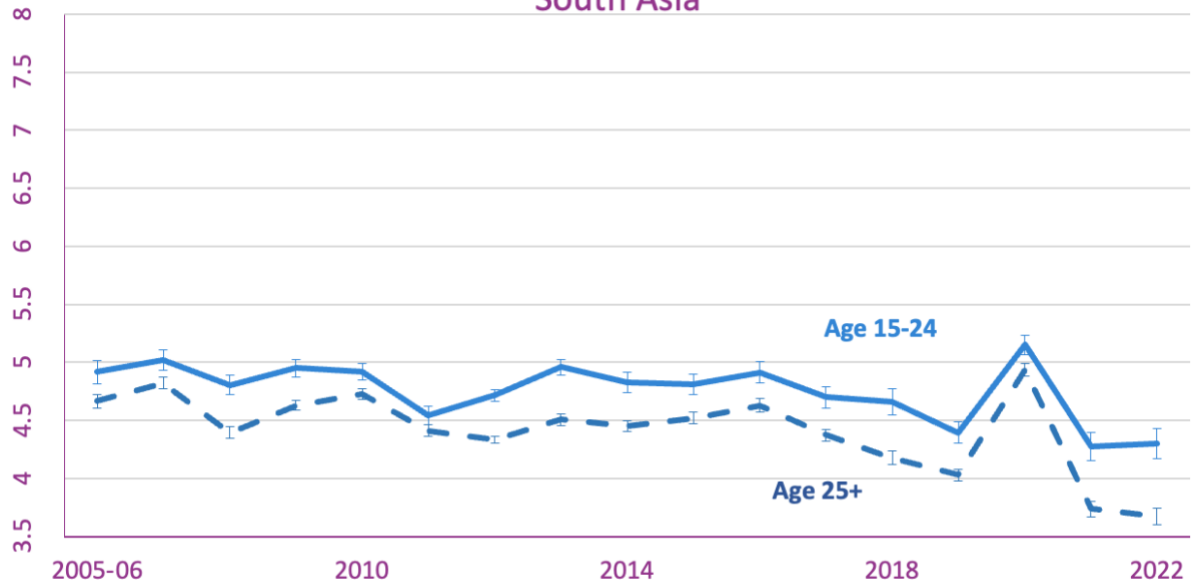
Life Satisfaction Commonwealth of Independent States



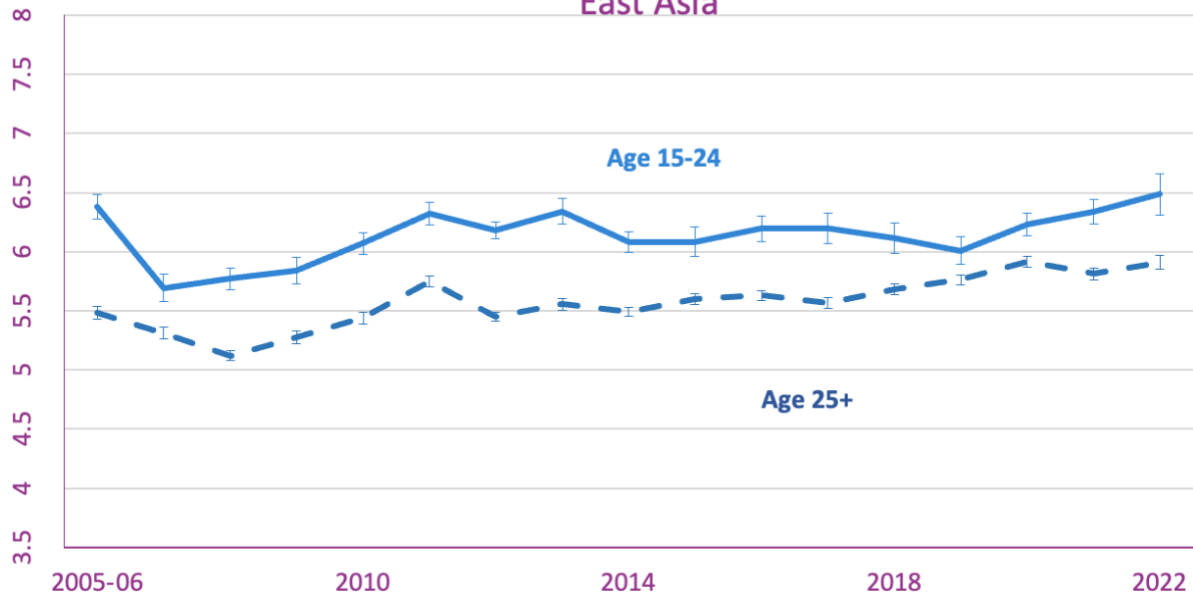
Life Satisfaction Southeast Asia



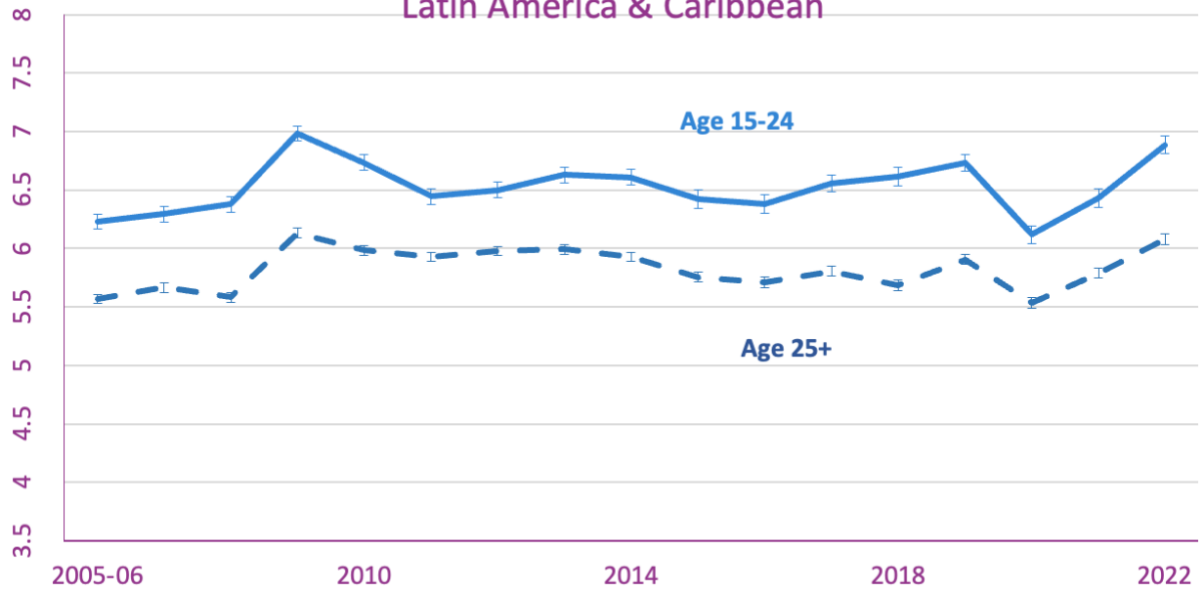
Life Satisfaction South Asia



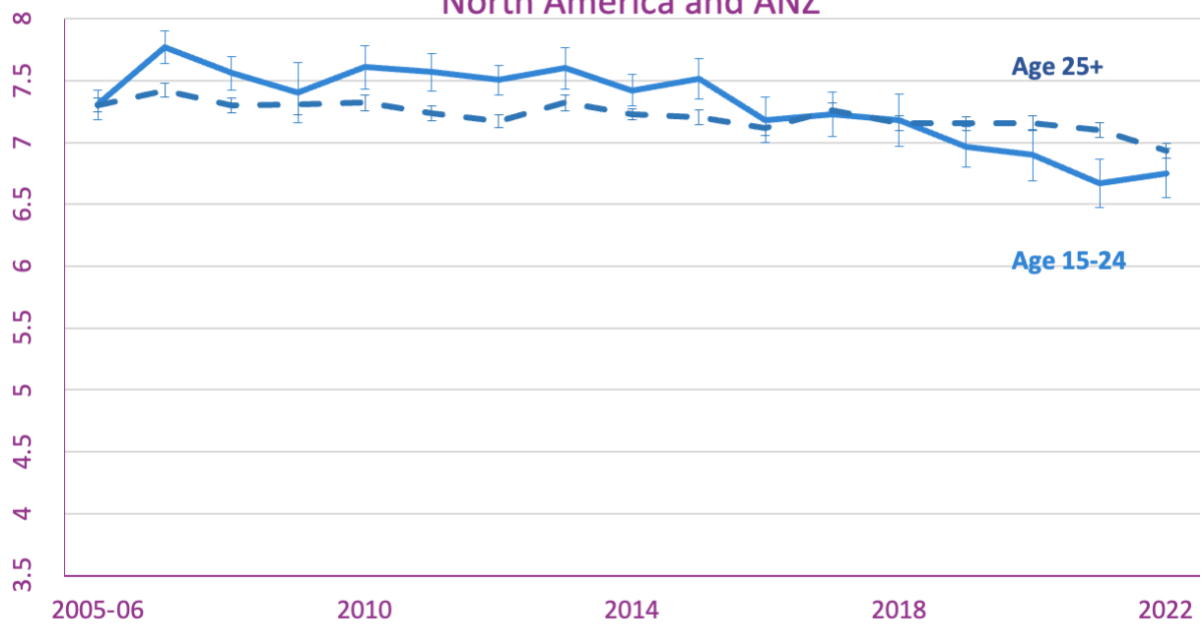
Life Satisfaction East Asia



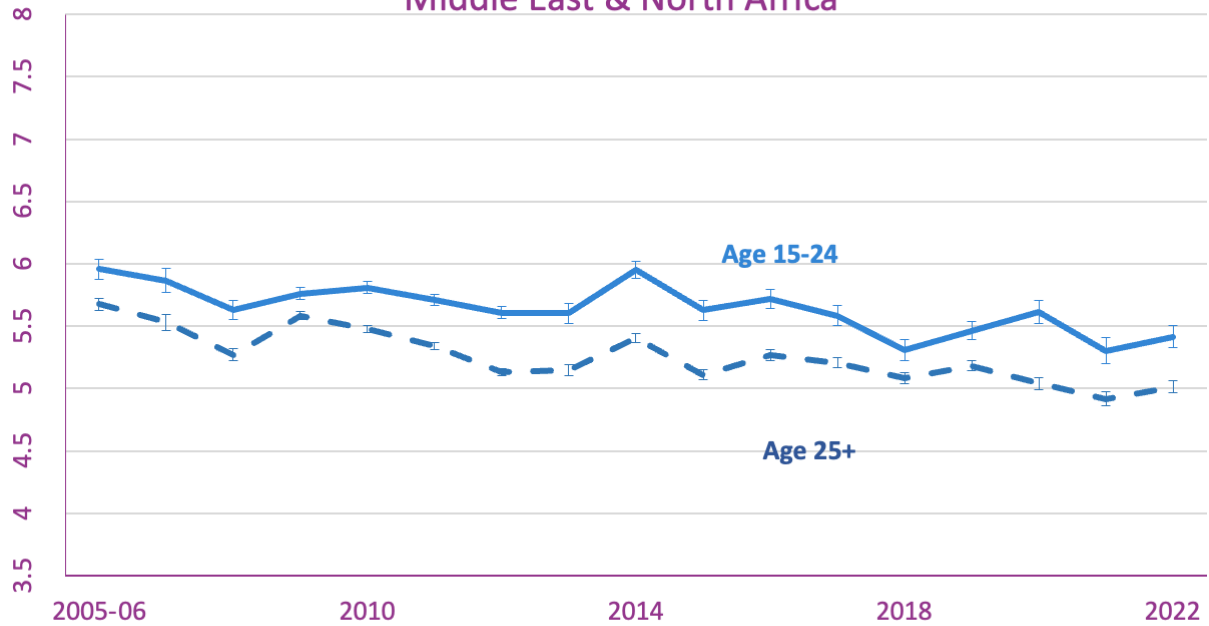
Life Satisfaction Latin America & Caribbean



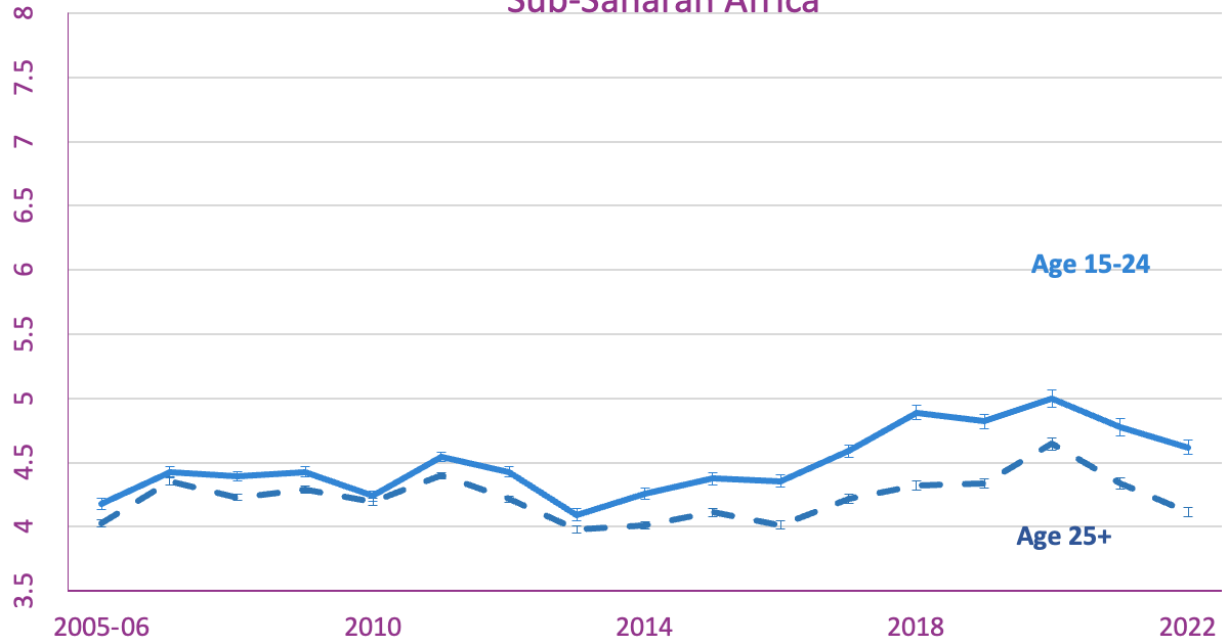
Life Satisfaction North America and ANZ



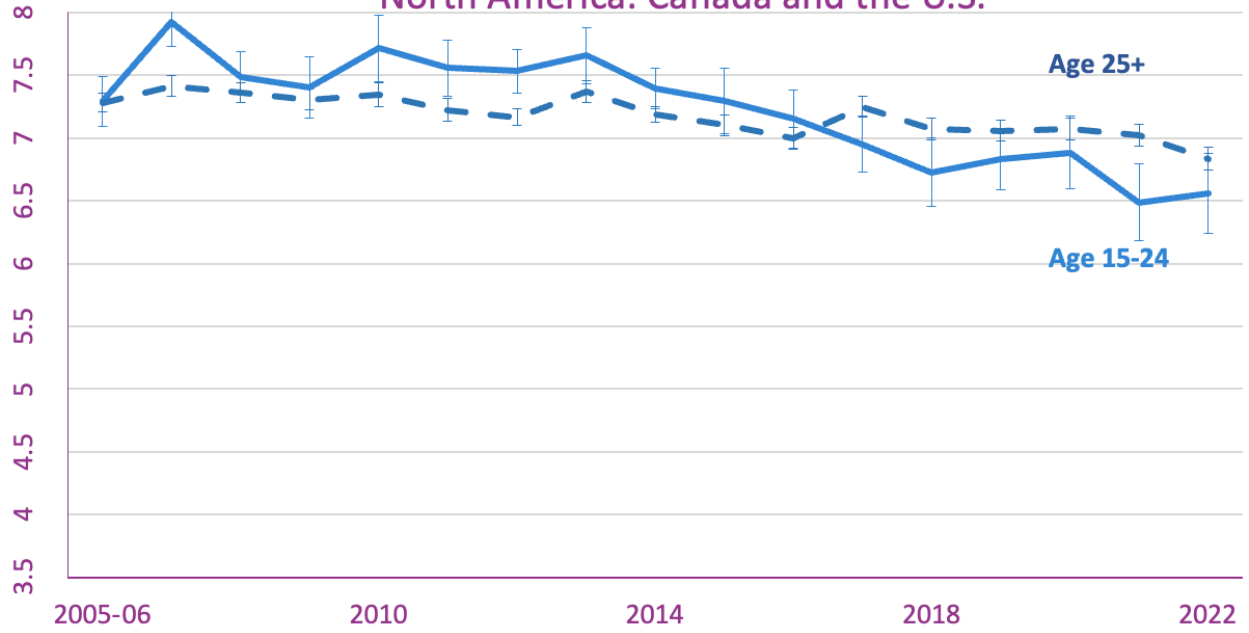
Life Satisfaction Middle East & North Africa



Life Satisfaction Sub-Saharan Africa



Life Satisfaction North America: Canada and the U.S.



Life Satisfaction Australia and New Zealand

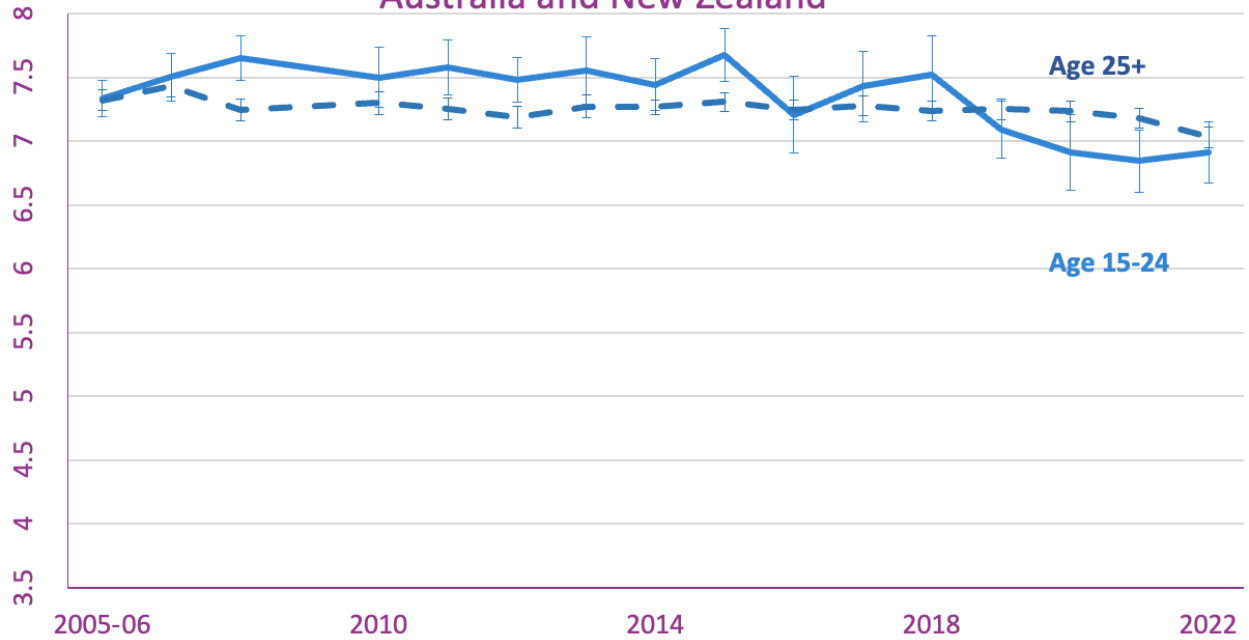


Table A1.2 PISA 2018-22 trends (age 15), by gender

Country	Females					Males					
	Country means			Trends		Country means			Trends		
	2015	2018	2022	2015-18	2018-22	2015	2018	2022	2015-18	2018-22	
Western Europe:						Western Europe:					
Austria	7.09	6.78	6.21	-0.31	-0.56	7.95	7.49	7.15	-0.46	-0.34	
Belgium	7.20					7.77					
Denmark			6.69					7.67			
Finland	7.51	7.21	6.81	-0.30	-0.40	8.25	8.02	7.99	-0.23	non.sign.	
France	7.41	6.93	6.40	-0.47	-0.53	7.86	7.44	7.15	-0.42	-0.28	
Germany	6.96	6.62	5.89	-0.33	-0.73	7.76	7.37	7.11	-0.39	-0.26	
Greece	6.59	6.74	6.14	0.15	-0.60	7.22	7.24	7.09	non.sign.	-0.15	
Iceland	7.35	6.94	6.36	-0.41	-0.58	8.28	7.76	7.44	-0.52	-0.32	
Ireland	7.02	6.45	6.27	-0.57	-0.18	7.58	7.02	6.88	-0.56	non.sign.	
Italy	6.50	6.54	6.12	non.sign.	-0.42	7.29	7.27	6.95	non.sign.	-0.31	
Luxembourg	6.99	6.74		-0.26		7.78	7.34		-0.44		
Malta			5.88					6.57			
Netherlands	7.56	7.18	6.96	-0.37	-0.23	8.11	7.83	7.61	-0.28	-0.22	
Portugal	7.11	6.87	6.61	-0.23	-0.26	7.61	7.38	7.49	-0.24	non.sign.	
Spain	7.24	7.12	6.44	-0.11	-0.69	7.60	7.57	7.33	non.sign.	-0.24	
Sweden			6.36					7.44			
Switzerland	7.38	7.04	6.53	-0.34	-0.51	8.03	7.68	7.58	-0.35	non.sign.	
U.K.	6.64	5.76	5.61	-0.88	non.sign.	7.31	6.61	6.51	-0.71	non.sign.	
<i>U.K. (England)</i>	6.61	5.70	5.53	-0.91	non.sign.	7.26	6.59	6.45	-0.68	non.sign.	
<i>U.K. (Northern Ireland)</i>	6.94	6.27	6.13	-0.67	non.sign.	7.54	6.90	6.91	-0.64	non.sign.	
<i>U.K. (Scotland)</i>	6.73	5.96	6.12	-0.76	non.sign.	7.60	6.56	6.84	-1.04	0.28	
<i>U.K. (Wales)</i>	6.74	6.07	5.65	-0.67	-0.42	7.52	6.84	6.66	-0.68	non.sign.	
Average:	7.03	6.61	6.24	-0.44	-0.47	7.70	7.27	7.14	-0.51	-0.20	
Central and Eastern Europe						Central and Eastern Europe					
Albania			7.74					8.27			
Bulgaria	7.20	6.97	6.70	-0.22	-0.27	7.62	7.32	7.34	-0.29	non.sign.	
Croatia	7.62	7.28	6.78	-0.34	-0.50	8.21	8.11	7.92	non.sign.	-0.19	
Czech Republic	6.72	6.57	5.94	non.sign.	-0.64	7.37	7.24	7.16	non.sign.	non.sign.	
Estonia	7.27	6.87	6.39	-0.40	-0.47	7.73	7.52	7.41	-0.21	non.sign.	
Hungary	6.80	6.72	6.68	non.sign.	non.sign.	7.54	7.52	7.74	non.sign.	0.22	
Kosovo			7.49					8.25			
Latvia	7.29	6.91	6.38	-0.39	-0.53	7.46	7.43	7.15	non.sign.	-0.28	
Lithuania	7.60	7.33	6.64	-0.27	-0.70	8.12	7.88	7.66	-0.25	-0.22	
Montenegro	7.50	7.42	6.98	non.sign.	-0.44	7.99	7.95	8.05	non.sign.	non.sign.	
North Macedonia			7.26					8.02			
Poland	6.83	6.30	5.66	-0.53	-0.64	7.53	7.19	6.84	-0.33	-0.36	
Romania			7.19					7.87			
Serbia			7.09					7.85			
Slovakia	7.17	6.85	6.42	-0.31	-0.44	7.76	7.59	7.56	-0.17	non.sign.	
Slovenia	6.71	6.30	5.96	-0.40	-0.34	7.62	7.40	7.24	-0.22	-0.16	
Average:	7.16	6.87	6.71	-0.36	-0.50	7.72	7.56	7.64	-0.25	-0.16	
CIS						CIS					
Baku (Azerbaijan)			6.41					7.16			
Georgia			7.26					7.97			
Kazhastan			8.15					8.66			
Moldavia			6.66					7.32			
Russia	7.60	7.08		-0.53		7.92	7.57		-0.35		
Uzbekistan			8.17					8.22			
Average:	7.60	7.08	7.33	-0.53		7.92	7.57	7.87	-0.35		
North America and ANZ						North America and ANZ					
New Zealand			5.78					6.77			
U.S.	7.06	6.47		-0.59		7.66	7.03		-0.63		
Average:	7.06	6.47	5.78	-0.59		7.66	7.03	6.77	-0.63		
Middle East and North Africa						Middle East and North Africa					
Jordan			6.68					6.86			
Morocco			6.53					6.98			
Qatar	7.30	6.73	6.66	-0.57	non.sign.	7.51	6.97	6.89	-0.54	non.sign.	
Saudi Arabia			7.26					7.48			
Tunisia	6.82					6.99					
Turkey	5.83	5.53	4.65	-0.30	-0.88	6.41	5.71	5.15	-0.70	-0.56	
United Arab Emirates	7.17	6.69	6.57	-0.48	non.sign.	7.44	7.10	7.13	-0.34	non.sign.	
Average:	6.78	6.32	6.39	-0.45	-0.88	7.09	6.59	6.75	-0.53	-0.56	

Latin America and the Caribbean					
Argentina			6.07		
Brazil	7.45	6.73	6.42	-0.72	-0.31
Chile	7.13	6.73	5.80	-0.40	-0.93
Colombia	7.71	7.42	6.57	-0.29	-0.85
Costa Rica	8.04	7.67	6.83	-0.36	-0.84
Dominican Republic	8.45	7.90	7.09	-0.55	-0.82
El Salvador			7.01		
Guatemala			7.46		
Jamaica			5.56		
Mexico	8.21	7.98	6.79	-0.23	-1.19
Panama			6.75		
Paraguay			7.04		
Peru	7.42	7.13	5.84	-0.30	-1.29
Uruguay	7.47	7.22	6.58	-0.25	-0.64
Average:	7.73	7.35	6.56	-0.39	-0.86

Latin America and the Caribbean					
Argentina			7.33		
Brazil	7.74	7.40	7.29	-0.34	non.sign.
Chile	7.60	7.32	6.99	-0.28	-0.33
Colombia	8.08	7.83	7.39	-0.25	-0.44
Costa Rica	8.39	8.25	7.80	-0.13	-0.45
Dominican Republic	8.55	8.30	7.83	-0.25	-0.47
El Salvador			7.79		
Guatemala			8.01		
Jamaica			6.17		
Mexico	8.33	8.25	7.78	non.sign.	-0.47
Panama			7.31		
Paraguay			7.63		
Peru	7.57	7.48	6.89	non.sign.	-0.58
Uruguay	7.95	7.90	7.48	non.sign.	-0.42
Average:	8.02	7.84	7.41	-0.25	-0.45

East Asia					
China (B-S-J-G)	6.78				
Hong Kong	6.44	6.19	6.30	-0.25	non.sign.
Japan	6.86	6.18	6.54	-0.68	0.36
Macau	6.59	5.93	6.16	-0.66	0.23
Mongolia			6.97		
South Korea	6.12	5.98	5.99	-0.14	non.sign.
Taiwan	6.45	6.30	6.45	-0.15	0.15
Average:	6.54	6.11	6.40	-0.38	0.25

East Asia					
China (B-S-J-G)	6.88				
Hong Kong	6.51	6.35	6.66	-0.16	0.31
Japan	6.74	6.18	6.98	-0.56	0.80
Macau	6.60	6.22	6.65	-0.38	0.43
Mongolia			7.42		
South Korea	6.59	7.01	6.70	0.42	-0.31
Taiwan	6.74	6.74	7.22	non.sign.	0.48
Average:	6.67	6.50	6.94	-0.17	0.34

Southeast Asia					
Brunei Darussalam			5.41		
Cambodia			7.47		
Indonesia			6.89		
Malaysia		7.01	6.29		-0.72
Philippines			6.91		
Thailand	7.70	7.56	6.92	non.sign.	-0.64
Vietnam			7.21		
Average:	7.70	7.29	6.73		-0.68

Southeast Asia					
Brunei Darussalam			6.29		
Cambodia			7.87		
Indonesia			7.58		
Malaysia		7.07	6.98		non.sign.
Philippines			7.04		
Thailand	7.73	7.72	7.34	non.sign.	-0.38
Vietnam			7.50		
Average:	7.73	7.39	7.23		-0.38

Table A1.3 Regional and country trends from 2001/02 through 2021/22. HBSC (age 15, 13, 11)

	Country means						Age 15 Trends			
	2001/02	2005/06	2009/10	2013/14	2017/18	2021/22	Trends			
	2001/02-17/18	2005/06-17/18	2013/14-17/18	2017/18-21/22						
Western Europe										
Austria	7.47	7.36	7.23	7.53	7.29	7.20	-0.18	non sign.	-0.24	non sign.
Belgium (Flemish)	7.23	7.37	7.26	6.89	7.48	7.46	0.25	0.12	0.60	non sign.
Belgium (French)			7.15	7.19	7.22	6.81			non sign.	-0.41
Cyprus				6.99		7.45				
Denmark	7.65	7.56	7.47	7.37	7.48	7.10	-0.17	non sign.	non sign.	-0.39
Finland	7.61	7.63	7.53	7.47		7.46				
France	7.15	7.11	7.22	6.97	7.28	6.91	0.14	0.17	0.32	-0.37
Germany	7.53	6.95	7.22	7.05	7.33	7.12	-0.19	0.39	0.28	-0.21
Greece		7.48	7.31	7.16	7.04	6.70		-0.44	non sign.	-0.34
Greenland	7.04	7.30	7.38	7.48	7.49	6.66	0.46	non sign.	non sign.	-0.83
Iceland		7.44	7.53	7.47	7.26	7.12		-0.18	-0.21	-0.14
Ireland	7.12	7.21	7.08	7.01	6.89	6.22	-0.22	-0.32	non sign.	-0.67
Italy	6.93	7.02	6.97	6.95	7.11	6.55	0.18	non sign.	0.16	-0.55
Luxembourg		7.08	7.28	7.01	7.35	7.10		0.26	0.33	-0.24
Malta				7.11	6.71	6.48			-0.40	-0.23
Netherlands	7.68	7.48	7.67	7.36	7.33	6.90	-0.35	-0.15	non sign.	-0.43
Norway	7.03	7.48	7.40	7.54	7.48	7.05	0.45	non sign.	non sign.	-0.43
Portugal	6.84	6.94	7.13	6.99	7.35	7.05	0.50	0.40	0.36	-0.29
Spain	7.10	7.43	7.55	7.30	7.64	6.77	0.54	0.21	0.34	-0.87
Sweden	7.07	7.33	7.20	6.83	7.10	6.80	non sign.	-0.23	0.27	-0.30
Switzerland	7.67	7.46	7.46	7.54	7.34	6.99	-0.33	non sign.	-0.19	-0.35
England	7.00	7.26	7.19	6.81	7.11	6.51	non sign.	non sign.	0.30	-0.60
Scotland	7.35	7.12	7.32	7.14	7.03	6.66	-0.32	non sign.	non sign.	-0.37
Wales	7.15	6.93	6.95	6.93	7.09	6.61	non sign.	0.15	0.16	-0.48
	7.26	7.28	7.29	7.17	7.25	6.90	0.05	0.03	0.15	-0.43
Central and Eastern Europe										
Albania				7.71	7.56	8.14			non sign.	0.58
Bulgaria		6.86		7.43	7.59	7.10		0.73	0.16	-0.49
Croatia	6.76	6.89	7.20	7.49	7.72	7.57	0.96	0.83	0.23	-0.15
Czech Republic	7.18	7.12	7.25	6.99	7.43	7.26	0.25	0.30	0.44	-0.17
Estonia	6.64	7.18	7.36	7.33	7.35	6.95	0.71	0.17	non sign.	-0.40
Hungary	7.03	6.76	6.99	7.09	7.14	6.99	non sign.	0.38	non sign.	non sign.
Latvia	6.78	6.68	6.99	7.06	7.00	6.73	0.22	0.32	non sign.	-0.27
Lithuania	6.71	6.93	7.29		7.47	6.95	0.76	0.53		-0.52
Macedonia	7.90	7.65	7.76	7.11	7.82	7.42	non sign.	0.17	0.70	-0.39
Poland	6.65	6.97	6.75	6.80	7.03	6.20	0.38	non sign.	0.23	-0.84
Romania		7.20	7.20	7.61	7.94	7.76		0.74	0.32	-0.18
Serbia					7.85	7.89				non sign.
Slovakia		7.41	7.22	7.06	7.36	6.00		non sign.	0.29	-1.35
Slovenia	7.20	7.15	7.40	7.41	7.45	7.08	0.25	0.30	non sign.	-0.36
	6.98	7.07	7.22	7.26	7.48	7.15	0.50	0.45	0.34	-0.38
CIS										
Armenia			7.84	8.19	8.06	8.15			non sign.	non sign.
Azerbaijan					7.83					
Georgia					7.57					
Kazakhstan					8.18	7.97				-0.21
Kyrgyzstan						7.95				
Republic of Moldova				7.87	7.85	7.70			non sign.	-0.15
Russia	6.72	6.99	7.33	6.94	6.92		0.20	non sign.	non sign.	
Tajikistan						8.00				
Ukraine	6.43	6.97	6.84	7.31	7.34		0.90	0.36	non sign.	
	6.58	6.98	7.34	7.58	7.68	7.95	0.55	0.36		-0.18
North America and ANZ										
Canada	7.30	7.32	7.17	7.18	6.98	6.63	-0.32	-0.34	-0.19	-0.36
USA	7.19	7.30	7.31							
	7.24	7.31	7.24	7.18	6.98		-0.32	-0.34	-0.19	-0.36
Middle East and North Africa										
Turkey		6.26	6.13		6.09			-0.17		
Israel	7.48	7.73	7.63	7.56	7.47		non sign.	-0.26	non sign.	
	7.48	7.00	6.88	7.56	6.78			-0.22		

	Country means						Trends			
							Pre-covid		Post-covid	
	2001/02	2005/06	2009/10	2013/14	2017/18	2021/22	001/02-17/1	005/06-17/1	2013/14-17/18	2017/18-21/22
Western Europe										
Austria	7.80	7.72	7.58	7.89	7.65	7.70	-0.15	non.sign.	-0.24	non.sign.
Belgium (Flemish)	7.72	7.70	7.49	7.34	7.81	7.78	non.sign.	non.sign.	0.47	non.sign.
Belgium (French)			7.48	7.43	7.46	7.20			non.sign.	-0.26
Cyprus						7.99				
Denmark	7.51	7.73	7.39	7.57	7.45	7.32	non.sign.	-0.28	non.sign.	non.sign.
Finland	7.86	7.92	7.72	7.63		7.66				
France	7.59	7.45	7.40	7.37	7.60	7.16	non.sign.	0.14	0.23	-0.43
Germany	7.50	7.26	7.23	7.30	7.65	7.50	0.15	0.40	0.36	-0.15
Greece		7.85	7.72	7.53	7.26	7.09		-0.59	-0.27	-0.18
Greenland	7.43	7.87	7.86	7.63	7.56	6.78	non.sign.	-0.31	non.sign.	-0.77
Iceland		7.70	8.02	7.67	7.57	7.28		-0.14	non.sign.	-0.29
Ireland	7.60	7.74	7.75	7.61	7.52	6.87	non.sign.	-0.23	-0.10	-0.65
Italy	7.49	7.52	7.62	7.24	7.67	7.16	0.18	0.16	0.43	-0.52
Luxembourg		7.49	7.63	7.44	7.65	7.46		0.17	0.21	-0.19
Malta				7.35	7.09	7.00			-0.26	non.sign.
Netherlands	8.12	7.96	8.00	7.69	7.74	7.22	-0.37	-0.22	non.sign.	-0.52
Norway	7.42	7.85	7.65	7.73	7.58	7.24	non.sign.	-0.27	non.sign.	-0.34
Portugal	7.36	7.44	7.40	7.41	7.63	7.54	0.27	0.19	0.23	non.sign.
Spain	7.59	7.87	7.89	7.79	7.99	7.13	0.39	0.11	0.20	-0.85
Sweden	7.49	7.60	7.68	7.22	7.50	6.91	non.sign.	non.sign.	0.28	-0.59
Switzerland	7.69	7.77	7.61	7.67	7.64	7.21	non.sign.	-0.14	non.sign.	-0.43
England	7.27	7.43	7.42	7.33	7.23	6.89	non.sign.	-0.21	non.sign.	-0.34
Scotland	7.49	7.48	7.58	7.70	7.47	6.97	non.sign.	non.sign.	-0.24	-0.50
Wales	7.27	7.01	7.22	7.17	7.52	7.09	0.25	0.51	0.35	-0.43
	7.57	7.64	7.61	7.51	7.56	7.26	0.10	-0.04	0.12	-0.44
Central and Eastern Europe										
Albania				8.40	8.40	8.67			non.sign.	0.28
Bulgaria		7.43		7.79	7.95	7.34		0.52	0.16	-0.61
Croatia	7.52	7.27	7.60	7.87	8.16	7.91	0.64	0.89	0.27	-0.25
Czech Republic	7.27	7.26	7.49	7.12	7.69	7.51	0.41	0.43	0.57	-0.18
Estonia	7.17	7.58	7.52	7.78	7.65	7.26	0.49	non.sign.	non.sign.	-0.39
Hungary	7.73	7.35	7.31	7.39	7.55	7.33	-0.18	0.20	0.15	-0.22
Latvia	6.97	6.91	7.35	7.23	7.30	7.06	0.33	0.39	non.sign.	-0.24
Lithuania	7.06	7.27	7.44		7.76	7.21	0.70	0.49		-0.54
Macedonia	8.37	8.22	8.14	7.72	8.49	7.79	non.sign.	0.27	0.77	-0.71
Poland	7.41	7.29	7.18	7.37	7.39	6.28	non.sign.	non.sign.	non.sign.	-1.10
Romania		7.87	7.50	8.22	8.35	8.06		0.48	non.sign.	-0.29
Serbia					8.26	8.30				non.sign.
Slovakia		7.83	7.36	7.30	7.54	6.28		-0.30	0.24	-1.26
Slovenia	7.53	7.46	7.54	7.63	7.94	7.34	0.41	0.49	0.31	-0.60
	7.45	7.48	7.49	7.65	7.89	7.45	0.40	0.38	0.36	-0.47
CIS										
Armenia			8.64	8.57	8.22	8.52			-0.36	0.30
Azerbaijan					8.50					
Georgia					8.05					
Kazakhstan					8.62	8.30				-0.33
Kyrgyzstan						8.30				
Republic of Moldova				8.20	8.21	8.02			non.sign.	-0.19
Russia	7.13	7.27	7.54	7.32	7.58		0.46	0.31	0.26	
Tajikistan						8.07				
Ukraine	7.20	7.26	7.22	7.71	7.64		0.45	0.38	non.sign.	
	7.16	7.27	7.80	7.95	8.12	8.24	0.45	0.35	-0.05	-0.07
North America and ANZ										
Canada	7.54	7.36	7.39	7.40	7.30	7.00	-0.24	non.sign.	-0.09	-0.31
USA	7.46	7.42	7.47							
	7.50	7.39	7.43	7.40	7.30		-0.24		-0.09	-0.31
Middle East and North Africa										
Turkey		6.58	6.62		6.43			-0.15		
Israel	7.96	8.14	7.87	7.96	7.88		non.sign.	-0.26	non.sign.	
	7.96	7.36	7.25	7.96	7.15			-0.21		

	Country means						Age 11			
							Trends			
	2001/02	2005/06	2009/10	2013/14	2017/18	2021/22	2001/02-17/18	Pre-covid 2005/06-17/18	2013/14-17/18	Post-covid 2017/18-21/22
Western Europe										
Austria	8.50	8.36	8.03	8.52	8.22	8.36	-0.28	-0.14	-0.30	non.sign.
Belgium (Flemish)	8.19	8.11	8.08	7.11	8.06	8.05	-0.13	non.sign.	0.96	non.sign.
Belgium (French)			7.98	7.95	7.91	7.80			-0.04	non.sign.
Cyprus						8.46				
Denmark	7.95	8.11	7.73	7.95	7.97	7.76	non.sign.	-0.14	non.sign.	-0.21
Finland	8.36	8.25	8.03	7.95		8.13				
France	7.98	7.83	7.94	7.67	8.03	7.68	non.sign.	0.20	0.36	-0.35
Germany	7.54	7.84	7.74	7.87	8.14	8.17	0.59	0.30	0.27	non.sign.
Greece		8.85	8.53	8.44	8.36	8.43		-0.49	non.sign.	non.sign.
Greenland	7.90	8.29	8.56	8.28	8.46	6.98	0.56	non.sign.	non.sign.	-1.48
Iceland		8.08	8.36	8.07	8.00	7.79		non.sign.	non.sign.	-0.21
Ireland	8.07	8.32	8.09	8.38	8.14	7.73	non.sign.	-0.19	-0.24	-0.41
Italy	7.80	8.05	7.98	7.88	7.95	7.55	0.15	non.sign.	non.sign.	-0.40
Luxembourg		8.01	8.16	8.01	8.09	8.12		non.sign.	non.sign.	non.sign.
Malta				8.29	7.92	7.81			-0.37	non.sign.
Netherlands	8.57	8.20	8.32	8.19	8.30	7.95	-0.26	non.sign.	0.12	-0.35
Norway	7.91	8.26	8.19	8.29	8.23	7.67	0.32	non.sign.	non.sign.	-0.56
Portugal	7.81	7.86	8.08	8.00	8.21	8.21	0.40	0.35	0.21	non.sign.
Spain	8.25	8.67	8.73	8.66	8.81	8.25	0.56	0.13	0.15	-0.56
Sweden	8.11	8.50	8.26	8.03	7.91	7.83	-0.20	-0.59	non.sign.	non.sign.
Switzerland	8.14	8.13	8.14	8.02	8.08	7.95	non.sign.	non.sign.	non.sign.	-0.14
England	7.57	7.82	7.70	7.87	7.87	7.37	0.30	non.sign.	non.sign.	-0.50
Scotland	8.01	7.87	8.14	8.41	8.24	7.64	0.24	0.38	-0.17	-0.60
Wales	7.65	7.43	7.86	7.86	8.17	7.70	0.51	0.73	0.30	-0.46
	8.02	8.13	8.12	8.07	8.14	7.89	0.21	0.05	0.10	-0.48
Central and Eastern Europe										
Albania				8.63	8.71	9.18			non.sign.	0.46
Bulgaria		8.28		8.34	7.97	7.64		-0.31	-0.38	-0.33
Croatia	8.19	7.85	7.90	8.42	8.54	8.47	0.35	0.70	non.sign.	non.sign.
Czech Republic	7.89	7.48	7.80	7.53	8.25	8.04	0.36	0.77	0.72	-0.21
Estonia	7.70	8.22	8.11	8.23	8.16	7.91	0.46	non.sign.	non.sign.	-0.25
Hungary	7.87	7.71	8.00	8.06	8.03	7.92	0.16	0.32	non.sign.	non.sign.
Latvia	7.29	7.21	7.64	7.77	7.86	7.64	0.57	0.65	non.sign.	-0.23
Lithuania	7.41	7.73	7.94		8.45	7.71	1.04	0.72		-0.74
Macedonia	9.14	8.81	8.68	8.15	8.94	8.42	-0.20	non.sign.	0.79	-0.51
Poland	8.02	7.80	7.76	7.98	8.05	7.06	non.sign.	0.25	non.sign.	-1.00
Romania		8.11	8.11	8.63	8.74	8.67		0.63	non.sign.	non.sign.
Serbia					8.84	8.84				non.sign.
Slovakia		8.14	7.91	7.91	8.00	6.91		non.sign.	non.sign.	-1.09
Slovenia	8.16	7.98	8.08	8.14	8.46	8.05	0.30	0.47	0.32	-0.40
	7.96	7.94	7.99	8.15	8.36	8.03	0.38	0.47	0.36	-0.43
CIS										
Armenia			9.09	8.89	8.74	8.80			-0.15	non.sign.
Azerbaijan					8.78					
Georgia					8.37					
Kazakhstan					8.86	8.49				-0.37
Kyrgyzstan						8.60				
Republic of Moldova				8.69	8.66	8.47			non.sign.	-0.19
Russia	7.46	7.58	7.65	7.67	7.99		0.53	0.41	0.32	
Tajikistan						8.10				
Ukraine	7.34	7.50	7.55	7.99	8.06		0.73	0.56	non.sign.	
	7.40	7.54	8.09	8.31	8.50	8.49	0.63	0.49	0.09	-0.28
North America and ANZ										
Canada	7.77	7.70	7.57	7.67	7.76	7.54	non.sign.	non.sign.	non.sign.	-0.22
USA	7.78	7.63	7.82							
	7.78	7.67	7.69	7.67	7.76					-0.22
Middle East and North Africa										
Turkey		7.31	7.20		7.12			-0.19		
Israel	8.62	8.50	8.39	8.35	8.09		-0.52	-0.41	-0.26	
	8.62	7.90	7.79	8.35	7.61		-0.52	-0.30	-0.26	

Table A1.4 HBSC post COVID-19 (2017/18-2021/22) country trends, by gender

	Females								
	Age 15			Age 13			Age 11		
	2017/18	2021/22	Diff.	2017/18	2021/22	Diff.	2017/18	2021/22	Diff.
Albania	7.50	7.87	0.37	8.32	8.50	0.19	8.80	9.15	0.36
Armenia	8.06	8.07	non.sign.	8.21	8.43	0.21	8.88	8.89	non.sign.
Austria	6.88	6.94	non.sign.	7.35	7.44	non.sign.	8.16	8.21	non.sign.
Belgium (Flemish)	7.33	7.19	-0.14	7.70	7.58	non.sign.	7.98	7.92	non.sign.
Belgium (French)	6.95	6.47	-0.48	7.17	6.82	-0.34	7.82	7.62	-0.20
Bulgaria	7.55	6.81	-0.73	7.90	6.95	-0.94	7.98	7.56	-0.42
Canada	6.62	6.31	-0.31	7.03	6.53	-0.50	7.60	7.26	-0.34
Croatia	7.42	7.18	-0.24	8.13	7.71	-0.42	8.67	8.47	-0.20
Czech Republic	7.22	6.83	-0.39	7.51	7.10	-0.41	8.33	7.87	-0.46
Denmark	7.22	6.72	-0.51	7.10	6.86	-0.24	7.87	7.43	-0.44
England	6.95	6.10	-0.85	6.95	6.38	-0.57	7.91	7.04	-0.86
Estonia	7.10	6.52	-0.58	7.36	6.81	-0.55	8.10	7.73	-0.37
France	7.10	6.56	-0.54	7.45	6.92	-0.52	7.99	7.57	-0.42
Germany	7.18	6.93	-0.25	7.50	7.24	-0.26	8.16	8.20	non.sign.
Greece	6.67	6.23	-0.44	6.91	6.70	-0.21	8.33	8.40	non.sign.
Greenland	7.06	6.61	non.sign.	7.33	6.68	-0.65	8.36	6.95	-1.42
Hungary	6.93	6.71	-0.22	7.41	6.94	-0.47	7.95	7.82	non.sign.
Iceland	7.02	6.78	-0.25	7.36	6.94	-0.42	7.90	7.72	-0.18
Ireland	6.73	5.91	-0.81	7.43	6.59	-0.84	8.12	7.71	-0.41
Italy	6.94	6.15	-0.79	7.49	6.72	-0.76	7.84	7.36	-0.48
Kazakhstan	8.15	7.77	-0.37	8.63	8.20	-0.43	8.89	8.53	-0.35
Latvia	6.69	6.33	-0.36	7.12	6.59	-0.53	7.97	7.48	-0.49
Lithuania	7.28	6.42	-0.86	7.50	6.79	-0.72	8.44	7.54	-0.90
Luxembourg	7.21	6.78	-0.43	7.47	7.02	-0.45	8.02	8.00	non.sign.
Macedonia	7.68	7.23	-0.45	8.57	7.79	-0.78	9.06	8.59	-0.48
Malta	6.54	6.11	-0.43	7.03	6.44	-0.59	7.89	7.60	-0.29
Netherlands	7.00	6.47	-0.53	7.53	6.81	-0.73	8.19	7.71	-0.48
Norway	7.25	6.69	-0.56	7.40	6.90	-0.49	8.13	7.40	-0.73
Poland	6.77	5.73	-1.04	7.04	5.76	-1.28	8.02	6.82	-1.20
Portugal	7.18	6.80	-0.37	7.51	7.39	non.sign.	8.26	8.15	non.sign.
Republic of Moldova	7.75	7.48	-0.27	8.30	7.92	-0.38	8.73	8.51	-0.22
Romania	7.84	7.56	-0.28	8.23	7.87	-0.36	8.75	8.61	-0.15
Scotland	6.87	6.34	-0.52	7.44	6.49	-0.95	8.33	7.63	-0.70
Serbia	7.63	7.63	non.sign.	8.27	8.04	-0.23	8.98	8.84	non.sign.
Slovakia	7.05	5.49	-1.56	7.32	5.87	-1.45	7.92	6.76	-1.17
Slovenia	7.07	6.62	-0.45	7.85	7.02	-0.82	8.46	7.99	-0.48
Spain	7.36	6.35	-1.00	7.70	6.74	-0.96	8.78	8.09	-0.69
Sweden	6.80	6.39	-0.42	7.17	6.47	-0.70	7.66	7.60	non.sign.
Switzerland	6.98	6.49	-0.49	7.39	6.82	-0.57	7.95	7.80	non.sign.
Wales	6.81	6.30	-0.51	7.33	6.80	-0.53	8.19	7.67	-0.52
Average:	7.16	6.70	-0.50	7.56	7.04	-0.56	8.23	7.85	-0.51

	Males								
	Age 15			Age 13			Age 11		
	2017/18	2021/22	Diff.	2017/18	2021/22	Diff.	2017/18	2021/22	Diff.
Albania	7.62	8.48	0.86	8.51	8.85	0.34	8.60	9.20	0.60
Armenia	8.07	8.25	non.sign.	8.22	8.60	0.38	8.61	8.70	non.sign.
Austria	7.78	7.59	-0.19	7.97	8.04	non.sign.	8.27	8.52	0.26
Belgium (Flemish)	7.65	7.73	non.sign.	7.91	8.00	non.sign.	8.15	8.18	non.sign.
Belgium (French)	7.49	7.17	-0.33	7.74	7.55	-0.19	8.00	7.99	non.sign.
Bulgaria	7.64	7.32	-0.32	7.99	7.74	-0.25	7.96	7.72	non.sign.
Canada	7.42	6.96	-0.47	7.61	7.45	-0.16	7.93	7.84	non.sign.
Croatia	8.02	8.02	non.sign.	8.19	8.11	non.sign.	8.42	8.47	non.sign.
Czech Republic	7.64	7.67	non.sign.	7.87	7.90	non.sign.	8.17	8.21	non.sign.
Denmark	7.73	7.51	-0.23	7.81	7.78	non.sign.	8.08	8.13	non.sign.
England	7.26	6.89	-0.37	7.49	7.36	non.sign.	7.84	7.68	non.sign.
Estonia	7.61	7.35	-0.26	7.94	7.73	-0.21	8.21	8.14	non.sign.
France	7.48	7.28	-0.20	7.75	7.41	-0.34	8.06	7.79	-0.27
Germany	7.54	7.50	non.sign.	7.81	7.79	non.sign.	8.11	8.18	non.sign.
Greece	7.41	7.27	non.sign.	7.62	7.52	non.sign.	8.39	8.47	non.sign.
Greenland	7.88	6.74	-1.14	7.80	6.95	-0.85	8.59	7.01	-1.57
Hungary	7.41	7.37	non.sign.	7.71	7.70	non.sign.	8.12	8.02	non.sign.
Iceland	7.51	7.56	non.sign.	7.78	7.71	non.sign.	8.09	7.97	non.sign.
Ireland	7.07	6.66	-0.41	7.61	7.28	-0.33	8.16	7.77	-0.39
Italy	7.31	6.89	-0.42	7.86	7.56	-0.30	8.06	7.74	-0.32
Kazakhstan	8.22	8.18	non.sign.	8.62	8.40	-0.22	8.84	8.45	-0.39
Latvia	7.31	7.13	non.sign.	7.47	7.51	non.sign.	7.75	7.80	non.sign.
Lithuania	7.67	7.45	-0.21	7.98	7.70	-0.28	8.46	7.91	-0.55
Luxembourg	7.49	7.43	non.sign.	7.84	7.94	non.sign.	8.15	8.23	non.sign.
Macedonia	7.96	7.62	-0.34	8.42	7.80	-0.62	8.80	8.24	-0.56
Malta	6.90	6.95	non.sign.	7.16	7.59	0.42	7.95	8.04	non.sign.
Netherlands	7.65	7.32	-0.33	7.94	7.62	-0.32	8.41	8.18	-0.23
Norway	7.72	7.38	-0.34	7.76	7.60	non.sign.	8.33	7.94	-0.39
Poland	7.32	6.77	-0.55	7.75	6.79	-0.96	8.08	7.30	-0.78
Portugal	7.54	7.43	non.sign.	7.78	7.82	non.sign.	8.16	8.33	0.18
Republic of Moldova	7.96	7.93	non.sign.	8.13	8.11	non.sign.	8.58	8.44	non.sign.
Romania	8.05	7.98	non.sign.	8.47	8.26	-0.21	8.72	8.74	non.sign.
Scotland	7.21	6.98	-0.23	7.49	7.46	non.sign.	8.15	7.80	-0.35
Serbia	8.08	8.26	non.sign.	8.24	8.55	0.30	8.68	8.84	non.sign.
Slovakia	7.61	6.42	-1.20	7.75	6.66	-1.08	8.07	7.07	-1.01
Slovenia	7.78	7.51	-0.27	8.04	7.65	-0.39	8.45	8.12	-0.33
Spain	7.94	7.21	-0.73	8.29	7.54	-0.75	8.84	8.44	-0.40
Sweden	7.42	7.25	non.sign.	7.84	7.45	-0.38	8.15	8.10	non.sign.
Switzerland	7.70	7.53	-0.17	7.88	7.65	-0.23	8.21	8.09	non.sign.
Wales	7.37	7.04	-0.33	7.72	7.51	-0.20	8.14	7.89	-0.25
Average:	7.61	7.40	-0.35	7.89	7.72	-0.28	8.27	8.09	-0.38

Table A1.5 Children's Worlds country means across waves (age 12, 10)

Country	Females																							
	Age 10						Age 12																	
	2012		2013-14		2016-19		2020-22		2012		2013-14		2016-19		2020-22									
n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.							
Albania						563	9.84	0.03	406	9.16	0.08				586	9.74	0.04	35	8.11	0.34				
Bangladesh						502	8.36	0.10	369	7.66	0.14				571	8.04	0.10	304	7.41	0.17				
Belgium						497	8.82	0.08	748	8.32	0.09				513	8.92	0.07	229	8.03	0.17				
Brazil	732	9.40	0.05			492	8.74	0.11				532	8.76	0.08		480	7.75	0.13						
Canada	69	8.94	0.18																					
Chile	338	7.94	0.19			436	9.04	0.10	413	8.78	0.10	349	8.16	0.15		454	8.10	0.12	364	8.62	0.11			
Colombia				479	9.56	0.06			472	8.93	0.08		482	9.42	0.06									
Cyprus									231	9.20	0.12													
Germany				552	8.91	0.08	376	9.18	0.08	80	7.95	0.22		440	8.44	0.10			80	7.51	0.26			
Algeria	245	8.64	0.15	579	9.29	0.06	576	9.31	0.07	237	7.82	0.20	214	8.65	0.17	546	9.22	0.08	511	9.27	0.08	122	7.95	0.26
Estonia				481	9.24	0.08	533	9.36	0.06	241	8.63	0.15		508	8.73	0.08	520	8.58	0.09	314	8.51	0.12		
England							325	9.04	0.11				644	8.19	0.08									
Spain (Catalonia)				499	9.25	0.07	1046	9.54	0.04	149	8.89	0.18	2821	9.17	0.03	783	8.73	0.06	971	9.05	0.05	91	8.52	0.24
Ethiopia				474	8.73	0.09								488	8.70	0.08								
Finland							512	9.15	0.08	330	9.02	0.12					566	8.48	0.09	30	8.83	0.37		
France							1074	9.02	0.05															
GB (ENG+WAL)				459	8.87	0.09								634	8.10	0.09								
Greece							412	9.70	0.04															
Hong Kong							346	8.61	0.10	138	7.66	0.24				355	7.67	0.12	35	7.49	0.48			
Croatia							619	9.56	0.05	302	9.16	0.10				561	8.79	0.09	293	8.90	0.11			
Hungary							523	9.14	0.08							527	8.54	0.09						
Indonesia							3704	8.56	0.04	824	8.61	0.07				4037	8.56	0.03	200	8.21	0.15			
Israel	490	9.06	0.10	525	9.25	0.08	764	9.20	0.08	342	8.84	0.12	488	9.27	0.08	458	9.26	0.09	697	9.26	0.06	88	9.06	0.15
India							481	9.10	0.09							487	8.96	0.08						
Italy							521	9.33	0.07	273	9.14	0.09				577	8.75	0.08	146	8.79	0.14			
South Korea	1454	8.13	0.06	1238	8.61	0.06	1631	8.65	0.05	765	7.30	0.05	1503	6.76	0.06	1361	7.27	0.06	1686	7.82	0.05			
Sri Lanka							509	8.58	0.11	76	7.42	0.36				520	9.05	0.09	668	8.16	0.10			
Malta				352	9.04	0.10	257	9.43	0.09					474	9.02	0.08	262	8.96	0.13					
Malaysia							549	9.22	0.08															
Namibia							586	9.06	0.09							647	8.43	0.09						
Norway				474	9.19	0.07	402	9.30	0.08				549	8.67	0.08	441	8.92	0.09						
Nepal	124	9.16	0.17	486	8.84	0.09	516	8.31	0.10				492	8.67	0.10	509	8.41	0.10						
Poland				521	9.25	0.07	582	9.27	0.07					506	8.22	0.10	590	8.39	0.10					
Romania	501	9.48	0.06	630	9.53	0.06	598	9.48	0.06	677	9.13	0.06	681	9.29	0.05	726	9.49	0.05	518	9.43	0.06	145	9.02	0.14
Russia							512	9.29	0.07							479	8.54	0.09	434	7.89	0.13			
Rwanda	132	8.84	0.18																					
Turkey				512	9.63	0.06			234	8.22	0.13		549	8.83	0.10				153	7.17	0.21			
Taiwan							664	8.91	0.07	361	7.99	0.10				757	8.33	0.08	164	7.80	0.16			
Uganda	472	7.12	0.13									507	6.76	0.13										
USA	225	9.03	0.13									394	8.51	0.12										
Vietnam							442	8.85	0.09							495	8.14	0.09						
Wales							458	8.97	0.10	98	8.70	0.24				821	8.07	0.09	168	8.15	0.19			
South Africa				548	8.42	0.12	1773	8.80	0.06	75	9.00	0.24	528	8.52	0.11	614	8.64	0.09	2048	8.81	0.05	325	8.78	0.13

Note. 'n' represents sample size and 's.e.' is the standard error. Data from the 2020/22 wave covers age 10/11 and 12/13, contrary to the previous waves where this is ages 10 and 12.

Country	Males																									
	Age 10						Age 12																			
	2012		2013-14		2016-19		2020-22		2012		2013-14		2016-19		2020-22											
n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.	n	Mean	s.e.									
Albania						601	9.81	0.03	469	9.15	0.07				574	9.72	0.04	52	8.77	0.25						
Bangladesh						413	8.43	0.10	405	7.67	0.14				433	8.23	0.11	275	7.70	0.17						
Belgium						507	9.12	0.07	749	8.21	0.09				510	9.17	0.06	205	8.02	0.17						
Brazil	555	9.43	0.05			381	8.88	0.11				466	8.99	0.08	401	8.49	0.12									
Canada	67	8.88	0.25																							
Chile	355	8.20	0.16			425	9.21	0.08	408	8.29	0.13	477	8.76	0.10				532	8.61	0.09	359	7.13	0.15			
Colombia				441	9.44	0.08			488	8.71	0.09			472	9.26	0.07										
Cyprus									254	9.34	0.09															
Germany				526	9.22	0.07	335	9.13	0.09	98	8.24	0.19			398	8.71	0.09				77	7.29	0.29			
Algeria	185	8.71	0.15	569	9.12	0.08	531	8.96	0.09	322	8.03	0.17	208	8.72	0.17	1280	9.05	0.06	519	8.82	0.11	93	8.41	0.25		
Estonia				513	9.13	0.08	461	9.14	0.08	264	8.51	0.14			517	8.80	0.08	549	8.74	0.08	319	7.75	0.15			
England									313	9.08	0.11			456	8.46	0.09										
Spain (Catalonia)				534	9.25	0.07	996	9.46	0.04	155	8.93	0.14	2793	9.16	0.03	866	8.84	0.06	1010	9.25	0.05	97	7.98	0.26		
Ethiopia				470	8.51	0.11									491	8.57	0.09				493	8.90	0.08	36	8.56	0.29
Finland							538	9.13	0.08	317	8.58	0.13														
France							1034	9.19	0.05																	
GB (ENG+WAL)				481	8.95	0.08									650	8.70	0.08									
Greece							398	9.69	0.05																	
Hong Kong							357	8.64	0.10	123	7.43	0.23					458	8.06	0.10	27	8.07	0.38				
Croatia							601	9.52	0.06	343	8.92	0.11					568	9.33	0.06	269	8.06	0.15				
Hungary							490	9.46	0.05								455	9.38	0.06							
Indonesia							3794	8.44	0.04	949	8.33	0.07					3891	8.47	0.03	249	8.04	0.14				
Israel	491	9.19	0.08	456	9.14	0.09	787	8.84	0.09	284	8.79	0.14	494	9.05	0.09	452	9.16	0.08	720	9.13	0.07	107	8.19	0.26		
India							465	9.15	0.09								489	9.14	0.07							
Italy							537	9.25	0.07	272	9.11	0.09					589	9.15	0.06	141	8.63	0.17				
South Korea	1157	8.36	0.06	1173	8.69	0.06	1513	8.85	0.05	732	7.43	0.05	1073	7.33	0.07	1216	7.93	0.06	1678	8.51	0.05					
Sri Lanka							602	8.55	0.11	54	8.72	0.32					674	8.55	0.10	535	8.30	0.12				
Malta				476	9.17	0.08	337	9.11	0.12						446	9.10	0.07	403	9.13	0.09						
Malaysia							443	9.13	0.08																	
Namibia							466	9.08	0.09										447	8.71	0.11					
Norway				465	9.16	0.09	357	9.28	0.08						412	9.08	0.07	345	9.26	0.07						
Nepal	127	9.26	0.16	479	8.75	0.10	474	8.08	0.11					494	8.34	0.11	522	8.54	0.08							
Poland				580	9.19	0.07	580	9.26	0.07						491	8.64	0.09	555	8.95	0.08						
Romania	422	9.45	0.06	701	9.59	0.04	573	9.59	0.05	707	9.06	0.07	666	9.29	0.06	761	9.45	0.05	541	9.59	0.05	153	8.96	0.17		
Russia							441	9.06	0.08								472	8.95	0.08	442	7.64	0.14				
Rwanda	161	8.61	0.18																							
Turkey				525	9.57	0.07				250	8.04	0.14			462	9.06	0.10				141	7.46	0.20			
Taiwan							662	8.90	0.07	428	7.84	0.11					737	8.42	0.08	200	7.82	0.14				
Uganda	519	7.10	0.12											517	6.41	0.14										
USA	271	8.95	0.13											376	8.89	0.10										
Viernam							493	8.49	0.10										575	8.35	0.09					
Wales							452	8.93	0.11	103	8.40	0.26							758	8.50	0.08	154	7.47	0.22		
South Africa				513	8.78	0.10	1577	8.81	0.06	190	8.84	0.15	449	8.53	0.11	517	8.42	0.12	1628	8.78	0.06	385	8.62	0.12		

Note. 'n' represents sample size and 's.e.' is the standard error. Data from the 2020/22 wave covers age 10/11 and 12/13, contrary to the previous waves where this is ages 10 and 12.

Figure A1.4 Country trends in selected countries. HBSC (age 15, 13, 11)

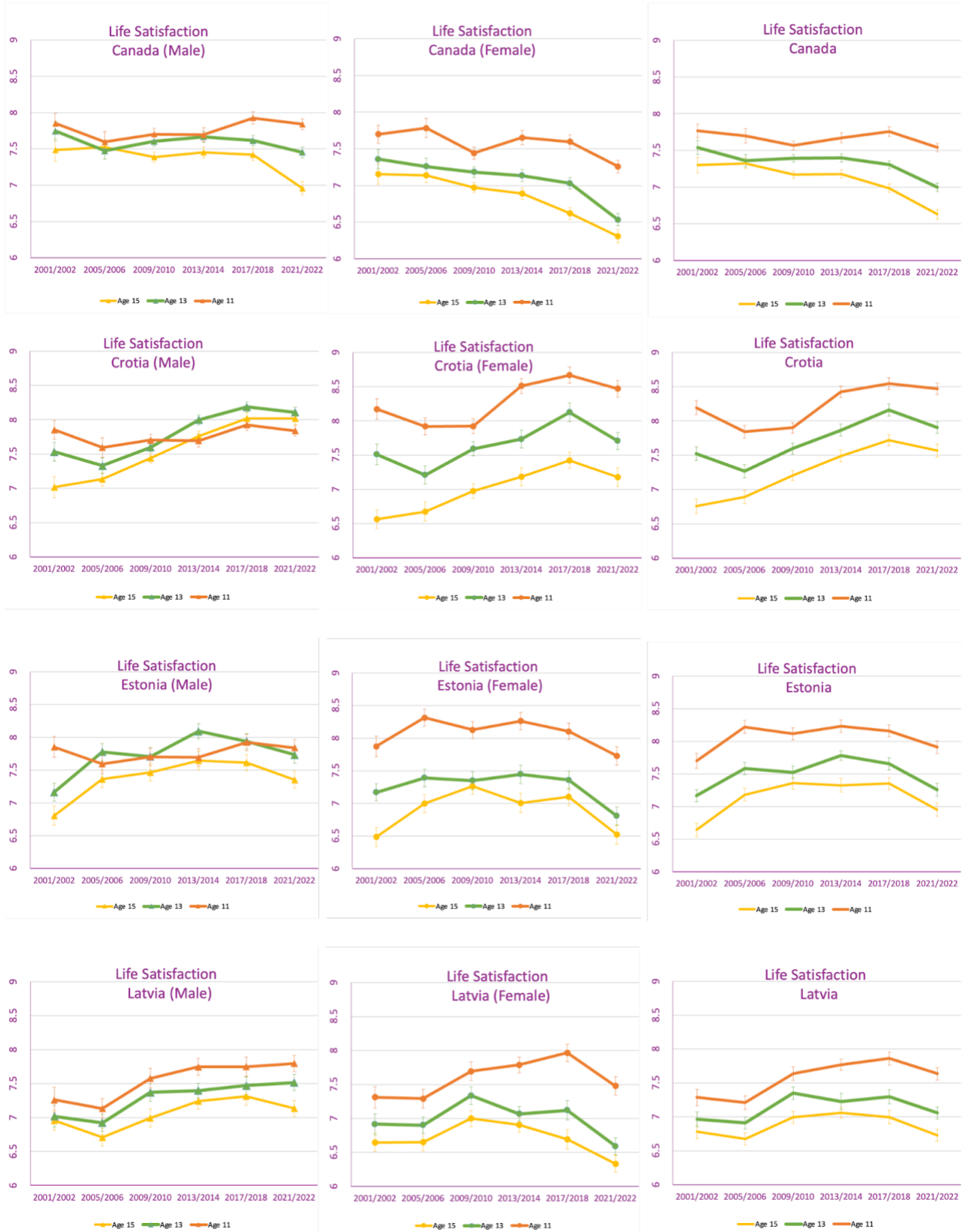


Table A1.6A Current state of Adolescents' well-being in High income countries

	GWP	PISA	HBSC		CW		
	2020/22 Age 15-24	2022 Age 15	2021/22 Age 15	2021/22 Age 13	2021/22 Age 11	2020/22 Age 12-13	2020/22 Age 10-11
Luxembourg	7.12		7.10	7.46	8.12		
Ireland	7.08	6.59	6.22	6.87	7.73		
Switzerland		7.06	6.99	7.21	7.95		
Norway	7.28		7.05	7.24	7.67		
Singapore	6.45						
U.S.	6.61						
Iceland	7.76	6.90	7.12	7.28	7.79		
Denmark	7.45	7.19	7.10	7.32	7.76		
Qatar		6.77					
Sweden	7.24	6.91	6.80	6.91	7.83		
Australia	6.94						
Austria	7.34	6.69	7.20	7.70	8.36		
Netherlands	7.30	7.29	6.90	7.22	7.95		
Greenland			6.66	6.78	6.98		
Finland	7.41	7.41	7.46	7.66	8.13	8.69	8.78
Canada	6.70		6.63	7.00	7.54		
Israel	7.98					8.58	8.78
Belgium	6.95					8.05	8.27
Belgium (Flemish)			7.46	7.78	8.05		
Belgium (French)			6.81	7.20	7.80		
Germany	6.58	6.51	7.12	7.50	8.17	7.41	8.11
New Zealand	6.85						
Hong Kong SAR	5.33	6.49				7.74	7.55
U.K. (England)		6.01	6.51	6.89	7.37		
U.K. (North Ireland)		6.50					
U.K. (Scotland)		6.48	6.66	6.97	7.64		
U.K. (Wales)		6.16	6.61	7.09	7.70	7.76	8.52
U.K.	6.92	6.07					
United Arab Emirates	6.54	6.85					
Macao		6.41					
France	6.83	6.77	6.91	7.16	7.68		
Japan	6.51	6.76					
Italy	6.71	6.53	6.55	7.16	7.55	8.71	9.13
South Korea	6.59	7.20					7.36
Malta	6.69	6.24	6.48	7.00	7.81		
Taiwan	7.12	6.85				7.80	7.91
Kuwait	7.39						
Cyprus	6.88		7.45	7.99	8.46		9.28
Spain	6.46	6.88	6.77	7.13	8.25		
Spain (Catalonia only)						8.18	8.88
Slovenia	7.17	6.61	7.08	7.34	8.05		
Estonia	6.79	6.91	6.95	7.26	7.91	8.00	8.53
Bahrain	6.52						
Czech Republic	7.17	6.56	7.26	7.51	8.04		
Portugal	6.83	7.06	7.05	7.54	8.21		
Saudi Arabia	6.45	7.36					
Lithuania	7.39	7.14	6.95	7.21	7.71		
Slovak Republic	6.70	7.02	6.00	6.28	6.91		
Latvia	6.86	6.76	6.73	7.06	7.64		
Greece	6.66	6.62	6.70	7.09	8.43		
Hungary	7.03	7.21	6.99	7.33	7.92		
Poland	6.55	6.26	6.20	6.28	7.06		
Uruguay	6.77	7.03					
Croatia	7.51	7.37	7.57	7.91	8.47	8.50	9.03
Chile	6.65	6.41				7.76	8.44
Turkish Republic of Northern Cyprus	5.32						

Table A1.6B Current state of Adolescents' well-being in Upper Middle income countries

	GWP	PISA	HBSC			CW	
	2020/22 Age 15-24	2022 Age 15	2021/22 Age 15	2021/22 Age 13	2021/22 Age 11	2020/22 Age 12-13	2020/22 Age 10-11
China, People's Republic of	6.05						
Russian Federation	6.34					7.76	
Costa Rica	6.93	7.32					
Bulgaria	6.29	7.04	7.10	7.34	7.64		
Malaysia	6.41	6.63					
Argentina	6.55	6.69					
Kazakhstan	6.52	8.41	7.97	8.30	8.49		
Mexico	6.77	7.26					
Türkiye, Republic of	5.07	4.90				7.28	8.11
Montenegro	6.56	7.52					
Serbia	7.53	7.48	7.89	8.30	8.84		
Mauritius	6.03						
Gabon	5.52						
Dominican Republic	6.38	7.44					
Brazil	6.46	6.85					
Botswana	4.09						
Bosnia and Herzegovina	6.88						
Thailand	6.75	7.12					
South Africa	5.75					8.60	8.86
North Macedonia	6.58	7.65	7.42	7.79	8.42		
Peru	6.23	6.37					
Albania	6.51	8.01	8.14	8.67	9.18	8.51	9.16
Colombia	5.95	6.96					8.82
Ecuador	6.40						
Paraguay	6.18	7.32					
Libya	5.93						
Azerbaijan	5.34						
Kosovo	6.94	7.87					
Moldova, Republic of	6.94	7.01	7.70	8.02	8.47		
Jamaica	5.81	5.83					
Guatemala	6.65	7.72					
Georgia	6.08	7.62					
Armenia	6.16		8.15	8.52	8.80		
Namibia	5.05						
Iraq	5.61						

Table A1.6C Current state of Adolescents' well-being in Lower Middle income countries

	GWP	PISA	HBSC			CW	
	2020/22 Age 15-24	2022 Age 15	2021/22 Age 15	2021/22 Age 13	2021/22 Age 11	2020/22 Age 12-13	2020/22 Age 10-11
Lebanon	2.93						
Iran	5.46						
Jordan	4.86	6.77					
Sri Lanka	4.80					8.22	7.96
Eswatini	3.84						
Egypt	4.38						
Tunisia	4.87						
Morocco	5.34	6.76					
Vietnam	6.06	7.35					
Algeria	5.54					8.15	7.94
Philippines	6.12	6.97					
Bolivia	6.23						
Palestine, State of	5.25						
Honduras	6.47						
Côte d'Ivoire	5.32						
Lao P.D.R.	4.90						
Bangladesh	4.72					7.55	7.66
Ghana	4.84						
Congo	5.78						
India	4.33						
Mauritania	4.61						
Venezuela	5.59						
Kenya	4.78						
Nigeria	5.28						
Nicaragua	6.84						
Uzbekistan	5.98	8.20					
Zimbabwe	3.77						
Cameroon	5.36						
Senegal	5.06						
Cambodia	4.62	7.65					
Comoros	4.01						
Pakistan	5.17						
Benin	4.52						
Kyrgyz Republic	6.15		7.95	8.30	8.60		
Nepal	5.67						
Myanmar	4.40						
Tanzania	4.15						
Zambia	4.09						

Table A1.6D Current state of Adolescents' well-being in Low income countries

	GWP	PISA	HBSC			CW	
	2020/22 Age 15-24	2022 Age 15	2021/22 Age 15	2021/22 Age 13	2021/22 Age 11	2020/22 Age 12-13	2020/22 Age 10-11
Lesotho	3.80						
Togo	4.34						
Ethiopia	4.48						
Tajikistan	5.61		8.00	8.07	8.10		
Burkina Faso	4.98						
Uganda	4.69						
Mali	4.47						
Guinea	5.05						
Gambia	4.52						
Chad	4.56						
Liberia	4.73						
Malawi	3.83						
Yemen	3.93						
Niger	4.63						
Congo, Democratic Republic of the	3.37						
Sierra Leone	3.19						
Madagascar	4.17						
Mozambique	5.32						
Afghanistan	1.96						

Table A1.7A Correlates of life satisfaction. Gallup World Poll 2022 (age 15-24). High-income countries

	Model 1		Model 2	
	β	S.E.	β	S.E.
Socio-demographic factors				
Gender (ref.: male)				
Female	0.02	0.06	0.01	0.06
Urban/rural residence (ref.: urban residence)				
Rural residence	0.09	0.06	0.12 *	0.06
Household income (ref.: lowest 20%)				
Second 20%	0.07	0.08	0.08	0.08
Middle 20%	0.10	0.08	0.16	0.08
Fourth 20%	0.25 **	0.08	0.24 **	0.09
Highest 20%	0.22 *	0.09	0.27 **	0.09
10 satisfaction items				
Satisfied with the public transportation system in your city/area			0.16 *	0.07
Satisfied with the roads and highways in your city/area			-0.11	0.07
Satisfied with the quality of air in your city/area			0.13	0.08
Satisfied with the quality of water in your city/area			-0.05	0.09
Satisfied with the availability of affordable housing in your city/area			0.18 **	0.06
Satisfied with the education system/schools in your city/area			-0.03	0.07
Satisfied with the quality healthcare in your city/area			0.42 ***	0.07
Satisfied with opportunities to meet people and make friends in your city/area			0.39 ***	0.08
Satisfied with the city/area where you live			0.46 ***	0.08
Satisfied with your standard of living (things you can buy and do)			1.32 ***	0.09

Note. Significance Levels: * 0.05 ** 0.01 *** 0.001. Model 1: R²= 0.00; N=4,147, $p < .001$. Model 2: R²= 0.14; N=3,390, $p < .001$

Table A1.7B Correlates of life satisfaction. Gallup World Poll 2022 (age 15-24). Upper middle-income countries

	Model 1		Model 2	
	β	S.E.	β	S.E.
Socio-demographic factors				
Gender (ref.: male)				
Female	0.14 *	0.06	0.19 **	0.06
Urban/rural residence (ref.: urban residence)				
Rural residence	-0.19 **	0.06	-0.17 **	0.06
Household income (ref.: lowest 20%)				
Second 20%	0.14	0.09	0.13	0.10
Middle 20%	0.23 *	0.10	0.10	0.10
Fourth 20%	0.23 *	0.09	0.13	0.10
Highest 20%	0.48 ***	0.10	0.30 **	0.10
10 satisfaction items				
Satisfied with the public transportation system in your city/area			-0.01	0.07
Satisfied with the roads and highways in your city/area			0.04	0.07
Satisfied with the quality of air in your city/area			0.09	0.08
Satisfied with the quality of water in your city/area			-0.03	0.08
Satisfied with the availability of affordable housing in your city/area			0.29 ***	0.07
Satisfied with the education system/schools in your city/area			0.03	0.08
Satisfied with the quality healthcare in your city/area			0.14	0.08
Satisfied with opportunities to meet people and make friends in your city/area			0.38 ***	0.09
Satisfied with the city/area where you live			0.40 ***	0.09
Satisfied with your standard of living (things you can buy and do)			1.52 ***	0.08

Note. Significance Levels: * 0.05 ** 0.01 *** 0.001. Model 1: $R^2= 0.01$; $N=6,097$, $p < .001$. Model 2: $R^2= 0.14$; $N=5,170$, $p < .001$

Table A1.7C Correlates of life satisfaction. Gallup World Poll 2022 (age 15-24). Lower middle-income countries

	Model 1		Model 2	
	β	S.E.	β	S.E.
Socio-demographic factors				
Gender (ref.: male)				
Female	0.18 **	0.05	0.19 **	0.05
Urban/rural residence (ref.: urban residence)				
Rural residence	-0.24 ***	0.06	-0.21 ***	0.06
Household income (ref.: lowest 20%)				
Second 20%	0.04	0.09	-0.01	0.09
Middle 20%	0.20 *	0.09	0.08	0.09
Fourth 20%	0.38 ***	0.09	0.24 **	0.09
Highest 20%	0.60 ***	0.09	0.41 ***	0.09
10 satisfaction items				
Satisfied with the public transportation system in your city/area			0.12	0.07
Satisfied with the roads and highways in your city/area			-0.05	0.07
Satisfied with the quality of air in your city/area			-0.06	0.07
Satisfied with the quality of water in your city/area			0.07	0.07
Satisfied with the availability of affordable housing in your city/area			0.16 *	0.06
Satisfied with the education system/schools in your city/area			0.15 *	0.07
Satisfied with the quality healthcare in your city/area			0.03	0.07
Satisfied with opportunities to meet people and make friends in your city/area			0.15	0.08
Satisfied with the city/area where you live			0.39 ***	0.07
Satisfied with your standard of living (things you can buy and do)			1.49 ***	0.07

Note. Significance Levels: * 0.05 ** 0.01 *** 0.001. Model 1: $R^2= 0.01$; $N=10,130$, $p < .001$. Model 2: $R^2= 0.11$; $N=9,027$, $p < .001$

Table A1.7D Correlates of life satisfaction. Gallup World Poll 2022 (age 15-24). Low-income countries

	Model 1		Model 2	
	β	S.E.	β	S.E.
Socio-demographic factors				
Gender (ref.: male)				
Female	0.19 *	0.08	0.16 *	0.08
Urban/rural residence (ref.: urban residence)				
Rural residence	-0.35 ***	0.10	-0.37 ***	0.10
Household income (ref.: lowest 20%)				
Second 20%	-0.24 *	0.13	-0.22	0.13
Middle 20%	0.16	0.13	0.12	0.13
Fourth 20%	0.50 ***	0.13	0.43 **	0.13
Highest 20%	0.59 ***	0.13	0.40 **	0.13
10 satisfaction items				
Satisfied with the public transportation system in your city/area			-0.08	0.10
Satisfied with the roads and highways in your city/area			0.03	0.10
Satisfied with the quality of air in your city/area			-0.13	0.10
Satisfied with the quality of water in your city/area			0.23 *	0.09
Satisfied with the availability of affordable housing in your city/area			0.23 *	0.09
Satisfied with the education system/schools in your city/area			0.27 **	0.10
Satisfied with the quality healthcare in your city/area			0.28 **	0.10
Satisfied with opportunities to meet people and make friends in your city/area			0.14	0.10
Satisfied with the city/area where you live			0.15	0.10
Satisfied with your standard of living (things you can buy and do)			1.28 ***	0.09

Note. Significance Levels: * 0.05 ** 0.01 *** 0.001. Model 1: $R^2=0.02$; $N=5,503$, $p<0.001$. Model 2: $R^2=0.10$; $N=5,112$, $p<0.001$

Appendix 2: PISA-HBSC discrepancies at age 15

This technical appendix examines the discrepancies in country means and trends observed in PISA and HBSC data at age 15. These differences are illustrated in Table 1 in the chapter, and Table A2.1 and Figure A2.1 below:

- Country means. Figure A2.1 plots country means in HBSC and PISA. If country means were the exact same in both datasets, all the countries would fall on the 45 degree line, but there is dispersion around this line. In general, country means in life satisfaction tend to be higher in HBSC than in PISA. In most countries, HBSC-PISA differences in country means can be considered small or moderate. However, a few of them fall quite far away from the line, indicating large HBSC-PISA differences. This includes the Czech Republic, Russia, Slovenia, Turkey, and the U.K. (England, Scotland, and Wales) in 2017/18, and Slovakia, Slovenia, Austria, Germany, Moldavia, Kazakhstan, and the U.K. (England and Wales only) in 2021/22.
- Country trends. In countries such as Austria and Switzerland, pre-pandemic declining trends are observed in both PISA and HBSC. However, in many of the countries that experienced a pre-COVID-19 decline in PISA between 2015 and 2018, this decline is not observed in HBSC data between 2013/14 and 2017/18. This includes Western Europe, where HBSC data shows a mixed picture, but mainly increases, whereas PISA shows only declines; Central and Western Europe, where HBSC shows an overall increase, whereas PISA shows an overall decline; and the only CIS country with available data in both studies, Russia, where PISA shows a decline, and HBSC shows no statistically significant changes ($p < 0.05$). PISA and HBSC post-pandemic trends are more consistent with a few exceptions like Scotland, discussed below.

Table A2.1 Regional and country trends at age 15 in PISA (2015-18-22) and HBSC (2013/14-17/18-21/22)

PISA (Age 15)						HBSC (Age 15)					
Country	Country means			Trends		Country	Country means			Trends	
	2015	2018	2022	2015-18	2018-22		2013/14	2017/18	2021/22	2013/14-17/18	2017/18-21/22
Western Europe:						Western Europe:					
Austria	7.52	7.14	6.69	-0.39	-0.44	Austria	7.53	7.29	7.20	-0.24	non.sign.
Belgium	7.49					Belgium (Flemish)	6.89	7.48	7.46	0.60	non.sign.
						Belgium (French)	7.19	7.22	6.81	non.sign.	-0.41
						Cyprus	6.99		7.45		
Denmark			7.19			Denmark	7.37	7.48	7.10	non.sign.	-0.39
Finland	7.89	7.61	7.41	-0.28	-0.21	Finland	7.47		7.46		
France	7.63	7.19	6.77	-0.44	-0.42	France	6.97	7.28	6.91	0.32	-0.37
Germany	7.35	7.02	6.51	-0.33	-0.51	Germany	7.05	7.33	7.12	0.28	-0.21
Greece	6.91	6.99	6.62	non.sign.	-0.37	Greece	7.16	7.04	6.70	non.sign.	-0.34
						Greenland	7.48	7.49	6.66	non.sign.	-0.83
Iceland	7.80	7.34	6.90	-0.46	-0.44	Iceland	7.47	7.26	7.12	-0.21	-0.14
Ireland	7.30	6.74	6.59	-0.57	-0.15	Ireland	7.01	6.89	6.22	non.sign.	-0.67
Italy	6.89	6.91	6.53	non.sign.	-0.38	Italy	6.95	7.11	6.55	0.16	-0.55
Luxembourg	7.38	7.04		-0.34		Luxembourg	7.01	7.35	7.10	0.33	-0.24
Malta			6.24			Malta	7.11	6.71	6.48	-0.40	-0.23
Netherlands	7.83	7.50	7.29	-0.33	-0.21	Netherlands	7.36	7.33	6.90	non.sign.	-0.43
						Norway	7.54	7.48	7.05	non.sign.	-0.43
Portugal	7.36	7.13	7.06	-0.24	non.sign.	Portugal	6.99	7.35	7.05	0.36	-0.29
Spain	7.42	7.35	6.88	non.sign.	-0.46	Spain	7.30	7.64	6.77	0.34	-0.87
Sweden			6.91			Sweden	6.83	7.10	6.80	0.27	-0.30
Switzerland	7.72	7.38	7.06	-0.34	-0.31	Switzerland	7.54	7.34	6.99	-0.19	-0.35
U.K.	6.98	6.16	6.07	-0.81	non.sign.	U.K. (England)	6.81	7.11	6.51	0.30	-0.60
U.K. (England)	6.94	6.12	6.01	-0.82	non.sign.						
U.K. (Northern Ireland)	7.24	6.58	6.50	-0.67	non.sign.	U.K. (Scotland)	7.14	7.03	6.66	non.sign.	-0.37
U.K. (Scotland)	7.17	6.25	6.48	-0.92	0.23	U.K. (Wales)	6.93	7.09	6.61	0.16	-0.48
U.K. (Wales)	7.13	6.45	6.16	-0.68	-0.29	Average:	7.17	7.25	6.90	0.15	-0.43
Average:	7.37	6.94	6.69	-0.51	-0.31						
Central and Eastern Europe:						Central and Eastern Europe:					
Albania			8.01			Albania	7.71	7.56	8.14	non.sign.	0.58
Bulgaria	7.42	7.15	7.04	-0.26	non.sign.	Bulgaria	7.43	7.59	7.10	0.16	-0.49
Croatia	7.90	7.69	7.37	-0.22	-0.32	Croatia	7.49	7.72	7.57	0.23	-0.15
Czech Republic	7.05	6.91	6.56	-0.14	-0.36	Czech Republic	6.99	7.43	7.26	0.44	-0.17
Estonia	7.50	7.19	6.91	-0.31	-0.28	Estonia	7.33	7.35	6.95	non.sign.	-0.40
Hungary	7.17	7.12	7.21	non.sign.	non.sign.	Hungary	7.09	7.14	6.99	non.sign.	non.sign.
Kosovo			7.87								
Latvia	7.37	7.16	6.76	-0.21	-0.40	Latvia	7.06	7.00	6.73	non.sign.	-0.27
Lithuania	7.86	7.61	7.14	-0.26	-0.47	Lithuania		7.47	6.95		-0.52
Montenegro	7.75	7.69	7.52	non.sign.	-0.16						
North Macedonia			7.65			North Macedonia	7.11	7.82	7.42	0.70	-0.39
Poland	7.18	6.74	6.26	-0.44	-0.49	Poland	6.80	7.03	6.20	0.23	-0.84
Romania			7.53			Romania	7.61	7.94	7.76	0.32	-0.18
Serbia			7.48			Serbia		7.85	7.89		non.sign.
Slovakia	7.47	7.22	7.02	-0.25	-0.20	Slovakia	7.06	7.36	6.00	0.29	-1.35
Slovenia	7.17	6.86	6.61	-0.32	-0.25	Slovenia	7.41	7.45	7.08	non.sign.	-0.36
Average:	7.44	7.21	7.18	-0.27	-0.33	Average:	7.26	7.48	7.15	0.34	-0.38
CIS:						CIS:					
Baku (Azerbaijan)			6.80			Armenia	8.19	8.06	8.15	non.sign.	non.sign.
Georgia			7.62			Azerbaijan		7.83			
Kazakhstan			8.41			Georgia		7.57			
						Kazakhstan		8.18	7.97		-0.21
Republic of Moldova			7.01			Kyrgyzstan			7.95		
Russia	7.76	7.32		-0.44		Republic of Moldova	7.87	7.85	7.70	non.sign.	-0.15
						Russia	6.94	6.92		non.sign.	
						Tajikistan			8.00		
Uzbekistan			8.20			Ukraine	7.31	7.34		non.sign.	
Average:	7.76	7.32	7.61	-0.44		Average:	7.58	7.68	7.95		-0.18
North America and ANZ:						North America and ANZ:					
New Zealand			6.27			Canada	7.18	6.98	6.63	-0.19	-0.36
U.S.	7.36	6.75		-0.60		Average:	7.18	6.98	6.63	-0.19	-0.36
Average:	7.36	6.75	6.27	-0.60							

Middle East and North Africa					
Jordan			6.77		
Morocco			6.76		
Qatar	7.41	6.84	6.77	-0.56	non.sign.
Saudi Arabia			7.36		
Tunisia	6.90				
Turkey	6.12	5.62	4.90	-0.50	-0.72
United Arab Emirates	7.30	6.88	6.85	-0.42	non.sign.
Average:	6.93	6.45	6.57	-0.49	-0.72

Middle East and North Africa			
Israel	7.56	7.47	non.sign.
Turkey		6.09	
Average:	7.56	6.78	

Latin America and the Caribbean					
Argentina			6.69		
Brazil	7.59	7.05	6.85	-0.53	-0.21
Chile	7.37	7.03	6.41	-0.34	-0.62
Colombia	7.88	7.62	6.96	-0.27	-0.66
Costa Rica	8.21	7.96	7.32	-0.25	-0.64
Dominican Republic	8.50	8.09	7.44	-0.41	-0.65
El Salvador			7.40		
Guatemala			7.72		
Jamaica			5.83		
Mexico	8.27	8.11	7.26	-0.16	-0.85
Panama			7.04		
Paraguay			7.32		
Peru	7.50	7.31	6.37	-0.19	-0.94
Uruguay	7.70	7.54	7.03	-0.16	-0.50
Average:	7.88	7.59	6.97	-0.29	-0.63

Latin America and the Caribbean			
Average:			

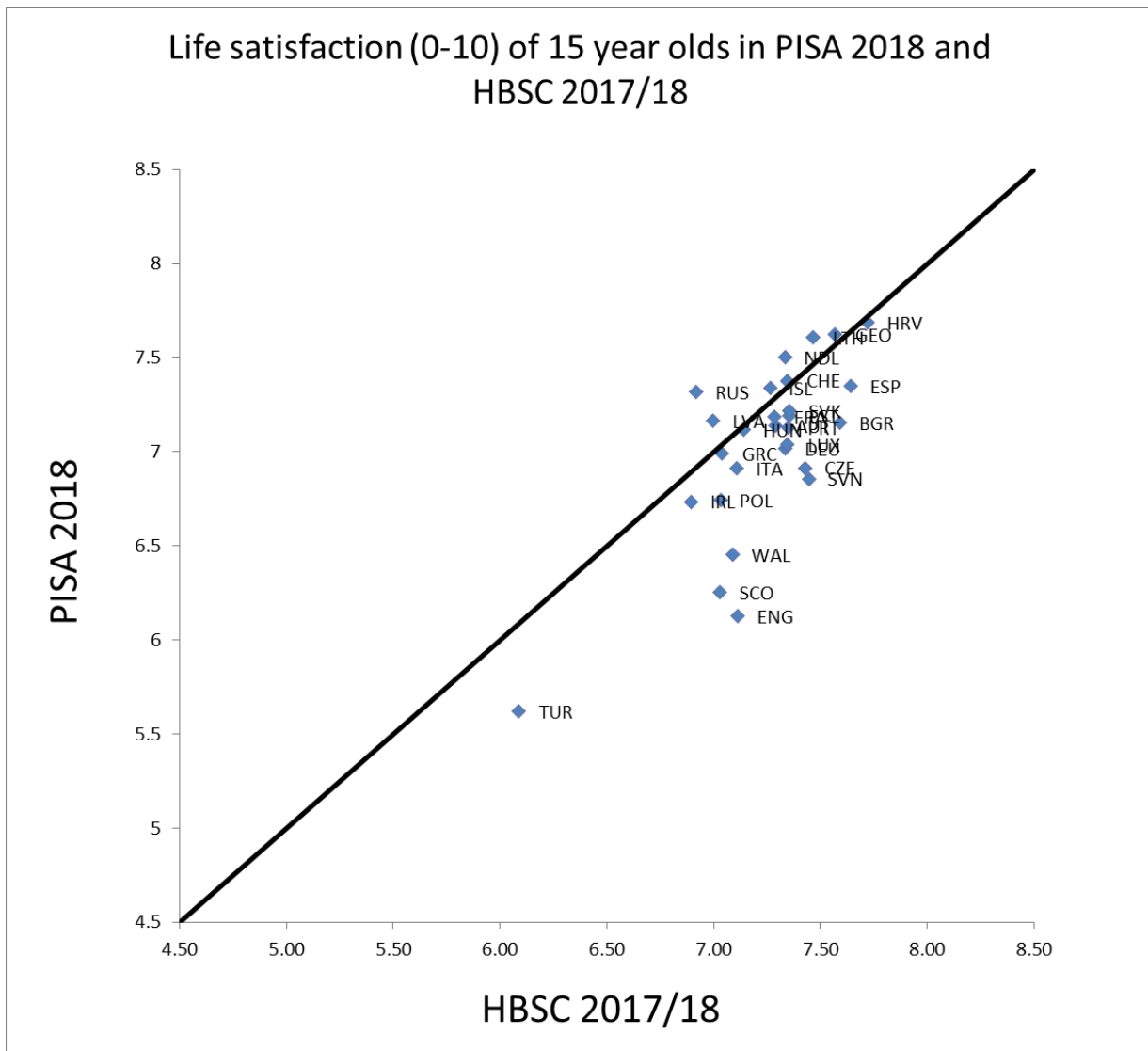
East Asia					
China (B-S-J-G)	6.83				
Hong Kong	6.48	6.27	6.49	-0.20	0.22
Japan	6.80	6.18	6.76	-0.62	0.58
Macau	6.59	6.07	6.41	-0.52	0.34
Mongolia			7.20		
South Korea	6.36	6.52	6.36	0.15	-0.16
Taiwan	6.59	6.52	6.85	non.sign.	0.33
Average:	6.61	6.31	6.68	-0.30	0.26

East Asia			
Average:			

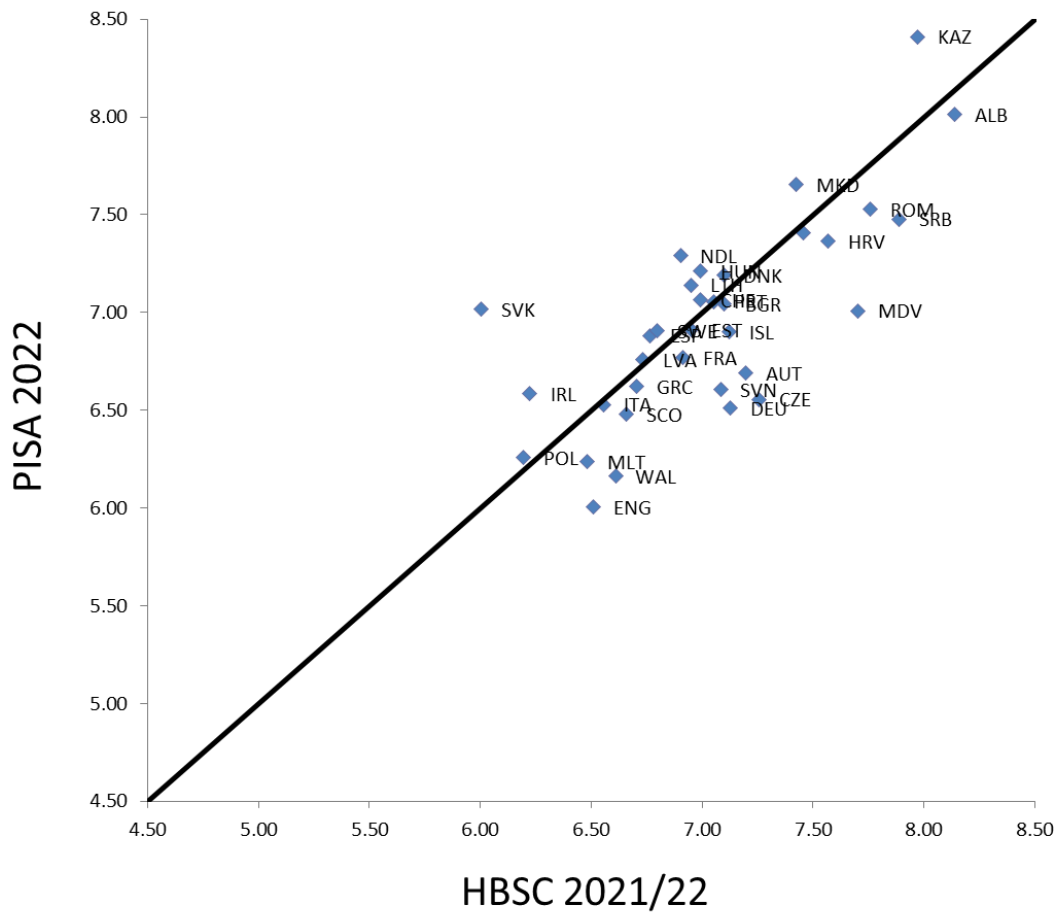
Southeast Asia					
Brunei Darussalam			5.86		
Cambodia			7.65		
Indonesia			7.22		
Malaysia		7.04	6.63		-0.40
Philippines			6.97		
Thailand	7.71	7.64	7.12	non.sign.	-0.51
Vietnam			7.35		
Average:	7.71	7.34	6.97		-0.46

Southeast Asia			
Average:			

Figure A2.1 HBSC-PISA discrepancies at age 15



Life satisfaction (0-10) of 15 year olds in PISA 2022 and HBSC 2021/22



There are several factors that may explain these discrepancies:

1. Different measures. HBSC uses an adapted version of the Cantril Ladder (“Here is a picture of a ladder. The top of the ladder ‘10’ is the best possible life for you, and the bottom ‘0’ is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment? Tick the box next to the number that best describes where you stand.”), whereas PISA uses an overall life satisfaction question (“The following question asks how satisfied you feel about your life, on a scale from “0” to “10”. Zero means you feel ‘not at all satisfied’ and “10” means ‘completely satisfied’. Overall, how satisfied are you with your life as a whole these days?”). Across different languages and cultures, respondents may interpret and respond to these two questions slightly differently.
2. Different year and month of data collection, and different lag between waves. HBSC data was collected throughout 2013/14, 2017/18 and 2021/22 (and up to early 2023 in Canada), whereas PISA was collected in 2015, 2018, and 2022. In HBSC, there is variation across countries in the time of data collection. For example, in 2021/22, this varies from one month in countries like Slovenia or Austria to up to 15 months in Canada, and this was not much different in previous waves. In PISA, in the Northern Hemisphere, data tends to be collected March-May, with the notable exception of the U.K., where data is collected in October-December, as explained in detail below.
3. Different school year and age. Both HBSC and PISA target students aged 15, with some variations. HBSC targets students aged 15.5 on average, which may include students from different school years. It aims at a minimum of 95% of the eligible target population being included in the sample frame. It uses cluster sampling, and the primary sampling unit is school class (or schools, when this is not possible). In contrast, PISA targets students between the ages of 15 years and 3 months and 16 years and 2 months who are enrolled in an educational institution at Grade 7 or higher. It also uses cluster sampling, with the school as the sampling unit, and also aims at an exclusion rate no higher than 5%. An exploration of PISA 2018 data shows substantial cross-country variation in the average school year. This can make a difference in country means, as we know that subjective well-being declines throughout adolescence and, at this age, school pressure increases in higher school years when high-stake exams may become more common and decisive for many adolescents. The average school year in PISA 2018 ranged between 9 and 10 in most countries (e.g. 9.53 in the Czech Republic, 9.39 in Germany, 9.97 in Slovenia, 9.84 in Turkey), but was notably lower in countries such as Estonia (8.80), Finland (8.86), Poland (8.98), and Russia (9.02), and higher in the U.K., which emerges as an outlier with an average school year of 11.13. In some countries, changes in the average school year from one wave to another can partly explain changes in trends, which is the case for Scotland in PISA 2015-2018, explained in more detail below.
4. Sampling issues (PISA exclusions). There are increasing concerns about sampling issues in international large-scale assessments, notably involving exclusion rates. This includes PISA, with reports that the percentage of the 15-year-old student population represented in PISA would be as low as 50% in Canada or 60% in the U.K., which is rather far away from the 95% objective.

5. Survey context. Unlike HBSC, PISA asked students about their life satisfaction right after/before taking a long academic test. Although this is not a high-stakes examination, it may trigger negative feelings in students at a time of their academic journey when academic pressure is increasing. In both PISA and HBSC, females tend to report lower life satisfaction than males, but this gender gap is larger in PISA than in HBSC, and research shows that, compared to males, females take the PISA academic test more seriously, and tend to suffer from higher test and academic anxiety.

Overall, the above indicates that, in some countries, PISA and HBSC may not be measuring well-being in the exact same way (slightly different measures), in the same context (on the day of a long academic test, or not) and, importantly, in the exact same population (different school year, average age, cohort, and time of data collection). All this together may partly explain PISA-HBSC differences in country means and trends. In those countries where there are substantial HBSC-PISA differences, we call for caution when interpreting the results for either study, and recommend contrasting these results with evidence from other data sources using representative samples in this age group. Below, we present an examination of the most extreme case of PISA-HBSC discrepancies: the U.K..

PISA-HBSC discrepancies in the United Kingdom

In the U.K., overall life satisfaction levels in HBSC 2017/18 (7.11 in England, 7.09 in Wales, and 7.03 in Scotland) were on average almost 1 point higher than those in PISA 2018 (6.12 in England, 6.45 in Wales, 6.25 in Scotland, and 6.58 in Northern Ireland). Moreover, whereas the 2015-18 PISA data shows a huge decline in country means in the four U.K. nations (-0.82 points in England, -0.68 points in Wales, -0.92 points in Scotland, and -0.67 points in Northern Ireland), HBSC 2013/14-17/18 data shows increases in England (0.30 points) and Wales (0.15 points), and no statistically significant differences in Scotland ($p < 0.05$).

These results are hard to reconcile, although the factors described above may explain some of these differences. First, as noted earlier, these are two slightly different subjective well-being measures. Second, the data was collected in relatively different years and months. In the last three waves, HBSC data was collected in the following times: in England (Sep 2013 - Apr 2014; Jun 2017 - Jul 2018; Mar-Jul 2022), Wales (Nov 2013 - Mar 2014; Sep - Dec 2017; Aug 2021 - Jan 2022), and Scotland (Feb-Jun 2014; Feb-Jun 2018; Mar-Jun 2022). In contrast, in PISA 2015, data collection took place in Oct-Dec in England, Wales and Northern Ireland, and in Mar-May in Scotland, while in PISA 2018 and 2022, data collection took place in Oct-Dec in the four U.K. nations. Third, most notably, the above indicates that HBSC participants are on average 5-6 months younger and enrolled in a lower school year. For example, the average age of HBSC participants targeted in this age group in 2017/18 in England was 15.47, while this was 15.90 among PISA 2018 participants. Fourth, there is evidence of sampling issues affecting PISA, especially in relation to exclusion rates, which have been reported to be up to 40% in the U.K.. Finally, the survey context is also important because having a long exam on the same day students are asked a life satisfaction question may affect students' responses to this question. As noted above, while females tend to report lower life satisfaction than males in both HBSC and

PISA, this gender gap is larger in PISA than in HBSC. The fact that, compare to males, females take the PISA academic test more seriously, and tend to suffer from higher test and academic anxiety, could explain why the gender gap is larger in PISA than in HBSC. Thus, a drop in students' life satisfaction on the day of an academic test, which would be particularly acute among females, could partly explain why PISA life satisfaction levels are on average lower than those in HBSC. All this suggests that, especially in the U.K., HBSC and PISA do not ask about students' well-being in the same way, in the same context, and to the same population of students.

The above may partly explain differences in country means, but HBSC-PISA differences in trends in the 5-6 years preceding the pandemic are harder to reconcile. The discrepancies in Scotland, the country that experienced the most substantial decline in well-being in PISA 2015-18 (-0.92 points), can partly be due to changes in the time of PISA data collection. This was moved from March-May in 2015 to Oct-Dec in 2018, resulting in an increase in the average school year of participants of almost 6 months, as well as an increase of some 4 months in the average age of participants. However, the discrepancies in England and Wales, with small increases in HBSC and large declines in PISA, are more difficult to understand. Looking at evidence from other studies using representative samples targeting this population group can shed light on this question. The Good Childhood Report regularly examines these trends in the U.K. using data from Understanding Society, a household survey that collects overall life satisfaction data on a 1-7 scale in a sample of 10-15 year olds. Their analyses use a version of this scale that has been reversed and converted into a 0-10 scale that is similar to PISA's overall life satisfaction measure. Their results show a substantial decline since the early 2010s, which is more pronounced after 2016. This contradicts HBSC findings, and is consistent with PISA findings and the plethora of studies reporting declining trends in different measures of adolescents' subjective well-being and related constructs in this period. Overall, more research is needed to better understand HBSC-PISA discrepancies in the U.K., but this is beyond the scope of this technical appendix.

In view of the above, we can be confident about the decline in adolescent subjective well-being observed in the 2010s in the U.K., but we would not be able to affirm this on the basis of evidence from international studies alone due to discrepancies in the available data from these studies. This speaks of some of the limitations in data availability in international studies on child and adolescent well-being discussed in this chapter.

A call for caution

In most countries, the evidence base on child and adolescent subjective well-being trends is far more scarce than in the U.K.. Often, the only data available exists thanks to the incredible efforts of studies such as PISA, HBSC and Children's Worlds. The available data provides solid evidence regarding some of the findings reported in this chapter. However, contrasting evidence emerges in some analyses. For example, with the available international data, we cannot confirm the existence of positive or negative trends in life satisfaction at age 15 in many Central and Eastern Europe in the 5-6 years preceding the pandemic. Overall, caution is needed when interpreting evidence on pre-pandemic trends at age 15 in those countries that present HBSC-PISA discrepancies. National studies can provide further support to trends observed in international studies, as it has been described for the U.K. above. However, in countries lacking

alternative data, caution is needed when making claims about trends during these years for this age group. Further research is essential to better understand the factors explaining these discrepancies.

Endnotes

⁷² Diener et al. (2010); Wierzbicka (2004)

⁷³ Cosma et al. (2023); Inchley (2016); Inchley et al. (2020)

⁷⁴ See HBSC survey protocol, retrieved from: <https://hbsc.org/publications/survey-protocols/>

⁷⁵ See the PISA 2018 Technical Report, retrieved from: <https://www.oecd.org/pisa/data/pisa2018technicalreport/> and <https://www.oecd.org/pisa/pisafaq/#:~:text=PISA%20assesses%20students%20between%20the,at%20grade%207%20or%20higher>

⁷⁶ Casas and González-Carrasco (2019)

⁷⁷ Banks and Smyth (2015)

⁷⁸ Jerrim (2023)

⁷⁹ Atasever et al. (2023)

⁸⁰ Anders et al. (2021)

⁸¹ Andersson and Sandgren Massih (2023); Jerrim (2021)

⁸² Cosma et al. (2020)

⁸³ Anaya and Zamarro (2023)

⁸⁴ Marquez (2023); Von Der Embse et al. (2018)

⁸⁵ Jerrim (2021)

⁸⁶ Anaya and Zamarro (2023)

⁸⁷ Marquez and Main (2020); Von Der Embse et al. (2018)

⁸⁸ See The Children's Society (2023)

⁸⁹ Ball et al. (2023); Sutcliffe et al. (2022)