Economic and Social Well-being of Young Adults in Belarus, Kazakhstan and Poland

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Contents

1. Motivation

Young adults in Central Asia and Eastern Europe have been under many social pressures in recent decades including rising unemployment levels and increasing inequality (Berrington, Billari, Thévenon & de Vilhena, 2017). These pressures have manifested themselves in many ways including a desire to migrate (Williams, Jephcote, Janta & Li, 2017) and in the postponement of their family formation (Perelli-Harris, 2008a, 2008b). It is likely that they may also have negatively affected the well-being of youth and young adults in the region. Yet a lack of cross-nationally comparable data has so far restricted the analysis of the well-being of young adults. In this short paper we draw on a unique comparable dataset to provide some insights on economic and social well-being of young adults in Belarus, Kazakhstan and Poland, and on differences as compared to older age groups. We do so using four indicators: the ability to make ends meet, relative material deprivation, self-reported health and loneliness.

2. Background

This Brief is based on data from the Generations and Gender Survey (GGS) Wave 1 Poland and GGS 2020 data for Belarus and Kazakhstan. In the case of Belarus and Kazakhstan, the data were collected in recent years (2017 and 2018 respectively) and have been little analysed. For the purpose of this analysis, we contrast these two countries with data from Poland collected a few years earlier (2010/11). The choice of Poland is particularly interesting as a reference as it is located within the region of Eastern Europe and is also a part of the European Union and the Schengen Area. This is useful from a comparative standpoint as it shares many similarities with other Western and Central European countries.

As a group these three countries present both similarities and dissimilarities. Geographically, Belarus and Poland share a geographical border within Eastern Europe, whereas Kazakhstan is situated slightly further east in Central Asia. Both Belarus and Kazakhstan were previously part of the Soviet Union until its dissolution in 1991 and have undergone economic restructuring since (Agrawal, 2008). Both Belarus and Kazakhstan share similar scores on the Human Development Index (HDI) (Belarus ranked 53rd and Kazakhstan 58th with 0.81 and 0.80 respectively in 2018) (UNDP, 2018) and have similar levels of GDP per capita (Kazakhstan

with $10,000 and Belarus with $7500) (World Bank, 2020). Poland scores higher than both Belarus and Kazakhstan on the HDI (33rd with 0.87 in 2018) (UNDP, 2018) and has a greater GDP per capita ($15,000 in 2018) (World Bank, 2020). The fertility rates in Belarus and Poland were very similar in 2018 (1.4 and 1.5 respectively), whilst Kazakhstan reported a higher rate of 2.8 in 2018 (World Bank, 2020). Furthermore, Belarus and Poland reported similar levels of youth unemployment in 2018 (young people aged 15-24), standing at 10.6% and 11.7% respectively (World Bank, 2020). Data from 2017 suggests that Kazakhstan has a much lower rate of youth unemployment at 3.8% (World Bank, 2020).

3. Methodology

We use data for Poland from the GGS Wave 1 (DOIs: 10.17026/dans-z5z-xn8g, 10.17026/dans-xm6-a262) and data for Belarus and Kazakhstan from the GGS 2020, see Gauthier, A. H. et al. (2018) or visit the GGP website (https://www.ggp-i.org/) for methodological details. The datasets were combined using the harmonisation syntax provided by the GGP (Deimantas, 2019; Gaut, 2020). There are a total of 44,838 cases in the dataset, however due to missing values for each dependent variable the N used in the analysis varies (see Table 1 for missing values). N ranges between 41,129 and 44,316 across the four models used (see Table 2 for the N for each model). In total, there are 778 missing values in Poland, 3363 in Belarus and 4330 in Kazakhstan.

The dependant variables are constructed in the following ways:

- The ability to make ends meet is a single factor variable *a1002* asking “Thinking of your households’ total monthly income, is your household able to make ends meet?” in the dataset with six possible answers ranging from “very easily” to “with great difficulty”. For the regression analysis this has been treated as a continuous variable between 1 and 6 (the higher the number the less an individual is able to make ends meet).
- Relative material deprivation is constructed by taking the sum of six yes-or-no variables (*a1003_*)* on questions such as whether the individual is able to afford to eat meat or afford to pay for a holiday, providing us with a continuous variable on a

scale of 0 to 6 (where a higher number indicates relatively more deprivation) with a Cronbach's alpha of 0.76.

- Subjective health is reported as a factor variable *a701* asking "How is your health in general?", with answers on a five-category scale ranging from "very good" to "very bad". For the regression analysis this has been treated as continuous ranging from 1 to 5 (where the higher the number the worse the subjective health).

- Finally, loneliness has been constructed according to the de Jong Gierveld Scale (de Jong Gierveld & van Tilburg, 2006) using six variables with the categories "yes", "more or less" and "no" (*a720_ **), on topics such as whether the individual has someone they can lean on, misses having people around or has enough people they feel close to. The six variables have a combined Cronbach's alpha of 0.76. Each category is coded either 0 or 1 according to the scale, and a continuous variable for loneliness is created on a scale of 0 to 6 (where the higher the value the higher the level of loneliness).

For the purposes of this research, young adults are classified as those aged between 18 and 29, with age categorised further into the ranges 30-45, 46-65 and 66-79. The same independent and control variables have been used across all four analyses, namely: age as a categorical variable (see above); respondents' sex as a dummy variable; education as a continuous variable using the ISLED scale (Schröder & Ganzeboom, 2014); whether the respondent has a partner as a dummy variable; whether the respondent has a child as a dummy variable; whether someone is employed or not as a dummy variable; and a categorical variable for the country. The explanatory variables were tested for multicollinearity and there was no evidence to suggest that this is a problem.

This analysis within this report was done using the software R (R Core Team, 2020). Multiple OLS Regression models were used to estimate the effects of age on the four dependent variables, controlling for several factors that may influence the outcomes. For all analyses the focus is on the age gradient across various social and economic well-being indicators (after controlling for other covariates). There is an interaction term between the variables age and country to allow us to make a comparison of the effects of age across the three countries used in the analysis. Testing each model separately without the interaction term against the

respective model fitted with the interaction term shows that the interaction improves the model fit (Ends meet: $F_{(6, 43418)} = 47.47$, $p < .001$; Relative deprivation: $F_{(6, 41135)} = 40.65$, $p < .001$; Health: $F_{(6, 44322)} = 94.66$, $p < .001$; Loneliness: $F_{(6, 42691)} = 7.50$, $p < .001$).[1]

Table 1 shows the summary statistics for all countries combined. For the summary statistics for each individual country, see Appendix 1.

Table 1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
ends_meet	43,786	3.874	1.195	1.000	6.000
deprivation	41,488	1.895	1.688	0.000	6.000
health	44,697	2.346	0.846	1.000	5.000
loneliness	43,056	1.854	1.770	0.000	6.000
age_cat18.29	44,818	0.188	0.391	0.000	1.000
age_cat30.45	44,818	0.282	0.450	0.000	1.000
age_cat46.65	44,818	0.365	0.482	0.000	1.000
age_cat66.79	44,818	0.165	0.371	0.000	1.000
employed	44,838	0.596	0.491	0	1
educ	44,764	49.765	17.829	17.300	90.400
sexmale	44,838	0.417	0.493	0	1
has_child1	44,568	0.748	0.434	0.000	1.000
partner1	44,838	0.607	0.488	0	1
country_labKazakhstan	44,838	0.331	0.471	0	1
country_labBelarus	44,838	0.223	0.416	0	1

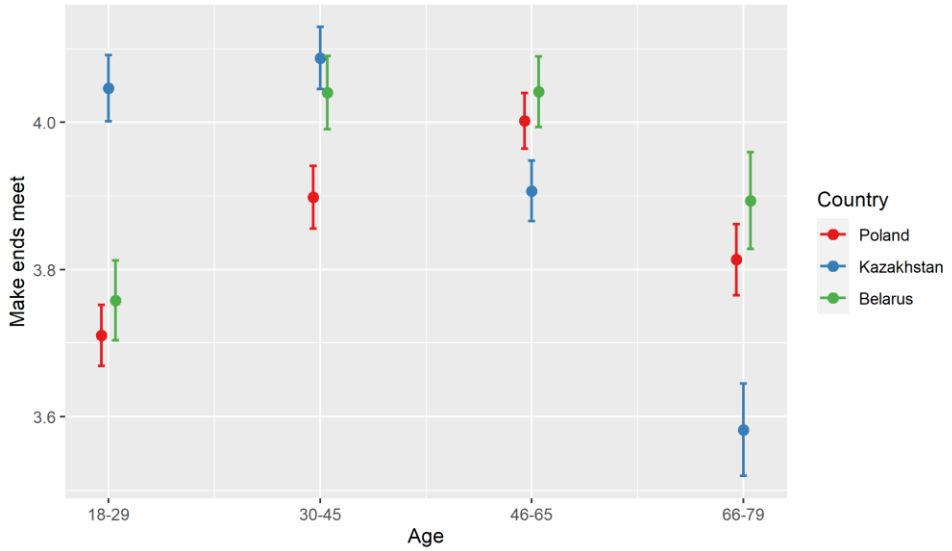
[1] We have run all four models with a three-way interaction between age, country and the employment status, however there were no significant differences between employed or unemployed young adults. For the ease of interpretation, we have only included the two-way interaction between age and country.

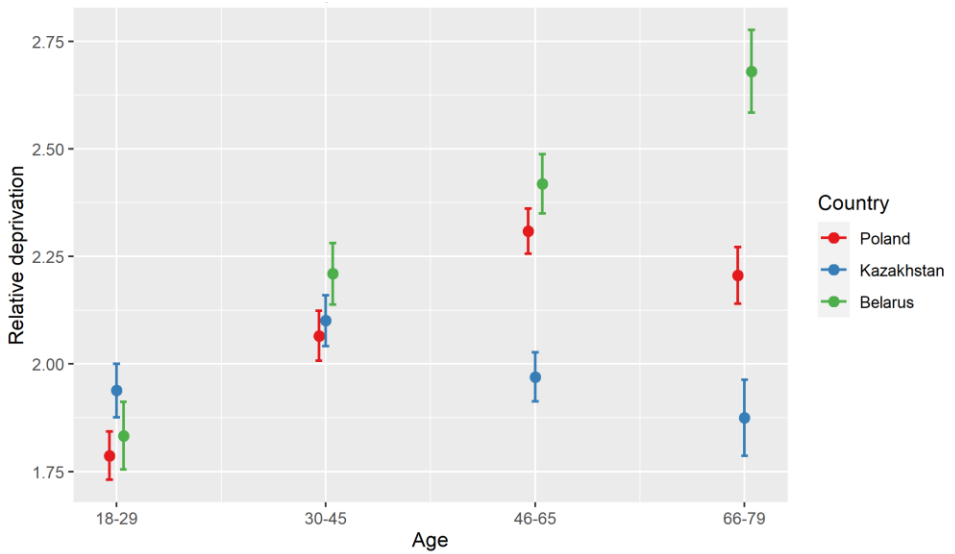
4. Results

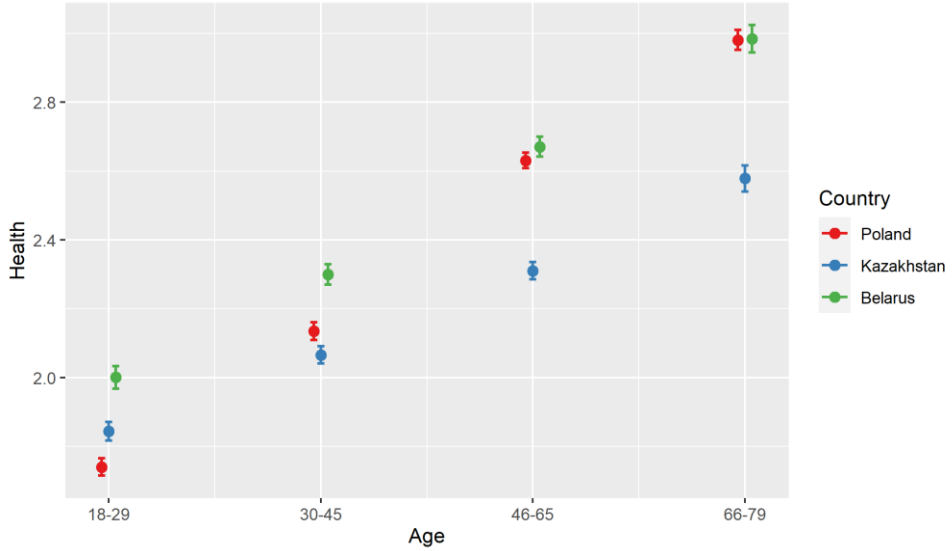
The following sections below report the results from the regression analyses. We begin by reporting a series of graphs that show the predicted value of each indicator of well-being by age. This highlights the interaction effect between age and country and allows us to visually see whether there is an age gradient for each of these variables. Following this will be the specific results for each variable, and finally some of the covariates will be covered. Importantly, for ease of interpretation, in all graphs and regression analyses the dependent variables have been constructed such that a higher score means a lower well-being.

Overall age gradient:

We see a negative age gradient across all our variables for Belarus and Poland meaning that young adults display a higher level of well-being as compared to other age groups. The exception is Kazakhstan where there appears to be no or a positive age gradient for the ability to make ends meet and relative deprivation (see Figures 1-4). The age gradient for loneliness (Figure 4) is strikingly similar across all three countries, with the curve for all countries seeing a sharp increase between adults aged 18-29 and 30-45 and then further increasing gradually. For relative deprivation, young adults and those aged 30-45 share similar predicted values across all three countries, however from there we see a diversion where the predicted value for Kazakhstan decreases, as opposed to an increase in Belarus and Poland. The age gradient is positive for subjective health across all three countries and shows a relatively linear relationship for each.


Make ends meet
4.0
3.8
3.6
18-29
30-45
46-65
66-79
Age
Country
Poland
Kazakhstan
Belarus


Relative deprivation
2.75
2.50
2.25
2.00
1.75
18-29
30-45
46-65
66-79
Age
Country
Poland
Kazakhstan
Belarus


Health
2.8
2.4
2.0
18-29
30-45
46-65
66-79
Age
Country
Poland
Kazakhstan
Belarus

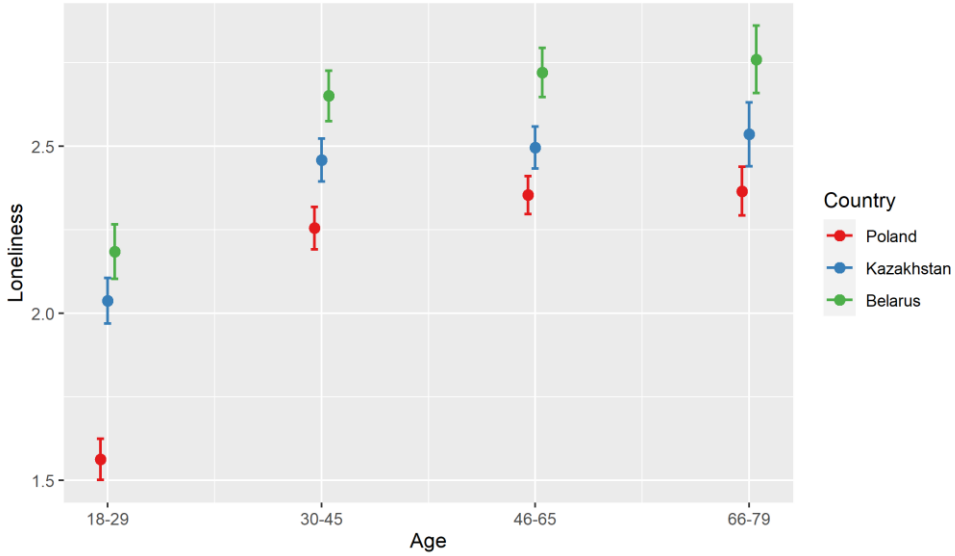

Loneliness
2.5
2.0
1.5
18-29
30-45
46-65
66-79
Age
Country
Poland
Kazakhstan
Belarus

Table 2: Regression analyses of various Economic and Social Well-being variables (Total N = 44,838)

	Make Ends Meet		Relative Deprivation		Material Health		Loneliness	
	B	*S.E*	*B*	*S.E*	*B*	*S.E*	*B*	*S.E*
Intercept	4.53***	0.03	3.23***	0.04	2.10***	0.02	1.89***	0.04
Age (Ref. 18-29)								
30 – 45	0.19***	0.03	0.28***	0.04	0.39***	0.02	0.69***	0.04
46 – 65	0.29***	0.03	0.52***	0.03	0.89***	0.02	0.79***	0.04
66 – 79	0.10***	0.03	0.42***	0.04	1.24***	0.02	0.80***	0.05
Employed	-0.23***	0.03	-0.42***	0.02	-0.22***	0.01	-0.05*	0.02
Sex (Ref. Female)								
Male	-0.10***	0.01	-0.14***	0.02	-0.10***	0.01	0.03	0.02
Education	-0.01***	0.00	-0.02***	0.00	-0.00***	0.00	-0.01***	0.00
Has partner	-0.28***	0.01	-0.57***	0.02	-0.07***	0.01	-0.66***	0.02
Has child	0.21***	0.02	0.23***	0.02	0.09***	0.01	-0.16***	0.02
Country (Ref. Poland)								
Kazakhstan	0.34***	0.03	0.15***	0.04	0.10***	0.02	0.47***	0.04
Belarus	0.05	0.03	0.05	0.05	0.26***	0.02	0.62***	0.05
Age*Country: Kazakhstan								
30 – 45	-0.15***	0.04	-0.12*	0.05	-0.17***	0.02	-0.27***	0.06
46 – 65	-0.43***	0.04	-0.49***	0.05	-0.42***	0.02	-0.33***	0.05
66 – 79	-0.57***	0.04	-0.48***	0.06	-0.51***	0.03	-0.30***	0.07
Age*Country: Belarus								
30 – 45	0.09*	0.04	0.10	0.06	-0.10***	0.03	-0.23***	0.06
46 – 65	-0.01	0.04	0.06	0.06	-0.22***	0.02	-0.26***	0.06
66 – 79	0.03	0.05	0.43***	0.07	-0.26***	0.03	-0.23**	0.07
Model Adj-R^2	0.08		0.16		0.32		0.06	
Model N	43,412		41,129		44,316		42,685	

Note: *p < 0·05; **p < 0·01; ***p < 0·001 (two-tailed tests). Source = GGS Wave 1 Poland and GGS 2020 data for Belarus and Kazakhstan

Making ends meet:

The results of the first model show that across all three countries young adults are more likely to be able to make ends meet when compared to the older generations (30-45: B = .19, t(43412) = 6.91, p < .001; 46-65: B = .29, t(43412) = 11.56, p < .001; 66-79: B = .10, t(43412) = 3.49, P < .001). The predicted values (as seen in Figure 1) suggest a negative age gradient in Poland and Belarus where we see that as age increases, the ability of a person to make ends meet decreases. We do not find support for a negative age gradient in Kazakhstan, however, where we see that as age increases the ability to make ends meet instead increases. The predicted values also show that young adults in Belarus and Poland are more likely to be able to make ends meet than young adults in Kazakhstan, and that on average people find it harder to make ends meet in Kazakhstan than in Belarus and Poland (B = 0.34, t(43412) = 11.54, p < .001).

Relative material deprivation:

Regarding relative material deprivation, the second model suggests that young adults also have lower levels of relative deprivation when compared to the older generations across all three countries (30-45: B = .28, t(41129) = 7.57, p < .001; 46-65: B = .52, t(41129) = 15.28, p < .001; 66-79: B = .42, t(41129) = 10.49, P < .001). The plotted predicted values (see Figure 2) once again show a negative age gradient for Poland and Belarus, whereas this does not appear to be the case in Kazakhstan. Individuals aged 46-65 and 66-79 in Kazakhstan appear to report similar levels of relative deprivation as young adults do, indicating that older generations are able to afford as many necessities as young adults living in Kazakhstan. We see little difference between young adults in each country, and the greatest differences between countries for adults in the 66-79 age range. The predicted values of 1.75-2 seen in the young adults category equate to answering that they are unable to afford an average of 2 items out of the six questions asked.

Subjective health:

For our third model on subjective health we see a significant difference between young adults and the older age groups (30-45: B = .39, t(44316) = 23.82, p < .001; 46-65: B = .89, t(44316) = 58.04, p < .001; 66-79: B = 1.24, t(44316) = 69.28, P < .001) as well as a clear age gradient across all three countries (see Figure 3). This is to be expected as health complications are more likely to get worse or become more pronounced with age. Young adults in Poland are predicted to report a better subjective health than young adults in Belarus or Kazakhstan, whilst it is people in Kazakhstan for the older age groups that report the best subjective health within their age group. The estimated values of 2 for young adults in Belarus would equate to an average answer of "good" on the question asked, whereas the estimated value closer to 3 for adults aged 66-79 would equate to answering "fair".

Loneliness:

Finally, for our fourth model estimating the effects of age on loneliness we see that young adults report significantly lower levels of loneliness than the older generations (30-45: B = .69, t(42685) = 16.98, p < .001; 46-65: B = .79, t(42685) = 20.90, p < .001; 66-79: B = .80, t(42685) = 18.15, P < .001) and we see evidence for a negative age gradient (see Figure 4). Young adults in Poland are predicted to have significantly lower levels of loneliness than other young adults from Kazakhstan and Belarus, and this is the same for the other age groups but to a lesser extent. On average, Belarus has the highest levels of estimated loneliness (B = 0.62, t(42685) = 12.51, p < .001), followed by Kazakhstan (B = 0.47, t(42685) = 10.82, p < .001) The biggest increase in loneliness between groups is that of the transition between young adults and adults aged 30-45, where following we see a smaller increase between the age ranges.

Covariates:

There are several significant covariates within each of our four analyses. The main effect of employment is statistically significant across all four of the variables, contributing to a substantial increase in well-being for the two economic variables (Ends meet: B = -0.23, t(43412) = -16.47, p < .001; Relative deprivation: B = -0.42, t(41129) = -22.07, p < .001). The largest difference in relative material deprivation is seen for individuals that have a partner (B = -0.57, t(41129) = -31.01, p < .001), where individuals living with a partner are estimated to answer

that they are better off than those without. Living with partner is also predicted to have a large impact on the loneliness of an individual (B = -0.66, t(42685) = -33.07, p < .001). Having a child is found to reduce an individual's economic well-being (Ends meet: B = 0.21, t(43412) = 12.86, p < .001; Relative deprivation: B = 0.23, t(41129) = 10.07, p < .001) and also reduce loneliness for an individual (B = -0.16, t(42685) = -5.58, p < .001). Education is shown to have a negative coefficient across all our indicators, with higher educated individuals experiencing greater levels of economic and social well-being (see Table 1).

5. Discussion and Conclusion

This short study aimed to shed light on the social and economic well-being of young adults in Eastern Europe and examine whether young adults report lower levels of economic and social well-being than older cohorts. The regression analysis suggests that there is a negative age gradient across all four of our chosen indicators for Belarus and Poland: the ability to make ends meet, relative economic deprivation, subjective health and loneliness. In other words, young adults report higher level of well-being than older generations. In Kazakhstan we see a negative age gradient for subjective health and loneliness, and instead a positive or neutral gradient for the ability to make ends meet and relative economic deprivation.

The general finding that young people are economically and socially better off than the older generation could be in part due to better access to education and job opportunities. Since the collapse of the Soviet Union in 1990, these countries have seen large increases in GDP per capita (World Bank, 2020) and undergone economic restructuring, changes that may now be benefitting young adults.

One possible explanation for the positive age gradient in Kazakhstan could come from the high cost of living within cities in Kazakhstan. Rent in urban areas of Kazakhstan can be up to 240% more than in the rural areas of the country (Seitz, 2020) and if there is a larger population of young adults living and working in the major cities this could be a reason why young adults have a harder time making ends meet.

The sharp increase in loneliness between young adults and individuals aged 30-45 could be due to several reasons. Firstly, it may be the case that students bring the average level of

loneliness down due to their lifestyles and the way that universities promote student interaction. Furthermore, lifestyle decisions of young adults may mean that they have more time for socialising with friends or encounter people outside their social circle more frequently. Finally, it may also be that young people respond differently to the questions asked in the survey, where for a question such as whether there are people around that they can lean on, having parents around may make a difference. The reasons for this increase are not entirely clear, and more research would be necessary in order to fully understand this occurrence.

These findings are useful for policy makers as they help to clarify where young people stand in relation to older age groups in terms of their economic and social well-being. Despite facing pressures to delay family formation and expressing a desire to migrate, young adults do not report having a lower well-being than older generations. These results run counter to earlier papers from the UNDP and may suggest that social policy is working within these countries to improve the well-being of young adults (Berrington et al., 2017). Further research will be required to explore whether other countries in the region show similar trend, or whether these results are only applicable to Belarus, Kazakhstan and Poland. Additionally, longitudinal analysis would be useful for further research in order to see whether well-being changes alongside key factors highlighted by the UNDP, such as youth unemployment and poverty.

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8. Appendix

Appendix 1. Descriptives Tables by Country

Table 3: Summary Statistics - Poland

Statistic	N	Mean	St. Dev.	Min	Max
ends_meet	19,783	3.876	1.278	1.000	6.000
deprivation	19,873	1.982	1.860	0.000	6.000
health	19,981	2.450	0.949	1.000	5.000
loneliness	19,864	1.712	1.812	0.000	6.000
age_cat18.29	19,982	0.170	0.376	0.000	1.000
age_cat30.45	19,982	0.236	0.425	0.000	1.000
age_cat46.65	19,982	0.391	0.488	0.000	1.000
age_cat66.79	19,982	0.203	0.402	0.000	1.000
employed	19,987	0.514	0.500	0	1
educ	19,913	48.295	16.934	17.300	90.400
sexmale	19,987	0.421	0.494	0	1
has_child1	19,858	0.758	0.428	0.000	1.000
partner1	19,987	0.614	0.487	0	1

Table 4: Summary Statistics - Belarus

Statistic	N	Mean	St. Dev.	Min	Max
ends_meet	9,667	3.859	1.062	1.000	6.000
deprivation	8,328	1.955	1.536	0.000	6.000
health	9,934	2.441	0.806	1.000	5.000
loneliness	9,353	2.093	1.693	0.000	6.000
age_cat18.29	9,979	0.197	0.398	0.000	1.000
age_cat30.45	9,979	0.303	0.460	0.000	1.000
age_cat46.65	9,979	0.341	0.474	0.000	1.000
age_cat66.79	9,979	0.159	0.366	0.000	1.000
employed	9,994	0.654	0.476	0	1
educ	9,994	52.304	17.577	17.300	90.400
sexmale	9,994	0.448	0.497	0	1
has_child1	9,981	0.749	0.434	0.000	1.000
partner1	9,994	0.598	0.490	0	1

Table 5: Summary Statistics - Kazakhstan

Statistic	N	Mean	St. Dev.	Min	Max
ends_meet	14,336	3.883	1.160	1.000	6.000
deprivation	13,287	1.727	1.483	0.000	6.000
health	14,782	2.142	0.671	1.000	5.000
loneliness	13,839	1.897	1.740	0.000	6.000
age_cat18.29	14,857	0.205	0.404	0	1
age_cat30.45	14,857	0.329	0.470	0	1
age_cat46.65	14,857	0.347	0.476	0	1
age_cat66.79	14,857	0.119	0.323	0	1
employed	14,857	0.666	0.471	0	1
educ	14,857	50.027	18.930	17.300	90.400
sexmale	14,857	0.391	0.488	0	1
has_child1	14,729	0.732	0.443	0.000	1.000
partner1	14,857	0.604	0.489	0	1