

Table S1. Measurement and descriptive statistics on all individual and country-level variables.

Variable	Measurement	Mean or share per category	SD
Dependent variables			
Wellbeing	Life satisfaction scale, Range: 0 = extremely dissatisfied - 10 = extremely satisfied	7.22	2.01
Capabilities	Free to decide how to live life. Agree strongly and Agree = 1, Neither agree nor disagree, Disagree and Disagree strongly = 0	0 = 20.00 % 1 = 80.00 %	-
Independent variables at the individual level			
Unemployment	Unemployed = 1, In paid work in in education = 0	0 = 90.38 % 1 = 9.62 %	-
Age	Measured in years	23.52	3.48
Sex	Woman = 1, Man = 0	0 = 51.61 % 1 = 48.39 %	-
Unemployment experience	Unemployed > 3 months = 1, Never unemployed > 3 months = 0	0 = 68.34 % 1 = 31.66 %	-
Education level	Highest level of education completed: ISCED 0-2 = 0, ISCED 3-4 = 1, ISCED 5-6 = 2. In the three-way interactions (Figure 1-5 and Table S5), low education is equal to ISCED 4 or less, and high education is to ISCED 5 or more.	0 = 23.33 % 1 = 45.67 % 2 = 30.99 %	-
Migration background	Born in country = 0, Not born in country = 1	0 = 91.16 % 1 = 8.84 %	-
Limiting longstanding illness	Are you hampered in your daily activities in any way by any longstanding illness, or disability, infirmity or mental health problem? Yes, a lot = 1; Yes, to some extent = 2; No = 3	1 = 1.36 % 2 = 7.97 % 3 = 90.67 %	-
Independent variables at the country level			
LMP expenditure	Total expenditure on labor market policies as % of GDP, divided by unemployment rate.	0.21	0.13
Tracking age	Age of first selection. In years, ranging from age 10 to age 16. Rescaled such that 10 = 0 and 16 = 1	13.98	2.04
Vocational prevalence	Vocational enrollment in upper secondary education, in %. Rescaled such that 0 = 78.96 % and 1 = 13.29 %.	48.82	15.86
Vocational specificity	Students in upper secondary education in a dual system, in %. Rescaled such that 0 = 58.3 % and 1 = 0 %.	17.63	17.35
Tertiary enrollment rate	Share of population aged 20 to 29 years that is enrolled in tertiary education, in %. Rescaled such that 0 = 13.2 % and 1 = 30.7 %.	20.51	4.55
Second chance opportunities	No second chance opportunities = 0, intermediate second chance opportunities = 1, Generous second chance opportunities = 2	0 = 47.42 % 1 = 22.77 % 2 = 29.81 %	-

Table S2. Sample structure

Country	Country abbreviation	Share unemployed aged 18-29	Students / Employed		Unemployed	
			Without tertiary education	Tertiary education	Without tertiary education	Tertiary education
Belgium	BE	.082	368	43	18	5
Bulgaria	BG	.182	604	385	88	37
Czech Republic	CZ	.073	485	127	167	23
Denmark	DK	.060	678	199	44	3
Germany	DE	.061	248	332	37	55
Estonia	EE	.058	665	175	76	8
Ireland	IE	.177	1 088	380	115	15
Greece	GR	.173	605	155	51	12
Spain	ES	.119	769	333	75	16
France	FR	.111	845	375	156	44
Italy	IT	.213	811	294	80	19
Cyprus	CY	.099	496	333	102	32
Lithuania	LT	.066	555	449	108	21
Hungary	HU	.101	362	195	93	65
Netherlands	NL	.045	648	216	116	12
Austria	AT	.045	485	536	188	106
Poland	PL	.077	96	23	6	1
Portugal	PT	.128	94	25	28	13
Slovenia	SI	.070	281	156	29	17
Slovakia	SK	.097	525	251	31	14
Finland	FI	.061	623	343	34	10
Sweden	SE	.075	932	363	117	32
Great Britain	GB	.088	751	175	147	22
Iceland	IS	.046	834	219	98	15
Norway	NO	.032	694	169	66	12
Switzerland	CH	.043	685	151	104	14
Average	-	.089	368	43	83	24

Source: Own calculations from ESS. Note: "Students / Employed" and "Unemployed" display the absolute number of respondents in each category.

Table S3. Country-level variables

Country	Tracking age	Vocational prevalence, %	Vocational specificity, %	Tertiary enrollment rate, %	Second chance opportunities	LMP expenditure, % of GDP	Total unemployment rate
BE	12	55.33	3.3	19.4	Generous	2.09	7.7
BG	13	53.48	N/A	18.4	No	0.29	8.8
CZ	11	78.96	35.5	18.2	No	0.26	6.4
DK	16	54.44	47.7	25.2	Generous	1.58	5.5
DE	10	59.38	45	18.8	No	1.21	7.7
EE	15	30.94	30.9	22.5	No	0.49	9.9
IE	15	32.33	3.8	14.7	Intermediate	1.86	9.6
GR	15	33.94	5.1	29.0	No	0.50	12.7
ES	16	42.54	2.8	19.0	Intermediate	2.35	15.2
FR	15	42.71	11.3	18.5	Intermediate	1.74	8.8
IT	14	60.55	0	19.4	Intermediate	1.03	7.7
CY	15	13.29	N/A	13.2	No	0.64	5.8
LT	16	29.12	N/A	28.6	No	0.45	19.5
HU	11	26.68	13.2	19.0	No	0.50	9.2
NL	12	67.98	20	20.6	N/A	1.34	4.7
AT	10	77.93	32.7	18.5	No	1.27	4.9
PL	15	45.14	6.5	23.8	No	0.40	10.8
PT	15	33.2	N/A	17.5	Generous	1.31	10.6
SI	14	60.81	3.7	27.9	No	0.57	6.3
SK	11	73.21	31.7	16.2	No	0.46	12.7
FI	16	54.02	10.5	30.7	Generous	1.51	7.6
SE	16	58.12	0	22.9	Generous	0.72	7.4
GB	16	31.77	0	14.0	Intermediate	0.22	6.7
IS	16	36.73	16.4	21.9	Intermediate	0.97	3.2
NO	16	59.96	13.3	22.9	Generous	0.32	5.0
CH	12	64.15	58.3	16.7	N/A	1.16	4.3

Source: Individual-level data from ESS. Enrollment and LMP expenditure from Eurostat, tracking age, vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. The indicator of LMP expenditure used in the models is LMP expenditure divided by the unemployment rate.

Table S4 – Correlations between country-level indicators

	Tracking age	Vocational prevalence(reversed)	Vocational specificity(reversed)	Enrollment rate	Generous SCO	Intermediate SCO	LMP expenditure
Tracking age	1						
Vocational prevalence (reversed)	0.50	1					
Vocational specificity (reversed)	0.55	0.43	1				
Enrollment rate	0.33	-0.12	0.03	1			
Generous SCO	0.34	-0.19	0.09	0.37	1		
Intermediate SCO	0.35	0.35	0.44	-0.45		1	
LMP expenditure	-0.05	-0.31	-0.24	0.13	0.53	0.04	1

Note: Correlations between tracking, vocational prevalence, enrollment and LMP-expenditure based on all 26 countries; correlations with vocational specificity and second chance opportunities based on 22 and 24 countries, respectively. Note also that second chance opportunities is a categorical variable.

Table S5. Three-way interaction effects with wellbeing as outcome

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.164***	-1.074***	-1.355***	-1.074***	-.922***
Tertiary education	.544***	.321**	.348***	.348***	.355***
Unemployed x Tertiary education	.626*	.157	1.043**	.394*	.512*
Tracking	.575*				
x Unemployed	.448***				
x Tertiary education	-.367***				
x Unemployed x Tertiary education	-.656†				
Vocational prevalence (reversed)		-.425			
x Unemployed		.392*			
x Tertiary education		-.079			
x Unemployed x Tertiary education		.080			
Vocational specificity (reversed)			-.038		
x Unemployed			.645***		
x Tertiary education			-.087		
x Unemployed x Tertiary education			-1.230*		
Enrollment rate				.401	
x Unemployed				.569***	
x Tertiary education				-.177	
x Unemployed x Tertiary education				-.420	
SCO‡: Generous					.340
x Unemployed					.513***
x Tertiary education					-.158*
x Unemployed x Tertiary education					-.520*
SCO‡: Intermediate					.159
x Unemployed					.191
x Tertiary education					-.090
x Unemployed x Tertiary education					-.519*
Constant	6.619 ***	7.259***	7.095***	6.838***	6.947***
Intraclass correlation (country- year level)	0.7 %	0.7 %	0.6 %	0.7 %	0.7 %
Intraclass correlation (country level)	4.2 %	4.8 %	4.3 %	4.7 %	4.5 %
Akaike information criterion	97888	97920	84738	97909	91501
N individual level	24 108	24 108	21 136	24 108	22 365
N country-year level	90	90	76	90	82
N country level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and LMP expenditure from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05. SCO‡ = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.

Table S6. Multilevel linear models with wellbeing as outcome. Alternative indicators for tracking.

	Model 1	Model 2
Unemployed	-1.071***	-1.006***
Number of school tracks (rescaled and reversed)	.669*	
x Unemployed	.344*	
All or most tracks provide higher education eligibility		.268
x Unemployed		.267**
Constant	6.967***	7.261***
Intraclass correlation (country- year level)	4.2 %	4.5 %
Intraclass correlation (country- level)	0.6 %	0.7 %
Akaike information criterion	95243	94397
N individual-level	23 264	23 264
N country-year level	86	86
N country-level	25	25

Source: Number of school tracks from OECD (2007), higher number of school tracks have been reversed, such that higher values imply more inclusiveness. Data on tracks provide higher education eligibility from Orr et al. (2017). Controlled for survey round, LMP expenditure, age, gender, migration background, unemployment experience, education level, and limiting long-standing illness.

***<0.001 **<0.01 *<0.05. All policy variables are rescaled so as to range from 0 to 1.

Table S7. Multilevel linear models with wellbeing as outcome. Employed and students in separate categories, with employed as reference category.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.049***	-1.115***	-1.199***	-.923***	-.731***
Student	.180**	-.090	.203**	.161**	.257***
Tracking age	.435				
x Unemployed	.320**				
x Student	-.156*				
Vocational prevalence (reversed)		-.565			
x Unemployed		.624***			
x Student		.378**			
Vocational specificity (reversed)			.021		
x Unemployed			.463**		
x Student			-.220*		
Enrollment rate				.404	
x Unemployed				.378*	
x Student				-.191	
SCO‡: Generous					.437
x Unemployed					.346**
x Student					-.345***
SCO‡: Intermediate					.251
x Unemployed					.041
x Student					-.291***
Constant	6.858***	7.615***	7.375***	7.130***	7.187***
Intraclass correlation (country-year level)	0.7 %	0.7 %	0.6 %	0.7 %	0.7 %
Intraclass correlation (country-level)	4.5 %	4.8 %	4.4 %	4.8 %	4.5 %
Akaike information criterion	97402	97871	84713	97876	91446
N individual-level	24 108	24 108	21 136	24 108	22 365
N country-year level	90	90	76	90	82
N country-level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and LMP expenditure from Eurostat, tracking age and vocational specificity from OECD, Vocational prevalence (reversed) from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05. SCO‡ = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.

Table S8. Multilevel linear models with wellbeing as outcome. With self-rated health and subjective income as control variables.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-.803***	-.813***	-.949***	-.667***	-.528***
Tracking age	.303				
x Unemployed	.362**				
Vocational prevalence (reversed)		-.417			
x Unemployed		.436**			
Vocational specificity (reversed)			-.068		
x Unemployed			.450**		
Enrollment rate				.365	
x Unemployed				.279*	
SCO‡: Generous					.295
x Unemployed					.433***
SCO‡: Intermediate					.028
x Unemployed					.131
Constant	6.019***	6.479***	6.283***	6.080***	6.218***
Intraclass correlation (country-year level)	0.7 %	0.6 %	0.4 %	0.6 %	0.5 %
Intraclass correlation (country-level)	3.2 %	3.4 %	3.5 %	3.4 %	3.3 %
Akaike information criterion	94372	94376	81497	94378	88240
N individual-level	23 707	23 707	20 761	23 707	21 995
N country-year level	90	90	76	90	82
N country-level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and LMP expenditure from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, LMP expenditure, age, gender, migration background, unemployment experience, education level, subjective income and self-rated health.

***<0.001 **<0.01 *<0.05 † < .10. SCO‡ = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.

Table S9. Multilevel linear models with wellbeing as outcome. With country youth unemployment rate as control variable.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.233***	-1.174***	-1.302***	-1.158***	-1.106***
Tracking age	.560*				
x Unemployed	.422**				
Vocational prevalence (reversed)		-.565			
x Unemployed		.400*			
Vocational specificity (reversed)			.272		
x Unemployed			.567**		
Enrollment rate				.504	
x Unemployed				.402**	
SCO \ddagger : Generous					.707**
x Unemployed					.282**
SCO \ddagger : Intermediate					.481*
x Unemployed					-.019
Youth unemployment rate	-1.352***	-1.009**	-1.227**	-1.234**	-1.034**
x Unemployed	.229	.284	-.008	.335*	.423*
Constant	8.181***	8.658***	8.313***	8.285***	8.124***
Intraclass correlation (country-year level)	0.6 %	0.6 %	0.5 %	0.7 %	0.7 %
Intraclass correlation (country-level)	6.0 %	6.6 %	5.2 %	6.5 %	4.7 %
Akaike information criterion	97879	97888	84721	97885	91482
N individual-level	24 108	24 108	21 136	24 108	22 365
N country-year level	90	90	76	90	82
N country-level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and youth unemployment rate from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05 † < .10. SCO \ddagger = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.

Table S10. Multilevel linear models with wellbeing as outcome. With GDP per capita rate as control variable.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.098***	-1.082***	-1.245***	-1.016***	-.820***
Tracking age	.186				
x Unemployed	.494***				
Vocational prevalence (reversed)		-.513			
x Unemployed		.488**			
Vocational specificity (reversed)			-.401		
x Unemployed			.557***		
Enrollment rate				.539	
x Unemployed				.444**	
SCO‡: Generous					.282
x Unemployed					.345**
SCO‡: Intermediate					.037
x Unemployed					.095
GDP per capita	1.875***	1.740***	1.452***	1.950***	1.563***
x Unemployed	-.164	0.31	-.124	.041	-.270
Constant	7.022***	7.435***	7.411***	7.034***	7.215***
Intraclass correlation (country-year level)	0.7 %	0.7 %	0.5 %	0.7 %	0.7 %
Intraclass correlation (country-level)	4.6 %	4.4 %	4.9 %	4.1 %	4.7 %
Akaike information criterion	97874	97881	84720	97879	91488
N individual-level	24 108	24 108	21 136	24 108	22 365
N country-year level	90	90	76	90	82
N country-level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and GDP per capita from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05 † < .10. SCO‡ = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.

Table S11. Multilevel linear models with wellbeing as outcome. With expenditure on passive and active labor market policies as control variables.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.111***	-.987***	-1.229***	-1.026***	-.755***
Tracking age	.407				
x Unemployed	.503***				
Vocational prevalence (reversed)		-.360			
x Unemployed		.364*			
Vocational specificity (reversed)			.230		
x Unemployed			.513*		
Enrollment rate				.299	
x Unemployed				.670***	
SCO \ddagger : Generous					.259
x Unemployed					.545***
SCO \ddagger : Intermediate					.219
x Unemployed					-.011
PLMP-expenditure	.508	.487	.280	.519	.354
x Unemployed	.431*	.322	.090	.645	.363
ALMP-expenditure	1.176**	1.062	1.264**	1.112*	1.167
x Unemployed	-.911**	-.566	-.293	-1.261**	-1.481***
Constant	7.176***	7.64 ***	7.255***	7.327***	7.410***
Intraclass correlation (country-year level)	0.7 %	0.7 %	0.5 %	0.7 %	0.7 %
Intraclass correlation (country-level)	4.3 %	4.7 %	3.8 %	4.7 %	4.7 %
Akaike information criterion	94385	94401	81251	94387	91471
N individual-level	24 108	24 108	21 136	24 108	22 365
N country-year level	90	90	76	90	82
N country-level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and LMP-expenditure from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05 † < .10. SCO \ddagger = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.

Table S12. Multilevel linear models with wellbeing as outcome. Limited to countries with full country data.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.060***	-.886***	-1.272***	-1.109***	-.824***
Tracking age	.518*				
x Unemployed	.363*				
Vocational prevalence (reversed)		-.476			
x Unemployed		.123			
Vocational specificity (reversed)			.196		
x Unemployed			.551**		
Enrollment rate				.517	
x Unemployed				.673***	
SCO‡: Generous					.565*
x Unemployed					.221
SCO‡: Intermediate					.121
x Unemployed					.070
Constant	7.134***	7.697***	7.946***	7.230***	7.430***
Intraclass correlation (country-year level)	0.7 %	0.7 %	0.7 %	0.7 %	0.6 %
Intraclass correlation (country-level)	3.1 %	3.1 %	4.1 %	3.6 %	3.1 %
Akaike information criterion	78353	78366	78357	78346	78364
N individual-level	19 393	19 393	19 393	19 393	19 393
N country-year level	67	67	67	67	67
N country-level	20	20	20	20	20

Source: Individual-level data from ESS. Enrollment and LMP expenditure from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, LMP expenditure, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05. SCO‡ = Second chance opportunities.

Note: the Netherlands, Switzerland Bulgaria, Cyprus, Lithuania and Portugal excluded. All policy variables are rescaled so as to range from 0 to 1.

Table S13. Multilevel linear models with wellbeing as outcome. Random slope for unemployment.

	Model 1	Model 2	Model 3	Model 4	Model 5
Unemployed	-1.075***	-1.000***	-1.279***	-.955***	-.817***
Tracking age	.406				
x Unemployed	.452*				
Vocational prevalence (reversed)		-.428			
x Unemployed		.484*			
Vocational specificity (reversed)			-.075		
x Unemployed			.564*		
Enrollment rate				.340	
x Unemployed				.361	
SCO‡: Generous					.312
x Unemployed					.344
SCO‡: Intermediate					.131
x Unemployed					.115
Constant	7.176***	7.693***	7.51***	7.314***	7.428***
Intraclass correlation (country-year level)	0.6 %	0.6 %	0.6 %	0.7 %	0.7 %
Intraclass correlation (country-level)	4.6 %	4.7 %	4.4 %	4.7 %	4.5 %
Variance component for unemployment (country-year level)	.026	.016	.021	.006	.014
Variance component for unemployment (country-level)	.087	.097	.053	.099	.098
Akaike information criterion	97825	97828	84687	97828	78364
N individual-level	24 108	24 108	21 136	24 108	22 365
N country-year level	90	90	76	90	82
N country-level	26	26	22	26	24

Source: Individual-level data from ESS. Enrollment and LMP expenditure from Eurostat, tracking age and vocational specificity from OECD, vocational prevalence from UNESCO, second chance opportunities from Eurydice. Controlled for survey round, LMP expenditure, age, gender, migration background, unemployment experience, education level and limiting long-standing illness.

***<0.001 **<0.01 *<0.05. SCO‡ = Second chance opportunities. All policy variables are rescaled so as to range from 0 to 1.