

Twin Research and Human Genetics

Education in twins and their parents across birth cohorts over 100 years: an individual-level pooled analysis of 42 twin cohorts

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Supplementary table S1. Original classifications of individual education, the corresponding numbers of education years and the proportions of twin individuals by education categories and zygosity by twin cohort.¹

Original label	Number of years	Males (%)			Females (%)		
		MZ	SSDZ	OSDZ	MZ	SSDZ	OSDZ
Australian Twin Registry							
Did not go to school	4	0	0	0	0	0	0
8 years or below	8	0	0	1	1	1	0
9 years or equivalent	9	1	0	0	3	2	3
10 years or equivalent	10	2	3	4	8	10	6
11 years or equivalent	11	3	4	3	3	3	3
12 years or equivalent	12	6	15	10	8	8	6
VET certificate I or II	13	2	0	0	3	3	5
VET certificate III or IV or trade certificate	14	14	19	20	10	8	6
VET Diploma or advanced diploma	15	10	10	7	8	7	16
Bachelor degree	16	30	25	23	26	22	23
Graduate diploma or graduate certificate	17	17	14	15	18	20	25
Postgraduate degree (masters / PhD)	18	16	11	17	14	16	8
N of twin individuals		352	80	109	1361	374	110
Berlin Twin Register Health TwiSt							
9 years of below	8	13	15	8	8	0	8
10 years	10	43	46	62	43	64	62
13 years	13	14	8	15	22	29	15
Professional School	14	10	31	8	11	7	8
College/University	18	20	0	8	16	0	8
N of twin individuals		84	13	13	76	14	13
Bielefeld Longitudinal Study of Adult Twins							
None	0	3	0	6	4	1	4
Elementary school	4	5	4	6	10	7	1
Secondary school I	9	5	7	9	8	9	7
Secondary school II	10	17	15	17	29	25	32
High school or	13	38	41	34	32	36	31

Technical high school							
Technical college	17	12	15	14	7	8	8
University	18	21	18	14	11	15	17
N of twin individuals		213	68	65	823	307	75
California Twin Program							
8 years or less	8	0	0	0	0	0	0
9-11 years	10	3	4	5	2	3	3
12 years	12	20	21	22	21	22	24
13-15 years	14	31	32	33	37	36	37
16 years	16	17	16	15	15	15	14
17 years or more	18	29	25	25	24	24	22
N of twin individuals		4052	3809	3425	6200	5683	3428
Carolina African American Twin Study of Aging²							
9 years or less	exact years	15	7	3	13	5	2
10 years	10	2	3	6	1	3	3
11 years	11	11	8	6	4	7	5
12 years	12	40	32	36	27	36	39
13 years	13	3	3	5	4	3	8
14 years	14	10	14	14	13	15	9
15 years	15	3	9	3	2	2	8
16 years	16	15	15	15	20	15	20
17 years	17	0	0	6	2	0	0
18 years	18	2	3	3	7	8	8
19 years	19	0	4	0	1	3	0
20 years	20	0	3	3	6	3	0
N of twin individuals		62	72	66	111	118	66
Colorado Twin Registry							
None	0	0	0	0	0	0	0
Elementary/Junior High School	9	1	1	0	1	2	1
GED or High School Diploma	12	47	51	36	39	43	28
Vocational or Technical Diploma	13	3	2	8	5	8	7
Associate degree or R.N. Diploma	14	9	10	8	9	9	7
Bachelor Degree	16	34	33	40	40	34	48
Master's Degree	18	5	3	8	5	4	8
Doctorate: M.D.,	20	1	1	0	1	1	1

Ph.D., J.D., etc.							
N of twin individuals		507	370	237	686	412	241
Finnish Older Twin Cohort							
Less than Primary School	3	3	3	1	3	4	0
Primary School	6	40	44	70	40	42	62
Primary School and at least 1 year of education such as vocational training	7	31	30	5	22	24	4
Upper Primary School	9	4	4	10	8	7	16
Junior High School and at least 1 year of education such as vocational training	10	9	9	2	11	10	3
High School graduate	12	1	1	13	2	2	15
High School graduate and at least 1 year of education	13	5	4	0	9	7	0
University degree	18	7	6	0	5	5	0
N of twin individuals		3378	8022	1445	4082	8380	1455
FinnTwin12							
No Primary School	6	0	0	1	0	0	0
Primary School	9	6	8	6	4	5	6
Vocational School	11	39	35	38	24	26	23
Matriculation examination	12	43	46	39	52	42	43
Diploma from University of Applied Sciences	16	7	7	7	12	17	19
University Graduate	18	5	4	8	9	11	9
N of twin individuals		478	443	462	658	551	577
FinnTwin16							
Primary School	9	4	3	4	2	2	3
Vocational School	11	23	32	31	15	18	17
Community College degree or matriculation examination	12	19	20	22	24	21	23
Diploma from University of Applied Sciences	16	26	22	20	29	27	27
University graduate	18	29	23	23	30	31	30

N of twin individuals		506	611	621	794	671	765
East Flanders Prospective Twin Survey							
No diploma	3	0	0	0	0	0	0
Primary education or special primary education	6	1	0	2	1	0	2
Special secondary education or lower secondary general or lower secondary technical	9	8	7	12	5	3	7
Lower secondary professionals or higher secondary general or higher secondary technical or higher secondary professionals	12	57	59	60	54	50	51
Non-university higher education: short type	14	17	16	16	25	34	33
Non-university higher education: long type	16	8	7	5	5	4	2
University and post- university	18	10	12	5	9	9	5
N of twin individuals		226	92	43	256	98	43
Hungarian Twin Registry							
Less than 8 years (below lower secondary, no vocational education)	6	6	6	13	9	8	12
9-10 years (lower secondary, no vocational education)	9	15	6	6	12	14	0
11-12 years (lower secondary plus vocational school)	11	19	44	25	14	28	35
13-16 years (upper secondary, vocational college)	14	20	0	19	17	20	6
University level or equivalent (e.g.	18	41	44	38	48	30	47

university of applied sciences)							
Doctoral degree	20	0	0	0	0	0	0
N of twin individuals		18	16	146	50	17	54
Italian Twin Registry							
None	0	0	0	0	0	0	0
Elementary School (5 years)	5	3	3	3	3	3	4
Middle School (3 years)	8	18	21	20	13	14	15
High School (5 years)	13	65	64	64	66	69	67
University (4/5 years)	16	14	12	13	18	14	14
N of twin individuals		2054	1271	1377	3421	1910	1381
Korean Twin-Family Register							
Did not go to school	0	0	0	0	0	0	0
Dropped out of Elementary School	3	0	0	0	1	0	0
Graduated Elementary School or dropped out of Middle School	6	5	8	0	4	9	0
Graduated Middle School or dropped out of High School	9	8	8	0	6	5	0
Graduated High School	12	28	27	0	37	46	0
Graduated Community College	13	11	13	0	8	10	0
Dropped out of University	14	3	3	0	3	2	0
Graduated University	18	35	34	0	34	27	0
Graduate School or more	20	11	6	0	7	2	0
N of twin individuals		397	106	0	699	133	0
Mid-Atlantic Twin Registry							
Elementary School (0-7 years)	6	1	2	2	1	1	0
Elementary School (8 years)	8	2	3	3	3	3	3
High School (1-3 years)	10	7	7	10	8	9	8
High School (4 years)	12	27	29	29	36	36	36
College (1-3 years)	15	24	25	24	28	27	25

College (4+ years)	18	39	36	33	25	24	27
N of twin individuals		1537	1142	1317	3643	2316	1322
Minnesota Twin Family Study²							
9 years or less	exact years	16	20	13	18	21	14
10 years	10	1	1	1	0	1	1
11 years	11	1	2	1	1	1	1
12 years	12	25	27	30	33	32	35
13 years	13	7	5	7	11	11	13
14 years	14	13	12	11	9	8	9
15 years	15	3	4	4	4	4	5
16 years	16	18	17	18	15	15	16
17 years	17	6	5	5	3	3	3
18 years	18	5	4	4	3	3	3
19 years	19	3	2	2	1	1	1
20 years	20	2	1	2	1	1	0
21 years	21	2	1	2	1	1	1
N of twin individuals		1145	979	815	1530	1393	794
Murcia Twin Registry							
Illiterate	0	0	0	0	0	0	0
No studies (just reading and writing)	3	0	2	1	0	0	2
Primary studies	4	4	3	9	9	13	10
General secondary education	6	26	33	34	31	39	40
Professional education (FP1)	7	28	27	24	27	26	22
Superior secondary education	9	9	7	4	12	7	6
Professional education (FP2) or	12	20	17	15	10	8	12
University – medium degree	15	6	7	5	8	4	3
University – high degree	17	6	4	8	3	3	4
N of twin individuals		250	315	269	431	435	267
NASC-NRC Twin Cohort²							
9 years or less	exact years	8	10	0	0	0	0
10 years	10	5	5	0	0	0	0
11 years	11	4	4	0	0	0	0

12 years	12	30	29	0	0	0	0
13 years	13	11	11	0	0	0	0
14 years	14	7	9	0	0	0	0
15 years	15	3	3	0	0	0	0
16 years	16	17	15	0	0	0	0
17 years	17	3	2	0	0	0	0
18 years	18	6	5	0	0	0	0
19 years	19	2	2	0	0	0	0
20 years	20	5	5	0	0	0	0
N of twin individuals		4885	4965	0	0	0	0
Netherlands Twin cohort							
Primary School only	9	2	3	3	2	2	2
Lower Vocational School or Lower Secondary School	11	14	13	10	14	16	12
Intermediate Vocational School or Intermediate/Higher Secondary School	13	37	50	47	25	34	46
Higher Vocational School	14	25	23	26	31	28	26
University	18	22	11	14	29	20	14
N of twin individuals		851	540	655	2064	1061	655
Norwegian Twin Registry							
Compulsory School	9	30	32	0	32	31	0
Secondary School, low level	11	37	38	0	45	43	0
Secondary School, high level	14	12	12	0	13	14	0
University	18	21	19	0	10	11	0
N of twin individuals		1893	2262	0	2480	2786	0
Osaka University Aged Twin Registry²							
12 years or less	12	49	64	20	33	38	40
13	13	8	2	0	1	8	0
14	14	3	5	20	18	31	0
15	15	0	0	0	9	10	20
16	16	26	19	40	29	12	40
17	17	1	0	0	3	2	0
18 years more	18	13	10	20	7	0	0
N of twin individuals		86	42	5	234	52	5
Qingdao Cohort of							

Adults							
Illiteracy or half-illiteracy	0	2	2	1	2	1	4
Primary School	6	14	19	10	11	8	22
Junior High School	9	50	48	50	38	43	34
Senior High School	12	20	18	20	24	24	22
Bachelor or diploma	16	14	11	19	26	25	17
Master degree and above	18	0	2	0	0	0	0
N of twin individuals		292	96	94	328	102	94
Queensland Twin Register							
Pre-primary education	6	0	0	0	0	0	0
Primary education or first stage of basic education	9	2	2	3	4	4	2
Lower secondary or second stage of basic education	12	13	14	14	20	19	16
Upper secondary education	13	16	20	20	21	21	22
Post-secondary non-tertiary education	14	30	30	29	23	24	25
First stage of tertiary education	16	23	19	19	21	21	22
Second stage of tertiary education	18	15	15	15	11	11	11
N of twin individuals		3028	2200	2213	5489	3830	2240
Sri Lanka Twin Study							
Not had school education	0	1	0	1	1	1	2
From grade 1 up to grade 5	5	4	6	5	5	8	4
From grade 6 up to O/LS	9	42	50	49	43	42	45
Passed O/LS	12	17	17	14	16	15	15
Up to A/LS or passed A/L	14	27	19	27	27	26	25
University or higher	18	10	8	4	8	8	9
N of twin individuals		344	212	253	487	302	253
Swedish Twin Cohort							
Elementary school	9	81	84	36	81	85	37

Secondary School	12	12	10	40	10	9	35
Bachelor degree	14	2	2	8	3	2	9
Master degree	18	5	4	16	5	4	19
N of twin individuals		4311	6664	5374	5159	7420	5177
Swedish Young Male Twins Study							
Primary School < 9 years	7	0	0	0	0	0	0
Primary School 9 years	9	4	4	0	0	0	0
Secondary School 10-11 years	11	10	9	0	0	0	0
Secondary School >= 12 years	13	36	39	0	0	0	0
Post-secondary School < 15 years	14	17	16	0	0	0	0
Post-secondary School >= 15 years	16	34	31	0	0	0	0
PhD >= 19 years	19	1	1	0	0	0	0
N of twin individuals		1218	912	0	0	0	0
Vietnam Era Twin Study of Aging²							
9 years or less	exact years	0	1	0	0	0	0
10 years	10	1	1	0	0	0	0
11 years	11	2	1	0	0	0	0
12 years	12	38	40	0	0	0	0
13 years	13	5	7	0	0	0	0
14 years	14	22	20	0	0	0	0
15 years	15	3	2	0	0	0	0
16 years	16	21	18	0	0	0	0
17 years	17	2	1	0	0	0	0
18 years	18	5	7	0	0	0	0
19 years	19	1	0	0	0	0	0
20 years	20	1	2	0	0	0	0
N of twin individuals		698	530	0	0	0	0
Washington State Twin Registry							
Never attended school or only attended kindergarten	0	0	0	0	0	0	0
Grade 1-8	7	5	4	5	5	4	5
Grade 9-11	10	8	8	8	5	4	5
Grade 12/ High School	12	24	26	25	21	24	24

Graduate/GED							
Some College	13	22	21	24	25	25	26
Associate's degree	14	7	8	7	9	9	8
Bachelor's degree	16	20	19	19	21	20	19
Graduate or professional degree	18	15	15	12	14	14	13
N of twin individuals		3057	1394	1770	5372	2441	1772

¹Only twin individuals with information on the sex of co-twins are included to separate same-sex and opposite sex pairs.

²Education reported as exact number of years

Supplementary table S2. Original classifications of maternal and paternal education, the corresponding number of education years and the proportions of twin individuals by parental education categories and zygosity in participating twin cohorts.

Original label	Number of years	Maternal education (%)		Paternal education (%)	
		MZ twins	DZ twins	MZ twins	DZ twins
Australian Twin Registry¹					
11 years or less	exact years	48	48	43	44
12	12	10	12	10	11
13	13	4	4	2	3
13	14	5	3	8	6
15	15	9	6	9	7
16	16	12	12	14	15
17	17	8	9	7	8
18	18	4	4	7	5
N of twin individuals		1577	602	1554	594
Boston University Twin Project					
Less than 7th grade	6	0	0	0	1
Junior High School	9	1	1	1	1
Some High School (10th/11th grade)	10	0	1	2	2
High School graduate	12	8	2	10	7
Trade School	13	3	2	4	1
Some College	14	9	14	14	16
College graduate	16	36	45	36	40
Some graduate study	17	8	5	5	6
Graduate degree	18	36	32	29	26
N of twin individuals		284	326	280	319
California Twin Program					
8 years or less	8	8	8	11	13
9-11 years	10	9	9	9	10
12 years	12	38	38	29	30
13-15 years	14	25	24	22	21
16 years	16	10	10	12	11
17 years of more	18	10	10	16	15
N of twin individuals		10202	16205	9935	15884
Carolina African American Twin Study of Aging¹					
11 years or less	exact	42	44	56	52

	years				
12 years	12	40	34	25	29
13 years	13	2	1	1	3
14 years	14	5	4	5	2
15 years	15	1	0	1	1
16 years	16	6	11	8	9
18 years	18	2	4	2	2
19 years	19	1	0	1	0
20 years or more	exact years	0	1	2	1
N of twin individuals		139	276	117	217
Child and Adolescent Twin Study in Sweden					
Basic education (year 0-9) or equivalent	9	4	5	12	11
High School or equivalent	12	48	44	52	52
University or college level	18	48	51	36	37
N of twin individuals		1040	1921	1018	1874
Colorado Twin Registry¹					
11 years or less	exact years	2	3	4	2
12 years	12	24	21	21	18
13 years	13	15	12	14	9
14 years	14	17	13	13	15
15 years	15	5	5	5	4
16 years	16	24	28	26	30
17 years	17	1	4	3	3
18 years	18	9	12	9	13
19 years	19	1	1	2	2
20 years or more	exact years	1	1	4	3
N of twin individuals		1018	982	901	884
East Flanders Prospective Twin Survey					
No diploma	3	6	6	4	3
Primary or special primary education	6	19	21	12	15
Special secondary or lower secondary general or lower secondary	9	14	13	15	21

technical education					
Lower secondary professional or higher secondary general or higher secondary technical or higher secondary professional education	12	33	32	32	25
Non-university higher education: short type	14	25	21	18	12
Non-university higher education: long type	16	0	1	6	6
University and post-university education	18	4	5	12	19
N of twin individuals		447	300	432	291
FinnTwin12					
Less than Lower Primary School	3	0	0	0	0
Less than Lower Primary School+ maximum of two years of vocational training	4	0	0	0	0
Less than Lower Primary School+ more than two years of vocational training	5	0	0	0	0
Lower Primary School	6	12	15	22	26
Lower Primary School+ maximum of two years of vocational training	7	8	8	12	12
Lower Primary School+ more than two years of vocational training	8	7	9	14	14
Primary School	9	10	7	7	5
Primary School+ maximum of two years of vocational training	10	9	11	7	6
Primary School+ more than two years of vocational training	11	17	14	13	13
Matriculation examination	12	3	3	2	1
Matriculation examination + maximum of two years of vocational training	13	0	0	0	0

Matriculation examination + more than two years of vocational training	14	8	6	2	2
Matriculation examination + more than two years of vocational training	16	11	11	7	8
University degree	18	13	15	14	14
N of twin individuals		1646	3153	1464	2838
FinnTwin16					
Primary education or other education	9	26	25	22	20
Primary education and at least one year of high school or vocational school	10	44	50	55	57
Matriculation examination	12	4	4	4	5
Matriculation examination and one year or education	13	23	18	15	14
University degree	18	2	3	5	4
N of twin individuals		914	1908	844	1736
Gemini study					
No qualification	4	3	5	10	8
CSE, GCSE, O level	9	15	13	22	19
Vocational qualification (GNVQ, BTEC)	10	16	13	15	15
A or AS level	12	13	10	7	8
HNC or HND	14	11	10	10	10
Undergraduate	16	28	29	26	24
Postgraduate	18	14	19	11	18
N of twin individuals		1160	2335	1112	2249
Italian Twin Registry					
None	0	0	0	0	0
Elementary School (5 years)	5	2	2	3	2
Middle School (3 years)	8	19	18	25	19
High School (5 years)	13	50	49	45	45
University (4/5 years)	18	29	32	28	34
N of twin individuals		2009	3758	1985	3701
Korean Twin-Family Register					
Did not go to school	0	12	20	5	10

Dropped out of elementary school	3	12	10	6	8
Graduated elementary school or dropped out of middle school.	6	32	36	29	25
Graduated middle school or dropped out of high school	9	12	8	11	14
Graduated high school	12	25	18	26	19
Graduated community college	13	1	0	1	3
Dropped out of university	14	1	0	4	5
Graduated university	18	6	7	14	14
Graduate school or more	20	0	0	3	2
N of twin individuals		771	155	771	155
Longitudinal Israeli Study of Twins¹					
11 years or less	exact years	0	1	1	4
12 years	12	24	17	28	26
13 years	13	3	4	4	5
14 years	14	3	8	9	9
15 years	15	10	18	16	13
16 years	16	17	22	13	17
17 years	17	17	8	6	8
18 years	18	16	12	9	8
19 years	19	2	2	3	3
20 years or more	exact years	7	8	11	8
N of twin individuals		175	568	159	519
Michigan Twins Study					
8 th grade or less	8	1	0	1	1
9 th grade	10	0	1	1	1
10 th grade	11	1	1	1	1
11 th grade	12	1	1	2	2
12 th grade	13	17	14	24	21
1 year of college	14	11	10	10	9
2 years of college	15	15	15	13	14
3 years of college	16	7	7	4	4
4 years of college	17	22	23	20	20
5 years of college	18	7	6	4	4
6 years of college	19	6	7	6	6
Post graduate	22	14	16	14	17
N of twin individuals		5228	12155	5082	11877

Mid-Atlantic Twin Registry					
Elementary School (0-7 years)	6	12	13	16	18
Elementary School (8 years)	8	16	16	19	18
High School (1-3 years)	10	14	13	14	14
High School (4 years)	12	32	30	23	21
College (1-3 years)	15	15	16	13	13
College (4+ years)	18	10	12	16	17
N of twin individuals		4553	5303	4372	5118
Minnesota Twin Family Study (adults)¹					
9 years or less	exact years	22	28	38	45
10 years	10	4	4	4	4
11 years	11	3	3	2	2
12 years	12	38	37	27	26
13 years	13	7	6	4	3
14 years	14	11	9	7	6
15 years	15	3	3	2	1
16 years	16	11	9	10	8
17 years	17	1	1	1	1
18 years	18	1	1	2	1
19 years	19	0	0	1	0
20 years	20	0	0	3	2
N of twin individuals		2324	4177	2326	4138
NAS-NRC Twin Cohort					
11 years or less	exact years	51	57	63	64
12	12	34	26	20	19
13	13	2	3	2	1
14	14	5	6	4	3
15	15	1	1	1	1
16	16	6	8	7	7
17	17	0	0	0	1
18 or more	exact years	0	1	3	4
N of twin individuals		1962	1815	1969	1846
Netherlands Twin cohort (children)					
Primary education	9	4	5	6	6
Pre-vocational secondary education	12	29	30	29	28

Secondary vocational education	14	42	41	35	35
Higher professional education	16	18	16	17	18
University	18	7	7	13	13
N of twin individuals		11453	22885	11168	22356
Norwegian Twin Registry					
Compulsory School	9	75	76	72	72
Secondary School, low level	11	19	18	17	17
Secondary School, high level	14	4	4	5	6
University	18	2	2	6	6
N of twin individuals		4743	6177	4648	6084
Portugal Twin Cohort					
Incomplete Primary School	3	2	5	6	7
1st cycle	6	47	36	45	37
2nd cycle	9	9	19	15	20
3rd cycle	12	14	11	15	10
Secondary education	14	22	14	13	21
Bachelor's or equivalent level	16	0	4	1	2
Master's or equivalent level	18	6	10	4	3
Doctoral or equivalent level	20	0	1	0	0
N of twin individuals		172	258	168	250
Qingdao Twin Cohort of Children					
Illiteracy	3	4	4	1	1
Primary School	6	17	20	9	7
Junior School	9	46	44	44	54
Senior School	12	16	15	25	19
Secondary School	13	6	7	8	6
Junior College	14	7	5	9	6
College	18	4	5	5	8
N of twin individuals		500	443	470	399
Southern California Twin Register					
Less than 7th grade	6	0	0	0	0
Junior high school	9	0	0	0	0
Partial high school 10th or 11th grade	10	19	13	22	16

High school graduate	12	18	17	26	24
Partial college, at least one year of specialized training	14	30	32	19	25
Standard college or university graduation	16	23	25	21	23
Graduate/professional training	18	10	13	12	13
N of twin individuals		665	858	640	822
South Korea Twin Registry					
Elementary School	6	3	2	2	2
Junior High School	9	5	5	4	4
Senior High School	12	56	48	46	31
University	16	32	42	41	53
Graduate level and above	18	3	4	6	9
N of twin individuals		1337	932	1337	932
TCHAD-study					
Compulsory (9-year comprehensive) school	9	16	13	22	20
2 years in upper secondary school	11	46	42	37	35
3-4 years in upper secondary school	13	9	13	17	16
University degree	18	29	32	24	29
N of twin individuals		962	1387	878	1216
Texas Twin Project¹					
11 years or less	exact years	9	4	5	4
12 years		1	1	3	1
13 years		5	7	11	11
14 years		1	2	0	2
15 years		3	6	2	2
16 years		18	15	15	17
17 years		2	6	4	5
18 years		30	28	37	30
19 years		5	5	3	5
20 years or more	exact years	25	27	19	24
N of twin individuals		185	344	185	336
Turkish Twin Study					
Illiterate		15	20	5	3
Primary		47	53	30	45
Secondary		11	12	12	19

High	12	18	8	28	22
University	16	8	6	21	11
Graduate	18	1	0	3	1
N of twin individuals		213	371	211	371
Vietnam Era Twin Registry¹					
11 years or less	exact years	29	32	44	48
12	12	51	55	34	36
13	13	7	5	6	6
14	14	4	3	5	3
15	15	1	2	1	2
16	16	5	2	5	3
17	17	1	0	1	1
18 years or more	exact years	1	1	3	1
N of twin individuals		693	528	679	524
West Japan Twins and Higher Order Multiple Births Registry					
Junior High School	9	0	0	1	0
Senior High School	12	23	15	23	14
Junior College	14	21	29	1	1
Technical School	15	15	14	9	4
University	16	36	37	55	66
Graduate School	18	4	5	10	14
N of twin individuals		414	407	414	407

¹Education reported as exact number of years

Supplementary table S3. The regression coefficients of individual education for same-sex and opposite-sex dizygotic twins as compared to monozygotic twins by sex and birth year.

Birth year	Same-sex DZ twins ¹		Opposite-sex DZ twins ¹		P-value of zygosity ¹
	β	95% CI	β	95% CI	
Men					
1890-1899	-0.15	-3.71, 3.41	-3.29	-7.69, 1.10	0.1707
1900-1909	-0.39	-1.10, 0.31	-1.57	-2.93, -0.20	0.0563
1910-1919	-0.36	-0.64, -0.07	-0.55	-1.03, -0.06	0.0144
1920-1929	-0.25	-0.39, -0.11	-0.27	-0.55, 0.01	0.0013
1930-1939	-0.11	-0.32, 0.11	-0.09	-0.33, 0.15	0.6013
1940-1949	-0.37	-0.53, -0.22	-0.60	-0.75, -0.45	<0.0001
1950-1959	-0.29	-0.42, -0.18	-0.24	-0.36, -0.11	<0.0001
1960-1969	0.03	-0.13, 0.20	-0.06	-0.21, 0.10	0.5065
1970-1979	-0.16	-0.29, -0.02	-0.25	-0.40, -0.10	0.0026
1980-1989	-0.13	-0.27, 0.01	-0.13	-0.26, 0.00	0.0885
1990-1999	-0.40	-0.78, -0.02	0.14	-0.14, 0.43	0.0178
Women					
1890-1899	-0.56	-2.28, 1.16	-1.71	-4.11, 0.68	0.3399
1900-1909	-0.05	-0.54, 0.45	-0.59	-1.70, 0.52	0.5784
1910-1919	-0.06	-0.33, 0.20	0.24	-0.16, 0.65	0.3447
1920-1929	-0.22	-0.41, -0.02	-0.03	-0.30, 0.25	0.0774
1930-1939	-0.26	-0.45, -0.07	-0.09	-0.32, 0.13	0.0241
1940-1949	-0.13	-0.26, 0.00	-0.22	-0.36, -0.08	0.0067
1950-1959	-0.17	-0.27, -0.06	-0.02	-0.13, 0.10	0.0028
1960-1969	-0.14	-0.26, -0.01	-0.13	-0.26, 0.00	0.0459
1970-1979	-0.12	-0.24, 0.01	-0.15	-0.28, -0.01	0.0585
1980-1989	-0.15	-0.27, -0.03	-0.14	-0.26, -0.03	0.0142
1990-1999	0.33	0.05, 0.62	0.10	-0.16, 0.36	0.0642

¹Adjusted for twin cohort