

Tab. A1 Assessment of the Necessity of Mathematical Learning Prerequisites of High School Students (S) and University Instructors (U) in Comparison

Mathematical Contents

	STEM			Group 1		Group 2		Group 3		Group 4			Group 5		Other
	U	S: Phy	S: Bio	U	S: Arc	U	S: Eco	U	S: Med	U	S: Pol	S: Edu	U	S: Soc	S: Eng
BASICS															
Basic algebraic rules like commutative, associative and distributive law, calculations with parentheses, rules of signs, binomial formula, factorization	n	90.4%	38.3%	n	72.7%	n	57.5%	n	36.6%	n	18.7%	10.1%	n	7.9%	3.7%
Calculations including fractions and handling of terms including fractions	n	93.8%	48.0%	n	86.1%	n	77.4%	n	49.6%	n	32.9%	10.5%	n	10.9%	4.3%
Calculations including percentage numbers, proportionality and Rule of Three	n	87.8%	71.0%	n	81.8%	n	84.7%	n	71.2%	n	60.8%	34.0%	n	30.1%	14.0%
Pythagorean theorem and theorems related to circles (e.g., Thales’ theorem)	n	83.9%	17.9%	n	90.1%	nc	32.3%	nn	17.8%	nn	8.2%	4.0%	nn	3.5%	1.8%
Calculation of angle, length, area and volume of simple figures (e.g., triangle, types of quadrilaterals, circle, pyramid, cylinder, sphere)	n	82.1%	25.1%	n	92.2%	nc	26.6%	nn	27.1%	nn	7.2%	3.9%	nn	2.9%	2.2%
Concept/Definition of a function	n	83.6%	39.4%	n	60.4%	n	51.1%	n	34.9%	n	22.2%	10.5%	n	8.7%	6.1%
Representations of functions (table, graph, equation)	n	87.4%	60.7%	n	73.9%	n	73.2%	n	55.8%	n	48.1%	28.9%	n	26.4%	18.0%
Linear and quadratic functions	n	86.8%	41.2%	n	67.5%	n	54.9%	n	39.1%	n	23.1%	10.1%	n	8.6%	3.7%
Zeroes	n	81.9%	35.7%	n	58.9%	n	46.0%	n	32.5%	n	16.8%	6.9%	nn	6.7%	2.4%
CALCULUS															
Graphic concept of continuity (e.g., as a „solid line“)	n	81.5%	37.5%	n	61.8%	n	45.7%	n	29.7%	n	20.0%	9.5%	nc	6.8%	4.1%
Graphic interpretation of differentiability (e.g., „no kink in the graph“)	n	76.5%	32.4%	nc	60.2%	n	45.9%	n	29.0%	nc	18.3%	8.8%	nc	7.2%	4.5%
Fundamental theorem of calculus	n	80.7%	28.4%	nc	64.2%	n	38.8%	nn	27.9%	nn	13.5%	6.0%	nn	6.3%	2.8%
Definition and calculation of extremum and point of inflection	n	78.8%	37.6%	nc	58.4%	n	53.4%	n	30.4%	nc	19.3%	5.7%	nc	4.4%	1.5%
Derivation rules (e.g., product rule)	n	79.6%	26.0%	nc	55.0%	n	40.9%	n	23.9%	nc	13.2%	5.6%	nn	3.8%	2.9%

	STEM			Group 1		Group 2		Group 3		Group 4			Group 5		Other
	U	S: Phy	S: Bio	U	S: Arc	U	S: Eco	U	S: Med	U	S: Pol	S: Edu	U	S: Soc	S: Eng
VECTORS AND MATRICES															
Vectors represented as arrows	n	76.2%	16.0%	n	66.4%	nc	23.2%	n	15.1%	nc	5.0%	3.6%	nn	3.1%	1.7%
Representation of vector components in $\mathbb{R}^3$	n	71.0%	12.6%	n	66.2%	n	23.2%	nn	17.1%	nn	3.8%	2.7%	nn	1.4%	0.3%
Basic vector operations (addition, scalar multiplication)	n	79.9%	16.8%	n	65.4%	n	26.3%	n	16.2%	nc	7.3%	3.9%	nn	2.8%	2.8%
Dot product	n	71.1%	12.0%	nc	65.9%	n	25.7%	nc	15.2%	nc	6.1%	3.8%	nn	2.0%	2.0%
Analytical description and representation of point, line and plane in plane and space	n	78.3%	22.0%	nc	83.5%	nc	31.7%	nn	19.3%	nn	12.2%	6.4%	nn	6.2%	2.9%
STOCHASTICS AND GENERAL CONCEPTS															
Basics of probability theory (random experiments, events and results, absolute and relative frequency, diagrams)	nd	72.8%	59.1%	n	45.8%	n	73.4%	n	56.0%	n	53.0%	34.8%	n	33.8%	13.1%
One-stage and multi-stage random experiments (also tree diagrams and path rules)	nd	66.3%	54.4%	nc	34.5%	n	60.2%	n	47.5%	n	38.8%	28.5%	n	25.9%	8.6%
Position parameters and dispersion parameters of descriptive statistics (arithmetic mean, mode, median, range)	nc	71.9%	42.3%	nc	60.1%	n	52.2%	n	38.9%	n	31.3%	19.1%	n	18.5%	11.3%
Bell curve as a basic mental model of normally distributed random variables	n	62.8%	38.5%	nc	35.8%	n	51.4%	n	33.9%	n	30.7%	19.7%	n	17.0%	5.5%
Basics of combinatorics (factorial, binomial coefficient)	nd	70.1%	36.2%	nc	52.7%	n	46.9%	n	33.9%	n	23.2%	13.8%	nn	12.9%	6.7%
Counting combinatorics (permutations, variations, combinations, counting principles)	n	50.3%	31.9%	nn	23.0%	n	46.7%	nc	25.0%	nc	25.7%	17.4%	nn	17.1%	3.3%
General concepts like definition, example, conjecture, heuristic, proposition, theorem, proof	n	76.3%	48.6%	nc	48.3%	n	52.0%	nc	42.8%	n	31.7%	24.3%	n	21.8%	15.7%

Mathematical Processes

	STEM			Group 1		Group 2		Group 3		Group 4			Group 5		Other
	U	S: Phy	S: Bio	U	S: Arc	U	S: Eco	U	S: Med	U	S: Pol	S: Edu	U	S: Soc	S: Eng
Fluent and proficient execution of known procedures without electronic tools (e.g., determining derivative and integral; solving systems of equations; manipulations of equations where simple calculation steps are taken through mental arithmetic)	n	79.6%	44.6%	n	75.2%	n	50.5%	n	44.2%	n	25.9%	14.4%	nc	14.9%	7.2%
Proficient handling of calculators and computers to solve mathematical problems (e.g., simple graphic solution methods, also critically reflecting the results)	n	85.6%	51.1%	n	77.1%	n	58.3%	n	52.3%	n	30.9%	16.3%	n	16.9%	10.0%
Fluent and proficient change of representations (e.g., terms/equations, tables, functions, diagrams, vectors and geometric objects) without electronic tools	n	83.9%	42.2%	n	71.8%	n	51.1%	n	43.2%	n	25.0%	11.2%	n	12.3%	6.4%
Understanding and verification of mathematical proofs	n	86.9%	37.5%	nn	53.0%	nc	41.7%	nn	34.1%	nn	18.0%	8.7%	nn	10.2%	3.2%
Comprehension of written mathematical formulations (including technical terms and mathematical symbols and notations)	n	83.7%	41.0%	n	66.9%	n	48.2%	n	42.0%	n	22.1%	15.1%	nc	14.9%	8.9%
Verbal explanation of mathematical concepts	n	85.4%	40.0%	nc	61.9%	n	51.1%	nc	40.3%	nc	26.5%	14.8%	nn	13.1%	8.1%
Comprehension of mathematical definitions (e.g., giving examples or counterexamples, verifying if a given example matches a definition)	n	82.8%	39.3%	n	60.9%	n	43.7%	nc	35.5%	n	21.9%	14.4%	nc	13.2%	6.8%
Explanation of mathematical concepts based on their definition	n	81.1%	32.4%	n	49.6%	n	38.8%	nc	30.3%	nc	16.7%	7.6%	nn	9.1%	3.6%
Comprehension given solutions to mathematical problems	n	82.0%	38.0%	n	61.1%	n	43.9%	n	36.5%	nc	22.1%	12.5%	nn	13.6%	5.7%
Description of extra-mathematical situations by means of mathematical tools	n	81.8%	46.6%	n	71.0%	n	52.1%	n	44.5%	n	32.4%	16.5%	nn	19.3%	8.9%
Collecting necessary information in mathematical text books, the internet, or other sources (incl. the critical reflection of the sources)	n	78.6%	52.9%	n	72.0%	n	58.6%	n	53.3%	n	42.0%	30.6%	n	31.4%	22.7%

Views about the Nature of Mathematics

	STEM			Group 1		Group 2		Group 3		Group 4			Group 5		Other S: Eng
	U	S: Phy	S: Bio	U	S: Arc	U	S: Eco	U	S: Med	U	S: Pol	S: Edu	U	S: Soc	
Proving is a central activity in mathematics.	n	85.6%	40.3%	n	58.6%	n	48.9%	nc	38.1%	nc	23.2%	10.9%	nn	10.8%	6.5%
In other disciplines, mathematical results, as defined concepts and proven statements, are used to make extra-mathematical phenomena and problems accessible through mathematical modeling.	n	81.6%	51.9%	n	72.1%	n	56.0%	n	51.4%	n	35.5%	23.5%	nc	21.9%	13.8%

Personal Attributes

	STEM			Group 1		Group 2		Group 3		Group 4			Group 5		Other S: Eng
	U	S: Phy	S: Bio	U	S: Arc	U	S: Eco	U	S: Med	U	S: Pol	S: Edu	U	S: Soc	
Openness towards mathematics as a scientific discipline and the way of learning mathematics at universities	n	87.1%	57.6%	n	81.2%	n	67.8%	n	58.2%	n	40.0%	21.3%	n	19.7%	11.0%
Interest, pleasure, motivation and curiosity towards the application of mathematics in extra-mathematical areas	n	86.1%	46.8%	n	80.3%	n	62.0%	n	47.2%	n	27.1%	16.2%	n	16.0%	8.1%
Diligence and willingness to frequently engage in mathematics	n	87.2%	44.3%	n	79.8%	n	61.1%	nc	47.4%	nc	28.3%	12.6%	nn	12.8%	6.6%

U = university instructors, S = high school students

Abbreviations of the subjects: Arc = Architecture, Bio = Biology, Eco = Economics, Eng = English, Edu = Educational Science, Med = Medicine, Phy = Physics, Pol = Political Science, Soc = Social Work,

Type of consensus of university instructors on the necessity of prerequisites: n = necessary, nn = not necessary, nc = no consensus, nd = no data

References:

- Neumann, I., Pigge, C., & Heinze, A. (2017). *Welche mathematischen Lernvoraussetzungen erwarten Hochschullehrende für ein MINT-Studium? Eine Delphi-Studie*. Kiel: IPN.
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Tab. A2 High School Students' Assessments of Mathematical Requirements for Various Study Subjects: Pairwise Comparisons of Subjects by Kruskal Wallis Tests

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
English- Educational Science	715.016	111.724	6.400	< .001	< .001
English-Social Work	790.657	111.724	7.077	< .001	< .001
English-Political Science	1980.542	111.664	17.737	< .001	< .001
English-Biology	2750.310	111.694	24.624	< .001	< .001
English-Medicine	2831.280	111.724	25.342	< .001	< .001
English-Economics	4067.817	111.694	36.419	< .001	< .001
English-Architecture	5022.235	111.664	44.976	< .001	< .001
English-Physics	5695.672	111.635	51.021	< .001	< .001
Educational Science-Social Work	75.641	111.664	.677	.498	1.000
Educational Science-Political Science	1265.526	111.604	11.339	< .001	< .001
Educational Science-Biology	2035.294	111.634	18.232	< .001	< .001
Educational Science-Medicine	2116.264	111.664	18.952	< .001	< .001
Educational Science-Economics	3352.801	111.634	30.034	< .001	< .001
Educational Science-Architecture	4307.219	111.604	38.594	< .001	< .001
Educational Science-Physics	4980.656	111.575	44.640	< .001	< .001
Social Work-Political Science	1189.885	111.604	10.662	< .001	< .001
Social Work-Biology	1959.653	111.634	17.554	< .001	< .001
Social Work-Medicine	2040.623	111.664	18.275	< .001	< .001
Social Work-Economics	3277.161	111.634	29.356	< .001	< .001
Social Work-Architecture	4231.578	111.604	37.916	< .001	< .001
Social Work-Physics	4905.015	111.575	43.962	< .001	< .001
Political Science-Biology	769.768	111.574	6.899	< .001	< .001
Political Science-Medicine	850.738	111.604	7.623	< .001	< .001
Political Science-Economics	2087.276	111.574	18.707	< .001	< .001
Political Science-Architecture	3041.693	111.545	27.269	< .001	< .001
Political Science-Physics	3715.130	111.515	33.315	< .001	< .001
Biology-Medicine	80.970	111.634	.725	.468	1.000
Biology-Economics	1317.508	111.604	11.805	< .001	< .001
Biology-Architecture	2271.925	111.574	20.362	< .001	< .001
Biology-Physics	2945.362	111.545	26.405	< .001	< .001
Medicine-Economics	1236.537	111.634	11.077	< .001	< .001
Medicine-Architecture	2190.955	111.604	19.631	< .001	< .001
Medicine-Physics	2864.392	111.575	25.672	< .001	< .001
Economics-Architecture	954.417	111.574	8.554	< .001	< .001
Economics-Physics	1627.854	111.545	14.594	< .001	< .001
Architecture-Physics	673.437	111.515	6.039	< .001	< .001

Note: Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05.

^a Significance values have been adjusted by the Bonferroni correction for multiple tests.

Tab. A3 High School Students' Attribution of Mathematical Requirements to Various Study Subjects

	1		2		3		4		5		6		7		8		9		10	
	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>	<i>abs.</i>	<i>in %</i>
Architecture	6	0.6%	3	0.3%	8	0.9%	8	0.9%	16	1.7%	26	2.8%	100	10.7%	202	21.6%	237	25.4%	328	35.1%
Biology	20	2.1%	30	3.2%	73	7.8%	114	12.2%	131	14.1%	163	17.5%	162	17.4%	133	14.3%	71	7.6%	35	3.8%
Economics	4	0.4%	9	1.0%	25	2.7%	43	4.6%	69	7.4%	89	9.5%	170	18.2%	221	23.7%	166	17.8%	137	14.7%
English	325	34.9%	202	21.7%	179	19.2%	117	12.6%	64	6.9%	25	2.7%	8	0.9%	8	0.9%	1	0.1%	1	0.1%
Educational Science	145	15.6%	178	19.1%	199	21.4%	161	17.3%	105	11.3%	70	7.5%	38	4.1%	22	2.4%	7	0.8%	7	0.8%
Medicine	22	2.4%	26	2.8%	79	8.5%	118	12.6%	153	16.4%	146	15.6%	171	18.3%	120	12.9%	71	7.6%	27	2.9%
Physics	7	0.7%	3	0.3%	3	0.3%	2	0.2%	6	0.6%	13	1.4%	27	2.9%	68	7.3%	172	18.4%	634	67.8%
Political Science	35	3.7%	68	7.3%	142	15.2%	150	16.1%	155	16.6%	165	17.7%	132	14.1%	54	5.8%	22	2.4%	11	1.2%
Social Work	162	17.4%	185	19.8%	182	19.5%	143	15.3%	124	13.3%	77	8.3%	40	4.3%	12	1.3%	4	0.4%	3	0.3%

Note: ten-point Likert scale (1 no relevance – 10 very high relevance)

Tab. A4 **Pairwise Comparisons of Study Subjects (Measures of Adequacy)**

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.^a
Educational Science-Social Work	5.405	99.973	.054	.957	1.000
Educational Science-Political Science	986.245	99.973	9.865	< .001	< .001
Educational Science-Biology	1499.569	99.973	15.000	< .001	< .001
Educational Science-Medicine	1649.048	99.973	16.495	< .001	< .001
Educational Science-Economics	2364.911	99.973	23.656	< .001	< .001
Educational Science-Architecture	3326.509	99.973	33.274	< .001	< .001
Educational Science-Physics	3970.274	99.973	39.713	< .001	< .001
Social Work-Political Science	980.840	99.973	9.811	< .001	< .001
Social Work-Biology	1494.163	99.973	14.946	< .001	< .001
Social Work-Medicine	1643.643	99.973	16.441	< .001	< .001
Social Work-Economics	2359.505	99.973	23.601	< .001	< .001
Social Work-Architecture	3321.104	99.973	33.220	< .001	< .001
Social Work-Physics	3964.869	99.973	39.659	< .001	< .001
Political Science-Biology	513.323	99.973	5.135	< .001	< .001
Political Science-Medicine	662.803	99.973	6.630	< .001	< .001
Political Science-Economics	1378.665	99.973	13.790	< .001	< .001
Political Science-Architecture	2340.264	99.973	23.409	< .001	< .001
Political Science-Physics	2984.029	99.973	29.848	< .001	< .001
Biology-Medicine	149.480	99.973	1.495	.135	1.000
Biology-Economics	865.342	99.973	8.656	< .001	< .001
Biology-Architecture	1826.940	99.973	18.274	< .001	< .001
Biology-Physics	2470.706	99.973	24.714	< .001	< .001
Medicine-Economics	715.862	99.973	7.161	< .001	< .001
Medicine-Architecture	1677.461	99.973	16.779	< .001	< .001
Medicine-Physics	2321.226	99.973	23.219	< .001	< .001
Economics-Architecture	961.598	99.973	9.619	< .001	< .001
Economics-Physics	1605.364	99.973	16.058	< .001	< .001
Architecture-Physics	643.765	99.973	6.439	< .001	< .001

Note: Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

^a Significance values have been adjusted by the Bonferroni correction for multiple tests.

Tab. A5 Role of Mathematics in Career and Major Choice Among Students in their Final Year of High School, Considering the Choice of Majors

Intended study subject	Mathematics...			Total
	... is sth., I would like to avoid.	... does not matter.	... is important to me.	
	<i>abs. (in %)</i>	<i>abs. (in %)</i>	<i>abs. (in %)</i>	
MaLeMINT (e.g., Biology, Physics)	7 (8.2%)	15 (17.6%)	63 (74.1%)	85
MaLeMINT-E: Group 1 (e.g., Architecture)	0 (0.0%)	3 (50.0%)	3 (50.0%)	6
MaLeMINT-E: Group 2 (e.g., Economics)	27 (32.5%)	33 (39.8%)	23 (27.7%)	83
MaLeMINT-E: Group 3 (e.g., Medicine, Pharmacy)	6 (25.0%)	11 (45.8%)	7 (29.2%)	24
MaLeMINT-E: Group 4 (e.g., Educational Science, Political Science)	17 (37.8%)	21 (46.7%)	7 (15.6%)	45
MaLeMINT-E: Group 5 (e.g., Social Work)	12 (50.0%)	9 (37.5%)	3 (12.5%)	24
Other (e.g., English)	12 (46.2%)	8 (30.8%)	6 (23.1%)	26
Total	81 (27.6%)	100 (34.1%)	112 (38.2%)	293

Tab. A6 Descriptive Results on Students' Subjective Relevance of Other Subjects for Their Future Study and Career Choices

Tab. A6a Descriptive results on students' subjective relevance of chemistry for their future study and career choices

Intended study subject	Chemistry...			Total
	...is sth., I would like to avoid.	... does not matter.	... is important to me.	
	<i>abs. (in %)</i>	<i>abs. (in %)</i>	<i>abs. (in %)</i>	
MaLeMINT (e.g., Biology, Physics)	49 (27.5%)	79 (44.4%)	50 (28.1%)	178
MaLeMINT-E: Group 1 (e.g., Architecture)	9 (69.2%)	2 (15.4%)	2 (15.4%)	13
MaLeMINT-E: Group 2 (e.g., Economics)	124 (68.1%)	53 (29.1%)	5 (2.7%)	182
MaLeMINT-E: Group 3 (e.g., Medicine, Pharmacy)	22 (32.8%)	20 (29.9%)	25 (37.3%)	67
MaLeMINT-E: Group 4 (e.g., Educational Science, Political Science)	48 (55.8%)	31 (36%)	7 (8.1%)	86
MaLeMINT-E: Group 5 (e.g., Social Work)	35 (81.4%)	8 (18.6%)	0 (0%)	43
Other (e.g., English)	48 (70.6%)	14 (20.6%)	6 (8.8%)	68
Total	335 (52.6%)	207 (32.5%)	95 (14.9%)	637

Tab. A6b Descriptive results on students' subjective relevance of physics for their future study and career choices

Intended study subject	Physics...			Total
	...is sth., I would like to avoid.	... does not matter.	... is important to me.	
	<i>abs. (in %)</i>	<i>abs. (in %)</i>	<i>abs. (in %)</i>	
MaLeMINT (e.g., Biology, Physics)	33 (18.4%)	56 (31.3%)	90 (50.3%)	179
MaLeMINT-E: Group 1 (e.g., Architecture)	6 (46.2%)	3 (23.1%)	4 (30.8%)	13
MaLeMINT-E: Group 2 (e.g., Economics)	112 (61.2%)	62 (33.9%)	9 (4.9%)	183
MaLeMINT-E: Group 3 (e.g., Medicine, Pharmacy)	27 (40.3%)	27 (40.3%)	13 (19.4%)	67
MaLeMINT-E: Group 4 (e.g., Educational Science, Political Science)	57 (66.3%)	25 (29.1%)	4 (4.7%)	86
MaLeMINT-E: Group 5 (e.g., Social Work)	32 (74.4%)	8 (18.6%)	3 (7%)	43
Other (e.g., English)	43 (63.2%)	21 (30.9%)	4 (5.9%)	68
Total	310 (48.5%)	202 (31.6%)	127 (19.9%)	639

Tab. A6c Descriptive results on students' subjective relevance of history/politics for their future study and career choices

Intended study subject	History/Politics...			Total
	...is sth., I would like to avoid.	... does not matter.	... is important to me.	
	<i>abs. (in %)</i>	<i>abs. (in %)</i>	<i>abs. (in %)</i>	
MaLeMINT (e.g., Biology, Physics)	58 (33.0%)	91 (51.7%)	27 (15.3%)	176
MaLeMINT-E: Group 1 (e.g., Architecture)	1 (7.7%)	11 (84.6%)	1 (7.7%)	13
MaLeMINT-E: Group 2 (e.g., Economics)	23 (12.8%)	81 (45.3%)	75 (41.9%)	179
MaLeMINT-E: Group 3 (e.g., Medicine, Pharmacy)	13 (20.0%)	34 (52.3%)	18 (27.7%)	65
MaLeMINT-E: Group 4 (e.g., Educational Science, Political Science)	16 (18.6%)	36 (41.9%)	34 (39.5%)	86
MaLeMINT-E: Group 5 (e.g., Social Work)	11 (25.6%)	13 (30.2%)	19 (44.2%)	43
Other (e.g., English)	6 (8.8%)	33 (48.5%)	29 (42.6%)	68
Total	128 (20.3%)	299 (47.5%)	203 (32.2%)	630

Tab. A6d Descriptive results on students' subjective relevance of Latin for their future study and career choices

Intended study subject	Latin...			Total
	...is sth., I would like to avoid.	... does not matter.	... is important to me.	
	<i>abs. (in %)</i>	<i>abs. (in %)</i>	<i>abs. (in %)</i>	
MaLeMINT (e.g., Biology, Physics)	128 (71.9%)	47 (26.4%)	3 (1.7%)	178
MaLeMINT-E: Group 1 (e.g., Architecture)	9 (69.2%)	4 (30.8%)	0 (0%)	13
MaLeMINT-E: Group 2 (e.g., Economics)	124 (68.9%)	51 (28.3%)	5 (2.8%)	180
MaLeMINT-E: Group 3 (e.g., Medicine, Pharmacy)	33 (49.3%)	24 (35.8%)	10 (14.9%)	67
MaLeMINT-E: Group 4 (e.g., Educational Science, Political Science)	58 (67.4%)	25 (29.1%)	3 (3.5%)	86
MaLeMINT-E: Group 5 (e.g., Social Work)	36 (83.7%)	7 (16.3%)	0 (0%)	43
Other (e.g., English)	44 (64.7%)	22 (32.4%)	2 (2.9%)	68
Total	432 (68%)	180 (28.3%)	23 (3.6%)	635

Note: Since Latin is not a compulsory subject at German school, these results should be treated with caution.

Tab. A6e Descriptive results on students' subjective relevance of literature/culture for their future study and career choices

Intended study subject	Literature/Culture...			Total
	...is sth., I would like to avoid.	... does not matter.	... is important to me.	
	<i>abs. (in %)</i>	<i>abs. (in %)</i>	<i>abs. (in %)</i>	
MaLeMINT (e.g., Biology, Physics)	90 (50.8%)	73 (41.2%)	14 (7.9%)	177
MaLeMINT-E: Group 1 (e.g., Architecture)	3 (23.1%)	1 (7.7%)	9 (69.2%)	13
MaLeMINT-E: Group 2 (e.g., Economics)	61 (33.5%)	81 (44.5%)	40 (22%)	182
MaLeMINT-E: Group 3 (e.g., Medicine, Pharmacy)	23 (34.3%)	31 (46.3%)	13 (19.4%)	67
MaLeMINT-E: Group 4 (e.g., Educational Science, Political Science)	20 (23.5%)	41 (48.2%)	24 (28.2%)	85
MaLeMINT-E: Group 5 (e.g., Social Work)	13 (30.2%)	17 (39.5%)	13 (30.2%)	43
Other (e.g., English)	7 (10.4%)	23 (34.3%)	37 (55.2%)	67
Total	217 (34.2%)	267 (42.1%)	150 (23.7%)	634