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(Mis)Matched College Aspirations and Expectations: The Role of Social Background and Admission Barriers

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Online Supplement to Article:

**(Mis)Matched College Aspirations and Expectations:
The Role of Social Background and Admission Barriers**

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Section A. Descriptive statistics (sample selection)

Table O-A1: Descriptive statistics on students with and without a college aspiration (included in study sample vs. excluded), by social background

	All		H0		H1		H2	
	College aspiration		College aspiration		College aspiration		College aspiration	
	No	Yes	No	Yes	No	Yes	No	Yes
	N*: 165	N: 1,325**	N: 125	N: 823	N: 29	N: 310	N: 11	N: 192
	%/ Mean (SD)	%/ Mean (SD)	%/ Mean (SD)	%/ Mean (SD)	%/ Mean (SD)	%/ Mean (SD)	%/ Mean (SD)	%/ Mean (SD)
Social background								
HE0	75.76	62.11						
HE1	17.58	23.40						
HE2	6.67	14.49						
Control variables								
School performance:								
Original GPA-scale	3.52 (0.47)	3.22 (0.60)	3.56 (0.44)	3.28 (0.59)	3.42 (0.51)	3.22 (0.58)	3.36 (0.59)	2.94 (0.62)
Inverted GPA-scale	1.48 (0.47)	1.78 (0.60)	1.44 (0.44)	1.71 (0.59)	1.58 (0.51)	1.78 (0.58)	1.64 (0.59)	2.06 (0.62)
Fluid competences (z-standardized)								
Verbal	-0.16 (0.96)	0.28 (1.00)	-0.22 (0.94)	-0.11 (0.98)	-0.07 (1.06)	0.09 (1.00)	0.20 (0.81)	0.52 (0.94)
Figural	0.07 (0.91)	0.00 (1.01)	0.07 (0.88)	-0.05 (1.02)	0.17 (1.04)	0.08 (0.91)	-0.26 (0.98)	0.10 (1.09)
Gender: male	43.03	42.04	44.80	39.61	34.48	45.16	45.45	47.40
Migration background	39.39	53.96	39.20	58.81	34.48	47.10	54.55	44.27
School type:								
Gymnasium	21.21	30.04	20.00	29.89	20.69	28.71	36.36	32.81
Comprehensive school	44.24	36.98	44.80	35.84	48.28	42.90	27.27	32.29
Vocational gymnasium	34.55	32.98	35.20	34.26	31.03	28.39	36.36	34.90

Source: Best Up individual data (wave 1), author's calculation.

Note: For categorical variables, deviations from 100 percent due to rounding.

This table shows how selective the sample becomes after excluding students without college aspirations. All numbers are based on a sample without missing values on any variable included in the table (88 out of 1,578 cases excluded). Yet the table does not restrict the sample to students with information on their field of study aspiration (see Table A-O2). Case numbers thus slightly diverge from Table O-A2 and the final study sample.

Table O-A2: Comparison of included and excluded cases

Variables	Sample 1: college aspiration-expectation match						Sample 2: field-specific aspiration-expectation match			
	Total	Included	Excluded	Excluded due to			Included	Excluded	Excluded due to	
	N: 1578	% (N: 1212)	% (N: 366)	No college aspiration % (N:183)	No info. on field aspiration % (N: 109)	Missing values % (N: 74)	% (N: 979)	% (N: 233)	No college expectation % (N: 169)	No info. on field expectation % (N: 64)
Social background	1545									
HE0	969	61.39	67.57	75.14	70.87	38.60	60.16	66.52	72.19	51.56
HE1	356	23.93	19.82	17.92	18.45	28.07	23.70	24.89	22.49	31.25
HE2	220	14.69	12.61	6.94	10.68	33.33	16.14	8.58	5.33	17.19
Mean (SD) of school performance:	1550									
Original GPA-scale		3.21 (0.60)	3.46 (0.54)	3.53 (0.46)	3.38 (0.57)	3.36 (0.65)	3.17 (0.61)	3.39 (0.53)	3.48 (0.50)	3.15 (0.56)
Inverted GPA-scale		1.79 (0.60)	1.54 (0.54)	1.47 (0.46)	1.62 (0.57)	1.64 (0.65)	1.83 (0.61)	1.61 (0.53)	1.52 (0.50)	1.85 (0.56)
Mean (SD) of fluid competence (z-stand.):										
Verbal	1571	0.05 (1.01)	-0.17 (0.94)	-0.14 (0.95)	-0.11 (0.87)	-0.30 (1.02)	0.06 (1.01)	-0.02 (1.01)	-0.04 (1.02)	0.05 (0.99)
Figural	1570	0.02 (1.01)	-0.05 (0.97)	0.06 (0.92)	-0.05 (0.99)	-0.35 (1.04)	0.02 (1.00)	0.01 (1.01)	0.11 (0.96)	-0.26 (1.11)
Gender: Male	1564	41.42	49.43	44.94	49.54	61.54	42.70	36.05	34.32	40.63
Migration background	1547	53.63	46.27	37.64	60.19	46.94	53.22	55.36	53.25	60.94
School type	1578									
Gymnasium	452	30.20	23.50	20.77	27.52	24.32	31.56	24.46	20.12	35.94
Comprehensive school	600	36.22	43.99	44.26	45.87	40.54	35.75	38.20	36.09	43.75
Vocational gymnasium	526	33.58	32.51	34.97	26.61	35.14	32.69	37.34	43.79	20.31

Source: Best Up individual data (wave 1), author's calculation

Note: For categorical variables, deviations from 100 percent due to rounding.

Section B. Full models on which the article's figures are based, significant tests

Table O-B1: Determinants of (field-specific) aspiration-expectation match, full models with interaction terms, logistic regression coefficients (standard error)

	College aspiration-expectation match ^a				Field-specific aspiration-expectation match ^b			
	M-A1	M-B1	M-C1	M-D1	M-A2	M-B2	M-C2	M-D2
Average admission barriers of aspired field of study								
A: Share of programs with enrolment caps	-0.001 (0.007)				0.008 (0.007)			
B: Share of programs with enrolment caps or eligibility criteria		0.002 (0.011)				-0.020+ (0.011)		
C: Av. selectivity of programs (av. GPA of last admitted applicant, rev. GPA-scale)			-1.033** (0.379)				-1.677** (0.349)	
D: Admission chances				0.948** (0.359)				1.473** (0.320)
Social background, ref. HE0								
HE1	0.080 (1.015)	-1.714 (1.777)	-0.045 (0.839)	-0.024 (0.588)	-0.244 (0.907)	3.131 (1.999)	0.321 (0.782)	0.245 (0.472)
HE2	2.638 (2.360)	3.393 (3.562)	-1.356 (1.481)	0.123 (0.784)	0.334 (1.143)	0.825 (2.025)	-1.296 (0.846)	0.213 (0.469)
Interaction terms								
HE1*A	0.002 (0.013)				0.004 (0.012)			
HE2*A	-0.020 (0.028)				-0.006 (0.014)			
HE1*B		0.022 (0.020)				-0.034 (0.022)		
HE2*B		-0.027 (0.039)				-0.010 (0.023)		
HE1*C			0.182 (0.528)				-0.101 (0.474)	
HE2*C			1.632 (1.015)				0.802 (0.517)	
HE1*D				-0.155 (0.335)				0.064 (0.286)
HE2*D				-0.689 (0.535)				0.173 (0.313)

Control variables								
Av. ISEI	-0.018 (0.014)	-0.021 (0.013)	0.021 (0.020)	0.235 (0.381)	-0.080** (0.013)	-0.062** (0.011)	-0.001 (0.017)	-0.005 (0.017)
School performance (inverted GPA-scale)	1.077*** (0.180)	1.082*** (0.181)	1.089*** (0.181)	0.235 (0.381)	0.227 (0.142)	0.219 (0.140)	0.217 (0.142)	-1.303** (0.334)
Fluid competences (z-stand.)								
Verbal	-0.110 (0.103)	-0.110 (0.103)	-0.089 (0.103)	-0.087 (0.104)	-0.061 (0.092)	-0.050 (0.092)	-0.011 (0.092)	-0.016 (0.092)
Figural	-0.180+ (0.094)	-0.178+ (0.095)	-0.197* (0.094)	-0.194* (0.094)	0.083 (0.082)	0.058 (0.082)	0.077 (0.083)	0.084 (0.083)
Gender: Male	0.412* (0.195)	-0.178+ (0.095)	0.347+ (0.197)	0.340+ (0.196)	0.280+ (0.167)	0.087 (0.171)	0.088 (0.169)	0.074 (0.169)
Migration background	-0.022 (0.191)	-0.025 (0.192)	-0.003 (0.191)	0.005 (0.192)	-0.119 (0.173)	-0.156 (0.170)	-0.141 (0.173)	-0.140 (0.173)
School type, ref.: Gymnasium								
Comprehensive school	-0.493+ (0.282)	-0.499+ (0.284)	-0.522+ (0.285)	-0.524+ (0.285)	0.100 (0.251)	0.094 (0.225)	0.067 (0.229)	0.077 (0.230)
Vocational Gymnasium	-0.746** (0.281)	-0.499+ (0.284)	-0.749** (0.283)	-0.753** (0.283)	0.014 (0.252)	-0.028 (0.226)	0.016 (0.230)	-0.001 (0.230)
Constant	1.481 (0.984)	1.445 (1.243)	0.484 (1.047)	1.931* (0.964)	5.224** (0.868)	6.492** (1.145)	3.338** (0.913)	5.807** (0.828)
Rho	0.026 (0.022)	0.027 (0.021)	0.028 (0.023)	0.028 (0.023)	0.032 (0.021)	0.017 (0.018)	0.019 (0.018)	0.019 (0.018)
AIC	925.636	924.061	917.232	918.477	1083.981	1074.058	1057.887	1060.344
BIC	1002.136	1000.561	993.733	994.977	1157.279	1147.356	1131.185	1133.642
Maddala R ²	0.049	0.050	0.055	0.056	0.050	0.058	0.073	0.071
N respondents /schools	1212/27	1212/27	1212/27	1212/27	979 /27	979 /27	979 /27	979/27

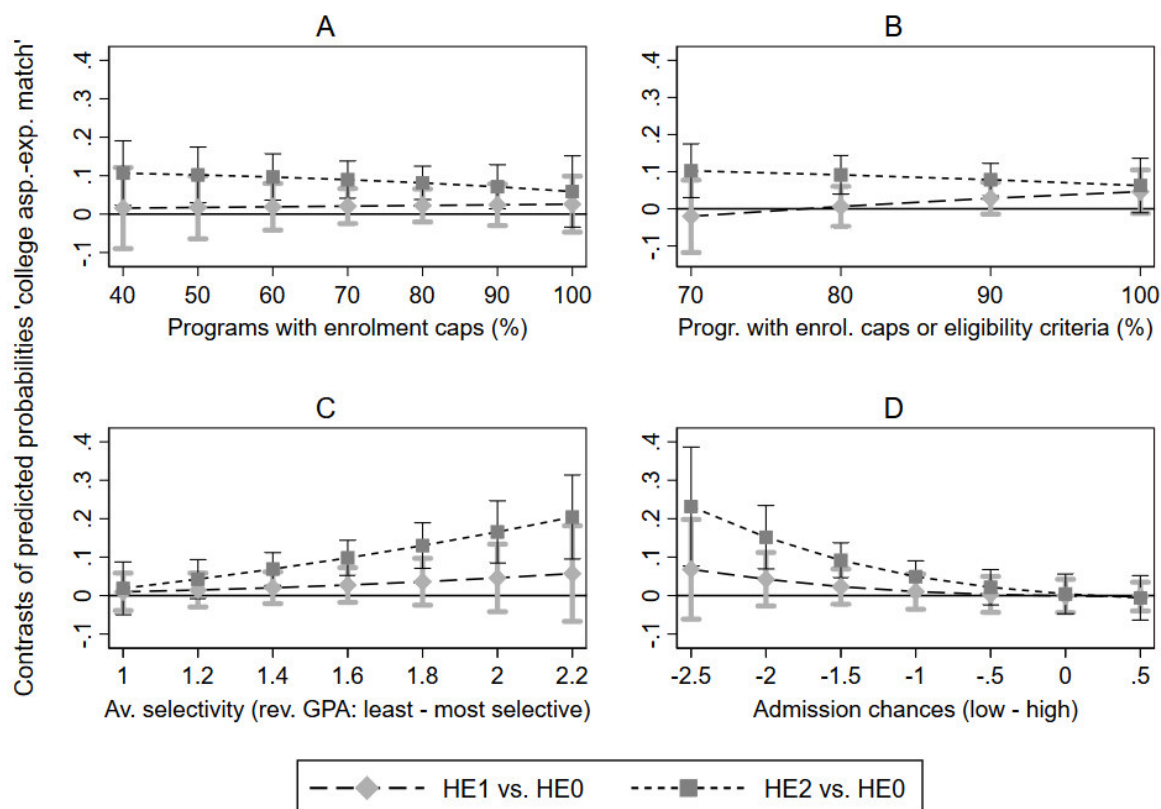
Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017

GLMM (see section “estimation method” for details), author’s calculation, ** p<0.01, * p<0.05, + p <0.1

^a Models underlying predicted probabilities of Figure 1 (main text), study sample 1

^b Models underlying predicted probabilities of Figure 3 (main text), study sample 2

Figure O-B1: Contrasts of predicted probabilities of college aspiration-expectation match (HE0 vs. HE1/HE2, 95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, study sample 1 (for details see section “analytical steps and sample restrictions”, main text), author’s calculation.

Note: The figure shows whether and at which values of admission barriers (x-axis) the social background difference between students from non-academic backgrounds (HE0) and those from single- and double-academic backgrounds (HE1/HE2) shown in Figure 1 (main text) is statistically significant: If the confidence interval does not cut the horizontal line, the difference is significant at the 95%-level.

A similar figure is not shown for the second dependent variable (field-specific aspiration-expectation match). As can be derived from Figure 3 (main text) respective social background differences are negligible.

Section C. Robustness check: different GPA-specifications

The German grading scale ranges from 1.0 (top grade) to 6.0. However, in order to pass the Abitur, students need an average grade of 4.0 or better. Students who fail the Abitur are not eligible to enroll in HE. This is the reason why the “average selectivity” measure (average GPA of the last admitted applicant) only contains values between 1.0 and 4.0. The “early GPA” in the individual-level data contains also poorer grades than 4.0. To harmonize the individual and institutional measures, I therefore truncated students’ GPA at 4.0.

In this section, I provide additional analyses of all models with alternative GPA-specifications and sample restrictions:

- 1) exploiting the whole GPA-range (Table O-C1 and Figures O-C1 and O-C2)
- 2) Adding a dummy variable which indicates whether students are above or below the 4.0 (pass) threshold to models with the truncated GPA-measure (Table O-C2 and Figures O-C3 and O-C4)
- 3) Restricting the sample to students with an early GPA of at least 4.0 (Table O-C3 and Figures O-C5 and O-C6)

Truncation applies to eleven percent of the sample and unsurprisingly to a higher share of students from non-academic backgrounds (14 percent) and single-academic backgrounds (10 percent) than from double-academic backgrounds (3 percent).

In 2014 (the final school year of the respondents), five percent of all high school students failed the Abitur in Berlin.¹ However, as our sample of schools is drawn from rather disadvantaged districts, 11 percent is probably not a strong overestimation (official statistics on the failure rate per district or school are not available). Furthermore, four percent of the respondents have an early GPA of 4.1 and another five percent an early GPA between 4.2 and 4.5 so that passing the Abitur is not very unlikely for them.

As can be seen below, estimates are very robust towards alternative GPA-specifications.

¹ https://www.kmk.org/fileadmin/pdf/Statistik/Aus_Abiturnoten_2014.pdf [accessed May 19, 2021]

Full range of GPA-scale (1.0-6.0)

Table O-C1: Determinants of (field-specific) aspiration-expectation match, AME/ DC (standard error)

	College aspiration-expectation match			Field-specific aspiration-expectation match		
	M-A1	M-B1	M-C1	M-A2	M-B2	M-C2
Average admission barriers of aspired field of study						
A: Share of programs with enrolment caps	-0.000 (0.001)	-	-	0.001 (0.001)	-	-
B: Share of programs with enrolment caps or eligibility criteria	-	0.001 (0.001)	-	-	-0.005** (0.002)	-
C: Av. selectivity of programs (av. GPA of last admitted applicant, rev. GPA-scale)	-	-	-0.092* (0.037)	-	-	-0.262**(0.050)
Social background, ref. HE0						
HE1	0.023 (0.023)	0.023 (0.023)	0.026 (0.023)	0.016 (0.033)	0.017 (0.033)	0.025 (0.032)
HE2	0.090** (0.024)	0.089** (0.024)	0.093** (0.024)	-0.024 (0.041)	-0.020 (0.040)	-0.004 (0.040)
Control variables						
Av. ISEI	-0.002 (0.002)	-0.002 (0.001)	0.002 (0.002)	-0.014** (0.002)	-0.011** (0.002)	-0.001 (0.003)
School performance (<i>inverted GPA-scale, full range</i>)	0.091** (0.016)	0.091** (0.016)	0.091** (0.016)	0.042+ (0.022)	0.042+ (0.022)	0.039+ (0.022)
Fluid competences (z-standardized)						
Verbal	-0.011 (0.011)	-0.011 (0.011)	-0.008 (0.011)	-0.013 (0.016)	-0.010 (0.016)	-0.004 (0.016)
Figural	-0.019+ (0.010)	-0.018+ (0.010)	-0.020+ (0.010)	0.014 (0.014)	0.009 (0.014)	0.014 (0.014)
Gender: Male	0.045* (0.021)	0.048* (0.022)	0.036+ (0.021)	0.050+ (0.029)	0.017 (0.030)	0.015 (0.029)
Migration background	-0.003 (0.021)	-0.002 (0.021)	-0.000 (0.021)	-0.020 (0.030)	-0.027 (0.030)	-0.023 (0.030)
School type, ref.: Gymnasium						
Comprehensive school	-0.049+ (0.027)	-0.049+ (0.027)	-0.051+ (0.027)	0.017 (0.044)	0.015 (0.039)	0.012 (0.039)
Vocational Gymnasium	-0.077** (0.029)	-0.076** (0.029)	-0.078** (0.029)	0.003 (0.045)	-0.003 (0.040)	0.001 (0.040)
Rho	0.028 (0.023)	0.027 (0.022)	0.028 (0.023)	0.033 (0.021)	0.018 (0.018)	0.019 (0.018)
AIC	927.723	927.478	921.586	1079.311	1071.438	1055.629
BIC	994.024	993.778	987.887	1142.836	1134.963	1119.154
Maddala R ²	0.048	0.048	0.051	0.051	0.058	0.072
N respondents /schools	1212/27	1212/27	1212/27	979 /27	979 /27	979 /27

Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017

GLMM (see section “estimation method” for details), author’s calculation, ** p<0.01, * p<0.05, + p<0.1

Truncated GPA-scale (1.0 – 4.0) + Dummy indicating whether students are above or below the GPA threshold of 4.0 (pass)

Table O-C2: Determinants of (field-specific) aspiration-expectation match, AME/ DC (standard error)

	College aspiration-expectation match			Field-specific aspiration-expectation match		
	M-A1	M-B1	M-C1	M-A2	M-B2	M-C2
Average admission barriers of aspired field of study						
A: Share of programs with enrolment caps	-0.000 (0.001)	-	-	0.001 (0.001)	-	-
B: Share of programs with enrolment caps or eligibility criteria	-	0.001 (0.001)	-	-	-0.005** (0.002)	-
C: Av. selectivity of programs (av. GPA of last admitted applicant, rev. GPA-scale)	-	-	-0.092* (0.037)	-	-	-0.263** (0.050)
Social background, ref. HE0						
HE1	0.023 (0.023)	0.023 (0.023)	0.026 (0.023)	0.015 (0.033)	0.017 (0.033)	0.025 (0.032)
HE2	0.089** (0.024)	0.089** (0.024)	0.092** (0.024)	-0.023 (0.041)	-0.018 (0.040)	-0.003 (0.040)
Control variables						
Av. ISEI	-0.002 (0.002)	-0.002 (0.001)	0.002 (0.002)	-0.014** (0.002)	-0.011** (0.002)	-0.001 (0.003)
School performance (inverted GPA-scale)	0.115** (0.024)	0.115** (0.024)	0.115** (0.024)	0.034 (0.028)	0.033 (0.028)	0.031 (0.028)
GPA threshold: fail (vs. pass)	-0.004 (0.028)	-0.004 (0.028)	-0.005 (0.028)	-0.018 (0.047)	-0.021 (0.047)	-0.021 (0.047)
Fluid competences (z-standardized)						
Verbal	-0.012 (0.011)	-0.012 (0.011)	-0.010 (0.011)	-0.011 (0.016)	-0.008 (0.016)	-0.002 (0.016)
Figural	-0.020+ (0.010)	-0.019+ (0.010)	-0.020* (0.010)	0.014 (0.014)	0.010 (0.014)	0.014 (0.014)
Gender: Male	0.045* (0.021)	0.049* (0.022)	0.036+ (0.021)	0.049+ (0.029)	0.016 (0.030)	0.014 (0.029)
Migration background	-0.003 (0.021)	-0.002 (0.021)	-0.000 (0.021)	-0.021 (0.030)	-0.028 (0.030)	-0.023 (0.030)
School type, ref.: Gymnasium						
Comprehensive school	-0.047+ (0.027)	-0.047+ (0.027)	-0.049+ (0.026)	0.018 (0.044)	0.016 (0.039)	0.013 (0.040)
Vocational Gymnasium	-0.077** (0.029)	-0.076** (0.029)	-0.078** (0.029)	0.003 (0.045)	-0.003 (0.041)	0.002 (0.040)
Rho	0.027 (0.022)	0.027 (0.022)	0.027 (0.023)	0.032 (0.021)	0.018 (0.018)	0.019 (0.018)
AIC	924.213	923.9298	918.135	1082.252	1074.334	1058.463
BIC	995.613	995.330	989.536	1150.663	1142.745	1126.875
Maddala R ²	0.050	0.050	0.053	0.050	0.057	0.071
N respondents /schools	1212/27	1212/27	1212/27	979 /27	979 /27	979 /27

Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017

GLMM (see section “estimation method” for details), author’s calculation, ** p<0.01, * p<0.05, + p<0.1

Restricting the sample to students with an early GPA of at least 4.0

Table O-C3: Determinants of (field-specific) aspiration-expectation match, AME/ DC (standard error)

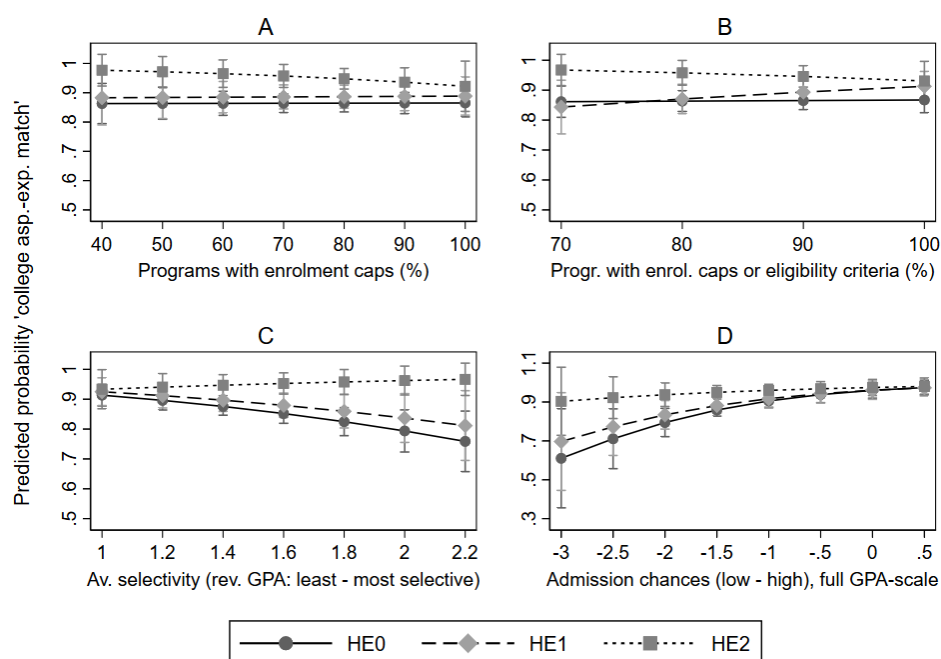
	College aspiration-expectation match			Field-specific aspiration-expectation match		
	M-A1	M-B1	M-C1	M-A2	M-B2	M-C2
Average admission barriers of aspired field of study						
A: Share of programs with enrolment caps	0.000 (0.001)	-	-	0.001 (0.001)	-	-
B: Share of programs with enrolment caps or eligibility criteria	-	0.001 (0.001)	-	-	-0.005** (0.002)	-
C: Av. selectivity of programs (av. GPA of last admitted applicant, rev. GPA-scale)	-	-	-0.092* (0.037)	-	-	-0.243** (0.052)
Social background, ref. HE0						
HE1	0.025 (0.024)	0.025 (0.023)	0.027 (0.023)	0.025 (0.034)	0.024 (0.034)	0.033 (0.034)
HE2	0.088** (0.023)	0.087** (0.023)	0.092** (0.023)	-0.008 (0.041)	-0.002 (0.040)	0.012 (0.039)
Control variables						
Av. ISEI	-0.001 (0.002)	-0.001 (0.002)	0.003 (0.002)	-0.014** (0.002)	-0.011** (0.002)	-0.002 (0.003)
School performance (<i>inverted GPA-scale, full range</i>)	0.107** (0.021)	0.107** (0.021)	0.107** (0.021)	0.030 (0.027)	0.029 (0.026)	0.025 (0.026)
Fluid competences (z-standardized)						
Verbal	-0.016 (0.012)	-0.016 (0.011)	-0.014 (0.012)	-0.017 (0.017)	-0.016 (0.017)	-0.009 (0.017)
Figural	-0.016 (0.010)	-0.015 (0.011)	-0.017 (0.010)	-0.014 (0.012)	0.018 (0.015)	0.022 (0.015)
Gender: Male	0.046* (0.022)	0.051* (0.023)	0.036 (0.022)	0.046 (0.031)	0.015 (0.031)	0.013 (0.031)
Migration background	-0.012 (0.021)	-0.011 (0.021)	-0.010 (0.021)	-0.012 (0.032)	-0.020 (0.031)	-0.017 (0.031)
School type, ref.: Gymnasium						
Comprehensive school	-0.063** (0.024)	-0.063** (0.024)	-0.066** (0.024)	0.024 (0.042)	0.021 (0.036)	0.017 (0.037)
Vocational Gymnasium	-0.105** (0.027)	-0.104** (0.027)	-0.106** (0.027)	0.009 (0.043)	-0.001 (0.038)	0.006 (0.038)
Rho	0.015 (0.023)	0.015 (0.023)	0.015 (0.024)	0.021 (0.019)	0.004 (0.015)	0.006 (0.015)
AIC	769.643	768.9136	763.5044	961.342	953.173	942.8049
BIC	834.396	833.6667	828.2575	1023.481	1015.312	1004.944
Maddala R ²	0.050	0.051	0.054	0.051	0.060	0.070
N respondents /schools	1076/27	1076/27	1076/27	880/27	880 /27	880/27

Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017

GLMM (see section “estimation method” for details), author’s calculation, ** p<0.01, * p<0.05, + p<0.1

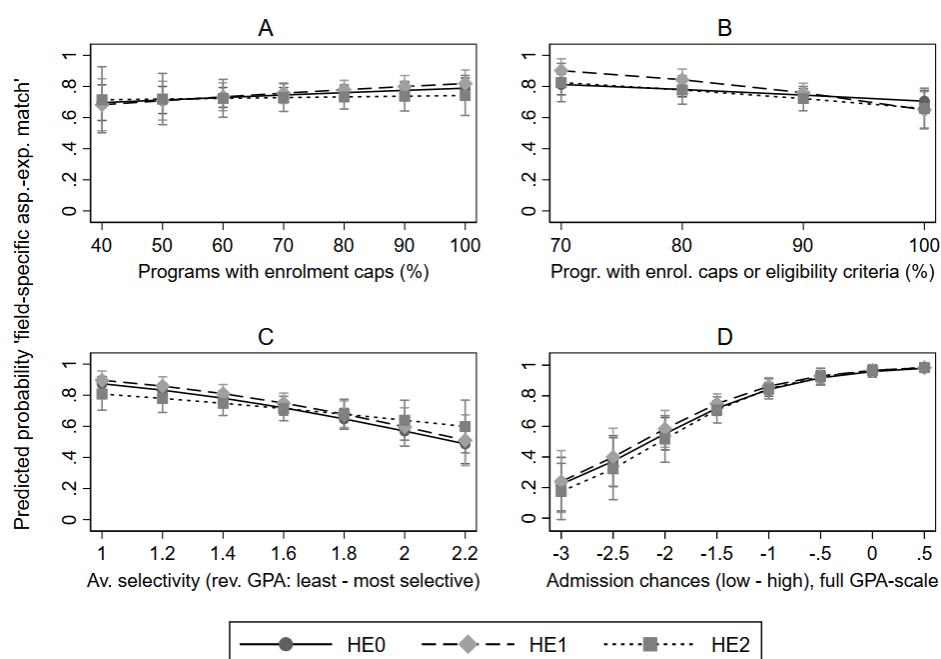
Full range of GPA-scale (1.0-6.0)

Figure O-C1: Predicted probabilities of college aspiration-expectation match, by social background and admission barriers/ admission chances (95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, study sample 1, author's calculation

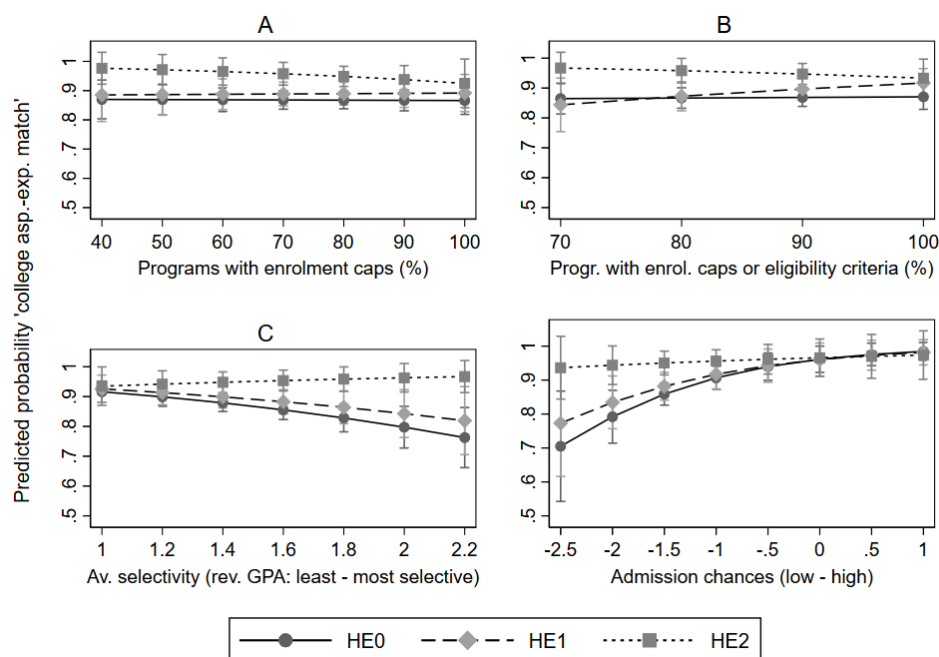
Figure O-C2: Predicted probabilities of field-specific aspiration-expectation match, by social background and admission barriers/ admission chances (95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, study sample 2, author's calculation

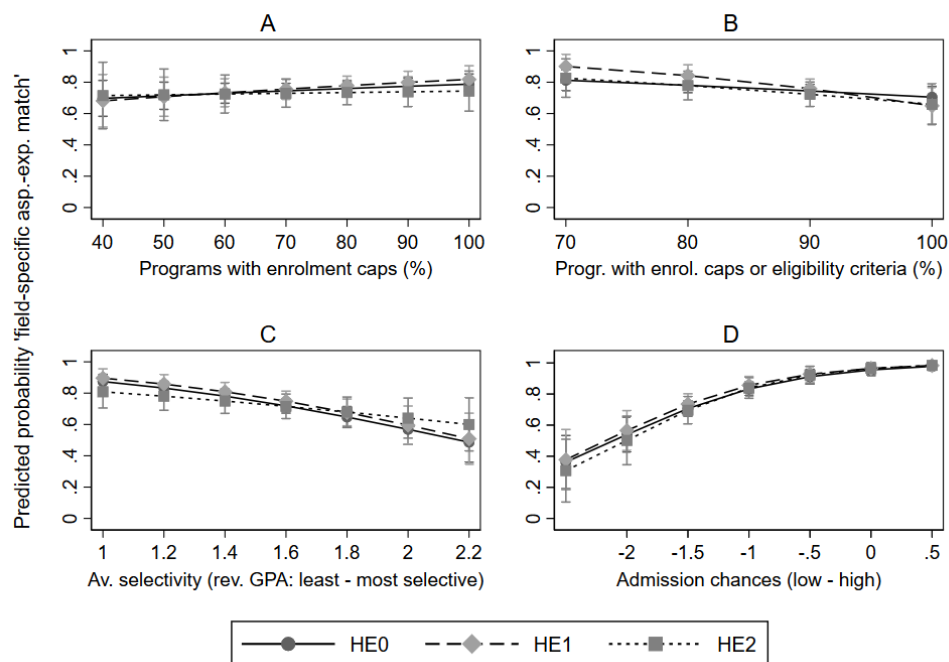
Truncated GPA-scale (1.0 – 4.0) + Dummy indicating whether students are above or below the GPA threshold of 4.0 (=pass)

Figure O-C3: Predicted probabilities of college aspiration-expectation match, by social background and admission barriers/ admission chances (95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, study sample 1, author's calculation

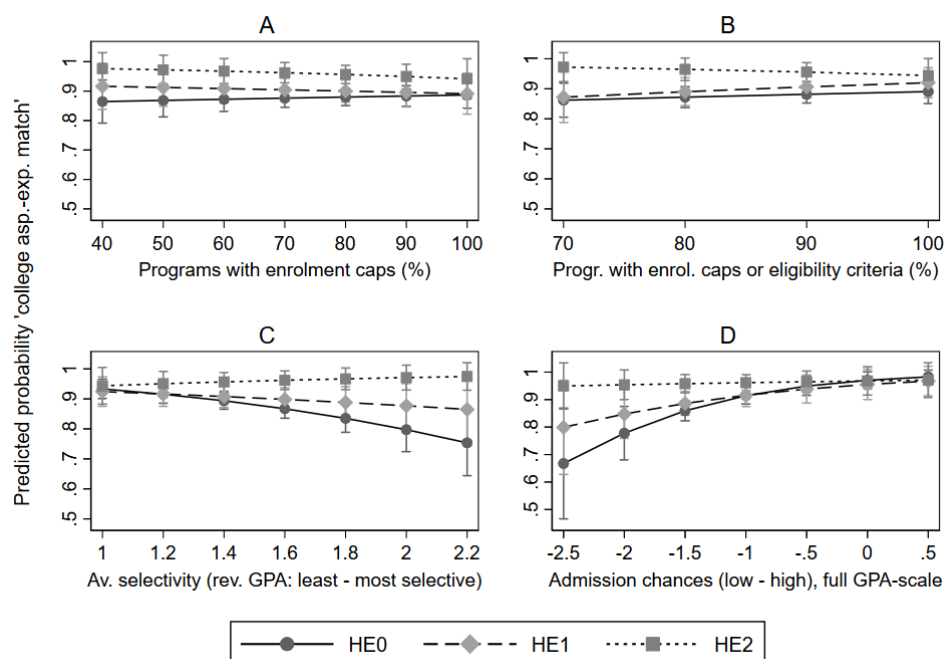
Figure O-C4: Predicted probabilities of field-specific aspiration-expectation match, by social background and admission barriers/ admission chances (95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, study sample 2, author's calculation

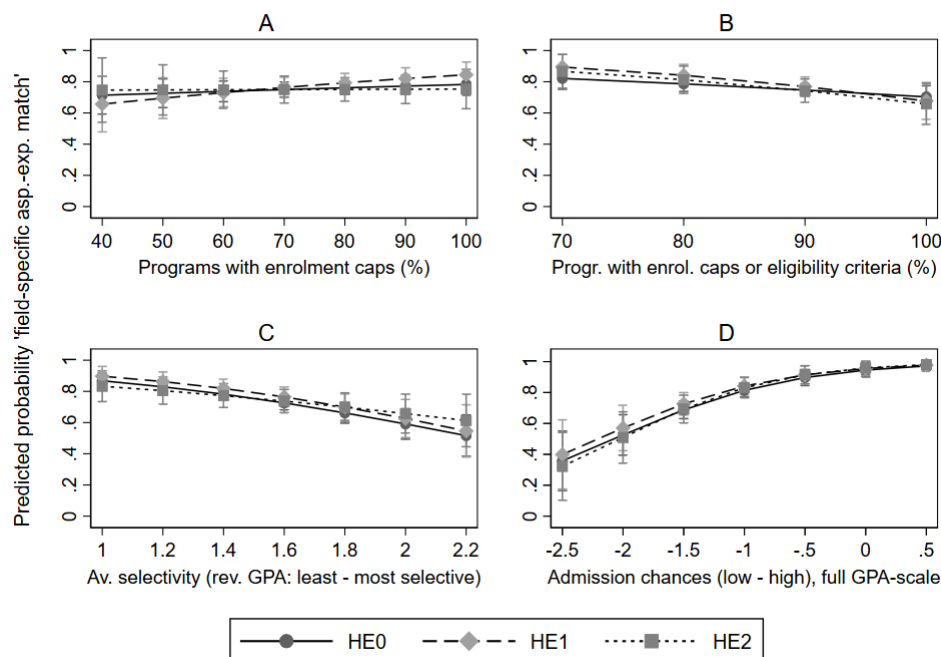
Restricting the sample to students with an early GPA of at least 4.0

Figure O-C5: Predicted probabilities of college aspiration-expectation match, by social background and admission barriers/ admission chances (95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, author's calculation

Figure O-C6: Predicted probabilities of field-specific aspiration-expectation match, by social background and admission barriers/ admission chances (95%-CI)



Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017, author's calculation

Section D. Supplementary analyses: students perceived probability of success

As discussed in the article's theory section, one possible mechanism behind the association between average admission barriers to the aspired field of study and the college aspiration-expectation match is students' perceived probability of getting admitted. In the following, I present additional analyses on the role of students perceived success probability. I focus on the average GPA-selectivity of students' aspired field of study as an operationalization of admission barriers and do not report the estimates for the average share of programs with enrolment caps (or eligibility criteria). As in the main analyses, respective estimates are neither substantial nor significant.

Operationalization: In the first Best Up-wave, we asked respondents who named an aspired field of study whether they consider it likely to get access to that field.² The four-items scale was transformed to a dummy variable: 0= (very) unlikely, 1= (very) likely (48 versus 52 percent of the study sample).

Descriptive statistics: Descriptives are in line with theoretical expectations and indicate that perceived success probabilities might indeed mediate the association between admission barriers and a (field-specific) aspiration-expectation match:

Students who perceive their access chances as likely aspire on average somewhat less selective fields (average selectivity: 1.4 versus 1.6). Furthermore, there is a strong association between students' perceived success probability and the two dependent variables. 93 percent of students who perceive high access chances have matched college aspirations and expectations (versus 78 percent who perceive low chances) and 86 percent report a field-specific aspiration-expectation match (versus 60 percent).

With regard to social background, the share of students with high perceived success probabilities is highest among students from double-academic backgrounds (58 percent; HE1:54 percent, HE0: 49 percent)

Multivariate analyses: Table O-D1 shows Average Marginal Effects/ Average Discrete Changes based on logistic random intercept models.

The first model (M-SP, for success probability) confirms that a one GPA-point increase in the average selectivity of the aspired field of study decreases the perceived success probability of getting access to this field by 23 percentage points. The social background of students is, however, not related to the success probability in these multivariate models (specifically after including school performance).

I now turn to the two main dependent variables of this study (aspiration-expectation match): M-C1 and M-C2 reproduce the models from the main analyses (deviations due to slightly varying case numbers in these models).

Models M-SP1 and M-SP2 (admission barriers not included) show that the perceived success probability increases the probability of matched college aspirations and expectations by 12 percentage

² Original item: „Wie hoch schätzen Sie Ihre Chancen ein, einen Studienplatz in diesem Studienfach zu bekommen? Sehr gering – eher gering – eher hoch – sehr hoch“ (How do you consider your chance to get a study place in this field? Very low – rather low – rather high – very high).

points and the probability of matched field-specific aspirations and expectations by 26 percentage points.

Model M-C-SP1 finally shows that including students' perceived success probabilities into the model presented in the main text clearly weakens the association between the average selectivity coefficient and the aspiration-expectation match, supporting the mediation assumption.

This is less clear for the field-specific aspiration-expectation match. Both, the coefficients for the average selectivity of the aspired field of study and for the perceived success probability remain substantial and significant in the full model (M-C-SP2).

I furthermore tested interaction effects between social background*average selectivity on success probabilities as well as social background*success probability on the dependent variables. Overall, there is no such interaction traceable.

Table O-D1: Students' perceived success probability as predictor and outcome, AME/ADC (standard errors)

	Perceived success probabilities ^{a)}	College aspiration-expectation match ^{a)}		Field-specific aspiration-expectation match ^{b)}			
	M-SP	M-C1 (main text)	M-SP1	M-C-SP1	M-C2 (main text)	M-SP2	M-C-SP2
Av. admission barriers of aspired field of study							
C: Av. selectivity of programs (av. GPA of last admitted applicant, rev. GPA-scale)	-0.235** (0.512)	-0.083* (0.038)	-	-0.048 (0.036)	-0.261** (0.051)	-	-0.205** (0.049)
Perceived success probability (very) high							
		-	0.125** (0.020)	0.123** (0.021)	-	0.261** (0.030)	0.209** (0.030)
Social background, ref. HE0							
HE1	0.022 (0.032)	0.026 (0.023)	0.022 (0.023)	0.024 (0.023)	0.027 (0.033)	0.021 (0.033)	0.028 (0.032)
HE2	0.017 (0.041)	0.099** (0.023)	0.095** (0.023)	0.098** (0.023)	-0.009 (0.041)	-0.023 (0.041)	-0.013 (0.040)
Control variables							
Av. ISEI							
School performance (inverted GPA-scale)	0.210** (0.023)	0.115** (0.020)	0.090** (0.020)	0.090** (0.020)	0.038 (0.025)	-0.011 (0.025)	0.001 (0.025)
Fluid competences (z-stand.)							
Verbal	-0.016 (0.016)	-0.010 (0.011)	-0.009 (0.011)	-0.008 (0.011)	-0.001 (0.016)	-0.005 (0.016)	0.002 (0.016)
Figural	0.011 (0.014)	-0.023* (0.010)	-0.024* (0.010)	-0.025* (0.010)	0.013 (0.015)	0.008 (0.015)	0.010 (0.014)
Gender: Male	0.107** (0.029)	0.038+ (0.021)	0.028 (0.021)	0.023 (0.021)	0.016 (0.029)	0.016 (0.029)	-0.009 (0.029)
Migration background	-0.002 (0.030)	0.001 (0.021)	-0.002 (0.020)	-0.001 (0.020)	-0.022 (0.030)	-0.023 (0.030)	-0.019 (0.029)
School type, ref.: Gymnasium							
Comprehensive school	-0.029 (0.048)	-0.044 (0.027)	-0.040 (0.028)	-0.041 (0.028)	0.022 (0.040)	0.039 (0.041)	0.027 (0.039)
Vocational Gymnasium	-0.061 (0.049)	-0.073* (0.029)	-0.066* (0.030)	-0.066* (0.030)	0.010 (0.041)	0.035 (0.041)	0.023 (0.039)
Rho	0.034 (0.017)	0.028 (0.023)	0.039 (0.027)	0.039 (0.027)	0.020 (0.018)	0.019 (0.017)	0.017 (0.018)
AIC	1471.946	896.0698	858.2683	860.3534	1039.455	1024.851	991.9602
BIC	1537.943	962.0663	919.1882	931.4265	1102.698	1083.229	1060.068
Maddala R ²	0.116	0.052	0.071	0.072	0.072	0.081	0.109
N respondents /schools	1,184 / 27	1,184 / 27	1,184 / 27	1,184 / 27	958 / 27	958 / 27	958 / 27

Source: Best Up institutional and individual data (wave 1), Microcensus 2012-2017

GLMM (for details see section “estimation method”, main text), author's calculation, ** p<0.01, * p<0.05, + p<0.1

^{a)} study sample 1 (for details see section “analytical steps and sample restriction”, main text)^{b)} study sample 2 (for details see section “analytical steps and sample restriction”, main text)

Diverging case numbers and estimates in M-C1 and M-C2 as compared to the models in the main text are due to item non-response on “perceived success probability.”