sociological science

Supplement to:

Gereke, Johanna, Joshua Hellyer, Jan Behnert, Saskia Exner, Alexander Herbel, Felix Jäger, Dean Lajic, Štěpán Mezenský, Vu Ngoc Anh, Tymoteusz Ogłaza, Jule Schabinger, Anna Sokolova, Daria Szafran, Noah Tirolf, Susanne Veit, and Nan Zhang. 2022. "Demographic Change and Group Boundaries in Germany: The Effect of Projected Demographic Decline on Perceptions of Who Has a Migration Background." Sociological Science 9: 206-220.

Contents

S1   Characteristics of the Online Sample

Table A1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Gender:					
Male	0.517	0.5	0	1	1077
Female	0.482	0.5	0	1	1077
Nonbinary	0.001	0.03	0	1	1077
Age	50.29	15.768	18	87	1077
Education:					
None	0.006	0.074	0	1	1077
Hauptschulabschluss (8th or 9th grade)	0.107	0.309	0	1	1077
Mittlere Reife (10th grade)	0.359	0.48	0	1	1077
Fachhochschulreife (Vocational training)	0.079	0.27	0	1	1077
Abitur	0.161	0.367	0	1	1077
Fachhochschulabschluss (Applied post-secondary education)	0.104	0.305	0	1	1077
University	0.166	0.372	0	1	1077
Still in school	0.002	0.043	0	1	1077
Other	0.017	0.128	0	1	1077
Non-natives in social network:					
None	0.531	0.499	0	1	1077
A Few	0.356	0.479	0	1	1077
Half	0.096	0.294	0	1	1077
Most	0.011	0.105	0	1	1077
All	0.006	0.08	0	1	1077
Should restrict immigration:					
Completely disagree	0.086	0.281	0	1	1077
Disagree	0.158	0.365	0	1	1077
Neutral	0.216	0.412	0	1	1077
Agree	0.241	0.428	0	1	1077
Completely agree	0.298	0.458	0	1	1077
Region:					
West	0.823	0.382	0	1	1066
East	0.177	0.382	0	1	1066
Municipal Population	295223.979	708764.384	435	3469849	1066

Note: All respondents are German citizens without a migration background. Contextual information is missing for 11 respondents who reported invalid zip codes.

S2   Native and Minority Profiles

Figure A1: Anonymized versions of unambiguous profiles with migration background.

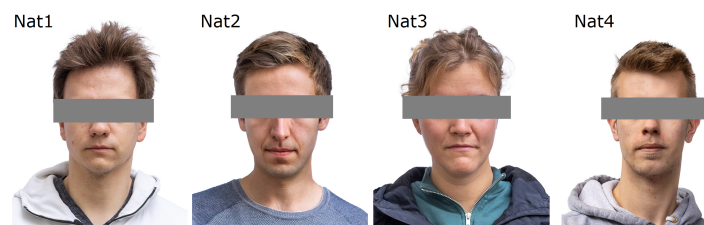**Figure A2:** Anonymized versions of ambiguous German/migrant profiles.

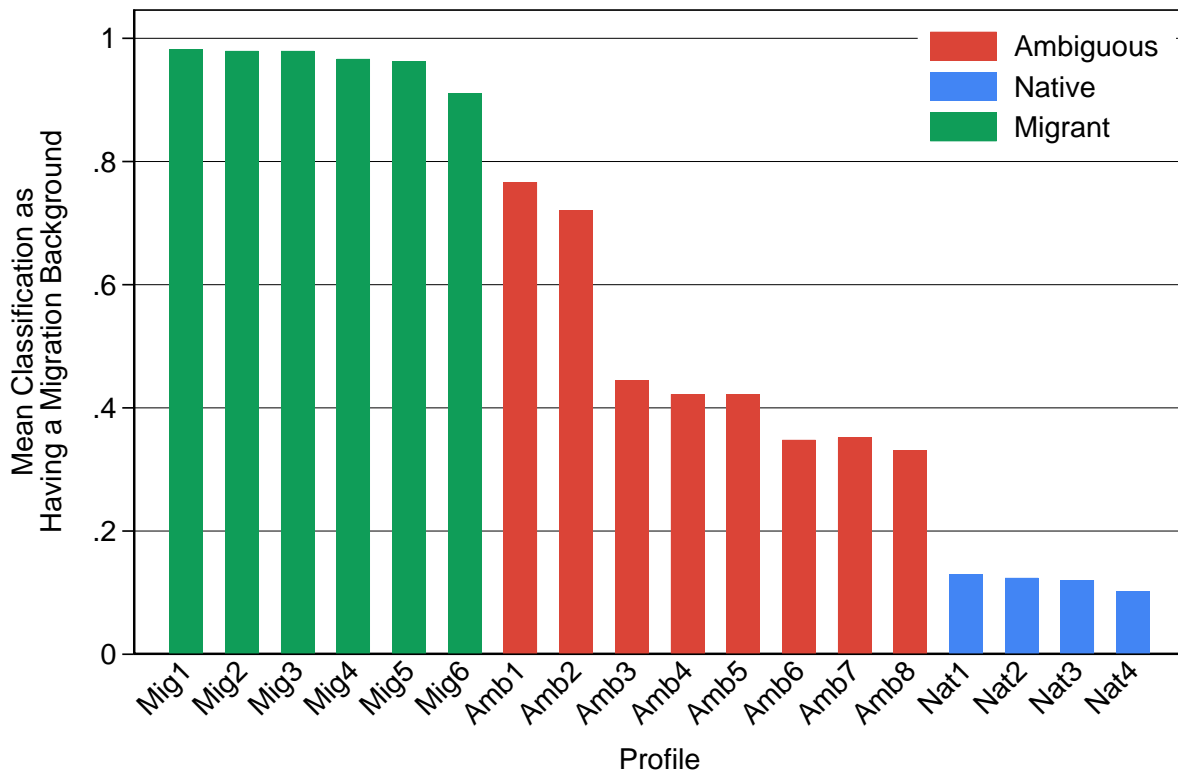**Figure A3:** Anonymized versions of unambiguous German ethnic majority profiles.

Figure A4: Mean classification in control condition by profile and profile type.

S3   Full Regression Tables for Results Reported in the Main Text

Table A2: Ratings of migration background by treatment condition

	(1)	(2)
Treatment	0.015	0.025
	(0.014)	(0.029)
Amb2		-0.046
		(0.027)
Amb3		-0.322***
		(0.027)
Amb4		-0.344***
		(0.027)
Amb5		-0.344***
		(0.027)
Amb6		-0.419***
		(0.027)
Amb7		-0.415***
		(0.027)
Amb8		-0.435***
		(0.027)
Treatment $\times$ Amb2		0.018
		(0.038)
Treatment $\times$ Amb3		-0.006
		(0.038)
Treatment $\times$ Amb4		0.006
		(0.038)
Treatment $\times$ Amb5		-0.017
		(0.038)
Treatment $\times$ Amb6		0.014
		(0.038)
Treatment $\times$ Amb7		-0.062
		(0.038)
Treatment $\times$ Amb8		-0.036
		(0.038)
Constant	0.476***	0.767***
	(0.010)	(0.020)
N respondents	1077	1077
N ratings	8616	8616

Note: The Table reports coefficients from mixed linear probability models. Estimates and their linear combinations are use to create Fig. 2 in the main text.

*p<0.05; **p<0.01; ***p<0.001

Table A3: Treatment heterogeneity by respondent characteristics

	(1)	(2)	(3)	(4)	(5)
Treatment	0.014	0.016	0.001	0.008	0.014
	(0.014)	(0.014)	(0.019)	(0.015)	(0.014)
Should Restrict Immigration	0.018				
	(0.010)				
Treatment × Should Restrict Immigration	-0.009				
	(0.014)				
Non-natives in Social Network		0.017			
		(0.010)			
Treatment × Non-natives in Social Network		0.014			
		(0.014)			
Abitur			0.003		
			(0.020)		
Treatment × Abitur			0.032		
			(0.028)		
East German				-0.059*	
				(0.026)	
Treatment × East German				0.037	
				(0.037)	
(log) Municipal Pop.					0.025*
					(0.010)
Treatment × (log) Municipal Pop.					-0.015
					(0.014)
Constant	0.476***	0.476***	0.473***	0.486***	0.475***
	(0.010)	(0.010)	(0.013)	(0.011)	(0.010)
N respondents	1077	1077	1057	1066	1066
N ratings	8616	8616	8456	8528	8528

Note: The Table reports coefficients from mixed linear probability models. Interaction coefficients are shown in Table 1 in the main text.

*p<0.05; **p<0.01; ***p<0.001

Table A4: Treatment Effects on Feelings towards Natives and Minorities

	(1)
Treatment	-0.021
	(0.029)
Native	-0.114***
	(0.017)
Foreign	-0.167***
	(0.015)
Treatment × Native	0.005
	(0.023)
Treatment × Foreign	-0.014
	(0.021)
Constant	0.350***
	(0.020)
N respondents	1077
N ratings	19386

Note: The Table reports coefficients from mixed linear probability models. Linear combinations of the interaction terms are shown in Table 2 in the main text.
*p<0.05; **p<0.01; ***p<0.001

S4   Re-estimation of Section S3 Tables using Logistic Regression

Table A5: Re-estimation of models from Table A2 using logistic regression

	(1)	(2)
Treatment	0.065	0.148
	(0.062)	(0.165)
Amb2		-0.277
		(0.149)
Amb3		-1.638***
		(0.144)
Amb4		-1.744***
		(0.145)
Amb5		-1.744***
		(0.145)
Amb6		-2.109***
		(0.148)
Amb7		-2.090***
		(0.147)
Amb8		-2.195***
		(0.148)
Treatment × Amb2		0.096
		(0.216)
Treatment × Amb3		-0.056
		(0.205)
Treatment × Amb4		-0.003
		(0.205)
Treatment × Amb5		-0.108
		(0.206)
Treatment × Amb6		0.053
		(0.208)
Treatment × Amb7		-0.333
		(0.210)
Treatment × Amb8		-0.199
		(0.210)
Constant	-0.106*	1.378***
	(0.044)	(0.116)
N respondents	1077	1077
N ratings	8616	8616

Note: The Table reports coefficients from mixed effect logistic regression models.
$^*p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$

Table A6: Re-estimation of models from Table A3 using logistic regression

	(1)	(2)	(3)	(4)	(5)
Treatment	0.062 (0.062)	0.069 (0.062)	0.006 (0.084)	0.033 (0.068)	0.063 (0.062)
Should Restrict Immigration	0.080 (0.043)				
Treatment × Should Restrict Immigration	-0.038 (0.062)				
Non-natives in Social Network		0.077 (0.043)			
Treatment × Non-natives in Social Network		0.061 (0.062)			
Abitur			0.015 (0.090)		
Treatment × Abitur			0.140 (0.126)		
East German				-0.265* (0.115)	
Treatment × East German				0.166 (0.162)	
(log) Municipal Pop.					0.110* (0.045)
Treatment × (log) Municipal Pop.					-0.068 (0.062)
Constant	-0.104* (0.044)	-0.108* (0.044)	-0.119* (0.058)	-0.061 (0.048)	-0.108* (0.044)
N respondents	1077	1077	1057	1066	1066
N ratings	8616	8616	8456	8528	8528

Note: The Table reports coefficients from mixed effect logistic regression models.
*p<0.05; **p<0.01; ***p<0.001

S5   Re-estimation of Section S3 Tables Dropping Respondents Who Failed Comprehension Checks

Table A7: Re-estimation of models from Table A2 dropping respondents who failed the comprehension checks

	(1)	(2)
Treatment	0.014	0.033
	(0.015)	(0.031)
Amb2		-0.041
		(0.029)
Amb3		-0.317***
		(0.029)
Amb4		-0.361***
		(0.029)
Amb5		-0.346***
		(0.029)
Amb6		-0.423***
		(0.029)
Amb7		-0.413***
		(0.029)
Amb8		-0.421***
		(0.029)
Treatment × Amb2		-0.001
		(0.041)
Treatment × Amb3		-0.010
		(0.041)
Treatment × Amb4		0.002
		(0.041)
Treatment × Amb5		-0.024
		(0.041)
Treatment × Amb6		0.014
		(0.041)
Treatment × Amb7		-0.068
		(0.041)
Treatment × Amb8		-0.062
		(0.041)
Constant	0.472***	0.762***
	(0.011)	(0.022)
N respondents	937	937
N ratings	7496	7496

Note: The Table reports coefficients from mixed linear probability models.
*p<0.05; **p<0.01; ***p<0.001

Table A8: Re-estimation of models from Table A3 dropping respondents who failed the comprehension checks

	(1)	(2)	(3)	(4)	(5)
Treatment	0.014 (0.015)	0.016 (0.015)	-0.001 (0.021)	0.007 (0.017)	0.013 (0.015)
Should Restrict Immigration	0.013 (0.010)				
Treatment × Should Restrict Immigration	-0.009 (0.015)				
Non-natives in Social Network		0.027* (0.011)			
Treatment × Non-natives in Social Network		0.015 (0.016)			
Abitur			-0.002 (0.022)		
Treatment × Abitur			0.033 (0.031)		
East German				-0.071* (0.028)	
Treatment × East German				0.037 (0.039)	
(log) Municipal Pop.					0.023* (0.011)
Treatment × (log) Municipal Pop.					-0.013 (0.015)
Constant	0.473*** (0.011)	0.472*** (0.011)	0.472*** (0.015)	0.484*** (0.012)	0.473*** (0.011)
N respondents	937	937	919	927	927
N ratings	7496	7496	7352	7416	7416

Note: The Table reports coefficients from mixed linear probability models.
*p<0.05; **p<0.01; ***p<0.001

Table A9: Re-estimation of the model from Table A4 dropping respondents who failed the comprehension checks

	(1)
Treatment	-0.025
	(0.030)
Native	-0.117***
	(0.018)
Foreign	-0.166***
	(0.016)
Treatment × Native	-0.007
	(0.025)
Treatment × Foreign	-0.001
	(0.022)
Constant	0.354***
	(0.022)
N respondents	937
N ratings	16866

Note: The Table reports coefficients from mixed linear probability models.
$^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$

S6 Sensitivity to Dropping Individual Profiles

Table A10: Re-estimation of the treatment effect dropping individual profiles

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treatment	0.013	0.010	0.014	0.012	0.015	0.011	0.022	0.018	0.008
	(0.015)	(0.015)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.016)
Constant	0.434***	0.441***	0.480***	0.484***	0.484***	0.494***	0.494***	0.497***	0.387***
	(0.011)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.011)
N	7539	7539	7539	7539	7539	7539	7539	7539	6462
Dropped Profile:	Amb1	Amb2	Amb3	Amb4	Amb5	Amb6	Amb7	Amb8	Amb1 + Amb2

Note: The Table reports coefficients from mixed linear probability models.
*p<0.05; **p<0.01; ***p<0.001