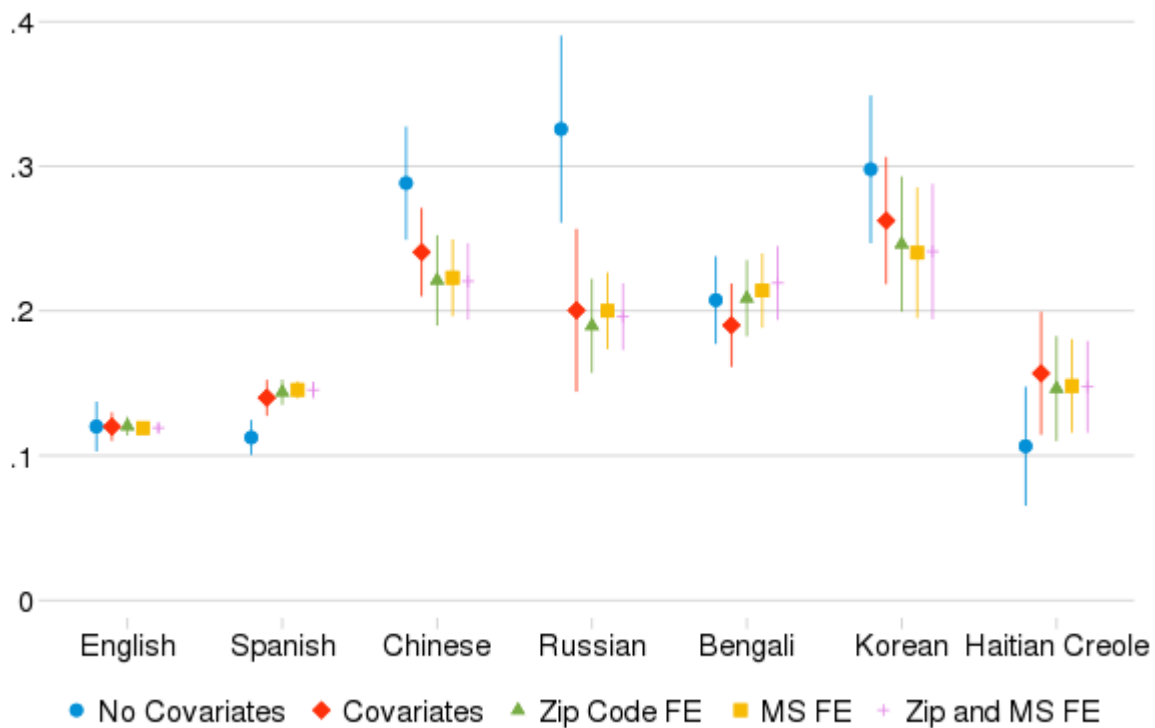
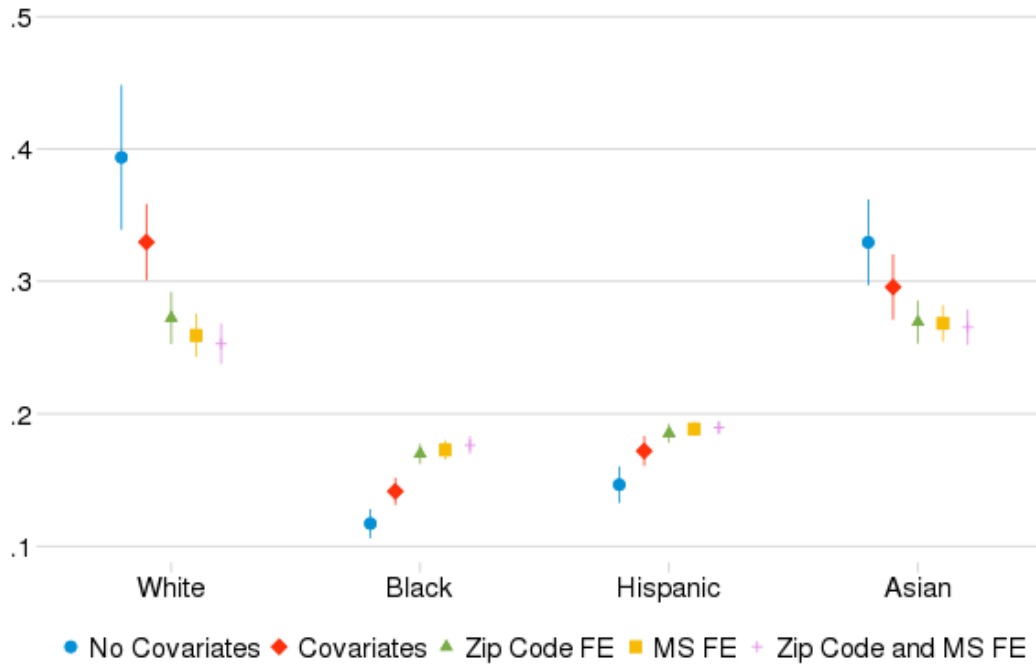


Appendix Figure 1: Within-School Similarity by Home Language

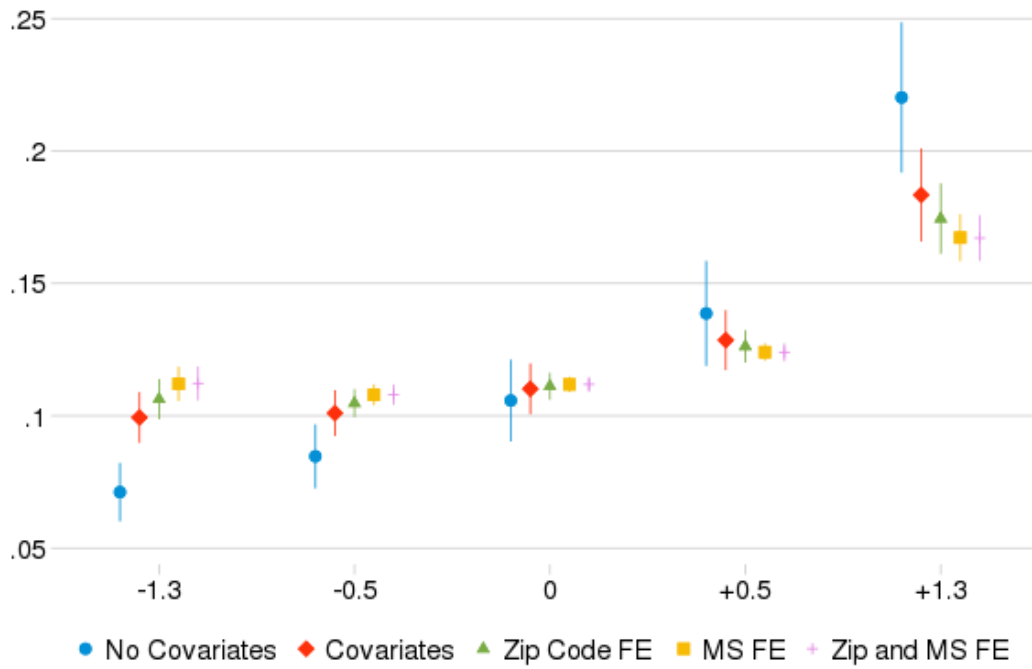


Note: see notes to Figure 1 for details.

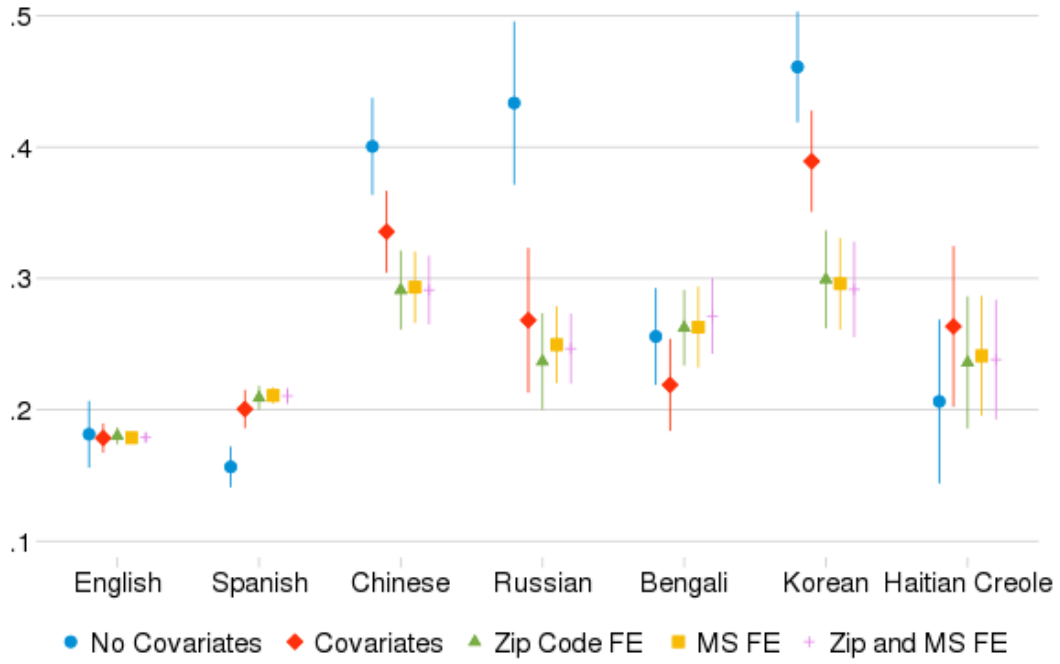
Appendix Figure 2: Within-School Similarity by Race/Ethnicity, Using School Codes



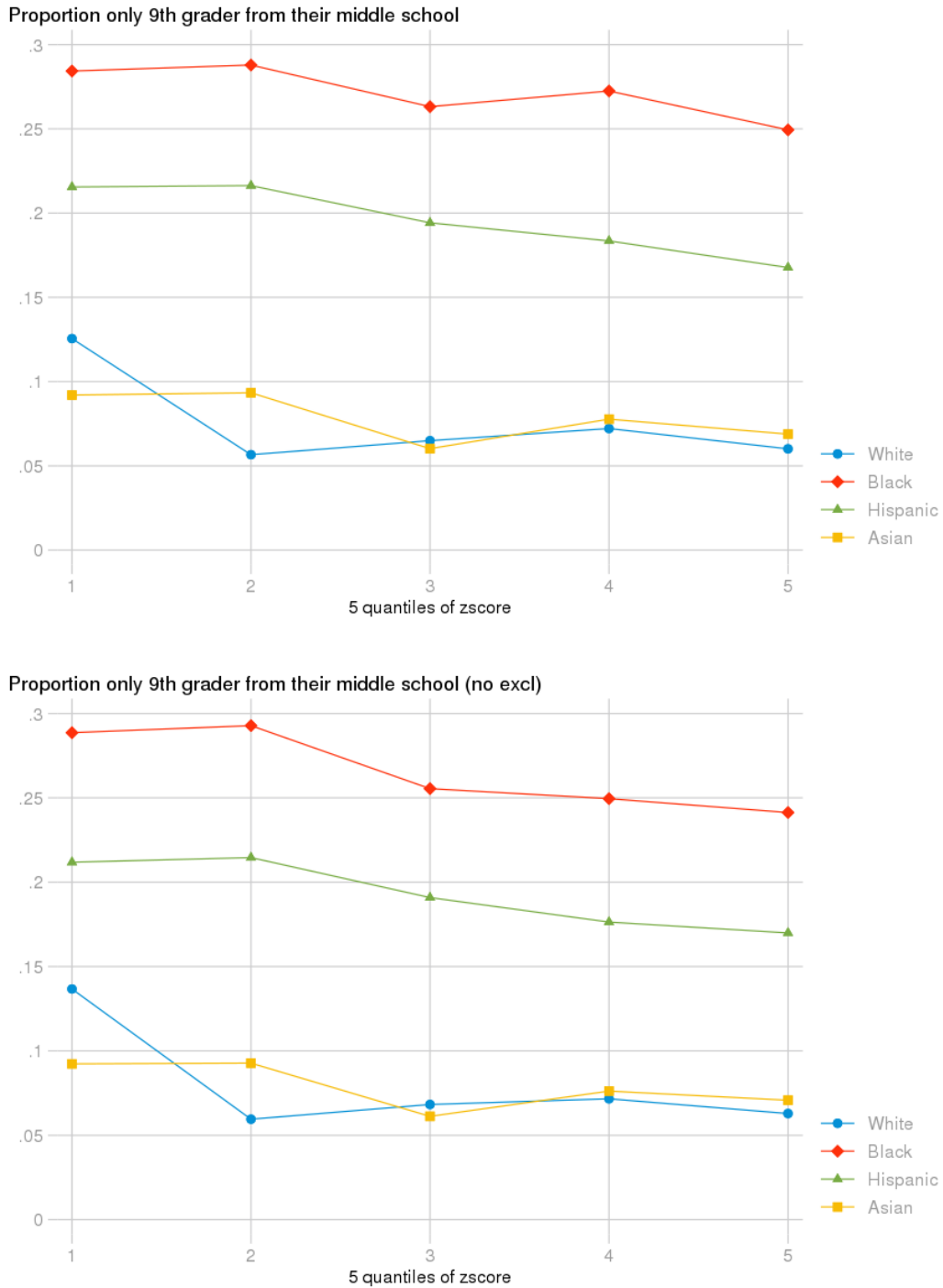
Appendix Figure 3: Within-School Similarity by Achievement Z-Score, Using School Codes



Appendix Figure 4: Within-School Similarity by Home Language, Using School Codes

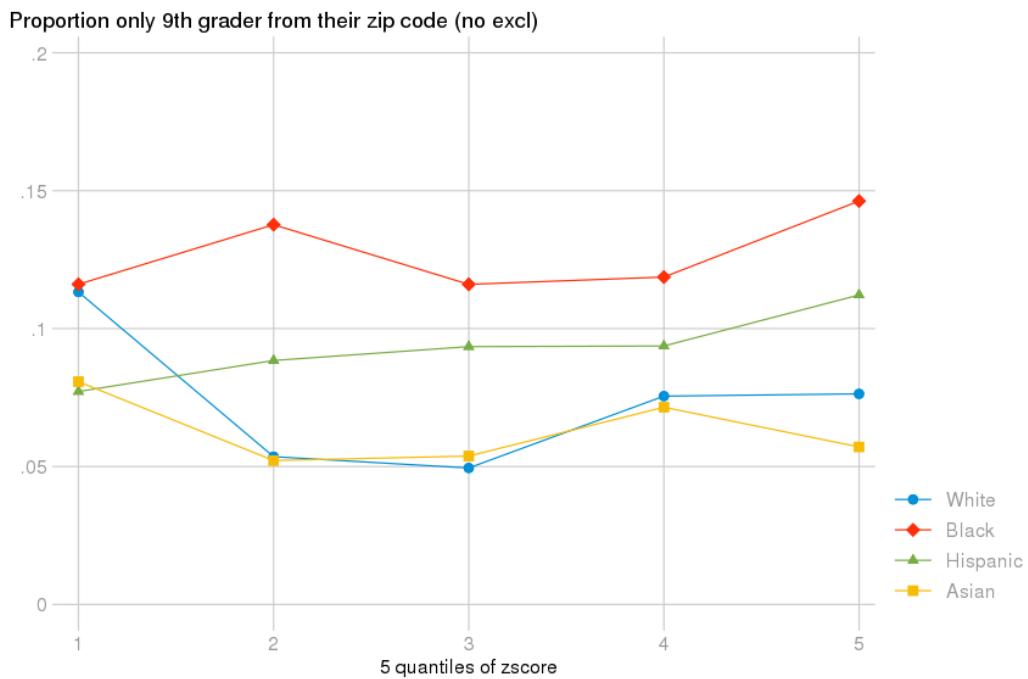
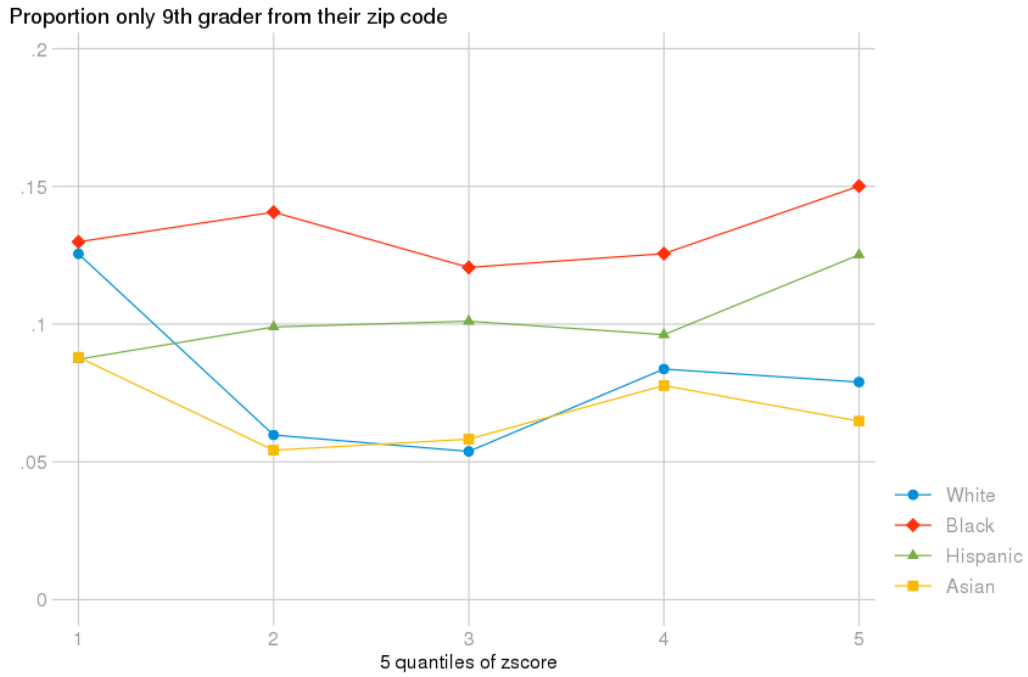


Appendix Figure 5: Isolation from middle school class, by race and achievement quintile



Notes: the top panel uses the analytic sample, which excludes students with the opportunity to remain in their school. The bottom panel uses the full sample of applicants.

Appendix Figure 6: Isolation from others in home zip code, by race and achievement quintile



Notes: the top panel uses the analytic sample, which excludes students with the opportunity to remain in their school. The bottom panel uses the full sample of applicants.

Appendix Table 1: Means of Student Variables, 2014-15

	Analytic sample	Excluded students
<u>Borough of middle school:</u>		
Manhattan	0.118	
Brooklyn	0.312	
Queens	0.294	
Staten Island	0.066	
Bronx	0.211	
<u>Race/ethnicity:</u>		
White	0.148	
Black	0.267	
Hispanic	0.405	
Asian	0.167	
<u>Language spoken at home:</u>		
English	0.548	
Spanish	0.254	
Chinese	0.066	
Russian	0.016	
Bengali	0.025	
Korean	0.006	
Haitian Creole	0.007	
Z-score (math + ELA)	-0.012	
Female	0.491	
Foreign born	0.194	
Charter school	0.029	

Notes: Authors' calculations using applications data provided by the Research Alliance for New York City Schools. Analytic sample includes all 8th grade students attending a NYC public middle school, including charter schools, who applied in the main round of admissions and did not have the option to remain in their school. N=62,225, but slightly lower (N=59,030) for z-score.

Appendix Table 2: Mean High School Application Similarity, Using “All Students” Reference Group

Subgroup:		<u>Programs: with respect to <i>all</i> students in the same:</u>				<u>Schools: with respect to <i>all</i> students in the same:</u>			
		School	Zip Code	Borough	City	School	Zip Code	Borough	City
Race/ Ethnicity	White	0.244	0.215	0.080	0.019	0.364	0.336	0.141	0.029
	Black	0.073	0.052	0.032	0.010	0.118	0.091	0.058	0.018
	Hispanic	0.100	0.072	0.035	0.011	0.142	0.111	0.058	0.016
	Asian	0.180	0.154	0.074	0.024	0.275	0.248	0.121	0.037
Home Language	English	0.121	0.096	0.045	0.013	0.183	0.156	0.079	0.020
	Spanish	0.100	0.071	0.034	0.010	0.143	0.109	0.057	0.016
	Chinese	0.219	0.181	0.088	0.028	0.326	0.287	0.143	0.044
	Russian	0.262	0.225	0.090	0.026	0.376	0.346	0.151	0.039
	Bengali	0.117	0.094	0.059	0.022	0.161	0.135	0.083	0.030
	Korean	0.222	0.219	0.084	0.027	0.384	0.387	0.158	0.047
	Creole	0.089	0.078	0.039	0.013	0.176	0.162	0.093	0.030
Ach. Quintile (citywide)	Lowest	0.082	0.060	0.027	0.007	0.130	0.103	0.051	0.013
	Second	0.095	0.073	0.034	0.010	0.151	0.124	0.063	0.017
	Third	0.114	0.094	0.043	0.012	0.180	0.156	0.078	0.021
	Fourth	0.142	0.118	0.055	0.016	0.218	0.192	0.096	0.026
	Highest	0.217	0.173	0.085	0.027	0.290	0.248	0.125	0.036
Female	No	0.130	0.104	0.047	0.014	0.196	0.167	0.081	0.022
	Yes	0.125	0.099	0.048	0.014	0.186	0.157	0.081	0.022
Immigrant	No	0.130	0.104	0.049	0.014	0.193	0.164	0.082	0.022
	Yes	0.119	0.093	0.043	0.014	0.184	0.154	0.075	0.023
Charter	No	0.129	0.103	0.048	0.014	0.193	0.165	0.082	0.022
	Yes	0.088	0.045	0.035	0.012	0.109	0.064	0.049	0.015

Notes: see notes to Table 1; for sample sizes, see Table 1.

Appendix Table 3: Mean High School Application Similarity within Middle School, by Race/Ethnicity and Achievement Quintile

<u>A. Within-middle school similarity with respect to own race/ethnic group:</u>						
	Quintile of achievement (city-wide)					
	Lowest	Second	Third	Fourth	Highest	All
White	0.199	0.210	0.242	0.271	0.326	0.275
Black	0.059	0.066	0.075	0.086	0.098	0.072
Hispanic	0.093	0.103	0.112	0.112	0.110	0.105
Asian	0.124	0.140	0.167	0.206	0.315	0.237
<i>Ratio W/B</i>	3.4	3.2	3.2	3.1	3.3	3.8
<i>Ratio W/H</i>	2.1	2.1	2.2	2.4	3.0	2.6
<u>B. Within-middle school similarity with respect to all students in school:</u>						
	Quintile of achievement (city-wide)					
	Lowest	Second	Third	Fourth	Highest	All
White	0.175	0.187	0.220	0.246	0.293	0.248
Black	0.059	0.067	0.074	0.091	0.112	0.074
Hispanic	0.084	0.094	0.103	0.112	0.135	0.101
Asian	0.106	0.125	0.143	0.163	0.231	0.183
<i>Ratio W/B</i>	3.0	2.8	3.0	2.7	2.6	3.3
<i>Ratio W/H</i>	2.1	2.0	2.1	2.2	2.2	2.5
<u>C. Within-middle school similarity with respect to students in the same quintile:</u>						
	Quintile of achievement (city-wide)					
	Lowest	Second	Third	Fourth	Highest	All
White	0.121	0.114	0.131	0.138	0.225	0.167
Black	0.030	0.033	0.036	0.050	0.090	0.040
Hispanic	0.049	0.051	0.059	0.060	0.117	0.060
Asian	0.060	0.060	0.069	0.084	0.227	0.142
<i>Ratio W/B</i>	4.1	3.5	3.6	2.7	2.5	4.2
<i>Ratio W/H</i>	2.4	2.2	2.2	2.3	1.9	2.8

Notes: see notes to Table 1. Means under “All” differ slightly from those in Table 1 and Appendix Table 2, since the student must have non-missing race/ethnicity and achievement score to be included.

Appendix Table 4: Identical Top Three Program Choices within Middle School, by Race/Ethnicity and Achievement Quintile

<u>A. Within-middle school similarity with respect to own race/ethnic group:</u>						
	Quintile of achievement (city-wide)					
	Lowest	Second	Third	Fourth	Highest	All
White	0.034	0.032	0.046	0.042	0.023	0.033
Black	0.001	0.001	0.001	0.001	0.002	0.001
Hispanic	0.005	0.004	0.005	0.004	0.003	0.004
Asian	0.006	0.005	0.006	0.006	0.011	0.008
<i>Ratio W/B</i>	23.8	26.6	39.7	27.9	10.4	24.0
<i>Ratio W/H</i>	6.7	7.6	9.9	11.1	8.1	7.8
<u>B. Within-middle school similarity with respect to all students in school:</u>						
	Quintile of achievement (city-wide)					
	Lowest	Second	Third	Fourth	Highest	All
White	0.028	0.028	0.042	0.038	0.021	0.030
Black	0.001	0.001	0.001	0.001	0.002	0.001
Hispanic	0.004	0.004	0.004	0.003	0.004	0.004
Asian	0.005	0.004	0.006	0.006	0.007	0.006
<i>Ratio W/B</i>	22.2	27.1	45.9	26.3	11.2	24.8
<i>Ratio W/H</i>	6.8	8.1	10.3	11.4	5.7	8.0
<u>C. Within-middle school similarity with respect to students in the same quintile:</u>						
	Quintile of achievement (city-wide)					
	Lowest	Second	Third	Fourth	Highest	All
White	0.045	0.044	0.060	0.046	0.025	0.040
Black	0.002	0.001	0.001	0.002	0.003	0.002
Hispanic	0.007	0.005	0.006	0.004	0.005	0.005
Asian	0.013	0.006	0.007	0.007	0.012	0.010
<i>Ratio W/B</i>	20.2	30.6	55.9	23.7	7.7	21.9
<i>Ratio W/H</i>	6.4	9.0	10.6	10.6	5.4	7.2

Notes: see notes to Table 2. Means under “All” differ slightly from those in Table 2, since the student must have non-missing race/ethnicity and achievement score to be included.

Appendix Table 5: Full regression results—within school similarity, own racial/ethnic group

	(1)	(2)	(3)	(4)	(5)
Black	-0.200*** (0.021)	-0.157*** (0.015)	-0.092*** (0.003)	-0.072*** (0.010)	-0.065*** (0.009)
Hispanic	-0.168*** (0.020)	-0.127*** (0.015)	-0.075*** (0.003)	-0.057*** (0.010)	-0.052*** (0.009)
Asian	-0.039 (0.022)	-0.035* (0.016)	0.004 (0.003)	0.018 (0.011)	0.022* (0.010)
zscore		0.026*** (0.004)	0.020*** (0.001)	0.007* (0.003)	0.007** (0.003)
zscore_2		0.015*** (0.003)	0.014*** (0.001)	0.008*** (0.002)	0.008*** (0.002)
zscore_3		0.003** (0.001)	0.003*** (0.000)	0.003*** (0.001)	0.002*** (0.001)
Spanish		0.014*** (0.004)	0.018*** (0.002)	0.020*** (0.003)	0.020*** (0.003)
Chinese		0.043** (0.014)	0.026*** (0.004)	0.030** (0.011)	0.026* (0.011)
Russian		0.008 (0.027)	-0.006 (0.006)	0.000 (0.010)	-0.003 (0.008)
Bengali		-0.019 (0.012)	0.003 (0.005)	0.008 (0.008)	0.012 (0.008)
Korean		0.065*** (0.018)	0.048*** (0.009)	0.044** (0.014)	0.043** (0.016)
Haitian Creole		0.016 (0.010)	0.006 (0.008)	0.008 (0.005)	0.008 (0.005)
French		0.018* (0.009)	0.012 (0.010)	0.017* (0.008)	0.017* (0.008)
SE Asian		0.019 (0.025)	0.022 (0.014)	0.018 (0.018)	0.016 (0.018)
Other		-0.001 (0.009)	0.005 (0.003)	0.009* (0.005)	0.010* (0.004)
Female		-0.007*** (0.002)	-0.006*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)

Foreign born		-0.009** (0.003)	-0.007*** (0.002)	-0.004 (0.002)	-0.004 (0.002)	
Charter		-0.012 (0.010)	0.008* (0.004)			
Brooklyn		-0.018 (0.016)				
Queens		-0.065*** (0.014)				
Staten Island		0.025 (0.041)				
Bronx		-0.065*** (0.013)				
Fixed effects			Borough	Zip code	School	Zip + School
Constant	0.272*** (0.021)	0.268*** (0.021)	0.185*** (0.002)	0.172*** (0.008)	0.167*** (0.007)	
Observations	61207	58077	58071	58076	58070	

Notes: these regression results were used in generating the predictive margins shown in Figure 1. Standard errors in parentheses, accounts for clustering at the middle school level (* p<0.05, ** p<0.01, *** p<0.001).

Appendix Table 6: Full regression results—within-school similarity, own achievement quintile

	(1)	(2)	(3)	(4)	(5)
zscore	0.042*** (0.004)	0.027*** (0.003)	0.023*** (0.003)	0.017*** (0.003)	0.018*** (0.003)
zscore_2	0.027*** (0.003)	0.023*** (0.003)	0.022*** (0.003)	0.021*** (0.002)	0.021*** (0.002)
zscore_3	0.004*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)	0.005*** (0.001)
Black		-0.076*** (0.011)	-0.033*** (0.006)	-0.023*** (0.005)	-0.018*** (0.004)
Hispanic		-0.059*** (0.010)	-0.025*** (0.005)	-0.017*** (0.004)	-0.013*** (0.004)
Asian		-0.027** (0.010)	-0.002 (0.006)	0.006 (0.005)	0.009 (0.005)
Other		-0.056*** (0.009)	-0.019*** (0.006)	-0.015* (0.006)	-0.010* (0.005)
Spanish		0.004 (0.003)	0.006** (0.002)	0.008*** (0.002)	0.008*** (0.002)
Chinese		0.018* (0.008)	0.004 (0.007)	0.008 (0.007)	0.007 (0.007)
Russian		0.001 (0.015)	-0.000 (0.009)	0.007 (0.007)	0.006 (0.006)
Bengali		-0.007 (0.010)	0.009 (0.007)	0.007 (0.006)	0.010 (0.006)
Korean		0.079*** (0.015)	0.043*** (0.012)	0.037** (0.013)	0.036** (0.013)
Haitian Creole		0.009 (0.008)	0.004 (0.006)	0.004 (0.006)	0.003 (0.005)
French		0.009 (0.007)	0.004 (0.006)	0.006 (0.006)	0.006 (0.006)
SE Asian		0.011 (0.015)	0.015 (0.014)	0.010 (0.013)	0.009 (0.013)
Other		0.000 (0.006)	0.007 (0.004)	0.007* (0.003)	0.007* (0.003)

Female		-0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	
Foreign born		-0.004 (0.002)	-0.003 (0.002)	-0.002 (0.002)	-0.002 (0.002)	
Charter		-0.018** (0.006)	-0.009 (0.006)			
Brooklyn		-0.013 (0.011)				
Queens		-0.016 (0.011)				
Staten Island		0.041 (0.033)				
Bronx		-0.026** (0.010)				
Fixed effects			Borough	Zip code	School	Zip + School
Constant	0.062*** (0.005)	0.125*** (0.016)	0.084*** (0.007)	0.076*** (0.005)	0.073*** (0.004)	
Observations	58931	58931	58924	58931	58924	

Notes: these regression results were used in generating the predictive margins shown in Figure 2. Standard errors in parentheses, accounts for clustering at the middle school level (* p<0.05, ** p<0.01, *** p<0.001).

Appendix Table 7: Full regression results—within-school similarity, own home language group

	(1)	(2)	(3)	(4)	(5)
Spanish	-0.008 (0.009)	0.020*** (0.005)	0.023*** (0.004)	0.026*** (0.004)	0.026*** (0.004)
Chinese	0.168*** (0.020)	0.121*** (0.016)	0.101*** (0.016)	0.104*** (0.015)	0.101*** (0.014)
Russian	0.206*** (0.031)	0.080** (0.029)	0.069*** (0.016)	0.081*** (0.014)	0.077*** (0.012)
Bengali	0.087*** (0.017)	0.070*** (0.015)	0.088*** (0.014)	0.095*** (0.014)	0.100*** (0.013)
Korean	0.178*** (0.026)	0.142*** (0.023)	0.126*** (0.024)	0.121*** (0.024)	0.122*** (0.024)
Haitian Creole	-0.014 (0.022)	0.037 (0.021)	0.026 (0.018)	0.029 (0.017)	0.028 (0.016)
Black		-0.133*** (0.015)	-0.061*** (0.008)	-0.036*** (0.007)	-0.028*** (0.006)
Hispanic		-0.106*** (0.014)	-0.048*** (0.008)	-0.027*** (0.006)	-0.022*** (0.005)
Asian		-0.079*** (0.014)	-0.032*** (0.008)	-0.014* (0.007)	-0.010 (0.006)
Other		-0.102*** (0.013)	-0.043*** (0.008)	-0.029*** (0.007)	-0.024*** (0.006)
zscore		0.025*** (0.004)	0.019*** (0.004)	0.005 (0.003)	0.006* (0.003)
zscore_2		0.014*** (0.003)	0.013*** (0.003)	0.008*** (0.002)	0.008*** (0.002)
zscore_3		0.002** (0.001)	0.003** (0.001)	0.002*** (0.001)	0.002*** (0.001)
Female		-0.009*** (0.002)	-0.008*** (0.002)	-0.007*** (0.001)	-0.007*** (0.001)
Foreign born		-0.006 (0.004)	-0.004 (0.004)	-0.001 (0.003)	-0.001 (0.003)
Charter		-0.019* (0.010)	0.000 (0.008)		

Brooklyn		-0.019				
		(0.015)				
Queens		-0.055***				
		(0.013)				
Staten Island		0.040				
		(0.045)				
Bronx		-0.062***				
		(0.013)				
Fixed effects			Borough	Zip code	School	Zip + School
Constant	0.120***	0.242***	0.157***	0.140***	0.135***	
	(0.009)	(0.020)	(0.009)	(0.006)	(0.005)	
Observations	57138	54283	54277	54278	54272	

Notes: these regression results were used in generating the predictive margins shown in Appendix Figure 1. Standard errors in parentheses, accounts for clustering at the middle school level (* p<0.05, ** p<0.01, *** p<0.001).

Appendix Table 8: Full regression results—within-school similarity, own race/ethnic group (using school codes)

	(1)	(2)	(3)	(4)	(5)
Black	-0.277*** (0.028)	-0.188*** (0.014)	-0.103*** (0.011)	-0.087*** (0.011)	-0.077*** (0.010)
Hispanic	-0.247*** (0.027)	-0.158*** (0.014)	-0.087*** (0.011)	-0.071*** (0.010)	-0.063*** (0.009)
Asian	-0.064* (0.029)	-0.034* (0.017)	-0.003 (0.012)	0.009 (0.012)	0.012 (0.011)
zscore		0.023*** (0.004)	0.014*** (0.003)	0.002 (0.003)	0.002 (0.003)
zscore_2		0.009*** (0.002)	0.008** (0.002)	0.003* (0.002)	0.003* (0.001)
zscore_3		0.002 (0.001)	0.002* (0.001)	0.002** (0.001)	0.002** (0.001)
Spanish		0.016*** (0.004)	0.022*** (0.003)	0.025*** (0.003)	0.024*** (0.003)
Chinese		0.074*** (0.016)	0.035** (0.013)	0.039** (0.012)	0.036** (0.011)
Russian		0.025 (0.025)	-0.012 (0.016)	-0.000 (0.011)	-0.004 (0.011)
Bengali		-0.049*** (0.014)	-0.002 (0.010)	-0.002 (0.011)	0.005 (0.009)
Korean		0.132*** (0.017)	0.049*** (0.013)	0.046*** (0.012)	0.043*** (0.012)
Haitian Creole		0.050** (0.016)	0.023* (0.010)	0.026*** (0.007)	0.025** (0.008)
French		0.023* (0.011)	0.012 (0.010)	0.018 (0.010)	0.017 (0.009)
SE Asian		-0.006 (0.029)	0.011 (0.025)	0.002 (0.021)	0.002 (0.021)
Other		0.002 (0.010)	0.008 (0.006)	0.011* (0.005)	0.011* (0.005)
Female		-0.010***	-0.009***	-0.008***	-0.008***

		(0.002)	(0.002)	(0.002)	(0.002)
Foreign born		-0.006 (0.004)	-0.003 (0.003)	-0.000 (0.002)	-0.000 (0.002)
Charter		-0.028** (0.011)	-0.000 (0.008)		
Brooklyn		0.035* (0.017)			
Queens		0.009 (0.016)			
Staten Island		0.286*** (0.042)			
Bronx		-0.056*** (0.013)			
Fixed effects		Borough	Zip code	School	Zip + School
Constant	0.394*** (0.028)	0.298*** (0.020)	0.262*** (0.010)	0.251*** (0.008)	0.245*** (0.008)
Observations	61207	58077	58071	58076	58070

Notes: these regression results were used in generating the predictive margins shown in Appendix Figure 2. Standard errors in parentheses, accounts for clustering at the middle school level (* p<0.05, ** p<0.01, *** p<0.001).

Appendix Table 9: Full regression results—within-school similarity, own achievement quintile (using school codes)

	(1)	(2)	(3)	(4)	(5)
zscore	0.053*** (0.006)	0.027*** (0.004)	0.021*** (0.003)	0.015*** (0.003)	0.015*** (0.003)
zscore_2	0.024*** (0.003)	0.018*** (0.002)	0.017*** (0.002)	0.016*** (0.002)	0.016*** (0.002)
zscore_3	0.002 (0.001)	0.003** (0.001)	0.003*** (0.001)	0.004*** (0.001)	0.004*** (0.001)
Black		-0.102*** (0.012)	-0.037*** (0.006)	-0.028*** (0.005)	-0.022*** (0.004)
Hispanic		-0.083*** (0.012)	-0.029*** (0.005)	-0.022*** (0.004)	-0.017*** (0.004)
Asian		-0.030* (0.012)	-0.002 (0.006)	0.003 (0.005)	0.006 (0.005)
Other		-0.075*** (0.011)	-0.023*** (0.005)	-0.021*** (0.006)	-0.017** (0.005)
Spanish		0.006 (0.003)	0.011*** (0.002)	0.012*** (0.002)	0.012*** (0.002)
Chinese		0.038*** (0.011)	0.012 (0.008)	0.015 (0.008)	0.015 (0.008)
Russian		0.008 (0.016)	-0.012 (0.012)	-0.003 (0.010)	-0.004 (0.009)
Bengali		-0.027* (0.012)	0.005 (0.008)	0.002 (0.006)	0.006 (0.005)
Korean		0.118*** (0.017)	0.042*** (0.012)	0.034** (0.011)	0.032** (0.011)
Haitian Creole		0.028* (0.013)	0.012 (0.009)	0.013 (0.008)	0.011 (0.008)
French		0.018* (0.009)	0.010 (0.008)	0.012 (0.007)	0.012 (0.007)
SE Asian		-0.005 (0.018)	0.010 (0.015)	-0.001 (0.015)	-0.001 (0.015)
Other		0.000	0.010**	0.008*	0.008*

		(0.008)	(0.004)	(0.003)	(0.003)	
Female		-0.003 (0.002)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	
Foreign born		-0.002 (0.003)	-0.000 (0.002)	0.001 (0.002)	0.001 (0.002)	
Charter		-0.032*** (0.009)	-0.017** (0.006)			
Brooklyn		0.019 (0.012)				
Queens		0.022 (0.013)				
Staten Island		0.256*** (0.048)				
Bronx		-0.020 (0.011)				
Fixed effects			Borough	Zip code	School	Zip + School
Constant	0.106*** (0.008)	0.149*** (0.016)	0.131*** (0.006)	0.124*** (0.004)	0.119*** (0.004)	
Observations	58931	58931	58924	58931	58924	

Notes: these regression results were used in generating the predictive margins shown in Appendix Figure 3. Standard errors in parentheses, accounts for clustering at the middle school level (* p<0.05, ** p<0.01, *** p<0.001).

Appendix Table 10: Full regression results—within-school similarity, own home language group (using school codes)

	(1)	(2)	(3)	(4)	(5)
Spanish	-0.025* (0.012)	0.022*** (0.006)	0.029*** (0.004)	0.032*** (0.004)	0.032*** (0.004)
Chinese	0.219*** (0.021)	0.157*** (0.016)	0.111*** (0.016)	0.115*** (0.015)	0.112*** (0.014)
Russian	0.252*** (0.028)	0.090** (0.028)	0.057** (0.018)	0.071*** (0.016)	0.068*** (0.014)
Bengali	0.074*** (0.021)	0.040* (0.018)	0.082*** (0.015)	0.084*** (0.016)	0.092*** (0.015)
Korean	0.280*** (0.023)	0.211*** (0.020)	0.119*** (0.019)	0.117*** (0.018)	0.113*** (0.019)
Haitian Creole	0.025 (0.033)	0.085** (0.030)	0.056* (0.025)	0.062** (0.023)	0.059* (0.023)
Black		-0.164*** (0.014)	-0.070*** (0.008)	-0.048*** (0.007)	-0.038*** (0.007)
Hispanic		-0.136*** (0.013)	-0.059*** (0.008)	-0.039*** (0.007)	-0.031*** (0.006)
Asian		-0.081*** (0.015)	-0.037*** (0.009)	-0.021* (0.008)	-0.017* (0.008)
Other		-0.125*** (0.013)	-0.053*** (0.008)	-0.042*** (0.007)	-0.036*** (0.007)
zscore		0.024*** (0.004)	0.015*** (0.003)	0.003 (0.003)	0.003 (0.003)
zscore_2		0.009*** (0.003)	0.007** (0.003)	0.003 (0.001)	0.003 (0.001)
zscore_3		0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Female		-0.011*** (0.002)	-0.011*** (0.002)	-0.009*** (0.002)	-0.009*** (0.002)
Foreign born		0.001 (0.004)	0.003 (0.004)	0.006 (0.003)	0.005 (0.003)
Charter		-0.036***	-0.009		

		(0.011)	(0.008)		
Brooklyn		0.031*			
		(0.016)			
Queens		0.019			
		(0.015)			
Staten Island		0.297***			
		(0.045)			
Bronx		-0.052***			
		(0.013)			
Fixed effects		Borough	Zip code	School	Zip + School
Constant	0.181***	0.271***	0.230***	0.214***	0.207***
	(0.013)	(0.019)	(0.008)	(0.006)	(0.006)
Observations	57138	54283	54277	54278	54272

Notes: these regression results were used in generating the predictive margins shown in Appendix Figure 4. Standard errors in parentheses, accounts for clustering at the middle school level (* p<0.05, ** p<0.01, *** p<0.001).

Appendix Table 11: Ninth Grade Exposure to Students from the Same Middle School or Zipcode, Full Sample Without Exclusions

	% of Gr9 from MS	Only student from MS	% of Gr9 from zipcode	Only student from zipcode
All students	0.135	0.182	0.113	0.096
Brooklyn	0.105	0.195	0.107	0.091
Manhattan	0.138	0.244	0.071	0.191
Queens	0.138	0.095	0.104	0.079
Staten Island	0.275	0.027	0.257	0.025
Bronx	0.131	0.288	0.116	0.089
White	0.212	0.075	0.161	0.073
Black	0.114	0.271	0.095	0.123
Hispanic	0.132	0.200	0.116	0.097
Asian	0.106	0.079	0.092	0.066
English	0.135	0.210	0.114	0.113
Spanish	0.126	0.182	0.117	0.082
Chinese	0.084	0.057	0.089	0.063
Russian	0.139	0.048	0.130	0.043
Bengali	0.088	0.151	0.072	0.079
Korean	0.126	0.029	0.106	0.050
Creole	0.060	0.152	0.097	0.067
Citywide quintile:				
Lowest	0.108	0.229	0.118	0.094
Second	0.110	0.220	0.112	0.101
Third	0.136	0.180	0.114	0.090
Fourth	0.167	0.156	0.118	0.092
Highest	0.149	0.112	0.092	0.087
Male	0.135	0.178	0.116	0.094
Female	0.134	0.187	0.110	0.100
Native born	0.139	0.190	0.113	0.101
Foreign born	0.114	0.151	0.113	0.076
Non-charter	0.131	0.175	0.113	0.093
Charter	0.213	0.350	0.101	0.175

Notes: same as Table 3, except that students with the option to remain in their current school are retained in the sample.