

Social Skills and Promotion: A Study of Racial and Gender Gaps

Online Appendix: robustness checks.

This document provides additional estimates that show that the qualitative estimates are robust to adding additional controls. The first control is a college indicator variable. It is possible that the effects of social skills are biased because of unmeasured ability differences. Since the social skills variable used in this study is a noisy indicator of the actual social skills, the noise from the proxy variable could be correlated with other types of ability. Graduating from college demonstrates ability. Therefore, controlling from college is a way to include another measurement of ability. The second control variable is the interaction between cognitive skills and social skills. Weinberger (2014) finds that the demand for social skills increases with cognitive skills. Tables 2A-5A replicate the analysis in main paper and test whether the results are robust to adding college dummy and the interaction between social skills and AFQT. The conclusions are robust to the inclusion of these variables.

I also report the distribution of social skills variable and compare it across race and gender. The distributions show that the distribution of social skills for white workers is dominant that for black workers. Among white workers, the distributions of social skills for male workers and female workers overlap each other. This suggests that there are racial gaps in the distribution of social skills, but there are not gender gaps in the distribution of social skills.

Table 2A: Social Skills and the Likelihood of Promotion, Robustness Checks

VARIABLES	Men White			Women White			Men Black			Women Black		
Social Skills	0.0166*** (0.00386)	0.0158*** (0.00386)	0.0159*** (0.00386)	0.0102*** (0.00372)	0.00993*** (0.00363)	0.0105*** (0.00373)	0.0145** (0.00621)	0.0144*** (0.00551)	0.0137** (0.00623)	0.0162*** (0.00618)	0.0193*** (0.00578)	0.0163*** (0.00618)
Cognitive (AFQT)	0.0102*** (0.00288)	0.00573* (0.00308)	0.00573* (0.00308)	0.00872*** (0.00337)	0.0105*** (0.00355)	0.0105*** (0.00355)	0.0101** (0.00456)	0.00688 (0.00509)	0.00692 (0.00510)	0.0111** (0.00505)	0.0134** (0.00524)	0.0119** (0.00532)
Soft Skills	0.00860*** (0.00294)	0.00783*** (0.00295)	0.00783*** (0.00295)	0.00109 (0.00288)	0.00148 (0.00290)	0.00145 (0.00290)	0.00794** (0.00361)	0.00722** (0.00363)	0.00728** (0.00364)	0.00243 (0.00384)	0.00227 (0.00386)	0.00259 (0.00386)
Social Skills * AFQT	0.000474 (0.00314)		-0.000168 (0.00315)	-0.00187 (0.00320)		-0.00164 (0.00321)	-0.00122 (0.00502)		-0.00157 (0.00502)	-0.00885* (0.00459)		-0.00883* (0.00460)
College		0.0225*** (0.00613)	0.0225*** (0.00615)		-0.00941 (0.00656)	-0.00922 (0.00657)		0.0194* (0.0117)	0.0196* (0.0117)		-0.00435 (0.00958)	-0.00417 (0.00958)
Observations	28,036	28,036	28,036	23,808	23,808	23,808	10,746	10,746	10,746	11,565	11,565	11,565

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3A: Racial and Gender Gaps in the Effects of Social Skills on Promotion, Robustness Checks

VARIABLES	Male Workers			Female Workers			Black Workers			White Workers		
Social Skills	0.0169*** (0.00385)	0.0159*** (0.00385)	0.0161*** (0.00386)	0.0109*** (0.00368)	0.00992*** (0.00363)	0.0112*** (0.00369)	0.0128** (0.00580)	0.0149*** (0.00549)	0.0125** (0.00581)	0.0170*** (0.00385)	0.0164*** (0.00385)	0.0167*** (0.00385)
Cognitive (AFQT)	0.0104*** (0.00287)	0.00596** (0.00303)	0.00596** (0.00303)	0.00871*** (0.00336)	0.0102*** (0.00349)	0.0102*** (0.00348)	0.00974** (0.00449)	0.00859* (0.00471)	0.00874* (0.00473)	0.0102*** (0.00286)	0.00873*** (0.00298)	0.00872*** (0.00298)
Soft Skills	0.00847*** (0.00294)	0.00774*** (0.00294)	0.00774*** (0.00294)	0.00108 (0.00287)	0.00143 (0.00288)	0.00137 (0.00288)	0.00839** (0.00365)	0.00795** (0.00365)	0.00818** (0.00366)	0.00856*** (0.00294)	0.00833*** (0.00294)	0.00832*** (0.00294)
Black*Social Skills	-0.00169 (0.00702)	-0.00148 (0.00668)	-0.00192 (0.00700)	0.00719 (0.00708)	0.00965 (0.00678)	0.00708 (0.00708)						
Black*Cognitive Skills	-0.00128 (0.00530)	-0.000509 (0.00529)	-0.000493 (0.00529)	0.00294 (0.00595)	0.00351 (0.00595)	0.00288 (0.00596)						
Black*Soft Skills	-0.000475 (0.00471)	-0.000547 (0.00469)	-0.000518 (0.00470)	0.000780 (0.00478)	0.000583 (0.00478)	0.000761 (0.00478)						
Female*Social Skills							0.00464 (0.00793)	0.00416 (0.00794)	0.00474 (0.00793)	-0.00726 (0.00528)	-0.00727 (0.00528)	-0.00728 (0.00528)
Female*Cognitive Skills							0.00269 (0.00667)	0.00358 (0.00658)	0.00256 (0.00665)	-0.00149 (0.00439)	-0.00143 (0.00439)	-0.00144 (0.00439)
Female*Soft Skills							-0.00622 (0.00529)	-0.00619 (0.00528)	-0.00624 (0.00529)	-0.00740* (0.00408)	-0.00746* (0.00408)	-0.00747* (0.00408)
Social Skills * AFQT	3.73e-05 (0.00266)		-0.000537 (0.00267)	-0.00385 (0.00264)		-0.00371 (0.00264)	-0.00494 (0.00338)		-0.00500 (0.00338)	-0.000622 (0.00225)		-0.000821 (0.00226)
College		0.0219*** (0.00544)	0.0220*** (0.00545)		-0.00785 (0.00542)	-0.00753 (0.00543)		0.00577 (0.00744)	0.00606 (0.00743)		0.00733 (0.00450)	0.00744* (0.00451)
Observations	38,782	38,782	38,782	35,373	35,373	35,373	22,311	22,311	22,311	51,844	51,844	51,844

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4A: The Wage Returns to Social Skills for Promoted, Robustness Checks

VARIABLES	Male White			Female White			Male Black			Female Black		
Social Skills	0.103*** (0.0118)	0.108*** (0.0118)	0.103*** (0.0118)	0.0564*** (0.0112)	0.0580*** (0.0113)	0.0564*** (0.0112)	0.0870*** (0.0172)	0.0686*** (0.0158)	0.0870*** (0.0172)	0.0638*** (0.0163)	0.0625*** (0.0150)	0.0638*** (0.0163)
Cognitive (AFQT)	0.115*** (0.00987)	0.115*** (0.00985)	0.115*** (0.00987)	0.0863*** (0.0106)	0.0861*** (0.0105)	0.0863*** (0.0106)	0.114*** (0.0143)	0.114*** (0.0143)	0.114*** (0.0143)	0.119*** (0.0132)	0.119*** (0.0132)	0.119*** (0.0132)
Soft Skills	0.0612*** (0.00864)	0.0610*** (0.00863)	0.0612*** (0.00864)	0.0506*** (0.00890)	0.0505*** (0.00888)	0.0506*** (0.00890)	0.0387*** (0.0115)	0.0405*** (0.0116)	0.0387*** (0.0115)	0.0472*** (0.0114)	0.0473*** (0.0114)	0.0472*** (0.0114)
Promoted	0.108*** (0.0159)	0.107*** (0.0159)	0.108*** (0.0159)	0.0856*** (0.0151)	0.0853*** (0.0151)	0.0856*** (0.0151)	0.137*** (0.0248)	0.137*** (0.0249)	0.137*** (0.0248)	0.139*** (0.0207)	0.139*** (0.0207)	0.139*** (0.0207)
Promoted*Social Skills	-0.0163 (0.0173)	-0.0145 (0.0174)	-0.0163 (0.0173)	0.0119 (0.0152)	0.0121 (0.0152)	0.0119 (0.0152)	-0.0268 (0.0230)	-0.0246 (0.0230)	-0.0268 (0.0230)	-0.0251 (0.0220)	-0.0245 (0.0219)	-0.0251 (0.0220)
Promoted*Cognitive Skills	0.000425 (0.0133)	0.00185 (0.0132)	0.000425 (0.0133)	0.0265* (0.0140)	0.0271* (0.0140)	0.0265* (0.0140)	0.0159 (0.0206)	0.0176 (0.0209)	0.0159 (0.0206)	0.0159 (0.0180)	0.0164 (0.0182)	0.0159 (0.0180)
Promoted*Soft Skills	-0.0168 (0.0128)	-0.0164 (0.0128)	-0.0168 (0.0128)	0.0172 (0.0131)	0.0172 (0.0130)	0.0172 (0.0131)	-0.00957 (0.0205)	-0.0100 (0.0205)	-0.00957 (0.0205)	-0.00467 (0.0148)	-0.00466 (0.0148)	-0.00467 (0.0148)
Social Skills * AFQT	0.0144 (0.00981)		0.0144 (0.00981)	0.00481 (0.00981)		0.00481 (0.00981)	0.0390*** (0.0132)		0.0390*** (0.0132)	0.00370 (0.0114)		0.00370 (0.0114)
College	0.175*** (0.0187)	0.177*** (0.0186)	0.175*** (0.0187)	0.130*** (0.0190)	0.131*** (0.0189)	0.130*** (0.0190)	0.152*** (0.0335)	0.156*** (0.0335)	0.152*** (0.0335)	0.106*** (0.0264)	0.106*** (0.0264)	0.106*** (0.0264)
Observations	28,036	28,036	28,036	23,808	23,808	23,808	10,746	10,746	10,746	11,565	11,565	11,565
R-squared	0.179	0.178	0.179	0.111	0.111	0.111	0.139	0.136	0.139	0.136	0.136	0.136

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

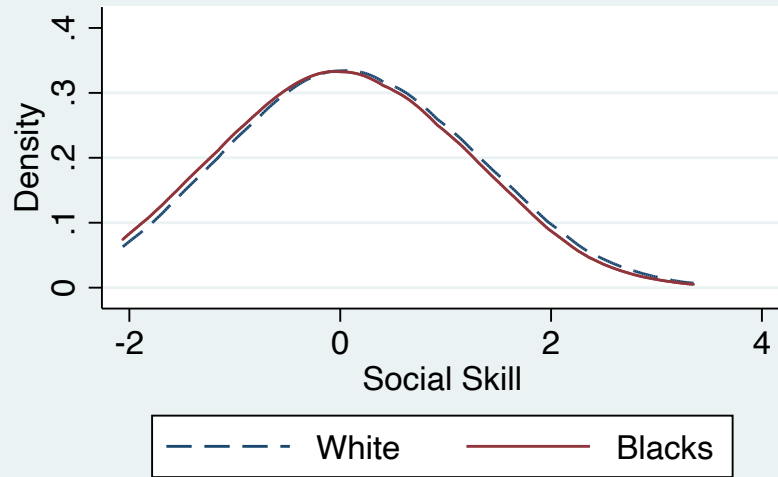
Table 5A: Gender and Racial Gaps in the Wage Returns to Social Skills, Robustness Checks

VARIABLES	Male			Female			White			Black		
Social Skills	0.104*** (0.0117)	0.106*** (0.0116)	0.0988*** (0.0115)	0.0627*** (0.0109)	0.0596*** (0.0110)	0.0580*** (0.0108)	0.108*** (0.0117)	0.107*** (0.0116)	0.103*** (0.0116)	0.0802*** (0.0169)	0.0655*** (0.0158)	0.0754*** (0.0166)
Cognitive (AFQT)	0.151*** (0.00907)	0.117*** (0.00947)	0.117*** (0.00948)	0.114*** (0.00963)	0.0905*** (0.00992)	0.0905*** (0.00994)	0.151*** (0.00905)	0.120*** (0.00929)	0.121*** (0.00930)	0.142*** (0.0136)	0.122*** (0.0137)	0.121*** (0.0137)
Soft Skills	0.0646*** (0.00852)	0.0589*** (0.00838)	0.0590*** (0.00841)	0.0572*** (0.00859)	0.0522*** (0.00852)	0.0523*** (0.00853)	0.0669*** (0.00851)	0.0619*** (0.00838)	0.0620*** (0.00839)	0.0431*** (0.0115)	0.0397*** (0.0114)	0.0388*** (0.0114)
Black*Social Skills	-0.0227 (0.0206)	-0.0414** (0.0196)	-0.0245 (0.0203)	-0.000181 (0.0188)	-0.00167 (0.0181)	0.00168 (0.0187)						
Black*Cognitive Skills	-0.00935 (0.0163)	-0.00262 (0.0162)	-0.00325 (0.0162)	0.0261* (0.0153)	0.0263* (0.0153)	0.0271* (0.0153)						
Black*Soft Skills	-0.0215 (0.0143)	-0.0207 (0.0141)	-0.0218 (0.0141)	-0.00299 (0.0139)	-0.00245 (0.0138)	-0.00268 (0.0139)						
Female*Social Skills							-0.0477*** (0.0162)	-0.0482*** (0.0160)	-0.0480*** (0.0160)	-0.0115 (0.0215)	-0.00685 (0.0214)	-0.00937 (0.0213)
Female*Cognitive Skills							-0.0361*** (0.0132)	-0.0352*** (0.0130)	-0.0351*** (0.0130)	0.00310 (0.0180)	-0.00404 (0.0180)	0.000359 (0.0180)
Female*Soft Skills							-0.0106 (0.0122)	-0.0121 (0.0120)	-0.0120 (0.0120)	0.00762 (0.0157)	0.00691 (0.0157)	0.00716 (0.0157)
Promoted	0.114*** (0.0134)	0.108*** (0.0131)	0.108*** (0.0131)	0.106*** (0.0122)	0.108*** (0.0121)	0.108*** (0.0121)	0.102*** (0.0113)	0.101*** (0.0111)	0.101*** (0.0111)	0.133*** (0.0145)	0.131*** (0.0144)	0.132*** (0.0144)
Social Skills * AFQT	0.0249*** (0.00810)		0.0205** (0.00805)	0.00708 (0.00774)		0.00481 (0.00773)	0.0138** (0.00699)		0.00971 (0.00696)	0.0230*** (0.00886)		0.0216** (0.00883)
College		0.172*** (0.0163)	0.170*** (0.0164)		0.123*** (0.0155)	0.123*** (0.0155)		0.154*** (0.0133)	0.153*** (0.0133)		0.128*** (0.0209)	0.126*** (0.0209)
Constant	2.212*** (0.259)	2.203*** (0.257)	2.187*** (0.257)	2.670*** (0.277)	2.643*** (0.276)	2.643*** (0.276)	2.613*** (0.233)	2.566*** (0.232)	2.562*** (0.232)	2.115*** (0.316)	2.142*** (0.314)	2.129*** (0.314)
Observations	38,782	38,782	38,782	35,373	35,373	35,373	51,844	51,844	51,844	22,311	22,311	22,311
R-squared	0.203	0.214	0.215	0.120	0.128	0.128	0.185	0.195	0.195	0.138	0.145	0.146

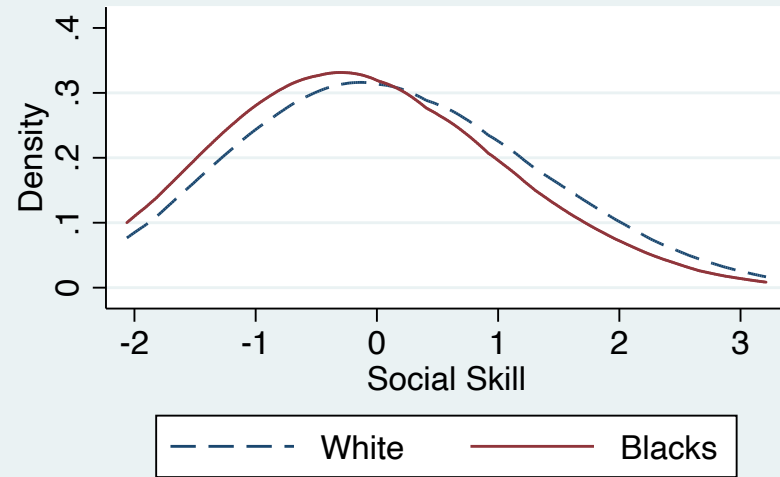
Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Male Workers



Female Workers



Black Workers



White Workers

