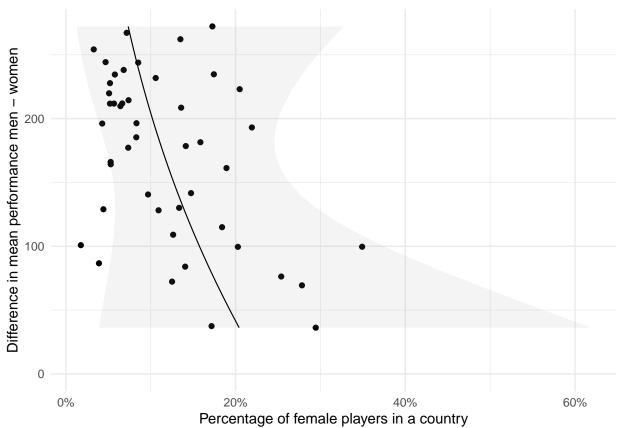
Gender Differences in Chess

Exploratory data analysis

Summary table of all players

Summary table of all players

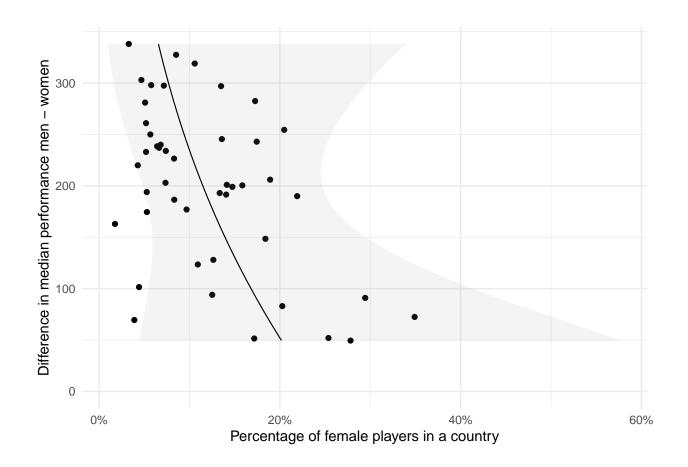
Difference in mean performance vs. share of female players



Difference in median performance vs. share of female players

Country	N	N M	N F	% F	Mean M	Mean F	$\operatorname{sd} M$	$\operatorname{sd} F$
ARG	2307	2205	102	4.4	1694.8	1565.9	309.8	342.1
AUT	2425	2299	126	5.2	1873.3	1645.5	242.1	306.0
BAN	704	644	60	8.5	1698.1	1454.2	241.2	266.4
BEL	2290	2171	119	5.2	1688.3	1476.5	295.2	283.4
BRA	2008	1737	271	13.5	1717.3	1455.1	288.5	254.8
BUL	626	538	88	14.1	1695.5	1611.5	416.3	397.0
CHI	992	887	105	10.6	1641.1	1409.3	339.1	300.4
CHN	798	576	222	27.8	1756.5	1687.2	394.9	397.0
COL	1167	982	185	15.9	1721.1	1539.6	307.9	307.0
CRO	2070	1929	141	6.8	1829.2	1591.1	289.4	335.0
CUB	830	660	170	20.5	1960.3	1737.2	290.2	285.5
CZE	5396	5090	306	5.7	1780.5	1568.8	285.6	337.8
DEN	2779	2730	49	1.8	1734.9	1634.1	281.6	327.3
EGY	907	842	65	7.2	1725.1	1457.9	310.3	301.6
ENG	1898	1772	126	6.6	1798.3	1586.4	299.7	316.6
ESP	15460	14673	787	5.1	1658.2	1438.4	309.0	304.9
FRA	13717	12579	1138	8.3	1581.0	1395.6	321.3	294.2
GEO	540	381	159	29.4	1559.5	1523.3	434.6	444.5
GER	11988	11103	885	7.4	1854.9	1640.5	272.0	281.5
GRE	2972	2552	420	14.1	1542.2	1363.7	360.5	290.0
HUN	3552	3291	261	7.3	1780.3	1603.1	322.4	351.3
IND	11682	10220	1462	12.5	1339.5	1267.3	292.1	288.6
IRI	5609	5066	543	9.7	1457.5	1317.0	297.9	267.6
ISR	1645	1558	87	5.3	1731.0	1566.8	366.9	358.2
ITA	5042	4751	291	5.8	1647.6	1413.1	304.2	302.1
KAZ	1398	1158	240	17.2	1454.0	1416.6	355.7	342.2
KEN	278	230	48	17.3	1540.3	1268.1	230.0	169.3
LAT	370	295	75	20.3	1697.8	1598.3	403.1	383.6
LTU	451	368	83	18.4	1657.1	1542.1	387.6	358.9
MEX	820	677	143	17.4	1791.4	1556.7	278.0	247.5
NED	3013	2884	129	4.3	1908.6	1712.5	258.4	330.7
NOR	2155	2071	84	3.9	1606.3	1519.6	317.1	332.7
PHI	584	456	128	21.9	1782.2	1589.2	339.1	248.3
POL	4442	3787	655	14.7	1605.5	1463.9	366.5	337.1
ROU	1918	1662	256	13.3	1596.8	1466.7	374.1	368.4
RUS	11165	9052	2113	18.9	1602.6	1441.4	394.9	343.9
SLO	705	628	77	10.9	1791.6	1663.4	349.7	383.5
SRB	2849	2666	183	6.4	1935.9	1726.1	254.3	320.7
SRI	1458	1088	370	25.4	1311.1	1234.8	268.5	199.3
SUI	1496	1426	70	4.7	1817.4	1573.2	275.5	330.9
SVK	2937	2782	155	5.3	1715.7	1549.7	279.1	328.9
SWE	2741	2651	90	3.3	1750.3	1496.1	301.7	348.4
TUR	4201	3670	531	12.6	1445.8	1336.8	305.1	270.9
UKR	1752	1514	238	13.6	1821.0	1612.5	367.9	353.8
USA	2717	2491	226	8.3	1842.2	1645.8	292.9	305.9
VIE	338	220	118	34.9	1704.5	1604.9	379.9	344.4

Country	N	N M	N F	% F	Mean M	Mean F	$\operatorname{sd} M$	$\operatorname{sd} F$
ARG	2307	10	10	0.4	1028.0	1057.1	11.4	36.1
AUT	2425	10	10	0.4	1105.1	1120.9	23.5	53.8
BAN	704	10	10	1.4	1131.5	1141.7	46.1	55.8
BEL	2290	10	10	0.4	1020.1	1048.1	10.8	34.7
BRA	2008	10	10	0.5	1024.0	1041.8	14.3	24.4
BUL	626	10	10	1.6	1012.9	1053.8	7.9	24.8
CHI	992	10	10	1.0	1013.4	1036.1	4.8	12.7
CHN	798	10	10	1.3	1057.8	1070.3	27.1	40.3
COL	1167	10	10	0.9	1044.1	1039.8	11.1	25.8
CRO	2070	10	10	0.5	1049.5	1082.6	22.8	24.5
CUB	830	10	10	1.2	1218.6	1235.4	49.2	42.9
CZE	5396	10	10	0.2	1017.0	1020.6	6.9	13.6
DEN	2779	10	10	0.4	1041.4	1214.7	20.7	86.6
EGY	907	10	10	1.1	1049.6	1088.1	18.8	42.5
ENG	1898	10	10	0.5	1025.0	1084.9	20.3	52.3
ESP	15460	10	10	0.1	1001.9	1010.5	0.9	6.4
FRA	13717	10	10	0.1	1001.9	1002.3	0.9	1.2
GEO	540	10	10	1.9	1022.9	1015.3	11.4	12.1
GER	11988	10	10	0.1	1029.4	1030.3	11.9	14.9
GRE	2972	10	10	0.3	1002.8	1007.8	1.3	5.4
HUN	3552	10	10	0.3	1014.3	1045.6	9.1	23.9
IND	11682	10	10	0.1	1001.0	1001.4	0.0	0.5
IRI	5609	10	10	0.2	1001.6	1004.3	0.7	1.7
ISR	1645	10	10	0.6	1015.2	1073.3	8.7	50.3
ITA	5042	10	10	0.2	1004.8	1020.8	2.5	10.9
KAZ	1398	10	10	0.7	1006.1	1018.8	2.2	5.9
KEN	278	10	10	3.6	1111.6	1058.0	45.4	28.6
LAT	370	10	10	2.7	1039.8	1065.8	20.8	47.9
LTU	451	10	10	2.2	1036.4	1053.4	22.8	29.4
MEX	820	10	10	1.2	1105.0	1126.2	45.5	42.2
NED	3013	10	10	0.3	1066.6	1164.9	31.7	90.9
NOR	2155	10	10	0.5	1009.5	1052.8	2.9	31.2
PHI	584	10	10	1.7	1046.5	1139.0	34.1	76.5
POL	4442	10	10	0.2	1003.1	1010.0	2.2	5.2
ROU	1918	10	10	0.5	1003.6	1014.2	2.1	3.6
RUS	11165	10	10	0.1	1001.6	1005.2	0.5	2.1
SLO	705	10	10	1.4	1046.6	1072.6	19.7	37.4
SRB	2849	10	10	0.4	1089.8	1162.9	43.4	38.4
SRI	1458	10	10	0.7	1002.8	1005.4	1.3	2.8
$\frac{\text{SUI}}{\text{SVK}}$	1496 2937	10	10	0.7	1077.4	1116.0	33.2	77.0
		10	10	0.3	1023.7	1060.7	9.6	40.7
SWE	2741	10	10	0.4	1039.8	1052.2	9.6	33.8
TUR UKR	4201 1752	10	10	0.2	1003.2 1054.6	1006.0 1061.8	24.4	2.8
	2717	10	10	0.6			24.4	26.7
USA		10	10	0.4	1044.4	1142.0	29.7	66.7
VIE	338	10	10	3.0	1120.6	1093.2	50.3	28.5



Permutation tests

Exploratory Data analysis

Histogram with the distribution of ratings

