

# Graphics

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## 1 Spain vs. tournament

### 1.1 Is being a winner from Spain independent of tournament?

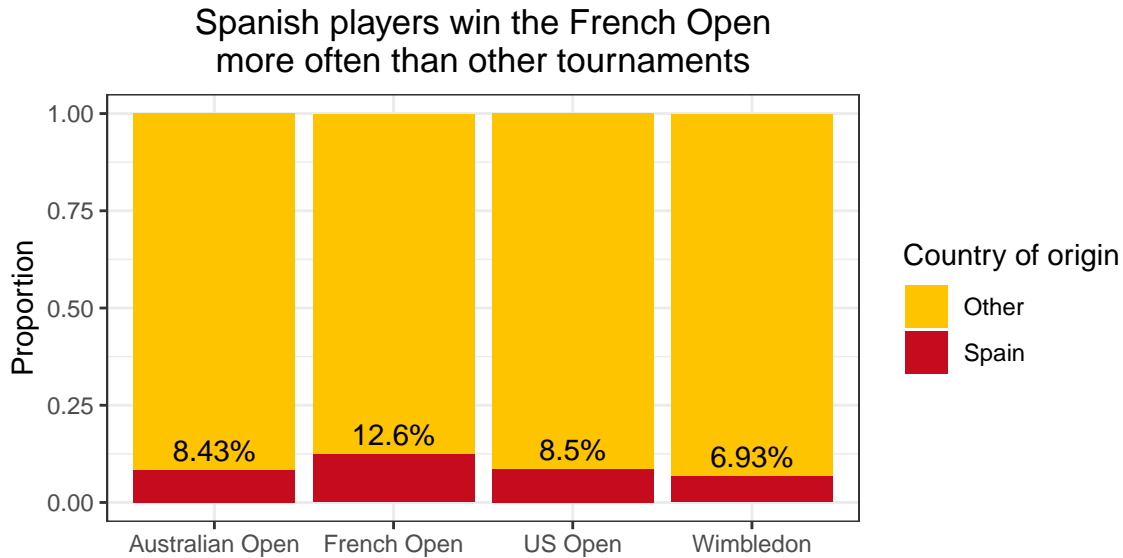


Table 1: Actual table

	Other	Spain
Australian Open	1163	107
French Open	1110	160
US Open	1162	108
Wimbledon	1182	88

Table 2: Expected table

	Other	Spain
Australian Open	1154.25	115.75
French Open	1154.25	115.75
US Open	1154.25	115.75
Wimbledon	1154.25	115.75

Table 3: Pearson's Chi-squared test: `spain_vs_tourn`

Test statistic	df	P value
27.23	3	5.265e-06 * * *

## 1.2 But do Spaniards enter the French open more than they do other tournaments?

We look at players in the *first round* of all tournaments.

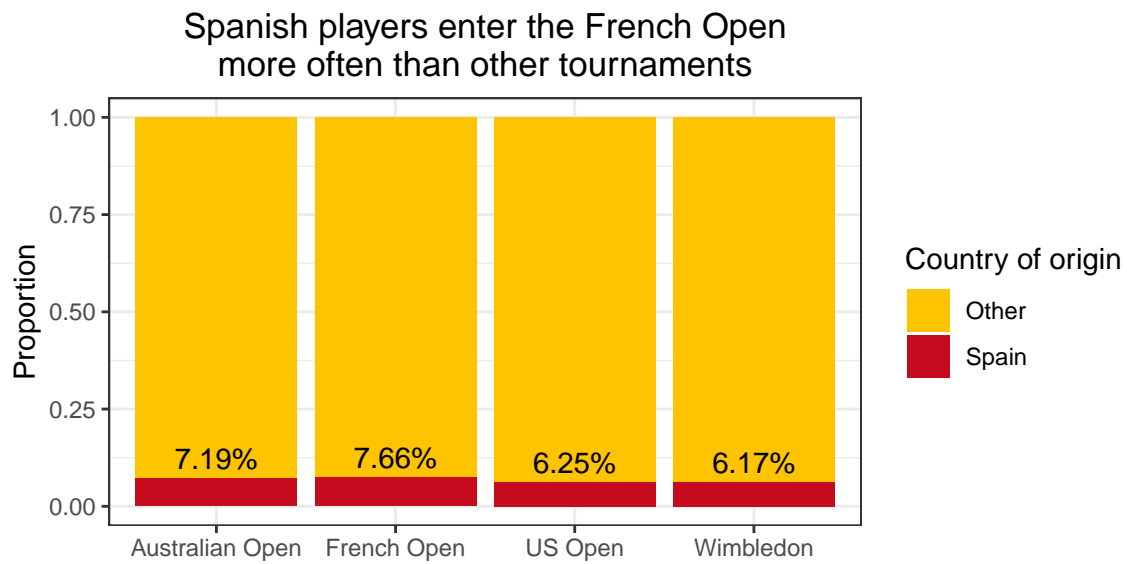


Table 4: Pearson's Chi-squared test: .

Test statistic	df	P value
3.183	3	0.3643

Yes, but not significantly more.

## 2 Home court advantage

### 2.1 France

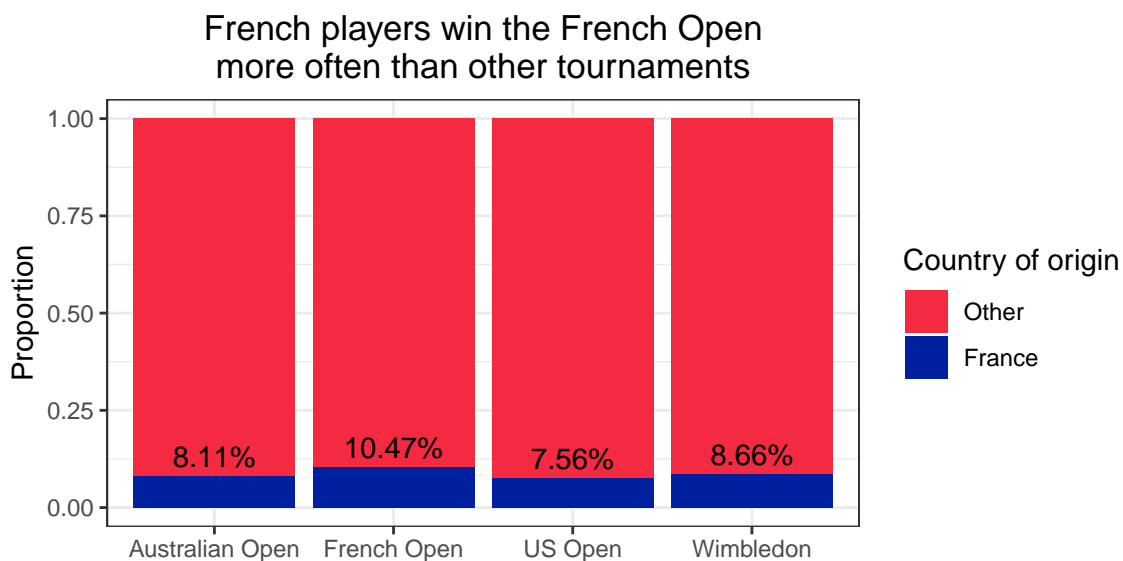


Table 5: Actual table

	France	Other
Australian Open	103	1167
French Open	133	1137
US Open	96	1174
Wimbledon	110	1160

Table 6: Expected table

	France	Other
Australian Open	110.5	1159.5
French Open	110.5	1159.5
US Open	110.5	1159.5
Wimbledon	110.5	1159.5

Table 7: Pearson's Chi-squared test: `france_vs_tourn`

Test statistic	df	P value
7.662	3	0.05354

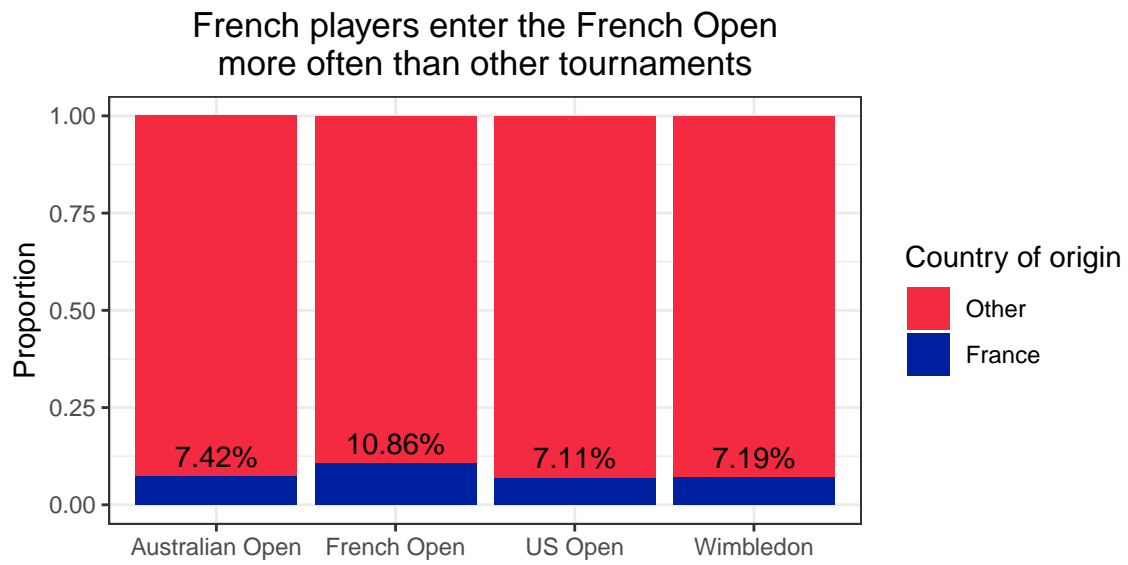


Table 8: Pearson's Chi-squared test: .

Test statistic	df	P value
16.9	3	0.0007395 * * *

*Yes, significantly.*

## 2.2 United States

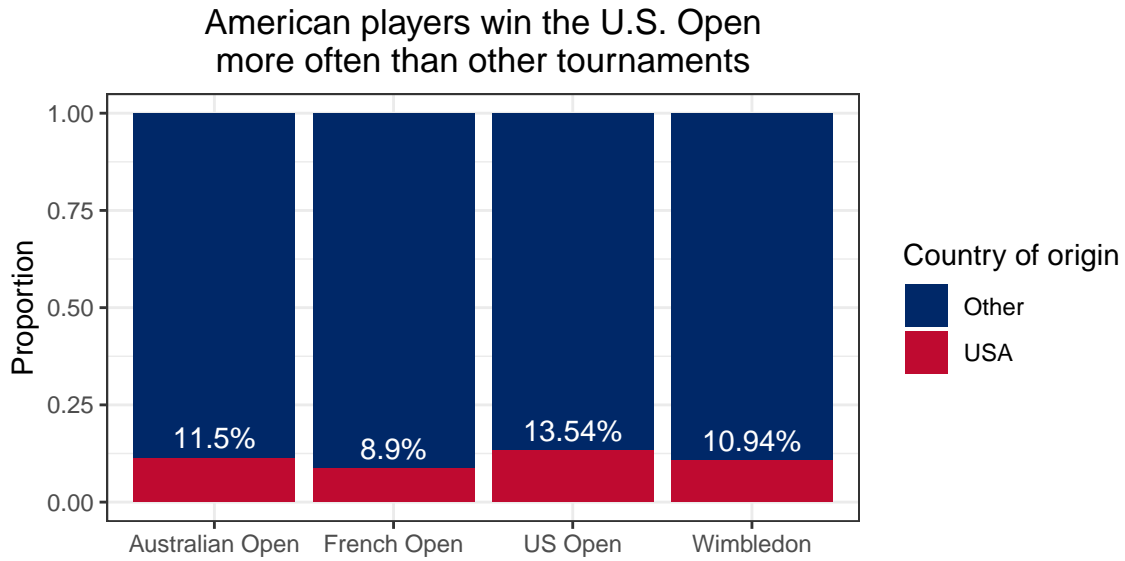


Table 9: Pearson's Chi-squared test: `usa_vs_tourn`

Test statistic	df	P value
13.95	3	0.002972 * *

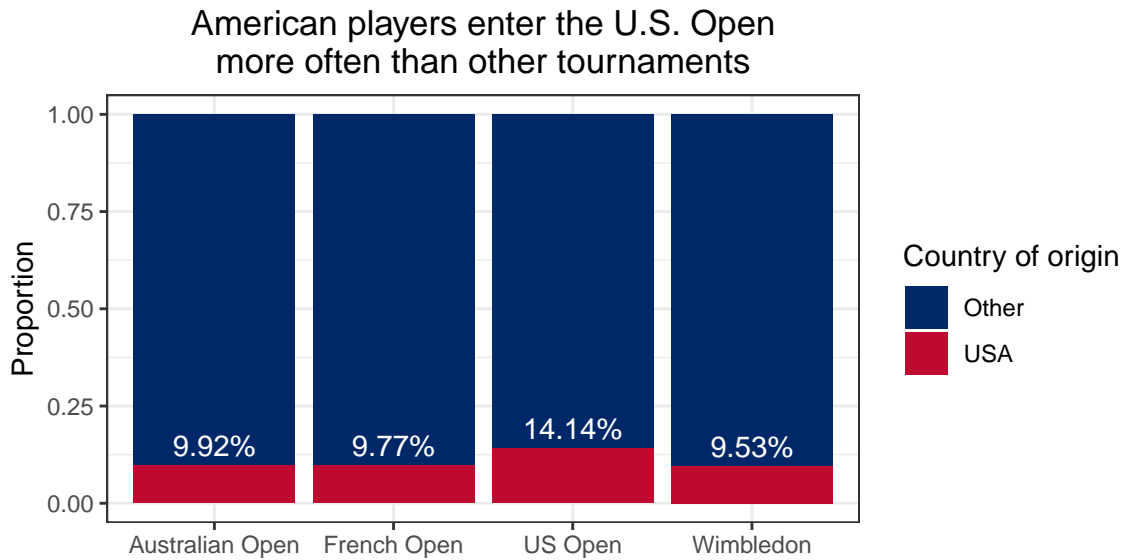


Table 10: Pearson's Chi-squared test: .

Test statistic	df	P value
19.34	3	0.0002323 * * *

## 2.3 Australia

Australian players win the Australian Open more often than other tournaments

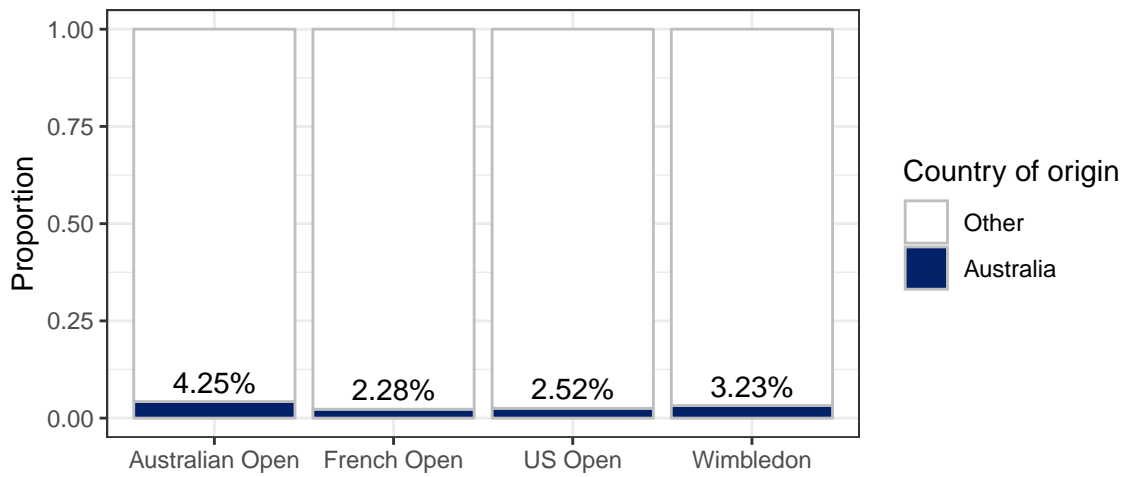


Table 11: Actual table

	Australia	Other
Australian Open	54	1216
French Open	29	1241
US Open	32	1238
Wimbledon	41	1229

Table 12: Expected table

	Australia	Other
Australian Open	39	1231
French Open	39	1231
US Open	39	1231
Wimbledon	39	1231

Table 13: Pearson's Chi-squared test: **Australia\_vs\_tourn**

Test statistic	df	P value
9.999	3	0.01857 *

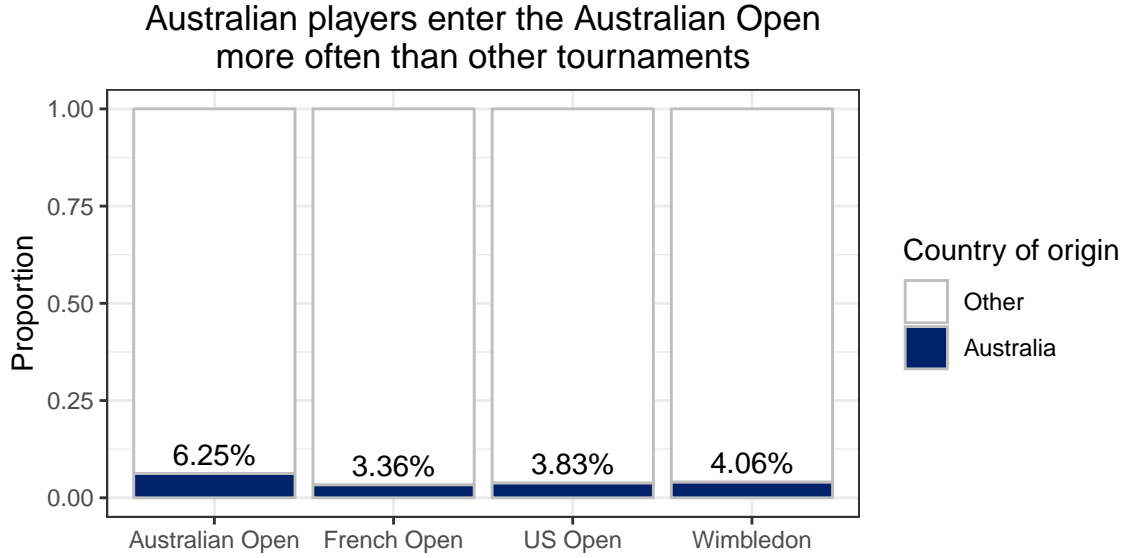


Table 14: Pearson's Chi-squared test: .

Test statistic	df	P value
15.13	3	0.001712 * *

### 3 Conclusions

- Spaniards win the French Open more often than they win other tournaments, and this difference is significant. They play in the French Open more often than they play in other tournaments, but not significantly.
- French win the French Open more often than they win other tournaments, but this difference is (barely) insignificant. They play in the French Open more often than they play in other tournaments, at a significantly higher rate.
- Americans win the US Open more often than they win other tournaments, and this difference is significant. But, they play in the US Open more often than they play in other tournaments, at a significantly higher rate.
- Australians win the US Open more often than they win other tournaments, and this difference is significant. But, they play in the Australian Open more often than they play in other tournaments, at a significantly higher rate.