

(Continued)

Men broccoli = 10.3; Women broccoli = 7.7

Men red peppers = 9.1; Women red peppers = 6.9

Men asparagus = 7.4; Women asparagus = 5.6

Men spinach = 6.3; Women spinach = 4.7

Men turnip greens = 5.7; Women turnip greens = 4.3

Men peas = 3.4; Women peas = 2.6

d) What are the degrees of freedom?

A: 6

e) What is the test statistic?

A: $\chi^2 = 21.55$

f) What is the critical value that SPSS used to compare the test statistic to?

A: With $df = 6$ and assuming an alpha of .05, we consult Appendix F and find a critical value of 12.59.

g) Is the χ^2 test statistic statistically significant?

A: Yes, our test statistic exceeds our critical value, so it is statistically significant, meaning that men and women appear to differ in their preference for particular vegetables.

h) Write this result in APA style.

A: A chi-squared test for independence revealed significant sex differences in vegetable preferences, $\chi^2(6, N = 100) = 21.55, p = .001$, Cramer's $V = 0.464$.