Chi-square

Pearson Product Chi-square test

Category:

Chi-square test of homogeneity

Population: they are same.

Reference:

[Goodness of fit - Wikipedia](https://en.wikipedia.org/wiki/Goodness_of_fit)

Chi-square test of independence

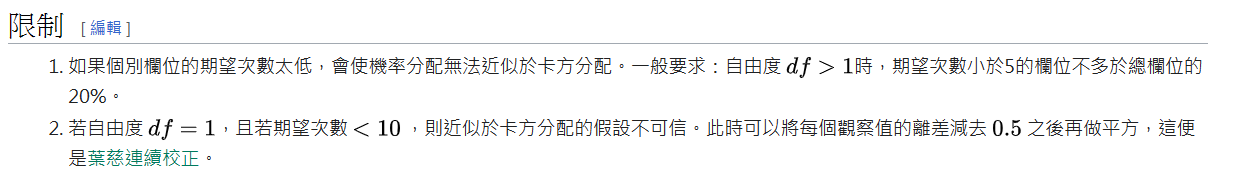
Population: they are not same.

Pro:

Easy to learn.

Cons:

Larger error than other type of chi-square.

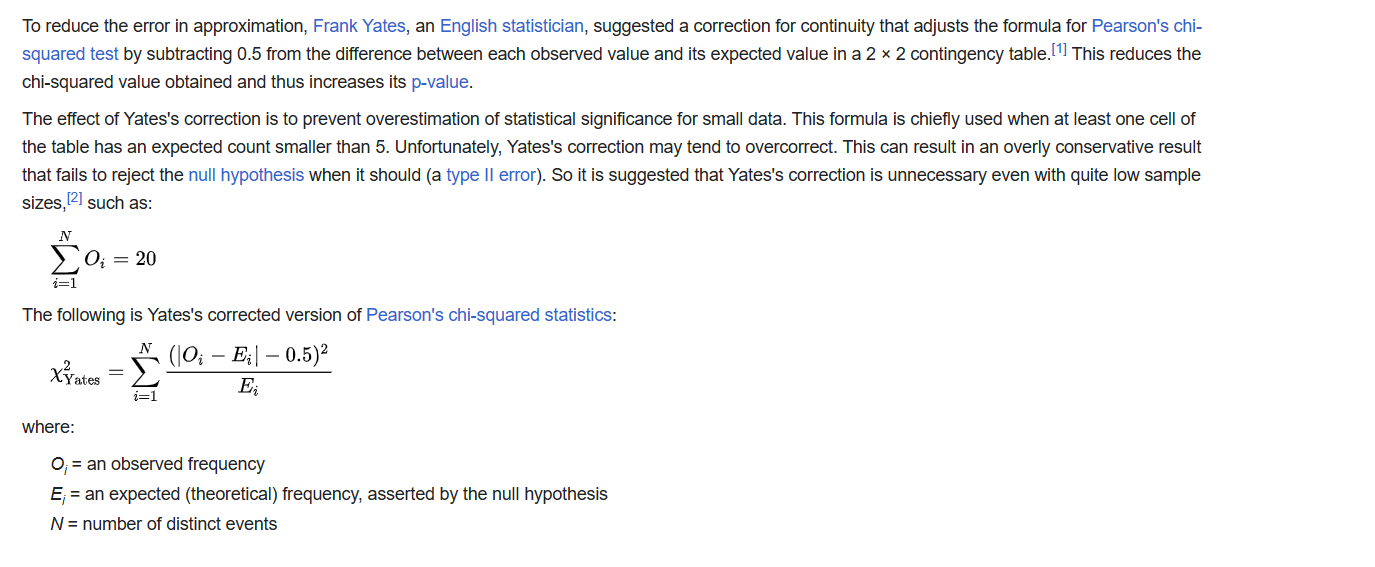


Reference

[皮爾森卡方檢定 - 維基百科，自由的百科全書 (wikipedia.org)](https://zh.wikipedia.org/zh-tw/%E7%9A%AE%E7%88%BE%E6%A3%AE%E5%8D%A1%E6%96%B9%E6%AA%A2%E5%AE%9A)

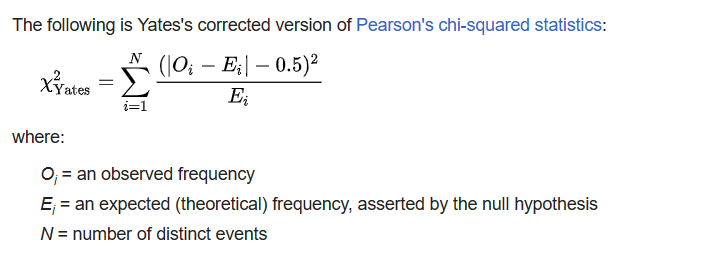
# Yates's correction for continuity

Figure:



Formula:

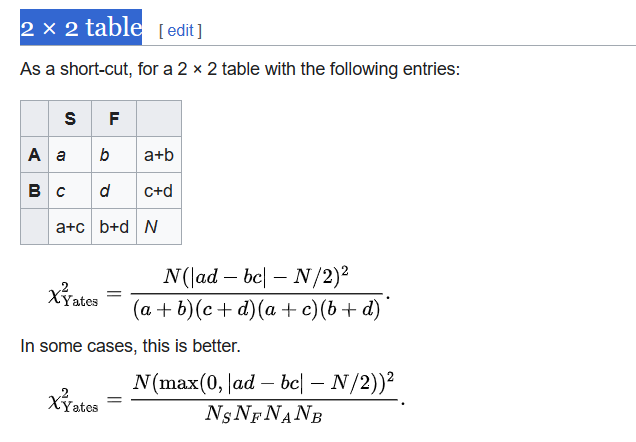
When requirements are satisfied,



2 \* 2 Table

Formula:

We can use other way to represent it:



Proof

Thus,

End of proof

Reference

[Yates's correction for continuity - Wikipedia](https://en.wikipedia.org/wiki/Yates%27s_correction_for_continuity)

See also

For proof of Fisher-Yates algorithm:

[probability - Fisher-Yates algorithm proof - Mathematics Stack Exchange](https://math.stackexchange.com/questions/3920328/fisher-yates-algorithm-proof)

Reference

[卡方檢定 - 維基百科，自由的百科全書 (wikipedia.org)](https://zh.wikipedia.org/zh-tw/%E5%8D%A1%E6%96%B9%E6%A3%80%E9%AA%8C)

Chi – squared Distribution

Category

