x2 significant results

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Gender and Tour History

Q14: Are you currently touring or have you toured in the past?

Is gender independent from tour history?

```
## [1] "Q14: Are you currently touring or have you toured in the past?"
## [1] "Contingency Table for  Q14: Are you currently touring or have you toured in the past?"
##      female male nonbinary
##
## Yes      53  194         2
## No       71   82         6
## [1] "Contingency Table in Percent of Gender for  Q14: Are you currently touring or have you toured in
##      female   male nonbinary
##
## Yes  42.742 70.290    25.000
## No   57.258 29.710    75.000

## Warning in chisq.test(tab): Chi-squared approximation may be incorrect

##
##  Pearson's Chi-squared test
##
## data:  tab
## X-squared = 31.754, df = 2, p-value = 1.272e-07
```

The Chi-Squared test generated a p-value less than 0.5, meaning that the null hypothesis can be rejected. There is a statistically significant relationship between gender and whether or not the participant is touring/has toured in the past.

Gender and Composer

Q: Is gender independent from the decision to become a composer?

```
## [1] "Q: Are you a composer?"
## [1] "Contingency Table for  Q: Are you a composer?"
##      female male nonbinary
##
## Yes      29  116         2
## No      102  163         6
## [1] "Contingency Table in Percent of Gender for  Q: Are you a composer?"
##      female   male nonbinary
##
## Yes  22.137 41.577    25.000
## No   77.863 58.423    75.000

## Warning in chisq.test(tab): Chi-squared approximation may be incorrect
```

```
##
##  Pearson's Chi-squared test
##
## data:  tab
## X-squared = 15.145, df = 2, p-value = 0.0005144
```

Yes.The Chi-Squared test generated a p-value less than 0.5, meaning that the null hypothesis can be rejected. There is a statistically significant relationship between gender and whether or not the participant is a composer.

Gender and Arranger

```
## [1] "Q: Are you an arranger?"
## [1] "Contingency Table for  Q: Are you an arranger?"
##      female male nonbinary
##
## Yes      39  168         3
## No       90  113         5
## [1] "Contingency Table in Percent of Gender for  Q: Are you an arranger?"
##      female   male nonbinary
##
## Yes  30.233 59.786    37.500
## No   69.767 40.214    62.500

## Warning in chisq.test(tab): Chi-squared approximation may be incorrect
```

```
##
##  Pearson's Chi-squared test
##
## data:  tab
## X-squared = 31.419, df = 2, p-value = 1.505e-07
```

Yes. The Chi-Squared test generated a p-value less than 0.05, meaning that the null hypothesis can be rejected. There is a statistically significant relationship between gender and whether or not the participant is an arranger.

Gender and Employment

Is gender independent of currently playing in a community theater pit?

```
## [1] "Q: Are you currently in a community theater pit?"
## [1] "Contingency Table for  Q: Are you currently in a community theater pit?"
##      female male nonbinary
##
## No      112  269         5
## Yes      20   18         3
## [1] "Contingency Table in Percent of Gender for  Q: Are you currently in a community theater pit?"
##      female   male nonbinary
##
## No   84.848 93.728    62.500
## Yes  15.152  6.272    37.500

## Warning in chisq.test(tab): Chi-squared approximation may be incorrect
```

```
## 
##  Pearson's Chi-squared test
## 
## data:  tab
## X-squared = 15.524, df = 2, p-value = 0.0004256
```