notes

# Chisq p-values

* Null hypothesis - independent
* Alternative hypothesis - they are NOT independent
* high p-value = there is no relation
* low p-value = there is a relation

Common treshold is 0.05 (or 5%) and I suggest you stick with it. So if a p-value is below 5% there is not enough evidence to support the null hypothesis that x and y are independent. You have to accept that x and y are dependent.

If the p-value is above 5% there is not enough evidence to disprove that x and y are independent. You have to accept that they are independent.

## H4

### H4a (table of counts)

The table of frequencies of use of different platforms. Based on the entire, combined, data set [Fb,Ig,Sc].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
| q1.1\_usefb | 18 | 56 | 129 | 903 |
| q1.2\_useig | 230 | 227 | 285 | 364 |
| q1.3\_usesc | 44 | 76 | 196 | 790 |

### H4b (Chisq p-values)

Chisq tests of the type Platform\_use\_freq ~ q8.1, q8.2, q8.3. #PlatformSpecific, #BeforeAfter

Facebook

|  |  |  |  |
| --- | --- | --- | --- |
|  | q8.1\_freqpost | q8.2\_freqsend | q8.3\_freqread |
| noEdu | 0.999 | 0 | 0.000 |
| Edu | 0.943 | 0 | 0.648 |

Instagram

|  |  |  |  |
| --- | --- | --- | --- |
|  | q8.1\_freqpost | q8.2\_freqsend | q8.3\_freqread |
| noEdu | 0.000 | 0.030 | 0.000 |
| Edu | 0.013 | 0.671 | 0.664 |

Snapchat

|  |  |  |  |
| --- | --- | --- | --- |
|  | q8.1\_freqpost | q8.2\_freqsend | q8.3\_freqread |
| noEdu | 0.013 | 0 | 0.000 |
| Edu | 0.539 | 0 | 0.319 |

## H5 (Chisq p-values)

Only fb\_q9 and ig\_q9 are answered correctly with disagreement. The rest of the questions sc\_q9, 10, 11 and 12 for the three platforms are answered correctly with agreement.

Facebook

|  |  |  |
| --- | --- | --- |
|  | q9binary vs q10binary | q11binary vs q12binary |
| noEdu | 0.006 | 0 |
| Edu | 0.187 | 0 |

Instagram

|  |  |  |
| --- | --- | --- |
|  | q9binary vs q10binary | q11binary vs q12binary |
| noEdu | 0.113 | 0.001 |
| Edu | 0.985 | 0.354 |

Snapchat

|  |  |  |
| --- | --- | --- |
|  | q9binary vs q10binary | q11binary vs q12binary |
| noEdu | 0.208 | 0.117 |
| Edu | 0.599 | 0.024 |

## H0

## H0a (Chisq p-values)

Caring about privacy settings vs eiditing privacy settings. Taken on the entire, combined, data set [fb,ig,sc]

|  |  |
| --- | --- |
| before | 0 |
| after | 0 |

### H0b (correlation)

|  |  |
| --- | --- |
| before | -0.364 |
| after | -0.493 |

## HX

### HXa (table of counts)

The row labels in the tables below are as well 1 to 4. Q15 vs Q16

Facebook before. q15 rows, q16 cols

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
| 16 | 24 | 46 | 11 |
| 0 | 24 | 91 | 13 |
| 0 | 6 | 63 | 17 |
| 0 | 0 | 9 | 14 |

Facebook after q15 rows, q16 cols

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
| 6 | 5 | 8 | 1 |
| 0 | 6 | 15 | 6 |
| 0 | 1 | 11 | 7 |
| 0 | 0 | 4 | 2 |

Instagram before. q15 rows, q16 cols

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
| 1 | 2 | 13 | 2 |
| 1 | 9 | 37 | 4 |
| 1 | 2 | 57 | 8 |
| 0 | 0 | 8 | 9 |

Instagram after q15 rows, q16 cols

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
| 1 | 4 | 5 | 1 |
| 0 | 6 | 8 | 4 |
| 0 | 0 | 4 | 4 |
| 0 | 0 | 0 | 1 |

Snapchat before. q15 rows, q16 cols

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
| 9 | 14 | 21 | 4 |
| 1 | 32 | 80 | 9 |
| 1 | 11 | 146 | 21 |
| 0 | 0 | 25 | 36 |

Snapchat after q15 rows, q16 cols

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
| 8 | 6 | 11 | 1 |
| 2 | 21 | 21 | 1 |
| 0 | 1 | 19 | 3 |
| 0 | 0 | 3 | 1 |

### HXb (Chisq p-values)

Platform specific and before/after q15 vs q17, q18 and q19

Facebook

|  |  |  |  |
| --- | --- | --- | --- |
|  | q17.1\_targetme | q18.1\_targetfr | q19.1\_comfortsell |
| noEdu | 0.354 | 0.007 | 0.065 |
| Edu | 0.198 | 0.350 | 0.228 |

Instagram

|  |  |  |  |
| --- | --- | --- | --- |
|  | q17.1\_targetme | q18.1\_targetfr | q19.1\_comfortsell |
| noEdu | 0.019 | 0.000 | 0.002 |
| Edu | 0.847 | 0.652 | 0.882 |

Snapchat

|  |  |  |  |
| --- | --- | --- | --- |
|  | q17.1\_targetme | q18.1\_targetfr | q19.1\_comfortsell |
| noEdu | 0.013 | 0.024 | 0.001 |
| Edu | 0.653 | 0.409 | 0.041 |

## H6, Q13 vs Q14

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.000 | 0.000 | 0.000 |
| Edu | 0.265 | 0.015 | 0.006 |

## H1, 10-05-2017, q15 vs q16

# Chisq

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.000 | 0.000 | 0 |
| Edu | 0.003 | 0.262 | 0 |

# Correlation

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.406 | 0.303 | 0.490 |
| Edu | 0.486 | 0.467 | 0.451 |

## H2, 10-05-2017, q15 vs q17

# Chisq

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.354 | 0.019 | 0.013 |
| Edu | 0.198 | 0.847 | 0.653 |

# Correlation

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.075 | 0.002 | 0.105 |
| Edu | 0.131 | -0.171 | 0.007 |

## H3, 10-05-2017, q15 vs q18

# Chisq

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.007 | 0.000 | 0.024 |
| Edu | 0.350 | 0.652 | 0.409 |

# Correlation

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.095 | 0.171 | 0.144 |
| Edu | 0.047 | -0.293 | 0.012 |

## H4, 10-05-2017, q15 vs q19

# Chisq

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | 0.065 | 0.002 | 0.001 |
| Edu | 0.228 | 0.882 | 0.041 |

# Correlation

|  |  |  |  |
| --- | --- | --- | --- |
|  | fb | ig | sc |
| noEdu | -0.039 | -0.033 | -0.029 |
| Edu | -0.116 | -0.164 | -0.231 |