Interpret the results of the above chi-square test results. State the statistical findings that support your conclusion. Be sure to describe the nature of relationship and state whether the null hypothesis should be retained or rejected. Hint: Use the contingency table to interpret direction of the relationship.

Interpret the odds ratio and its 95% confidence interval generated by the above chi-square test procedure.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **gender \* anxiety Crosstabulation** | | | | | |
|  | | | Anxiety | | Total |
| 0 | 1 |
| gender | 0 | Count | 87 | 16 | 103 |
| % within gender | 84.5% | 15.5% | 100.0% |
| % within anxiety | 52.4% | 29.6% | 46.8% |
| % of Total | 39.5% | 7.3% | 46.8% |
| 1 | Count | 79 | 38 | 117 |
| % within gender | 67.5% | 32.5% | 100.0% |
| % within anxiety | 47.6% | 70.4% | 53.2% |
| % of Total | 35.9% | 17.3% | 53.2% |
| Total | | Count | 166 | 54 | 220 |
| % within gender | 75.5% | 24.5% | 100.0% |
| % within anxiety | 100.0% | 100.0% | 100.0% |
| % of Total | 75.5% | 24.5% | 100.0% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Chi-Square Tests** | | | | | |
|  | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
| Pearson Chi-Square | 8.492a | 1 | .004 |  |  |
| Continuity Correctionb | 7.602 | 1 | .006 |  |  |
| Likelihood Ratio | 8.723 | 1 | .003 |  |  |
| Fisher's Exact Test |  |  |  | .005 | .003 |
| Linear-by-Linear Association | 8.453 | 1 | .004 |  |  |
| N of Valid Cases | 220 |  |  |  |  |
| a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.28. | | | | | |
| b. Computed only for a 2x2 table | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Estimate** | | | |
|  | Value | 95% Confidence Interval | |
| Lower | Upper |
| Odds Ratio for gender (0 / 1) | 2.616 | 1.354 | 5.054 |
| For cohort anxiety = 0 | 1.251 | 1.076 | 1.454 |
| For cohort anxiety = 1 | .478 | .284 | .805 |
| N of Valid Cases | 220 |  |  |