

Survey Analysis (Cross Tabulation)

Categorical platform provides myriad tools to tabulate and analyze multivariable categorical data, such as that which would come from surveys. Commonly referred to as cross-tabulation, these analysis methods can be used to compare responses across multiple factors and uncover relationships between categories.

Categorical

Note: The results displayed in the analysis demonstrated will be easier to interpret if “Agree” instead of “Disagree” is the target level. Do this by changing the value order for each answer column. Select the columns: ‘I am working on my career’, ‘I want to see the world’, ‘My home needs some major improvements’, ‘I have vast interests outside of work’, and ‘I want to get my debt under control’. Select **Cols > Standardize Attributes**. Under **Standardize Properties**, select **Value Order**. Change the value order so that “Agree” is listed last.

- From an open JMP® data table, select **Analyze > Consumer > Research > Categorical**.

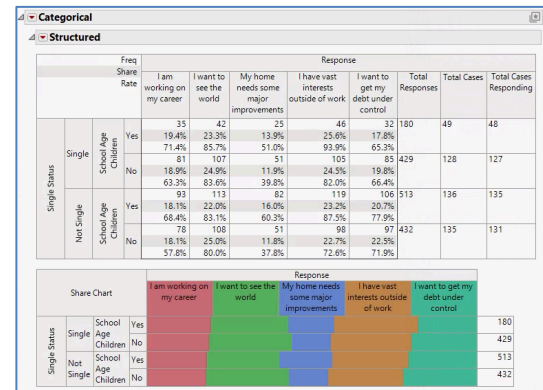
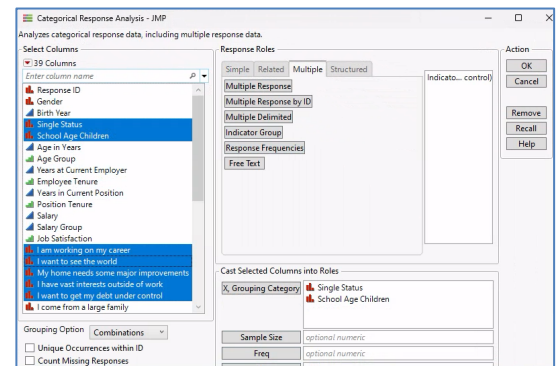
Note: There are many options on the types of analyses and the format of the data that can be performed with this platform. This guide illustrates just one of those – comparing binary outcomes (“Agree” or “Disagree”) across a multiple response survey from different types of responders.

- Select the **Multiple** tab. Select the set of variables representing the “Agree/Disagree” questions. Choose **Indicator Group** as the answers in this survey are binary.

- Select one or more variables defining the types of responders and place in the X, **Grouping Category** role. Click **OK**.

A Cross-tabulation table and visualization is the default output.

Consumer Preferences.jmp (Help > Sample Data Folder)

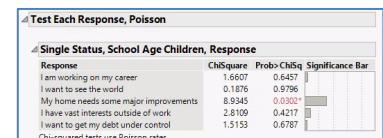


Interpretation:

The Total Responses is the total number of “Agreed” that occurred across all questions for each type of responders (‘Single Status’ and ‘School Age Children’). Total Cases is the number of responders of each type. Total Cases Responding is the number of responders who answered “Agreed” to at least one question. Each count in the cells is the number of responders who “Agreed” to each question. The first set of percents are the percentage of responders who answered “Agreed” to each question per Total Responses. The second set of percents are the percentage of responders who answered “Agreed” per Total Cases.

- Select **Test Multiple Responses > Count Test, Poisson** under the top red triangle to test for equality across the type of responders.

Note: This test is chosen since each responder can answer “Agreed” to more than one question.



- Select **Compare Each Cell** under the red triangle to perform all pairwise comparisons between the types of responders for each question.

LR Pairs	AA	AB	BB	AC	BC	CC	AD	BD	CD	DD
I am working on my career	1.0000	0.5526	1.0000	0.8266	0.6097	1.0000	0.3040	0.5662	0.2715	1.0000
I want to see the world	1.0000	0.8908	1.0000	0.8636	0.9641	1.0000	0.7058	0.7474	0.7783	1.0000
My home needs some major improvements	1.0000	0.3185	1.0000	0.4583	0.0186	1.0000	0.2270	0.7880	0.0079	1.0000
I have vast interests outside of work	1.0000	0.4496	1.0000	0.6869	0.6296	1.0000	0.1570	0.3340	0.1699	1.0000
I want to get my debt under control	1.0000	0.9357	1.0000	0.3732	0.2702	1.0000	0.6367	0.5955	0.5624	1.0000

Visit **Consumer Research > Categorical** in **JMP Help** to learn more.