Max Diff Question Type

Using the Max Diff question type (aka maximum difference scaling) respondents are shown a set of the possible attributes and are asked to indicate the best and worst attributes (or most and least important, most and least appealing, etc.).

Which of the following support channels would you most/least desire? Least Desirable Support Channel Most Desirable 0 0 Social Media Support 0 0 **Email Support** 0 Live Chat Support 0 0 0 Phone Support 1 of 3 sets Check it out in an example survey! Add a survey with this question to your account!

When to use it

Max Diff is an alternative to standard rating scale results that might lead you to believe everything is important. By forcing

respondents to make choices between options, Max Diff delivers results that show the relative importance of the items being rated.

Consider the above example in which a respondent evaluates four support channels: Social Media Support, Email Support, Live Chat Support, and Phone Support. These four support channels create six possible comparisons

- Social Media Support vs. Email Support
- Social Media Support vs. Live Chat
- Social Media Support vs. Phone Support
- Phone Support vs. Email Support
- Phone Support vs. Live Chat
- Email Support vs Live Chat

If the respondent says that Phone Support is best and Social Media Support is worst, this informs us the outcome of five of the six possible comparisons. The only paired comparison that cannot be inferred is Email Support vs. Live Chat Support, because we do not know how the respondent ranks these two support channels in comparison to each other. As you can see, this produces better data than a standard ranking question. And people are much better at judging items at extremes than in discriminating the importance of items in the middle.

The Max Diff question type has the added benefit of showing random sets of attributes so respondents are not evaluating all attributes at the same time, which is really hard for people to do. And, by displaying the same attributes several times, you gather even more robust data.

What is an attribute? - An attribute is the property of the object, product, brand, service or advertisement that you are comparing.

What is a set? - A set is a randomly selected group of attributes.

1. Click the Question link on the page where you would like to add your Max Diff question.

Max Diff questions must be on a page by themselves on the Build tab as the respondent will need to use the next button to submit each set.

- 2. Select Max Diff from the Question Type dropdown and enter the question you wish to ask.
- 3. Under the MaxDiff Format section, select the Orientation you desire.



Best Practice Tip: Orientation We recommend the Worst | Item | Best layout option. We have found that this best conveys the task at hand. Survey respondents can easily comprehend that you would like for them to compare the attributes and select one for the each column. In addition, worst/least to best/most is a standard layout that most respondents will expect (this is for left-to-right languages). Which of the following support channels would you most/least desire? Least Desirable Item Most Desirable 0 Live Chat Support 0 0 0 0 0 Phone Support 0 Email Support 1 of 3 sets

4. Next, you can also customize the **Best** and **Worst** Labels, as well as the Label for the **Items** respondents are evaluating.



5. Next, scroll down and add the attributes you would like your respondents to evaluate.



6. Finally, above your attributes, customize the **Number of attributes per set** and the **Number of sets per respondent**. By default, your question will be setup to show 4 attributes and 6 sets. You will see the below warning as a result:

Warning! With this combination of attributes per set and sets per respondent, not every attribute will be shown to each survey taker.

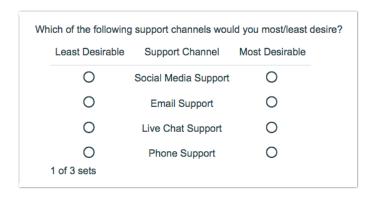
We recommend setting up your question to at least show each attribute 3 to 5 times for each respondent. To do so, use one of the below equations; plug in the number of attributes (K) and number of attributes per set (k).

- 3 times per respondent: 3K/k = number of set to show
- 4 times per respondent: 4K/k = number of set to show
- 5 times per respondent: 5K/k = number of set to show



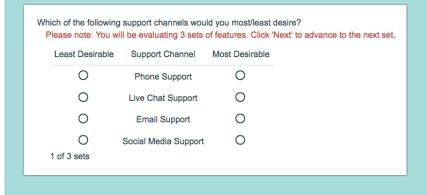
Survey Taking

On a desktop and most laptops, the Max Diff question type looks like the below. *Remember, your Max Diff question should be the only question on the page!*



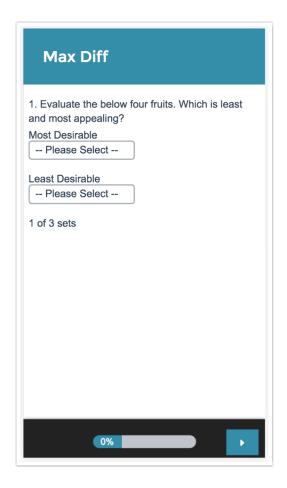
Best Practice Tip: Add Instructions

It is a good idea to add instructions to the question text so respondents are aware they are evaluating different sets. We also recommend displaying no more than 5 attributes at one time. In addition, by displaying a couple of options in multiple sets you will get more robust data!



When optimized for mobile devices the Max Diff question type will convert your question to a mobile friendly format as pictured below.

By default, survey questions show one at a time on mobile devices to prevent the need for scrolling on smaller screens. You can turn off this one-at-a-time interaction if you wish.



Reporting

Standard Report

We have improved the reporting of the Max Diff question in the Standard Report! It's much easier to understand and allows for more visibility into how items were ranked. For each attribute you will see the percentage of times it was ranked as most appealing, least appealing, or not chosen.

The attributes will be ranked based on the score which is computed using the below formula:

times attribute was selected as best - # times attribute was selected as worst

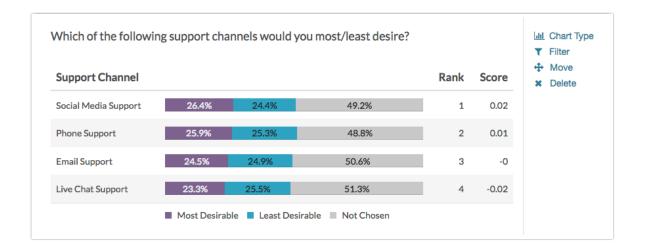
times the item appeared

From the score we can determine a couple of things:

- The higher the score, the more the feature is appealing to respondents.
- A positive score means that that attribute was selected as MOST appealing more often than least appealing.
- A negative score means that that attribute was chosen as LEAST appealing more often than most appealing.
- A score of zero means that that attribute was chosen as MOST and LEAST appealing an

equal number of times OR it has never been chosen as most and least appealing.

If a score of an item is two times bigger than another item, it can be interpreted that it is twice
as appealing.

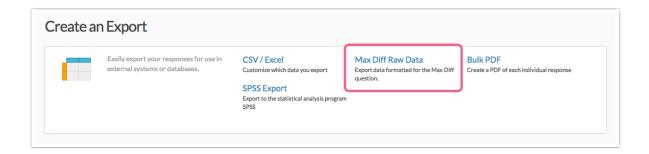


- See additional compatible chart types
- See what other report types are compatible

Exporting

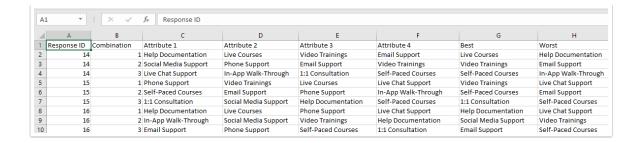
The Max Diff question has its own export which will be available under Results > Exports. Once there, select the Max Diff Raw Data option.

The Max Diff question does not export via the SPSS Export.



In the export, there will be a row per combination displayed to the respondent. There will be a column per attribute displayed in the combination and a Best and Worst column. The reporting values of your Max Diff question will populate the rows.

Looking below at Response ID 14, Combination 1 you can see that the following attributes were displayed to the respondent as their first combination: Help Documentation, Live Courses, Video Trainings, and Email Support. Live Courses was selected as best and Help Documentation was selected as worst.



FAQ

- Will each respondent see each attribute?
- How is the experiment set up?
- Will sets be shown equally?
- How many responses do I need? How many sets should I show? How many attributes per set should I show?
- ① Can I hide the x per y sets that displays below my Max Diff question?

The Max Diff Question Type is not compatible with Page Repeating.

Net Promoter[®], NPS[®], NPS Prism[®], and the NPS-related emoticons are registered trademarks of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld. Net Promoter Score [™] and Net Promoter System [™] are service marks of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.

Related Articles