

## GETTING MORE OUT OF SURVEY DATA : THE SEINFELD AND CLINTON EXAMPLES

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- Who should a *Seinfeld* spin-off series be based on?
- Should President Clinton be worried about how he is rated on personal honesty?

Survey data appears to be the best approach to answering these topical questions. In fact, surveys have been conducted to measure the extent to which each of the characters in *Seinfeld* is an audience favorite and to measure President Clinton's personal honesty ratings. But the usefulness of the survey data are limited by the quality of information that can be derived from the data. In other words, reporting the results of these surveys in terms of means and percentages alone may not be sufficient to answer these questions and may even result in misleading answers. From traditional marketing research we know that one way to understand the data better is to use multivariate statistical analysis methods. For example, regression analysis is used quite often in customer satisfaction research to identify the key drivers of overall satisfaction with a product or service. But how often do we see it used on, say, political polling data? Invariably the results of such studies are reported as percentages and conclusions are drawn from those numbers. How much difference would statistical analysis techniques make in such cases?

The objective of this article is to answer these questions in a way that provides survey researchers with a clear idea about the benefits of using statistical analysis in their data. It will be shown that using multiple regression analysis can provide answers that are different from those provided by cross tabulations. Further, a method that was developed at *The Response Center* called asymmetry

analysis, will be used to show how insights beyond those from a regression analysis can be obtained.

### Entertainment

The first example is from the field of entertainment and more specifically television. TV shows are often ranked based on the number of people who watch the show. The Nielsen ratings are one such indicator. However, the people watching the show are also consumers and hence it should be possible to measure their perceptions of the show and use analytical techniques to draw conclusions that may not otherwise be possible. To investigate this issue, we decided to focus on the TV sitcom *Seinfeld*. The show's popularity and the fact that this was going to be its last season, indicated that a substantial number of people would have opinions about the show.

The main objective of the study was to determine if the contribution of each of the four main characters could be derived using regression analysis and if this result would be different from the self described ratings for the main characters. A national random telephone survey of 667 people was conducted of whom 56% indicated that they watched *Seinfeld* at least sometimes. These *Seinfeld* watchers were asked which of the four main characters was their favorite. As shown in the first column of Table 1, Kramer was the overwhelming favorite, followed by Jerry, Elaine and George.

Table 1

	Favorite Character	Extremely/ Very Funny	Beta Weight
Elaine	13%	43%	0.18
George	12%	51%	0.25
Jerry	18%	56%	0.28
Kramer	56%	80%	0.28

The respondents were also asked to rate how funny each character was on a 5 point scale ranging from “Extremely Funny” to “Not at all Funny”. As shown in the second column of Table 1, once again Kramer clearly came out on top with 80% considering him to be “Extremely Funny” or “Very Funny”. The ratings for Jerry, George and Elaine were much lower than Kramer’s ratings. Thus univariate analysis of the data seem to indicate that the most dominant force on the show is Kramer. Based on this we could draw the conclusion that he contributes the most to the show. The argument could also be extended to say that a spin-off show based on the Kramer character would be the most likely to be successful.

The next stage of the analysis used regression analysis to see if the above conclusions could be supported. The regression analysis used the overall rating of the show (measured on a 5 point scale anchored by “Excellent” and “Poor”) as the dependent variable and the “funny” scales for the characters as the predictors. In this case the results were noticeably different. As shown in the third column of Table 1, the beta weights from the regression analysis for Kramer, Jerry and George were statistically the same and that for Elaine was only slightly less.

This indicates that the three male characters have equal impact on the show’s ratings. From the impact weights we could further conclude that the show does have an ensemble cast. We could also draw the conclusion that a spin-off show based on George is likely to be equally successful, since individual ratings do not seem to translate into impact on the show’s ratings. Further, when the analysis was run only on data provided by frequent *Seinfeld* watchers, Kramer, George and Elaine had equal impact on the show’s ratings.

The results from this example imply that looking just at means and percentages is not sufficient. Univariate ratings are useful if the objective is to identify the favorite character. But they are not

enough if we want to understand the impact of the individual characters’ contribution to the show’s ratings. Univariate ratings exaggerated the impact of Kramer, while the multivariate analysis clearly shows the combined strength of the four characters and hence the ensemble nature of the cast.

## Politics

Almost everyone in the marketing research profession is aware of the fact that public opinion polls are constantly used to gauge the popularity of politicians and the public’s perceptions of political issues. The results of the polls are widely reported in the press and the numbers are often used in developing campaign themes and even in making policy decisions. But do these numbers always tell the full story? Is cutting the data by socio-demographic segments enough to identify the relationships between variables in the data?

To answer these questions, we conducted a national random telephone survey of 476 people. The primary purpose was to measure President Clinton’s job approval rating and to ascertain which issues have the most impact on that rating. The issues included in the study were:

- Handling the economy
- Ability to understand the average American’s problems
- Handling foreign affairs
- Personal honesty and trustworthiness
- Leadership in social issues

Respondents were asked to indicate which of these five issues were most important in how they rated President Clinton’s job performance. The results are shown in the first column of Table 2.

Table 2

	Self Stated	Beta Weight
Handling the economy	29%	0.29
Personal honesty	24%	0.16
Ability to understand	19%	0.1
Leadership in social issues	16%	0.29
Handling of foreign affairs	9%	0.15

personal honesty and trustworthiness have very different meaning for men and women.

Handling the economy was first, followed by personal honesty and trustworthiness, ability to understand the average American's problems, leadership in social issues and finally handling of foreign affairs.

As in the previous case, a regression analysis was run to identify the extent to which respondents' ratings of the President on each of these issues (measured on a 10 point "Excellent" to "Poor" scale) impacted his overall job performance. The results are shown in the second column of Table 2. The highest beta weights from the regression were for leadership in social issues and handling the economy, followed by personal honesty and trustworthiness, handling foreign affairs and finally ability to understand the average American's problems. The most important difference here is in leadership in social issues. While it does not appear to be particularly important in the stated reasons, it comes out as very important in the regression results.

To take the analysis a step further, we decided to focus on the issue that is of most current interest: personal honesty and trustworthiness. The mean ratings on this issue (4.0 on a 10 point scale) were much lower than the ratings on the other four issues. When the data are cut in terms of men (3.8 ) and women (4.1 ) the mean ratings are not statistically different. Further, there are no statistically significant differences between the top box scores ("Excellent") given by the two groups or the bottom box scores ("Poor") given by the two groups. All of these results seem to imply that the issue of personal honesty and trustworthiness is of equal importance to men and women.

When separate regression analyses were run for men and women, the results were quite different. In the case of men, (along with handling the economy), honesty had the highest impact (.31) on job performance. Among women, honesty had the least impact (.05) on overall job performance. Therefore, the regression results clearly imply that

### Asymmetric Effects

Our research in customer satisfaction over the last several years, across many industries, has indicated that in many cases the impact of attribute performance on overall satisfaction tends to be asymmetric. This means that negative performance on an attribute often has a disproportionately strong impact on overall dissatisfaction as compared to the impact that positive performance on that attribute has on overall satisfaction. In some cases this is reversed and the positive performance has a disproportionately larger impact. The former type of attribute is referred to as a dissatisfier and the latter type of attribute is referred to as a satisfier.

Asymmetry analysis was applied to both data sets to see if any additional insights could be obtained. The results of the analysis on the Seinfeld data are provided in Table 3.

Table 3

	Impact of	
	Positive Performance	Negative Performance
Elaine	0.35	-0.09
George	0.56	-0.05
Jerry	0.44	-0.09
Kramer	0.36	-0.75

These results show that while Elaine, George and Jerry are satisfiers, Kramer is primarily a dissatisfier. The implication is that while good performance from all of them has a positive effect on the show's ratings, poor performance from Kramer has a much larger impact compared to the impact of poor performance from the others. This could be due to the fact the Kramer's brand of humor is more high profile and hence the risk of failure is also high.

In the political example, to investigate any possible asymmetric effects of personal honesty and trustworthiness on President Clinton's job performance, we used asymmetry analysis on the entire sample and on men and women separately. No asymmetric effects were apparent on the entire sample (i.e.) the President's positive and negative performance on this attribute had equal impact on his overall job performance.

When the analysis was applied to each group, the results were very different as shown in Table 4.

Table 4

	Impact among men	
	Positive Performance	Negative Performance
Honesty	0.69	-1.04
	Impact among women	
	Positive Performance	Negative Performance
Honesty	0.54	-0.08

In the case of men there was a pronounced asymmetric effect with the importance weight for negative performance being much larger than that for positive performance. Among women the opposite result was observed with the importance weight for negative performance being much smaller than that for positive performance.

Taken together with the previous results from the regression analysis, the implications are very interesting. The regression results indicate that President Clinton's personal honesty and trustworthiness are very important for men and not at all important for women when evaluating job performance. The asymmetry analysis adds a further twist. For men, any further decreases in ratings of honesty will have a disproportionately strong negative impact on the overall job performance rating. For women, on the other hand, improvements in honesty ratings will have a disproportionately strong positive impact, while lower honesty ratings will have a negligible impact on overall job performance.

## CONCLUSIONS

The answers to the two questions posed at the beginning of the article vary based on how the data are analyzed. When looking at just means and percentages, it appears that a *Seinfeld* spin-off series should be based only on Kramer. The results of the multivariate analysis shows that a series based on George, or even Elaine, may be equally successful. In the case of President Clinton, the univariate analysis show that his approval rating is high in spite of low ratings on honesty, hence implying that honesty has no impact on the overall approval rating. The univariate analysis also implies that this is true for both men and women. The multivariate analysis shows that honesty is very important for men, but not for women. Further, the asymmetry analysis shows that a decrease in honesty ratings will have a much larger effect among men than on women.

The examples in this article clearly illustrate that use of multivariate statistical techniques can result in better understanding of survey data as compared to looking at just means and percentages. Further, it has also been demonstrated that survey data collection does not have to be restricted to traditional industries such as financial services, telecommunications and automobiles, but could encompass less traditional industries like entertainment.

## References

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## Biography

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