In the marketing world, it is common knowledge that sex appeal sells products. How much of that sex appeal translates into profit is for another discussion but public attitude does change towards the company. As taboo as it seems, the question of how intense of sex appeal in relationship to a company’s image has not been studied as much. The data that is being used to explain this issue looks at four different conditions when measuring the attitude of sex appeal in an advertisement. A low score would indicate a lower attitude towards the company while a higher score would indicate a higher attitude. Ad1 was used as a control whose image is a company’s values that is depicted as a “pioneer of industry standards in social responsibility.” Ad2 through Ad4 were more suggested sexual depictions with Ad2 being medium intensity, Ad3 as mild intensity and Ad4 being the most intensity. Four groups were tested with group 1 being the control showing only Ad1, group 2 showing Ad1 and Ad2, group 3 showing Ad1 and Ad3 and group 4 showing Ad1 and Ad4. Participants were asked to measure their attitude level towards the company after being shown the ads. Looking at the summary statistics in table 1, the control has a higher average score than that of the other groups. Variances were far different from each other, but standard deviation were similar. To compare the groups and see if there is any difference from the control, an ANOVA test statistic was conducted using an alpha level of 0.05. As such, the null hypothesis would be that the groups would show the same levels of attitude in all groups and the alternative hypothesis is that at least one group’s attitude is different. When taken into the context of this study, researchers were looking to see if there is a noticeable change of attitude in the three groups to the control.

When interpreting the data, it was determined that it would be best to use an ANOVA. First thing to note, groups were mixed with males and females in which biases cannot be separately accounted for. This is important to note as males and females have different views on sex appeal. By including them in the groups, those views should be equally distributed. Assumptions of ANOVA for the first assumption was met as each person was selected from a population that is assumed to be normally distributed. The normal QQ plot on the other hand depicts heavy tails on both ends. This was to be expected as attitudes are that of personal opinion which should not be in a straight line. As such, it raises no concerns. Looking at the standard deviation in table 1, the values are similar without much difference, so it meets the second assumption. For the third assumption, it is satisfied as all subjects were independent from each other which in turn makes all groups independent from each other. The fourth assumption is satisfied as the groups were formed by random assignment of the participants to these groups.

Table 1 shows the group means, variances, and standard deviation from the dataset. As expected, on average group 1 was the highest followed by group 3. This makes sense as these ads were not that intense which in turn paints the company in a better picture. Conversely, groups 2 and 4 had lower scores which would suggest that the company’s image was lower. The box plot also shows a clear difference between the groups which supports the ANOVA findings (*F*(423) = 32.81, *p* < .001.) This would suggest that the null hypothesis is rejected as there is a statistical significance. This would suggest that the group’s attitude is different from each other, but which groups were not that different? To check, the Tukey-Kramer test was also done and the mean differences between groups 2 and 3 and groups 2 and 4 were not significant (refer to table 2) This may be that group’s 2 image was not that different when comparing to other groups when looking at the p-values but the difference between groups 3 and 4 were statistically significant. It may be that the differences in groups 3 and 4 could be explain by the ad depictions as group 2 was only middle of the road. This may have cause participants to have a more neutral opinion that was not as different to groups 3 and 4.

When looking at these results, it is no surprise that each group would be different from that of the control group as each group has a distinct ad that would shape the attitude of the company. The most extreme depictions of sexual appeal of group 4 shows a lower attitude of the company while the mild and moderate portrayals were still lower than the control but not by much. These results would mean that marketing with sexual appeal is not as effective as one might think when it comes to a company’s image. This would not mean that it could sell less products but rather the opinion of the company which some companies pride themselves on to sell products. If a company were to use sexual appeal as new marketing stunt, the public sentiment towards the company will change likely to that of a lower opinion which may change profit forecast.

In terms of limitations to this study, there were few as all assumptions were met which causes no issues. In many other studies, ANOVA may not be the best statistic to use as all four assumptions must be met to make it work effectively. If the null hypothesis is rejected, ANOVA does not state which group is different so it would be hard to conclude the findings but thanks to post-hoc tests such as the Tukey-Kramer test, it helps identify those differences. As for new research questions, it would be to look for sexual appeal in television ads and public opinion due to a wider range of audience. A couple of years ago, Carl’s Jr. had a controversial ad that used sex appeal as a main selling point. Public opinion did change for the months for better or for worse. Today however, that ad does not play anymore as it seems Carl’s Jr moved on to other types of marketing material, but it did alter their image for better or for worse.

Appendix

Data set used Influence of Ad Type (Social Responsibility vs Sex Appeal) on Consumers' Attitudes toward Clothing Firm from <http://users.stat.ufl.edu/~winner/datasets.html> based on the study of K. Hyllegard, J. Ogle, R-N. Yan (2009). "The Impact of Advertising Message Strategy - Fair Labour v. Sex Appeal - Upon Gen Y Consumers' Intent to Patronize an Apparel Retailer," Journal of Fashion Marketing and Management, Vol. 13, #1, pp. 109-127.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 1 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Summary statistics |  |  |  |  |  |  |  |  |  |
| Group |  | n |  | *M* |  | *SD* |  | *Variance* |  |
| 1 |  | 98 |  | 68.01 |  | 19.14 |  | 366.34 |  |
| 2 |  | 112 |  | 54.14 |  | 17.08 |  | 291.72 |  |
| 3 |  | 103 |  | 58.28 |  | 17.7 |  | 313.3 |  |
| 4 |  | 112 |  | 51.31 |  | 16.61 |  | 275.89 |  |
| *Note:* Total Sample = 425 |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 2 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Tukey-Kramer test |  |  |  |  |  |  |  |  |
| Group mean differences |  | difference |  | lower |  | upper |  | *p* |
| 2-1 |  | -13.87 |  | -20.15 |  | -7.59 |  | <.001 |
| 3-1 |  | -9.73 |  | -16.14 |  | -3.32 |  | <.001 |
| 4-1 |  | -16.7 |  | -22.98 |  | -10.42 |  | <.001 |
| 3-2 |  | 4.14 |  | -2.06 |  | 10.34 |  | 0.31 |
| 4-2 |  | -2.83 |  | -8.9 |  | 3.24 |  | 0.63 |
| 4-3 |  | -6.97 |  | -13.17 |  | -0.77 |  | 0.02 |



