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Marketing Situation

When people say they love the Drake Relays, that could mean a lot of things. They could be referring to the increase in school spirit, the alumni reunions, the Peggy’s tent, or the actual races themselves. Despite the love of the Drake Relays, many in our group noted that the stadium never seemed to be full on the occasions we had attended (and some of us had never been to a track event!). Loving the Relays and increasing school spirit is important, however, we sought to increase Drake’s bottom line in concession sales, Drake apparel, etc., by seeing if offering alcohol in the stadium would make students more likely to actually attend the track events themselves. Right now, alcohol is only served in a tent outside the stadium.

How the Experiment Was Designed

The specific questions are included in the appendix of this paper. All respondents are asked whether they had attended the relays before, gave their age in school, stated the extent to which they enjoyed watching track, how many times a year they attend organized sporting events, and listed aspects of spectator sports that were important to them. However, half the respondents were asked “how likely would you be to attend the track events of the Drake Relays if alcohol was being served” and the other half was asked “How likely are you to attend the track events of the Drake Relays.” The whole purpose of our survey is to see if selling alcohol is likely to make more Drake students attend the relays, so we wanted to see if there was a significant difference in the likelihood of attending between those who would go if alcohol was served and those who are indifferent. The difference in stimuli, therefore, was merely which question they answered in first. Data was recorded in Qualtrics. Extraneous information like computer IP address, longitude, and latitude, were thrown out. In addition, the four responses that were incomplete were thrown out. Since our sample size was at 79, cutting down to 75 was not very dramatic.

In its original form, the data looked like this: We transformed it into:

|  |  |
| --- | --- |
| Combo  How likely are you to  attend (regardless of which question you were asked)? | AlcTrueorFalse  Which question were you asked (1= if alcohol were served; 0 = no mention of alcohol |
| 1 | 1 |
| 3 | 0 |
| 2 | 0 |
| 3 | 1 |

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|  |  |
| --- | --- |
| How likely would you be to attend the track events of the Drake Relays if alcohol was being served? | How likely are you to attend the track events of the Drake Relays? |
| 1 | Null |
| Null | 3 |
| Null | 2 |
| 3 | Null |

Making this change allows us to measure whether the inclusion of alcohol is significant effects how likely one is to attend. We constructed the following model:

**proc** **import** OUT=WORK.resultstwo DATAFILE = "E:\Marketing Analytics\abtesting\surveyresultsfinal.xlsx" DBMS=XLSX REPLACE;

**run**;

**proc** **glm** data = work.resultstwo;

class AlcTrueorFalse attended studentstatus enthusiasm food drinks socializing competitive;

model combo = AlcTrueorFalse attended studentstatus enthusiasm food drinks socializing competitive EnjoyTrack HowOften / solution;

**run**; **quit**;

All the variables following the class statement were obviously treated as class variables. The last question, “Please select the aspects of spectator sports that are important to you,” was split into five yes/no questions. These are the enthusiasm, food, drinks, socializing, and competitive columns, which you will note correspond to the answer choices to this question. The variables “EnjoyTrack” and “HowOften” were treated as numeric/continuous variables despite the fact that they are ordinal in nature. In other words, we assumed that there is equal distance between all of the options (same distance between “very likely” and “likely”, same distance between “likely” and “neither likely nor unlikely”, etc.).

Overall, alcohol was determined to be a significant predictor of whether Drake students would attend the Relays, which confirmed our initial hypotheses. We understand there are valid concerns about serving alcohol at the event, but from a financial standpoint, we are confident that serving alcohol would raise profits.

