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One and Two Sample Inference Write up

The population in this dataset is all people who regularly watch ASMR videos. A one sample inference was conducted on this dataset by exploring the confidence interval of proportions. The population parameter in this case is the proportion of people whose sleep was positively affected by ASMR videos. After conducting the one sample inference, it was found that the true percentage of people who watch ASMR videos whose sleep is affected by these videos is between 54.8% and 63.8%. This means that of all the people who watch ASMR videos as part of their routine, more than half of them do get better sleep as a result. In other words, ASMR videos do seem to have a relaxing and positive effect on viewers. However, the effects may depend on the individual since some responses to ASMR videos may differ. In order to investigate more on how ASMR videos have a positive impact on viewers in terms of mental health, a two sample inference was also conducted with confidence intervals on the population means of paired populations. The confidence interval has to take into account the dependence of the populations since the two pieces of data are from the same sample and correspond to each other. The population parameter in this case is the mean mood of people who watch ASMR videos after they watch them and also on the daily. After the two sample inference test was conducted, it was found that the mean daily mood of people who watch ASMR videos is between 23.4 and 20.6 lower than the mean mood after watching. In other words, there is a significant difference between the daily mood of people who watch ASMR videos and their mood after watching. Since there is an increase in mood of between 23.4 and 20.6 points after watching ASMR videos, then that shows that ASMR videos are able to uplift people's moods. It can then be concluded that ASMR videos overall can have a positive impact on the mental health of viewers since ASMR videos help people sleep better and uplift their mood.