Video: Below Average Presentation (10:43):
(0:00):
Hi, in this presentation we will be looking at a below average presentation and will discuss improvements and corrections by comparing it with a good presentation available in blackboard.
(0:17):
This should be the second slide of your presentation and should include the topics and sub topics in your presentation.
(0:25):
Some sections were actually missing in the below average presentation and are added here such as background, results, etc.
(0:39):
In the introduction here there are two parts, but both of them are poorly written. Either one of them can be re-written to form a good introduction, but the hypothesis should relate to it. In this study the presenter studied college students rather than himself, so it would make more sense to rewrite the objectives in a correct matter like in the next slide.
(1:03):
Here are the correctly written aims and objectives and are related to the hypothesis discussed later.
(1:17):
This is the second slide of the introduction section with the hypothesis defined. First bullet under hypothesis is not actually a hypothesis and should be written above the hypothesis. The problem here with hypothesis is that they aren't written correctly. The first one is written as a question, not a statement, but it does have something that can be tested. However, the second hypothesis isn't written as something that can be tested, such as "is there any relationship" doesn't tell us what to test. If there isn't a clearly written hypothesis then it's really hard to write a test or computation to test later and to discuss similar studies it would be better to include a prior background slide.
(2:16):
So these are well written hypothesis statements which are relevant with are aims and objectives and can be tested using t tests.
(2:28):
This is a background slide which discusses studies related to this one, but it's important to be specific about which study is being included and what they said.
(2:43):
Here from a writing point of view, it's better to say participants of the study rather than the data set consisted of and it's important to include the information about the data set like how many participants are in the data set, or how many men and women, etc. Also the MATLAB variables shouldn't be included since they are implementation specific details. In the last bullet point, you should avoid using phrases like I generated graphs, but you could mention that statistics were computed and t tests were done to test the hypothesis.
(3:26):
This is a well written methodology.
(3:32):
Here the pie chart shows 6 categories, but there are no units or percentages shown in the figure, also the figures background doesn't look good contrast with the slides background.
(3:50):

This is a better pie chart with units shown and is more understandable.
(3:59):
In this figure the SD error bars are shown for 4 categories, but earlier the data was shown in 6 categories. This causes confusion, if there are many small and insignificant categories then they can be grouped together, but it should be done from the beginning of the presentation so there is uniformity throughout the presentation.
(4:23):
A refined and correct version of SD error bars for activities is shown here. The other category is actually the sum of remaining categories such as eat, entertainment and others shown in the previous slide.
(4:41):
This figure is actually better and shows relevant information compared to the other figures in the below average presentation.
(4:52):
The graph shows work, sleep, and study hours for working students.
(5:02):
This graph shows amount of sleep and study hours for non-working students. Clearly, the graph in the previous slide and the graph in this slide should be together in the same figure using the side by side by chart for better comparison.
(5:20):
So here is a side by side bar chart that represents the same information in the previous two slides but provides better comparison between 2 data sets.
(5:36):
This graph shows 2 graphs together in a single figure as subplots, however it isn't a side by side bar chart. The subplots look similar and it's hard to see the difference between each category and again the distribution is back to 6 categories now.
(5:58):
So here is a side by side bar chart comparing working men and women which is much better than the subplot shown in the previous slide.
(6:12):
Here is the statistical data computed for this study. It is better to distinguish averages for men and women from the rest of the overall statistics such as mean median and standard deviation.
(6:30):
Like this one here that shows a better presentation of the statistics described in the previous slide.
(6:39):
T tests are the best method to test the initial hypothesis, but it's important to carefully design the questions in t tests to test the hypothesis. It should discuss the the results of the t tests, null hypothesis, alternative hypothesis, and significance or p values and confidence intervals.
(7:00):
These t tests were to test the initial hypothesis. The first t test is a right sided t test to test if non working spent more time studying than students who work more than 5 hours. Here h = 1 means the null hypothesis, that is they spend the same amount of time on studies, is rejected in favor of the alternative hypothesis and the p value is very small which means the result is highly significant. The confidence interval tells us that non-working students actually spend at least 1.3 or more hours on average on than students who work 5 or more hours. The second t test is a left sided t test which is testing if students who work 5 or more hours spend less time on other

activities on average than students who don't work. It is similar to the first one and can be done similarly. The third one is actually a two sided t test and the null hypothesis here is that female student and male students spend the same amount of time studying on average. The $h = 0$ represents that the null hypothesis is not rejected, however the p value is not significant indicating that there is 40% chance that this result is random. Also the confidence interval includes 0 in it which says that the average of two datasets could be the same. The fourth t test is also a two sided t test and is testing if female students and male students get different amounts of sleep on average.

(9:14):
There is no results slide here and more importantly there is no quantitative analysis done in terms of data and numbers.

(9:29):
This is a results slide which is missing in the below average presentation. It discusses the most significant results that supports or disproves the initial hypothesis.

(9:45):
The conclusion here seems like repetition of information and phrases already discussed in previous slides. Also there is no limitations slide here which could be used to present your analysis or the limitations of your study.

(10:04):
Here the discussion and conclusion are shown together and they represent a quantitative analysis of the study.

(10:17):
This is a limitations slide showing the limitations of the study.

(10:25):
These are the references that were used in the study.

(10:30):
At the end, here are some tips and suggestions regarding a good presentation.

(10:35):
Thank you and good luck!