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Data Visualization Writeup

In the stacked bar graph of the worrisome level of participants while watching ASMR videos, the conditional percentages across all groups seem to be almost constant. The BDI group variable is not dependent on the FlowNotWorried variable. The BDI group category of “moderate or severe depression” should generally experience more worrisome individuals. However, the FlowNotWorried variable is the measure of worry while watching ASMR videos and essentially relaxing. So regardless of the level of depression an individual has, how worried they feel while watching ASMR videos will generally be independent of the level of depression. Also, in the stacked bar graph that shows the control level of participants while watching ASMR, the conditional percentages are relatively the same while the “moderate or severe depression” group has a slightly lower percentage, which is expected and related to the reasonings for the first stacked bar graph. For the histogram of the mood of participants before watching ASMR videos, the distribution seems very slightly left skewed with the mode of 50. The median seems to be around 50 or a very little above it. The outliers seem to be on the left end, with very low values of mood, like 0. The range of this histogram is from 0 to 100. The histogram is also very much like the histogram of the general mood of participants. Overall, this shows that the mood of participants before watching ASMR videos is very slightly above average. For the histogram of the mood while watching ASMR videos, the shape is more left skewed, so there are more outliers on the left with values of around 30. The median is somewhere around 75 and the mode is a little above 80. The range is from 30 to 100. As for the histogram of the “after” mood, the distribution is more left skewed with an outlier of 0. The range is from 0 to 100, and it seems to be bimodal, with modes of 70 and 93. The median is somewhere around 65. Overall, there seems to be an increase in mood based on the progression of the histograms. Likewise, for the side-by-side boxplots of the “before”/“general”, “during”, and “after” mood grouped by the BDI groups, there is an increase in mood. The median for the BDI group of “little to no depression” is consistently higher than the other two groups, with the median of the “mild depression” group in the middle and the “moderate or severe depression” group with the lowest. The medians are the greatest for the “while” mood boxplots for all groups. The group of “little to no depression” has outliers on both ends of the boxplot for the “before”/“general” mood, and has outliers on the lower end of around 26 and 38 for the “while” and “after” mood boxplots. The “mild depression” and “moderate or severe depression” groups have outliers in the “after” mood box plots as well, on the lower end. However, there is one outlier in the “general” boxplot for the “mild depression” group. So in general, the groups of “mild depression” and “moderate or severe depression” tend to have less spread compared to the group of “little to no depression”. For the scatterplots of the BDI total score and the moods of the participants before/in general, while, and after watching asmr videos, there seems to be a negative relationship between the BDI total score and mood. The higher the BDI total score, the lower the mood of a participant. However, the correlation between the two does not seem to be strong. Therefore, there are definitely outliers in these scatterplots. For example, in the scatterplot of the mood of participants before watching ASMR videos, there is a point with a BDI total score of close to 0, meaning this participant is almost not depressed at all, but has a “before” mood of just below 12.5 which is really low. Overall, however, there seems to be an increase in mood before/in general, while, and after watching ASMR videos as expected. For the side-by-side boxplots of the BDI group, BDI total score and the category of relief of negative mood, the median for the “little to no depression” group is the lowest in terms of the BDI total score and increases across the “relieve negative mood” categories. This means that the more likely participants watch ASMR videos to relieve negative mood, the more they have a higher BDI score, which makes sense because their levels of depression are higher. The median of the BDI score is higher for the “mild depression” group and highest for the “moderate or severe depression” group, though the median is not increasing for these two groups across the “relieve negative mood” categories. The median is more consistent for the “mild depression” group and fluctuates for the “moderate or severe depression” group. The same observations can be made for the “watch to deal with anxiety/stress/depression” side-by-side boxplots as well. This means that for the groups with higher levels of depression, their reasonings in watching ASMR videos vary and do not really correlate with their depression BDI score. Lastly, the facet-wrapped bar graph of

the BDI group, HelpWithSleep, and EffectSleep variables show that participants who watch ASMR videos for the purpose of aiding with sleep are more likely to agree that the videos do indeed affect their sleep. However, across the depression group, it varies, with the participants who are the least depressed are less likely to agree that the videos helped them sleep in comparison to the other two depression groups. Overall, since the conditional percentages vary across the three depression groups and within the categories of the “HelpMeSleep” and “EffectSleep” variables, the three variables are dependent on each other.