**Hypothesis Test Conclusion and Scope Guide**

**Conclusion**

P-value < significance level / Reject Ho

There is sufficient (strong / overwhelming) evidence to suggest that (state the alternative hypothesis in clear, specific, practical and easy to understand language). (Add the p-value and what test it came from.)

P-value >= significance level / FTR Ho

There is **not** sufficient evidence to suggest that (state the alternative hypothesis in clear, specific, practical and easy to understand language). (Add the p-value and what test it came from.)

**Scope:**

If You FTR Ho

It is a moot point to discuss causal relationship or association since there was not statistically sufficient evidence of an effect / difference.

It is still very important to discuss the generalizability of the study. If it is a random sample then you can conclude that there is no evidence of an effect / difference in this population. If it was not random sample then you can only assume that there was no evidence of an effect / difference in this sample.

If You Reject Ho

Now there is statistically significant evidence of an effect / difference. If the subjects were randomly assigned to the treatment groups (a randomized experiment) then group membership can be assumed to cause that effect / difference. If they were not randomly assigned to the groups then only an association can be implied between the group membership and the effect / difference.

Generalizability: If it is a random sample then you can assume group membership causes (if a randomized experiment) or is associated with (if an observational study) the effect for everyone in the population. If it was not random sample then you can only assume group membership causes (if a randomized experiment) or is associated with (if an observational study) the effect for subjects in this sample.