

Hypothesis Test Conclusion Table *(updated version)*

	Reject Ho or Fail to reject Ho?	Conclusion if Claim is Null Hypothesis (Ho)	Conclusion if Claim is Alternative Hypothesis (Ha)	Explain: What does the hypothesis test tell us?
HIGH P-VALUE + GOOD DATA (P-value higher than the significance level AND random sample data DOES meet the conditions / assumptions for the hypothesis test and is relatively unbiased.)	Fail to Reject Ho	There is NOT significant evidence to REJECT the claim that ...	There is NOT significant evidence to SUPPORT the claim that...	Sample Statistic from good unbiased random sample data does NOT significantly disagree with the null hypothesis and so cannot support the alternative hypothesis.
HIGH P-VALUE + BAD DATA (P-value higher than significance level BUT the data does NOT meet the conditions / assumptions for the hypothesis test OR has other sources of bias.)	Fail to Reject Ho	There is NOT significant evidence to REJECT the claim that ...	There is NOT significant evidence to SUPPORT the claim that...	Sample Statistic from bad biased sample data does NOT significantly disagree with null hypothesis. P-values calculated from bad biased data should not be taken as evidence to make decisions about a population claim.
LOW P-VALUE + GOOD DATA (Low P-value AND random sample data DOES meet the conditions / assumptions for the hypothesis test and is relatively unbiased.)	Reject Ho	There IS significant evidence to REJECT the claim that...	There IS significant evidence to SUPPORT the claim that...	Sample Statistic from good unbiased random sample data significantly disagrees with the null hypothesis and supports the alternative hypothesis.
LOW P-VALUE + BAD DATA (P-value lower than significance level BUT the data does NOT meet the conditions / assumptions for the hypothesis test OR has other sources of bias.)	Fail to Reject Ho	There is NOT significant evidence to REJECT the claim that ...	There is NOT significant evidence to SUPPORT the claim that...	Sample Statistic from bad biased sample data significantly disagrees with null hypothesis. P-values calculated from bad biased data should not be taken as evidence to make decisions about a population claim.