

Wording Final Conclusions in Hypothesis Tests

Some key points:

- Never conclude a hypothesis test by saying either “reject the null hypothesis” or “fail to reject the null hypothesis.” Always make sense of the conclusion by stating it with simple nontechnical wording that addresses the original claim.
- An original claim can be *supported* only if it is stated in a way that makes it the alternative hypothesis.
- An original claim can be *rejected* only if it is stated in a way that makes it the null hypothesis.

Table 8-3 in the textbook lists the four possible circumstances and their corresponding conclusions.

TABLE 8-3 Wording of the Final Conclusion

Condition	Conclusion
Original claim does not include equality, and you reject H_0 .	“There is sufficient evidence to <i>support</i> the claim that . . . (original claim).”
Original claim does not include equality, and you fail to reject H_0 .	“There is not sufficient evidence to support the claim that . . . (original claim).”
Original claim includes equality, and you reject H_0 .	“There is sufficient evidence to warrant <i>rejection</i> of the claim that . . . (original claim).”
Original claim includes equality, and you fail to reject H_0 .	“There is not sufficient evidence to warrant rejection of the claim that . . . (original claim).”

The following diagram depicts the same criteria in Table 8-3.

