

	In Reality, null H is true	In Reality null H is false
Researcher uses level of significance to reject null hypothesis.	Type 1 error. The null is rejected even though it is true. (Researcher claims a difference, but there isn't one)	Correct. Null is rejected and it is false. (Researcher finds difference)
Researcher uses level of significance to retain null hypothesis. (Researcher doesn't find difference)	Correct. Null is retained and it is true. (Researcher doesn't find difference)	Type II error. Null is retained even though it is false. (Researcher misses a real difference)

To reduce Type 1 error, set p level closer to 0.

To reduce Type II is harder. They do have an inverse relationship, so if Type I goes up, Type II goes down.

Sometimes have to balance which is better.