

CHI SQUARE TEST

The Chi Square Test for Goodness of fit test claims about population proportions. {categorical variables}

It is a non parametric test that is performed on categorical [ordinal, nominal] data

Eg: There is a population of Male who likes different color of bikes

	<u>Theory</u>	<u>Sample</u>	⑧ Goodness of fit.
Yellow Bike	$\frac{1}{3}$	22	
Orange Bike	$\frac{1}{3}$	17	
Red Bike	$\frac{1}{3}$	59	
	↓		↳ Observed categorical distribution.
	Theory categorical distribution		

Goodness of fit test

* In a student class of 100 students, 30 are Right handed. Does this class fit the theory 12% of people are right handed

	<u>O</u>	<u>E</u>	$\frac{12}{100} \times 100 = 12$
Right handed	30	12	
Left handed	70	88	
	100	100	⇒ Theory categorical distribution

