

**IB PSYCHOLOGY**  
(Which Inference Test To Use)

<b>QUANTITATIVE (RANKED) DATA</b>		
	<b>Distribution Not Normal</b>	<b>Distribution Normal</b>
Is there a <i>significant</i> difference between 2 medians or means in a between groups design?	Mann Whitney U Test ( $M_1 > M_2$ etc)	Two sample t-test ( $\mu_1 > \mu_2$ etc)
Is there a <i>significant</i> difference between 2 medians or means in a within groups design?	Wilcoxon Signed Ranks T Test ( $M > 0$ etc)	One sample t-test ( $\mu > 0$ etc)

<b>CATEGORICAL (NOMINAL) DATA</b>	
Is the observed data <i>significantly</i> different when compared to a hypothesized distribution?	Chi-Square Goodness of Fit
Is there a <i>significant</i> difference between categorical variables from the same sample (or different samples)?	Chi-Square Test of Independence (or Homogeneity)

<b>PROPORTIONS</b>	
Is there significant evidence for a hypothesized proportion ( $p > .50$ etc)?	1-Proportion Z Test
Is there a significant difference between 2 proportions from a between groups design ( $p_1 > p_2$ etc)	2-Proportion Z Test

**References**

Jackson, Sherri L. (2005). *Statistics Plain and Simple*. Canada: Thomson Wadsworth

Yates, Daniel S., Moore, David S. and Starnes, Daren S. (2003). *The Practice of Statistics*. New York: W. H. Freeman and Company.