



(3) Test statistic

$$J\text{-test} = \frac{\bar{x} - \mu}{s/\sqrt{n}} = \frac{140 - 100}{15/\sqrt{30}} = 4.6$$

Decision Making

$14.60 > +1.96$  standard deviation

hence we Reject Null hypothesis  
and accept the Null  
hypothesis  $\rightarrow$  Mediation  
has some +ve effect