**S3. Critical value of** 

To obtain the critical value of , we utilize an expression, from Blumenfeld [1], page 8. That is, when two random variables U and V are independent,  and . Letting and in Higgins score, we note that and



because. This means that a new statistic,

 (4)

could be utilized as it follows a chi-squared distribution with one degrees of freedom (df). In other words, the of a data base is . These results would help the practitioner to have more confidence in conducting meta-analysis.

REFERENCES

1. Blumenfeld D. Operations research calculations handbook. Boca Raton: CRC Press; 2009, p. 8-9.