

# Online appendix E

## Calculations of Cohen's d

	Intermediary measure	Intermediary variance	Cohen's d	Variance of Cohen's d	Source/Explanations				
Regression Coefficient, Difference-in-Difference Coefficient	$t = \frac{beta}{se(beta)}$		$= t * \sqrt{\frac{1}{n_{treatment}} + \frac{1}{n_{control}}}$	$= \frac{n_{regression}}{(n_{treatment} * n_{control})} + \frac{Cohen's d^2}{n_{regression}}$	Approximating Cohen's d via t-statistic transformation as seen in Waddington et al. (2019)				
Two by two table Treatment vs Control group, behavior (change) observed yes vs no <table border="1" style="margin-left: 20px;"> <tr> <td>TY</td> <td>CY</td> </tr> <tr> <td>TN</td> <td>CN</td> </tr> </table>	TY	CY	TN	CN	<i>Odds Ratio</i> $= \frac{TY}{TN} \frac{CY}{CN}$	<i>Variance(Odds Ratio)</i> $= \frac{1}{TY} + \frac{1}{TN} + \frac{1}{CY} + \frac{1}{CN}$	$= \ln(Odds Ratio) * \frac{\sqrt{3}}{\pi}$	$= \ln(Variance of Odds Ratio) * \frac{\sqrt{3}}{\pi}$	Borenstein et al. (2009)
TY	CY								
TN	CN								

Measured that are based on two by two tables are: Odds Ratios, Risk Ratios / Relative Risk, Risk Difference, Proportion or Number of participants exhibiting change in behavior in treatment and control groups

### References:

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. (2009). *Introduction to meta-analysis*. Chichester, U.K: John Wiley & Sons.

Waddington, H., Sonnenfeld, A., Finetti, J., Gaarder, M., John, D., & Stevenson, J. (2019). Citizen engagement in public services in low-and middle-income countries: A mixed-methods systematic review of participation, inclusion, transparency and accountability (PITA) initiatives. *Campbell Systematic Reviews*, 15(1-2), e1025.