IDEAL

Impact Data and Evidence Aggregation Library

Field session: Estimates

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INTRODUCTION

This set of fields depend on previous stages of data entry and will be last ones to enter.

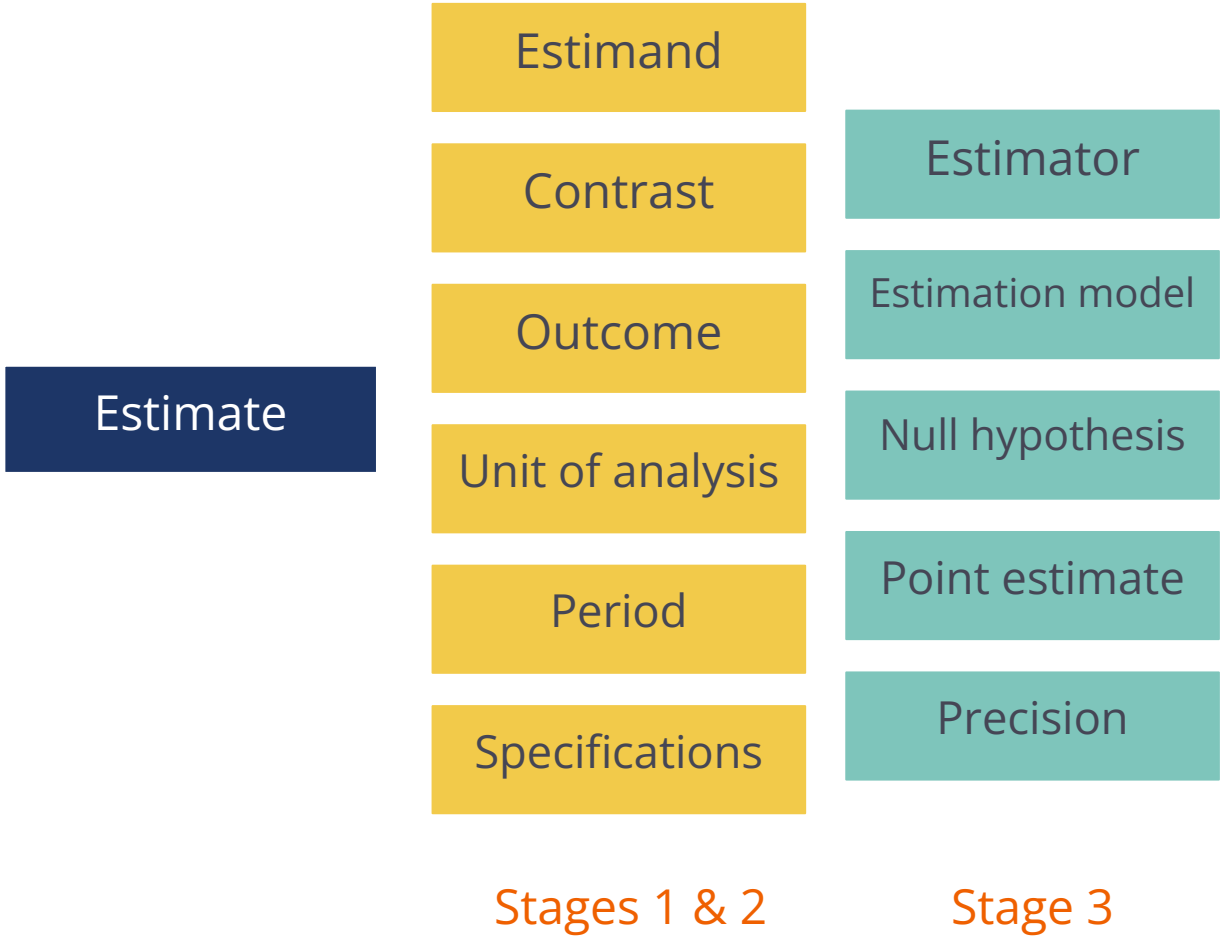
You will need to look for and engage with many statistics (“numbers”) for these fields.

Agenda

1. Estimates
2. Precision
3. Mean, SD, and SE
4. Sample size

1 Estimate

Estimate


Estimate
Estimand
Contrast
Outcome
Unit of analysis
Period
Specifications
Estimator
Estimation model
Null hypothesis
Point estimate
Precision
Stages 1 & 2
Stage 3

Step 0: Locate the t

Exhibit Label: Table 4
Outcome: Teaching professional wellbeing Motivation
Treatment: Teaching training and coaching + Parent awar
parents on school readiness + Flyers to parents on schoc
coaching + Parent awareness meetings
Control: None
Unit of analysis: Other
Type: IDEAL-preferred
Estimand: ITT
Empirical Specification: Strata Fixed Effects + Static Cont
Round of data collection: Follow up

Wolf et al., 2019

Table 4. Impacts on teacher professional well-being and classroom quality.

	b	(*SE*)	*p* value	d_{wt} or *OR*
Teacher professional well-being				
Motivation				
TT	0.103	(0.068)	.132	0.345
TTPA	0.033	(0.072)	.648	0.111
Burnout				
TT	−0.330	(0.155)	.035*	−0.398
TTPA	−0.492	(0.159)	.002**	−0.593
Job satisfaction				
TT	0.130	(0.096)	.175	0.328
TTPA	0.043	(0.100)	.663	0.108
Teacher turnover[a]				
TT	−0.868	(0.414)	.036*	0.420[b]
TTPA	−0.629	(0.351)	.073+	0.533[b]
Classroom outcomes				
Fidelity checklist (no. of activities)				
TT	1.310	(0.246)	.000***	0.560
TTPA	1.434	(0.266)	.000***	0.613
Facilitating deeper learning				
TT	−0.045	(0.106)	.672	−0.113
TTPA	−0.063	(0.116)	.588	−0.158
Emotional support and behavior management				
TT	0.170	(0.065)	.010**	0.647
TTPA	0.172	(0.066)	.010**	0.655
Supporting student expression				
TT	0.235	(0.110)	.033*	0.524
TTPA	0.042	(0.116)	.719	0.094

Note. TT = teacher training condition; TTPA = teacher training plus parent-awareness meetings condition.
Estimates are computed using observed scores, in two-level models: teachers nested in schools. Effect sizes are calculated accounting for the two-level model structure (Hedges, 2009).
Sample size for TT vs. control =296 teachers nested in 161 schools. Sample size for TTPA vs. control =291 teachers nested in 158 schools. All impact estimates computed from 20 multiply imputed data sets. Models include the following control variables: private- (vs. public-) sector status of the school, six district dummies, a dummy variable for whether the school was assigned to receive teacher text messages, a dummy for whether the school was assigned to receive parent flyers, and a series of five dummy variables accounting for within-sample mobility, teacher gender, age, level of education, and years of teaching experience. Models for teacher professional well-being outcomes also include the baseline score for each respective outcome.
$+p < .10$.
$^{*}p < .05$.
$^{**}p < .01$.
$^{***}p < .001$.
[a]Model estimated with multinomial logistic regression.

Estimation parameter - Estimator

- Select the estimator parameter of the treatment effect.

CV (or Options)

- Mean Difference (Final Values)
- Mean Difference (Net)
- Median Difference (Final Values)
- Median Difference (Net)
- Hazard Ratio (HR)
- Hazard Ratio, Log
- Odds Ratio (OR)
- Odds Ratio, Log
- Risk Difference (RD)
- Risk Ratio (RR)
- Risk Ratio, Log
- Slope
- Other, specify

Estimator: Group means

TABLE 3 Age-specific exclusive breastfeeding rate by group (24-h compared with monthly recall)[1]

	24-h recall			1-mo recall		
	PC + PCS *n* (%)	Control *n* (%)	*P* value	PC + PCS *n* (%)	Control *n* (%)	*P* value
Month 1	121 (86.0)	107 (72.79)	0.007	121 (86.13)	104 (71.20)	<0.05
Month 3	108 (83.08)	73 (52.03)	<0.001	99 (76.43)	55 (39.27)	<0.001
Month 5	92 (73.02)	34 (27.0)	<0.001	81 (64.0)	25 (19.0)	<0.001

[1]Adjusted for cluster. PC + PCS, peer counseling + psychosocial stimulation.

Estimation model

- The statistical model used to estimate the treatment effect.

Hints:

- The information is usually found in sections that focus on methods, analytical strategy, or results or in the table notes. It is often presented as an equation in economics papers.

Select one

- Ordinary Least Squares (OLS) regression
- Multi-level or hierarchical model/regression
- Logistic regression
- Probit regression
- Log-linear binomial regression
- Structural equation model (SEM) /regression
- Analysis of Variance (ANOVA)
- Analysis of Covariance (ANCOVA)
- T-test (mean-comparison test)
- Other, specify

Estimation model

Multi-level or hierarchical model/regression

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Wolf et al., 2019

Null hypothesis

- The null hypothesis was tested for the treatment effect.

Hints:

- Null=0 and Null=1 will cover the majority of the cases.

Select one

Null = 0

Null = 1

Null = constant (other than 0 or 1), specify constant

Null: $\beta_i = 0, \forall i$ (sharp null hypothesis)

Null: $\beta_i = 1, \forall i$ (sharp null hypothesis)

Null: $\beta_i = constant, \forall i$ (sharp null hypothesis), specify constant

Null ≥ 0

Null ≤ 0

Null ≥ 1

Null ≤ 1

Null ≥ constant (other than 0 or 1), specify constant

Null ≤ constant (other than 0 or 1), specify constant

Other, specify

Number of coefficients

- The number of coefficients used to calculate the treatment effect estimate.

Hints:

- This is to capture the case of having interaction terms in the estimation.

Caveat:

- Not yet developed in the survey for “More than one (1)”

Select one

- One
- More than one, specify
  - You will report estimates and precision statistics separately for each coefficient. Do not calculate the linear combination of coefficients.

ESTIMATE

- The **numeric** value of the treatment effect.

Hints:

- Enter the number and the decimals as it appears in the paper.

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$^{***}p < .001$.
[a]Model estimated with multinomial logistic regression.
[b]Odds ratio presented.

Results

TABLE 3—RESULTS OF DIFFERENT TARGETING METHODS ON ERROR RATE BASED ON CONSUMPTION

		By income status		By detailed income status				
Sample:	Full population (1)	Inclusion error (2)	Exclusion error (3)	Rich (4)	Middle income (5)	Near poor (6)	Very poor (7)	Per capita consumption of beneficiaries (8)
Community treatment	0.031*	0.046**	0.022	0.028	0.067**	0.49	−0.013	9.933
	(0.017)	(0.018)	(0.028)	(0.021)	(0.027)	(0.038)	(0.039)	(18.742)
Hybrid treatment	0.029*	0.037**	0.009	0.020	0.052**	0.031	−0.008	−1.155
	(0.016)	(0.017)	(0.027)	(0.020)	(0.025)	(0.037)	(0.037)	(19.302)
Observations	5,753	3,725	2,028	1,843	1,882	1,074	954	1,719
Mean in PMT treatment	0.30	0.18	0.52	0.13	0.23	0.55	0.48	366

Notes: All regressions include stratum fixed effects. Robust standard errors in parentheses, clustered at the village level. All coefficients are interpretable relative to the PMT treatment, which is the omitted category. The mean of the dependent variable in the PMT treatment is shown in the bottom row. All specifications include stratum fixed effects.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

2 Precision

How to collect different precision statistics

Always collects

For all precision values, search for both the main paper and supplementary materials.

- Fill out the tables as much as you can! Leave them blank if missing.

	Value	Adjusted Value	Adjustment Method
Standard Error			
t-statistic			
Z-statistic			

Unadjusted/ conventional

Adjusted: Robust or clustered robust or other

Additional p-values

	Value	Adjustment Method
Unadjusted p-value		
Covariate adjustment		
Multiple-inference correction p-value		
Small-sample correction p-value		
Bootstrap p-value		
Permutation tests p-value		
Uknown adjusment p-value		
Other correction p-value - specify method		

Additional statistics

	Lower Bound	Upper Bound	Level
Confidence Interval			

	Value
F-ratio	

[additional_precision_det]: Please provide information on any additional or alternative precision statistics reported for this treatment effect.

3

Mean, SD, and sample size

Baseline mean and sample size for outcome

Refer to the treatment effect information for the rows (Step 0)

	Mean	Stand. Deviation	Stand. Error	Sample Size
Evaluation Arm				
Reference Arm				
Both combined				

- The information may be in another table (!), e.g. descriptive statistics.
- If multiple treatment effects were estimated for the **same outcome** over different periods or using different specifications, you will only see this table once.

Baseline outcome same at baseline as it entered in the estimation

[baseline_format]: Indicate whether the outcome variable was in the **same format** at baseline as it entered estimation:

- ○ Yes
- ○ No, specify the format at baseline

- If yes, the previous question will only show up once. Otherwise, fill it out for every period.

Mean and sample size for outcome over the period

Refer to the treatment effect information for the rows (Step 0)
There is also a hint about which period to look at .
Enter this table for treatment effect estimate if estimator is group means.

[period_values]: Please report the following information for round "**Follow up**" associated with this treatment effect:

Important:
- Sometimes, authors choose to report less commonly used precision statistics for the treatment effect. Please enter the information on those statistics in this field, and if available include the reason for which the authors chose to report them.
- Please provide the details of precision statistics reported for the treatment effect, including the type and values.

	Mean	Stand. Deviation	Stand. Error	Sample Size
Evaluation Arm				
Reference Arm				
Both combined				