

# ESER Reporting Guide for Study Authors

Advancing the evidence in the employment and training field requires that evaluators conduct and analyze the results of their studies rigorously. And, those studies must consistently report information that readers would need to assess the credibility of the research design and the strength of the evidence for the intervention or strategy being evaluated. This document provides recommendations for how to describe randomized controlled trials and matched comparison group design studies and report their findings in a way that is clear, complete and transparent.<sup>1</sup> The document was developed by the [Employment Strategies for Low-Income Adults Evidence Review](#) (ESER). In 2015, the ESER team reviewed 314 studies published in 1990 through mid-2014 that examined the impacts of employment and training interventions for low-income adults. Based on the experience of reviewing these studies and querying authors for information not included in study reports, the ESER team produced this reporting guide to recommend best practices for describing impact evaluations of employment programs and strategies. Authors of future evaluation reports may find this reporting guide to be a useful reference tool.

## I. Study Characteristics

<b>A. Intervention Condition</b>	Describe the employment and training intervention in sufficient detail for readers to know what is being tested. Clearly define all core intervention strategies and their intended duration and intensity. Indicate which strategies were delivered to all participants and which were targeted to a particular subgroup. Describe the actual implementation of the intervention studied, including participation rates in various core strategies.
<b>B. Comparison Condition</b>	Describe the comparison condition on dimensions similar to those described for the intervention condition. If it includes an intervention, describe the comparison intervention and provide details on the actual implementation experience in the comparison condition.
<b>C. Setting</b>	Describe the location of the study, including indicators of the characteristics of the setting such as region and urbanicity.
<b>D. Participants</b>	Describe the characteristics of the study participants before program services began (at baseline), including: <ul style="list-style-type: none"> <li>• Race and ethnicity</li> <li>• Gender</li> <li>• Age</li> <li>• Socioeconomic status (SES). Measures of educational attainment (e.g., percent of people with a high school degree or the equivalent) are the recommended measures of SES.</li> <li>• Baseline measures of the outcomes of interest</li> <li>• One-year or more lagged measure of earnings. Measures of lagged earnings report the average earnings for a time period that is more than one year before the start of the intervention and does not include earnings from the 365 days immediately prior to the start of the intervention (e.g., quarterly earnings 6 quarters prior to baseline would be acceptable, while average quarterly earnings the first through sixth quarter prior to baseline would not be acceptable).</li> </ul>
<b>E. Funding Source for the Intervention and Evaluation</b>	Describe the source of support for implementing the intervention and for research on the intervention.

<sup>1</sup>This author reporting guide is modeled after and includes language from an author reporting guide developed by the What Works Clearinghouse (WWC), a project of the U.S. Department of Education’s Institute of Education Sciences. ESER is grateful to the WWC for introducing the concept of an author reporting guide and for having published the guide on which this is modeled.

## II. Study Design and Analysis

<b>A. Sample Formation</b>	Describe how the study sample was identified, including eligibility for the study and for the intervention, if that differs from eligibility for the study in general. Clearly state the unit of assignment, especially if it differs from the unit of analysis (for instance, training sites assigned to different conditions in a study where people’s earnings rather than site averages are analyzed). For randomized controlled trials, describe the random assignment process and any anomalies in it. For matched comparison group designs, describe the characteristics on which the intervention and comparison groups were matched.
<b>B. Measures</b>	For each outcome measure and participant characteristic used in the study, describe the measure, how it was collected, when it was collected, and how to interpret it if necessary.
<b>C. Analytic Approach</b>	Describe the analytic models and methods used to estimate the effects of the intervention and, where relevant, the method used to calculate reported effect sizes. Describe the unit of analysis.
<b>D. Statistical Adjustments</b>	Include controls for measures of the outcomes at baseline. Describe all control variables used in the analyses (definitions, means, and standard deviations); where relevant, also describe adjustments made to standard errors to account for clustering of the sample (e.g., within sites).
<b>E. Missing Data</b>	Describe the method for addressing missing data (e.g., case deletion, nonresponse weights, imputation) for both outcomes and control variables and, if relevant, the method to adjust the standard errors of the impact estimates to account for the missing data.

## III. Study Data (see associated tables on pages 3 and 4)

<b>A. Pre-Intervention Data, Baseline Sample (Table 1)</b>	If the design is a randomized controlled trial, provide sample sizes for measures of key background characteristics (including race/ethnicity, gender, age, SES, and lagged earnings) and for baseline measures of the outcomes or closely associated variables for the sample that was randomly assigned, by condition. If the unit of assignment to condition is not the same as the unit of analysis, provide sample sizes at both the level of group assignment (e.g., sites) and level of analysis (e.g., workers). If multiple samples are analyzed, provide this information separately for each sample, by condition.
<b>B. Pre-Intervention Data, Analysis Sample (Table 2)</b>	Provide sample sizes, means, and standard deviations for measures of race/ethnicity, gender, age, SES, and lagged earnings and for baseline measures of the outcomes (or closely associated variables) for the final sample that was analyzed, by condition.
<b>C. Post-Intervention Data and Findings (Table 3)</b>	For each outcome measure used in the study, and for each follow-up period assessed, provide means and standard deviations for the intervention and comparison groups, along with the <i>p</i> -value. ESER recommends adjusted means, unadjusted standard deviations, and adjusted <i>p</i> -values. If reporting adjusted means, authors should clearly indicate what has been adjusted. ESER also recommends that authors calculate effect sizes.

*The tables below further illustrate the guidelines outlined in section III. Reporting data in tables such as these would help ensure that the information in section III is fully reported and easily located by readers.*

**Table 1. Pre-Intervention Sample Sizes and Characteristics for the Baseline Sample (see III.A.)**

	Intervention Group		Comparison Group	
	Sample Sizes		Sample Sizes	
Baseline Measures	Unit of Assignment	Unit of Analysis	Unit of Assignment	Unit of Analysis
Measure 1				
Measure 2				
Measure 3				

*Table 1 contains information on **sample sizes** for the **baseline sample**, for both the intervention and comparison groups. This information is useful for determining **sample attrition** in randomized controlled trials.*

**Table 2. Pre-Intervention Sample Sizes and Characteristics for the Analytic Sample (see III.B.)**

	Intervention Group				Comparison Group			
	Sample Sizes		Sample Characteristics		Sample Sizes		Sample Characteristics	
<b>Baseline Measures</b>	Unit of Assignment	Unit of Analysis	Mean	Standard Deviation	Unit of Assignment	Unit of Analysis	Mean	Standard Deviation
Age								
Female								
White								
Black								
Hispanic								
HS Diploma or GED								
One-year Lagged Earnings								
Measure 1								
Measure 2								
Measure 3								

Table 2 contains information on **sample sizes** and **pre-intervention characteristics** for the **analytic sample**, for both the intervention and comparison groups. This information is useful for determining **baseline equivalence of the intervention and comparison groups**; it is also used in conjunction with information in Table 1 to determine sample attrition for randomized controlled trials.

**Table 3. Post-Intervention Outcomes for the Analytic Sample and Estimated Effects (see III.C.)**

<b>Outcome Measures</b>	Intervention Group		Comparison Group		Estimated Effects		
	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	p-value (0.XXXX)	Effect Size
Measure 1							
Measure 2							
Measure 3							

Table 3 contains information on **post-intervention** outcomes for the **analytic sample**, for both the intervention and comparison groups, along with information useful for determining **the magnitude and significance of mean differences in outcomes between the intervention and comparison groups**. Reporting of the effect size as well as statistical significance is preferred, but not required.