

Below is a clear, practical, and evaluator-friendly guide on **how to most effectively address the Data Collection section in Chapter 4 (Analysis) of an Applied Research Project (ARP) / Applied Research Paper (ARP).**

This assumes your Chapter 3 already described your methodology. Chapter 4 should *report* what happened — not justify, not propose, not analyze theory — but *demonstrate that you followed the approved methods and that your data are trustworthy and ready for analysis.*

✓ How to Effectively Address Data Collection in Chapter 4 (Analysis)

Chapter 4 typically begins with a section called **Data Collection** (or “Data Collection and Management”). Your goal is to **recount the process of data gathering exactly as it occurred** and provide clarity, transparency, and alignment with your Research Questions and Methods.

Below are the **essential components** expected by ARP committees.

◆ 1. Restate the Data Sources Briefly (for context)

Do *not* repeat the full Chapter 3 description.
Do provide a short reminder to orient the reader.

Example:

“As outlined in Chapter 3, this study used a mixed-methods design consisting of:
(a) a survey administered to 112 teachers; and
(b) semi-structured interviews with 10 campus leaders.
This section summarizes how data were collected, screened, and prepared for analysis.”

◆ 2. Report What Actually Happened (not what you planned)

This is the most common error committees flag.

Your data collection section must describe:

- ✓ **What was collected**
- ✓ **When it was collected**

- ✓ How it was collected
- ✓ Any deviations from the plan
- ✓ Any challenges or limitations
- ✓ Response rates and final sample sizes

Example:

“A total of 186 survey links were distributed via district email between March 1–7, 2025. Of these, 128 respondents opened the survey and 112 completed all mandatory items, yielding a completion rate of 60.2%.”

This shows transparency and boosts credibility.

◆ 3. Describe Recruitment & Participation Clearly

Committees look for ethical, procedural accuracy.

Include:

- ✓ Sampling method applied
- ✓ How participants were invited
- ✓ Consent/assent process
- ✓ Inclusion/exclusion criteria
- ✓ Attrition or non-response details

Example:

“Participants were recruited through purposive sampling to ensure at least one representative from each elementary school. Two schools experienced last-minute testing conflicts, resulting in only partial participation.”

◆ 4. Describe the Instruments as They Functioned in Practice

Even though instruments were defined in Chapter 3, Chapter 4 shows what *actually happened* when they were deployed.

Address:

- ✓ Whether the instrument operated as expected

- ✓ Reliability or consistency observed
- ✓ Any items removed during cleaning
- ✓ Any unexpected patterns (“ceiling effects,” missing data, confusion)

Example:

“Item 7 on the ‘Instructional Support Scale’ showed a 32% non-response rate, likely due to ambiguous wording. The item was excluded from composite scoring.”

◆ 5. Describe Data Cleaning and Preparation

This is required for quantitative, qualitative, or mixed methods.

For quantitative data:

- Screening for missing data
- Treatment of outliers
- Reverse-scored items
- Data transformations (if any)
- Creation of composite variables

For qualitative data:

- Transcription (manual or AI-assisted)
- Verification of accuracy
- Coding preparation
- Secure data storage

Example:

“Interviews were transcribed using Otter.ai and manually verified for accuracy. Two transcripts required redaction of personally identifiable information.”

◆ 6. Describe Final Sample Used for Analysis

Committees want a **concise final N**, not just the invited N.

Include:

- Total invited
- Total participated
- Total included in analysis
- Reasons for exclusion

Example:

“After excluding five incomplete surveys and two statistical outliers, the final analytic sample consisted of 105 participants.”

This ensures alignment with your analytic strategies.

◆ 7. Ensure Clear Alignment With Research Questions (RQs)

Do **not** analyze findings yet — you only show how the data allow analysis.

But you must link the data source to each RQ.

Example format:

Research Question	Data Source	Notes
RQ1: Teacher perceptions...	Survey Items 1–10	Complete responses from 112 participants
RQ2: Leadership practices...	Interviews 1–10	All interviews transcribed and verified

Committees love this because it eliminates ambiguity.

◆ 8. Common Language to Use for Committees

Here are phrases that signal strong methodology:

- “The following describes the procedures used to collect and prepare data for analysis.”
- “Data collection proceeded as outlined in Chapter 3, with the following exceptions...”
- “The final dataset was screened for completeness and accuracy...”

- “These procedures ensured that the data were appropriate for answering RQ1–RQ3.”
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◆ 9. Common Errors (Avoid These!)

- ✗ Repeating the Chapter 3 methodology verbatim
 - ✗ Describing what you *intended* rather than what *occurred*
 - ✗ Presenting results in the Data Collection section
 - ✗ Failing to report sample size after cleaning
 - ✗ Leaving out response rates
 - ✗ Not linking data sources to RQs
 - ✗ Failing to explain missing data or deviations
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◆ 10. Suggested Template for Your Chapter 4 Data Collection Section

4.1 Overview

Brief restatement of design and purpose of section.

4.2 Data Collection Procedures

Timeline, instrumentation, how data were gathered, response rates.

4.3 Participant Recruitment and Sample Characteristics

Actual participation details, sample demographics.

4.4 Instrument Performance and Data Quality

Issues encountered, removal of items, reliability notes.

4.5 Data Cleaning and Preparation for Analysis

Missing data handling, coding process, transcription validation.

4.6 Alignment to Research Questions

Table linking data to RQs.

Transition:

“With the dataset prepared and validated, the following section presents the results of the analysis.”