Statistical Links (Power Inputs & Analysis Shell) — Service Segment

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Help Desk · WhatsApp

Service Segment · Statistical Links (Power Inputs & Analysis Shell) Charge: Rs 15400

We connect your design, endpoints, and variables to a clear statistical backbone. Instead of vague lines like "data will be analysed using appropriate tests", you receive structured power inputs, effect size and variance assumptions, and an analysis shell that maps each endpoint to planned tests, models, and key tables or figures.

- Summary of primary and key secondary endpoints with proposed analysis approach for each
- Power and sample size input sheet (effect sizes, variability, event rates, alpha, power targets) to discuss with your statistician or guide
- High level mock table and figure shell for primary and key secondary results
- Choice of core statistical tests or models justified in plain

language for reviewers

Notes on handling missing data, outliers, and key sensitivity or subgroup analyses at PhD scale

Protocol and synopsis ready text for Statistical Methods and Sample Size sections, tuned for your design family

Workflow — How Statistical Links (Power Inputs & Analysis Shell) Runs

1. **Gathering design and outcomes context**
   We review your protocol blueprint, PICO/PECO framing, endpoints, variables, and sample size constraints so that statistical choices stay coherent with the overall design.
2. **Clarifying primary question and estimand**
   The primary research question is rephrased in analysis terms (what is being compared, estimated, or predicted) along with the target measure (difference, ratio, odds, hazard, correlation, etc.).
3. **Drafting candidate analysis approaches**
   For each primary and key secondary endpoint, we shortlist plausible tests or models (for example t test, chi square, non parametric tests, regression, survival models) that match data type and design.
4. **Power input framing**
   We help you frame realistic effect sizes, variance or event rate assumptions, alpha and power levels, and allocation ratios in a structured sheet, using available literature or pilot notes where possible.
5. **Sample size narrative**
   A narrative is drafted that explains the logic behind chosen sample size inputs and acknowledges constraints typical of PhD work.
6. **Analysis shell and mock outputs**
   A high level analysis shell is created that links each endpoint to planned tests or models and sketches the structure of main tables and figures.

7. **Missing data and sensitivity notes**
   We suggest simple, defensible approaches for handling missing data, protocol deviations with analysis impact, and any key sensitivity or subgroup checks.
8. **Assumption and diagnostics plan**
   Basic checks you should perform (for example normality, proportional hazards, model fit summaries) are listed at a practical level.
9. **Protocol ready statistical methods text**
   Methods and sample size paragraphs are written in reviewer friendly language, avoiding both under and over technical extremes.
10. **Delivery and refinement cycle**
    You receive the power input sheet, analysis shell, and text blocks. One refinement cycle is included after guide or statistician feedback.

What You Get in Your Statistical Links Pack

- **Endpoint–analysis mapping table** listing each endpoint with its primary planned test or model.
- **Power and sample size input sheet** with structured effect size, variability, event rate, alpha, power, and allocation assumptions.
- **Mock table and figure shells** for primary and key secondary results, suitable for both thesis and paper planning.
- **Missing data and sensitivity notes** tailored to your design and feasible tools.
- **Short assumption and diagnostics checklist** you can use at the analysis stage.
- **Protocol/synopsis ready text blocks** for Statistical Methods and Sample Size sections.

The goal is not to replace a full time statistician, but to give you a coherent, documented bridge between your design and the analyses you expect to run and defend.

Detailed Deliverables, Formats, and Service Boundaries

Deliverables and formats

- One **endpoint–analysis mapping and analysis shell document** in DOCX or similar editable format.
- **Power input sheet** in spreadsheet or table format describing assumptions and design parameters.
- **Mock table and figure outlines** for core outputs.
- **Protocol text snippets** for sample size justification and statistical methods.

What is included

- Choice and explanation of primary analysis approaches matched to your design family.
- Structuring of power/sample size inputs for discussion with guides or statisticians.
- Design of a simple analysis shell and mock outputs.
- High level guidance on missing data, sensitivity checks, and diagnostic basics.
- One round of refinement after expert or guide feedback.

What is not included

- Running full statistical analyses on your actual data (covered under separate analysis/reporting services).
- Formal regulatory level SAP (Statistical Analysis Plan) for industry or multi centre trials.
- Development of complex simulations or advanced Bayesian designs.
- Guarantees that committees will accept specific sample sizes or analytic choices; we focus on methodological clarity.

When to Use This Service and What You Should Have

Ready

Best time to book

- After endpoints, variables, and basic design family (for example cohort, case control, trial, lab experiment) are clear.
- Before finalising sample size or submitting protocols that require explicit Statistical Methods sections.
- When guides or ethics committees ask for more concrete power justification or analysis detail.
- When you are unsure how to link your research questions to specific tests, models, and outputs.

Helpful inputs from your side

- Your latest protocol draft, especially Aims, Outcomes, and Methods sections.
- Any pilot data, historical data, or literature values that inform effect size, variance, or event rates.
- Constraints on maximum feasible sample size and follow up duration.
- Preferences or suggestions from your guide or statistician, if already discussed.
- Examples of papers or theses whose analysis style you would like to broadly emulate.

FAQs — Statistical Links (Power Inputs & Analysis Shell)

1. Will you actually calculate the sample size for me?
We primarily help frame the assumptions and logic behind sample size and can suggest plausible ranges. Exact numerical calculations may be cross checked with your institution's statistician or tools, especially where local norms apply.

2. Do I still need a statistician if I use this service?
For most serious projects, yes. This service makes conversations with your

statistician easier and more efficient by giving them structured inputs and a draft shell.

3. Can you help if my data are mostly categorical or non normal?
Yes. We adapt tests and models to the type and distribution of data expected, and can suggest non parametric or transformation based approaches where appropriate.

4. What if I do not have any pilot data?
We rely on literature ranges, expert judgement, and sensitivity style thinking to frame effect sizes and assumptions, while clearly stating the limitations.

5. Will the analysis shell lock me into one method?
No. It provides a primary plan plus reasonable alternatives, and can be updated later as your data and discussions evolve.

6. Can this work for qualitative or mixed methods projects?
Parts of the service (for example mapping questions to outputs and table shells) can still help, but pure qualitative designs usually require separate framing; we clarify fit during intake.

7. Is this aligned with common reporting guidelines?
We keep guidelines such as CONSORT, STROBE, and similar in mind so that later, your thesis and papers can be written with fewer back and forths.

8. Will you provide code in R, SPSS, or other software?
This segment focuses on design and shell. Any detailed coding support is usually handled under separate analysis or tutoring services.

9. What if my committee wants very simple analysis only?
We can tune the shell to keep methods conservative and implementable on common packages like SPSS, while still documenting the logic clearly.

10. Can this pack be updated after interim data looks different from assumptions?
Yes. Because you receive editable documents, you and your statistician can revise effect sizes, tests, or shells if emerging data suggest a better path.