



Workload, research support and submission readiness

A synthetic survey example demonstrating a transparent analysis workflow

DEMONSTRATION ONLY • SYNTHETIC DATA • NOT A REAL STUDY

Prepared as an anonymised AcademicFix service example

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No personal, client or real participant data are used in this report.

- 01 Analysis brief and decision map
- 02 Data screening and preparation record
- 03 Reliability and descriptive statistics
- 04 Associations and group comparison
- 05 Multiple regression model
- 06 Technical interpretation, limitations and next steps

1. Analysis brief

This document shows how a single, reasonably structured survey dataset can be reviewed, analysed and reported without turning the analytical process into a black box. The figures below were generated specifically for this demonstration.

Synthetic-data note: values were generated to resemble plausible survey data. They do not describe any person, institution or empirical population.

Illustrative research question

How are perceived research support, confidence in research methods, weekly workload and prior publication experience associated with submission readiness?

Agreed analytical scope

- One synthetic cross-sectional dataset with 184 records
- Two five-item scales and three observed variables
- Data screening, reliability, descriptives and Pearson correlations
- One independent-group comparison and one multiple regression model
- Separate technical interpretation; no manuscript results section

Analysis decision map

Question	Data requirement	Selected procedure	Reporting focus
Scale consistency	Five related items per construct	Cronbach's alpha	Estimate and item handling
Bivariate association	Approximately continuous scores	Pearson correlation	Direction, magnitude, uncertainty
Two-group difference	Independent experience groups	Welch independent t test	Mean difference, CI, effect size
Adjusted association	Continuous outcome and four predictors	Multiple linear regression	Standardised coefficients, fit, limits

2. Data screening and preparation record

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Quality indicators

Records	Item missingness	Cases with ≥ 1 missing item	Excluded cases
184	2.0%	34	0

Dataset structure

Variable	Operational form	Role in this example
Research support	Mean of 5 items; 1–5	Predictor / scale
Method confidence	Mean of 5 items; 1–5	Predictor / scale
Weekly workload	Hours per week	Predictor / observed
Prior publication	0 = no; 1 = yes	Predictor / grouping
Submission readiness	Continuous score; 1–5	Outcome

Screening log

- 184 records; no duplicate case identifiers in the generated file.
- Item-level missingness was low and dispersed; no respondent missed more than one item within a scale.
- Scale scores used the respondent mean when at least four of five items were present.
- Observed ranges were checked against their stated coding boundaries.
- No cases were removed to improve the direction or statistical significance of results.

3. Reliability and descriptive statistics

Internal consistency

Scale	Items	Cronbach's α	Technical note
Research support	5	0.86	Suitable for illustrative composite scoring
Method confidence	5	0.86	Suitable for illustrative composite scoring

Alpha is reported as a scale-consistency indicator, not proof of unidimensionality or construct validity. A real project may require item diagnostics or factor analysis.

Descriptive statistics

Variable	n	Mean	SD	Minimum	Maximum
Research support	184	3.19	0.67	1.32	4.85
Method confidence	184	3.07	0.66	1.52	4.83
Weekly workload (hours)	184	42.80	7.29	25.81	65.83
Submission readiness	184	3.18	0.74	1.41	5.00

Means and standard deviations describe this generated file only. They are not population estimates and should not be used as benchmarks.

4. Associations and group comparison

Pearson correlation matrix



The matrix is used as an association summary and regression diagnostic. Correlation does not establish causal direction.

Submission readiness by prior publication experience

Group	n	Mean	SD
No prior publication	105	3.05	0.73
Prior publication	79	3.36	0.72

Welch $t(169) = 2.87$, $p = 0.005$, $d = 0.43$; 95% CI [0.10, 0.52].

In this synthetic example, the prior-publication group has a higher average readiness score. The confidence interval and effect size are shown so the difference is not reduced to a significance label.

5. Multiple regression model

Outcome: submission readiness. Predictors entered together: research support, method confidence, weekly workload and prior publication experience.

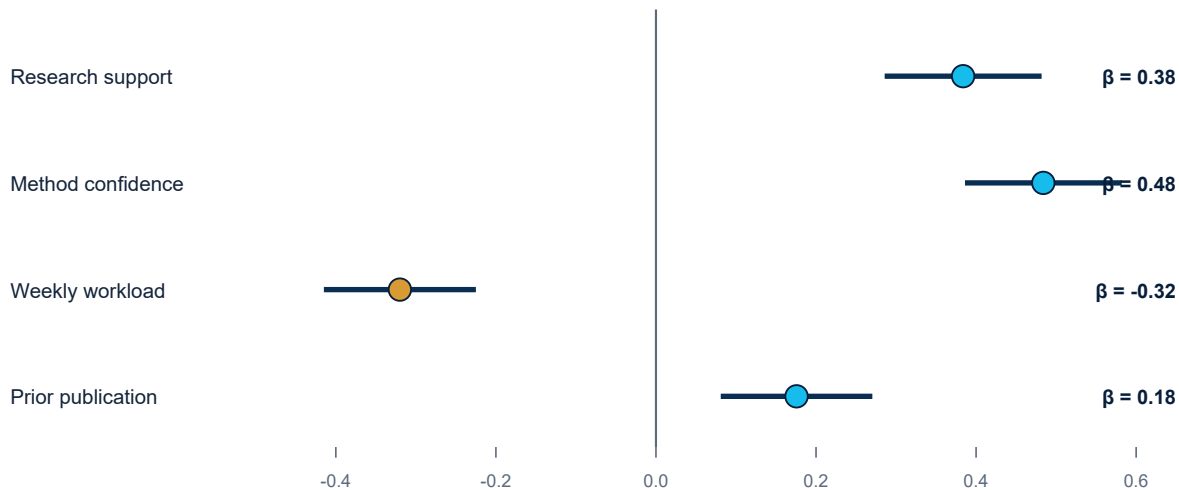
Model fit

$R^2 = 0.590$; adjusted $R^2 = 0.581$; $F(4, 179) = 64.53$, $p < .001$.

Standardised coefficient estimates

Predictor	β	SE	t	p	95% CI	VIF
Research support	0.38	0.05	7.67	< .001	[0.29, 0.48]	1.09
Method confidence	0.48	0.05	9.69	< .001	[0.39, 0.58]	1.09
Weekly workload	-0.32	0.05	-6.60	< .001	[-0.41, -0.23]	1.03
Prior publication	0.18	0.05	3.64	< .001	[0.08, 0.27]	1.02

Standardised coefficient (95% CI)



Coefficients are standardised for comparability. They represent adjusted associations within this generated dataset, not causal effects.

6. Technical interpretation and next steps

Technical interpretation

- Research support and method confidence show positive adjusted associations with submission readiness.
- Higher weekly workload shows a negative adjusted association after the other predictors are held constant.
- Prior publication experience retains a smaller positive adjusted association.
- The model explains a meaningful share of variation in this demonstration, while substantial unexplained variation remains.

Model diagnostics reviewed

- Predictor collinearity: all variance inflation factors remained low.
- Residual pattern: no severe curvature or funnel pattern in the generated example.
- Influence: no single synthetic record materially changed the substantive pattern.
- Specification: the model is illustrative and does not replace a theory-led design.

Limitations that must remain visible

- The dataset is synthetic and the numerical findings have no empirical generalisability.
- A cross-sectional design cannot establish temporal or causal direction.
- Composite scores simplify measurement and do not demonstrate construct validity.
- Self-report variables may share method-related variance.
- Model results depend on the supplied coding, assumptions and omitted variables.

Author decisions before manuscript reporting

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- Confirm that the research questions and hypotheses were specified before analysis.
- Confirm scale provenance, scoring rules and evidence for measurement validity.
- Decide whether covariates are theoretically justified rather than adding them for significance.
- Write the substantive interpretation in the study context and preserve all limitations.
- Archive the agreed data dictionary, cleaned file and analysis syntax with version information.

Illustrative delivery package

01	Data-screening and decision record
02	Labelled analysis outputs
03	Reproducible syntax or script where applicable
04	Separate technical report

AcademicFix documents analytical choices and delivers traceable outputs. It does not create data, manufacture preferred findings or write the author's manuscript.