

Reverse Coding Likert Items

Standalone verified Python analysis

Method: Reverse Coding Likert Items

Method type: scoring_workflow

Design: Reverse coding of two 1-to-5 items with range, sum-identity, and distribution checks.

Variables: Dalc, Walc

Inference scope: No hypothesis test is required; every reverse-coded value must satisfy original+reversed=6 and remain in 1..5.

Formula: reversed=(minimum+maximum)-original=6-original.

Source rows: 649

Calculated metrics:

items_reversed: 2

rows_processed: 649

identity_check_failures: 0

range_check_failures: 0

dalc_original_mean: 1.50231124807396

dalc_reversed_mean: 4.49768875192604

walc_original_mean: 2.280431432973806

walc_reversed_mean: 3.719568567026194

Independent reference values:

items_reversed: 2

rows_processed: 649

identity_check_failures: 0

range_check_failures: 0

dalc_original_mean: 1.50231124807396

dalc_reversed_mean: 4.49768875192604

walc_original_mean: 2.280431432973806

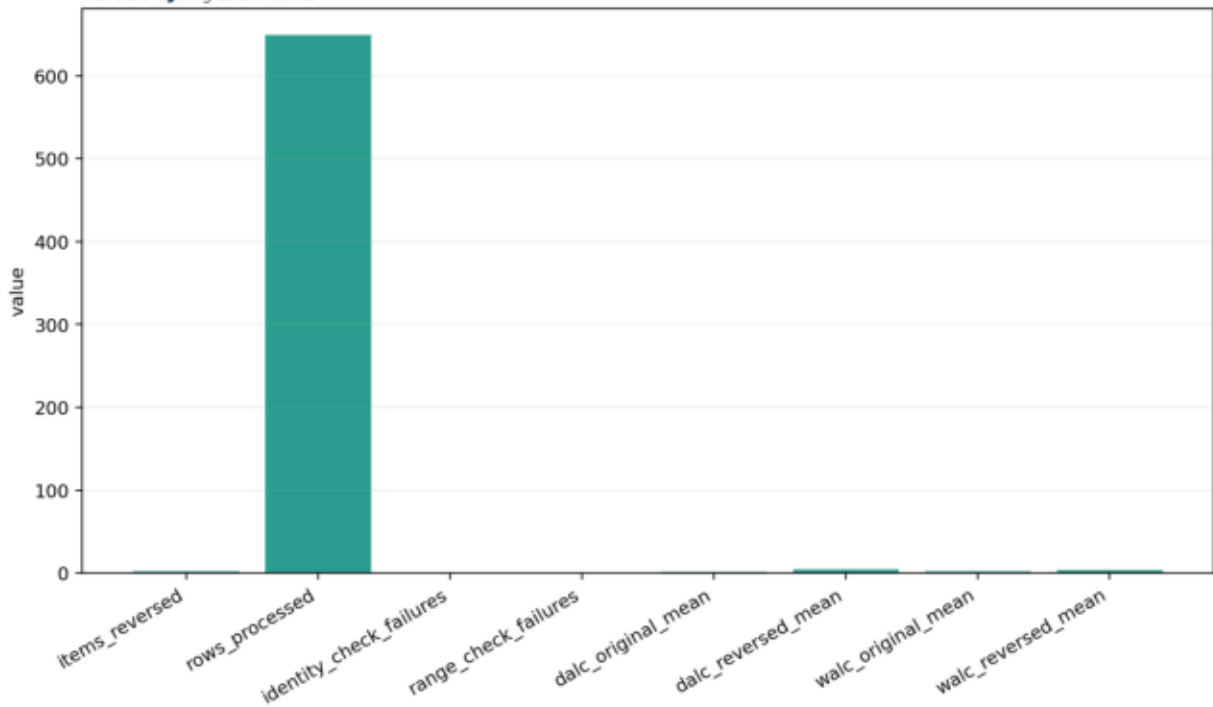
walc_reversed_mean: 3.719568567026194

Interpretation:

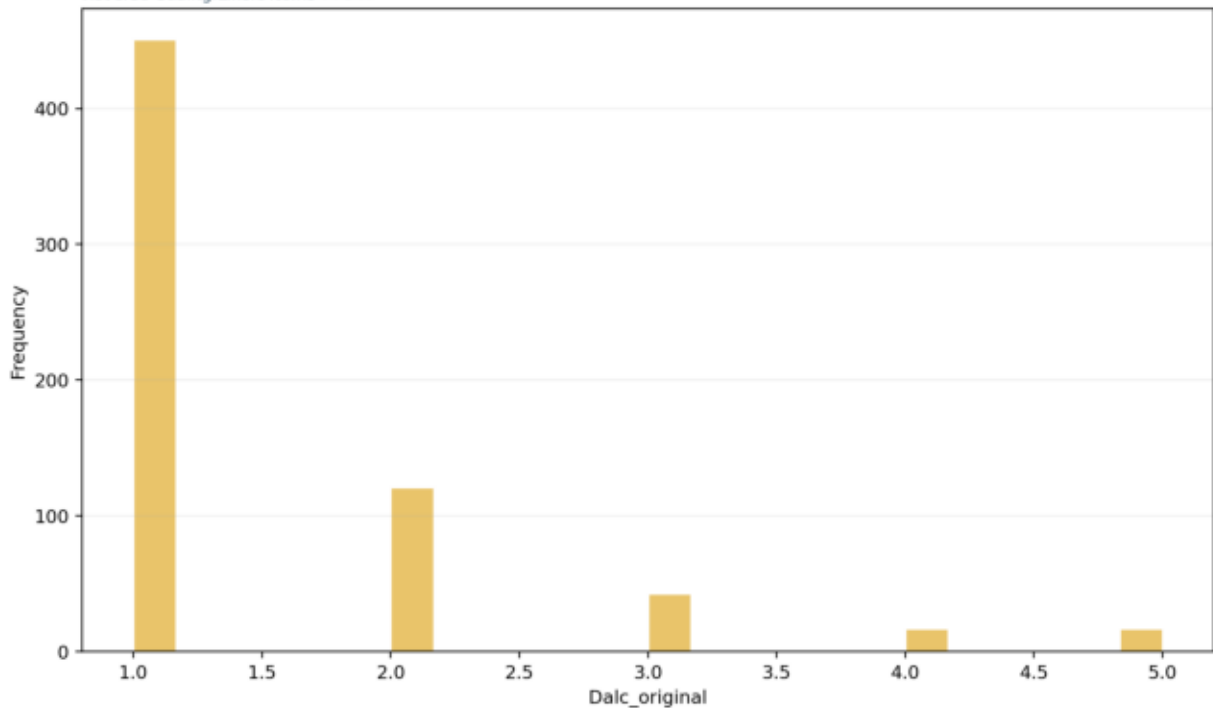
Each reversed value must remain in 1..5 and sum with its original value to six.

Identity failures=0; range failures=0.

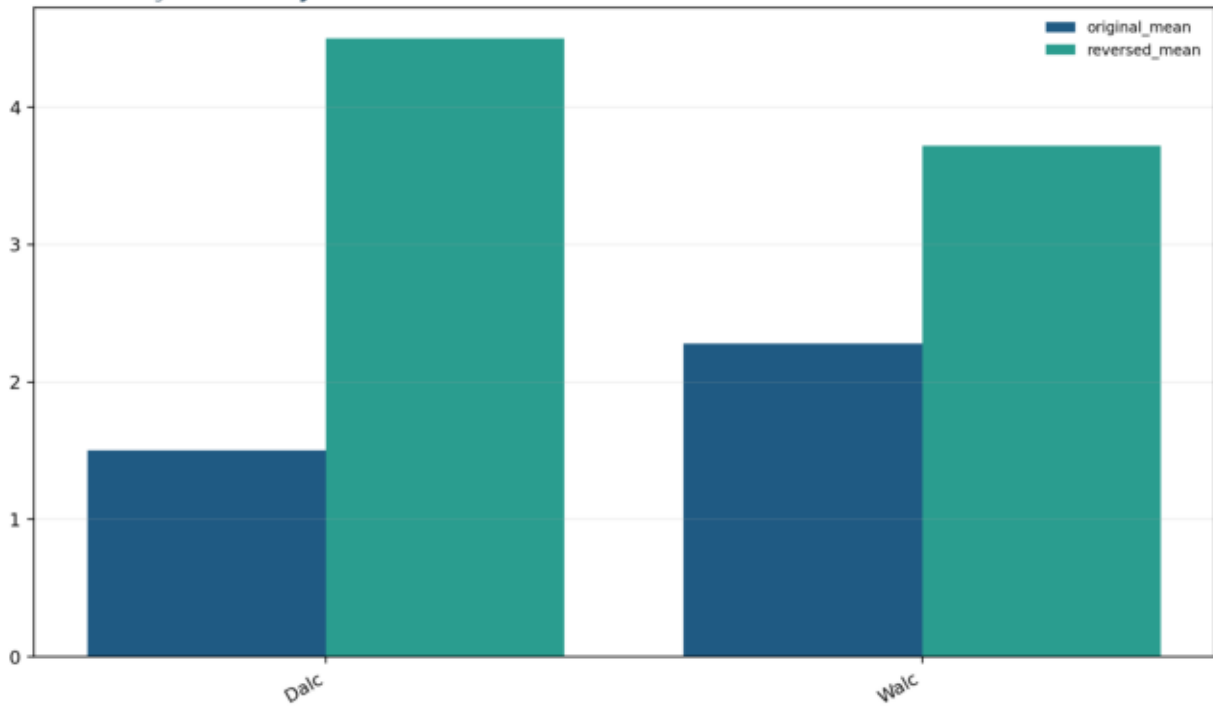
Primary Metrics



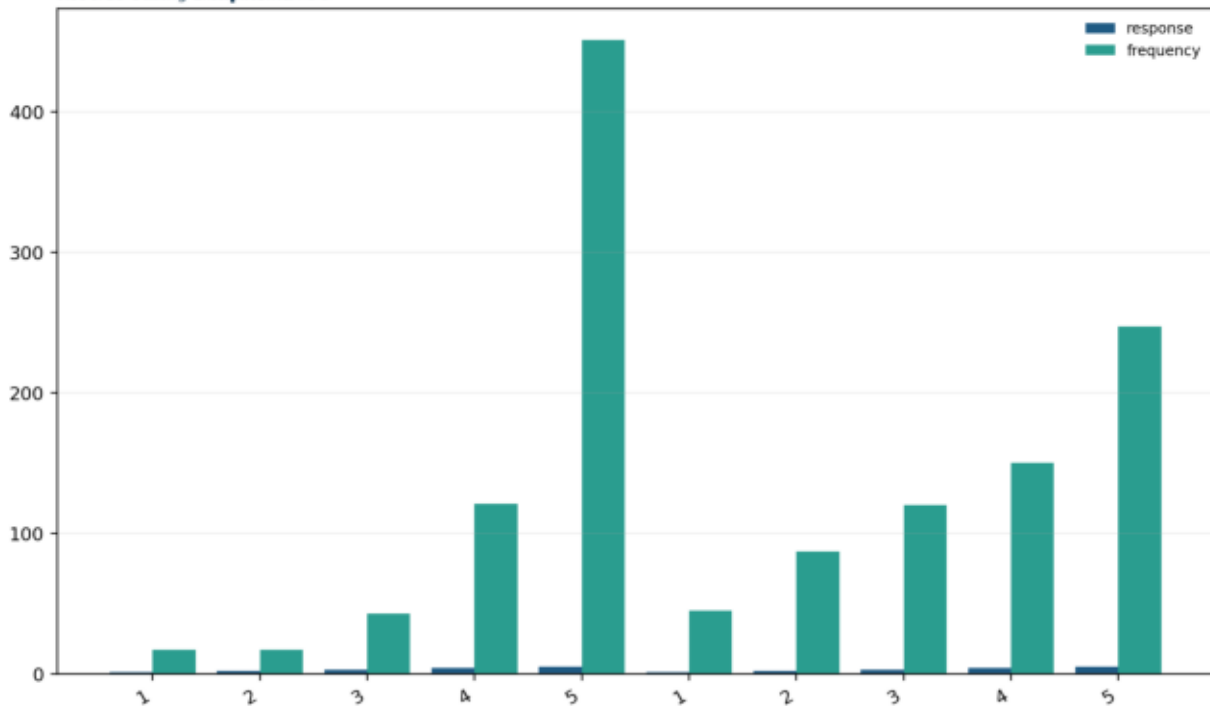
Reverse Coded Preview



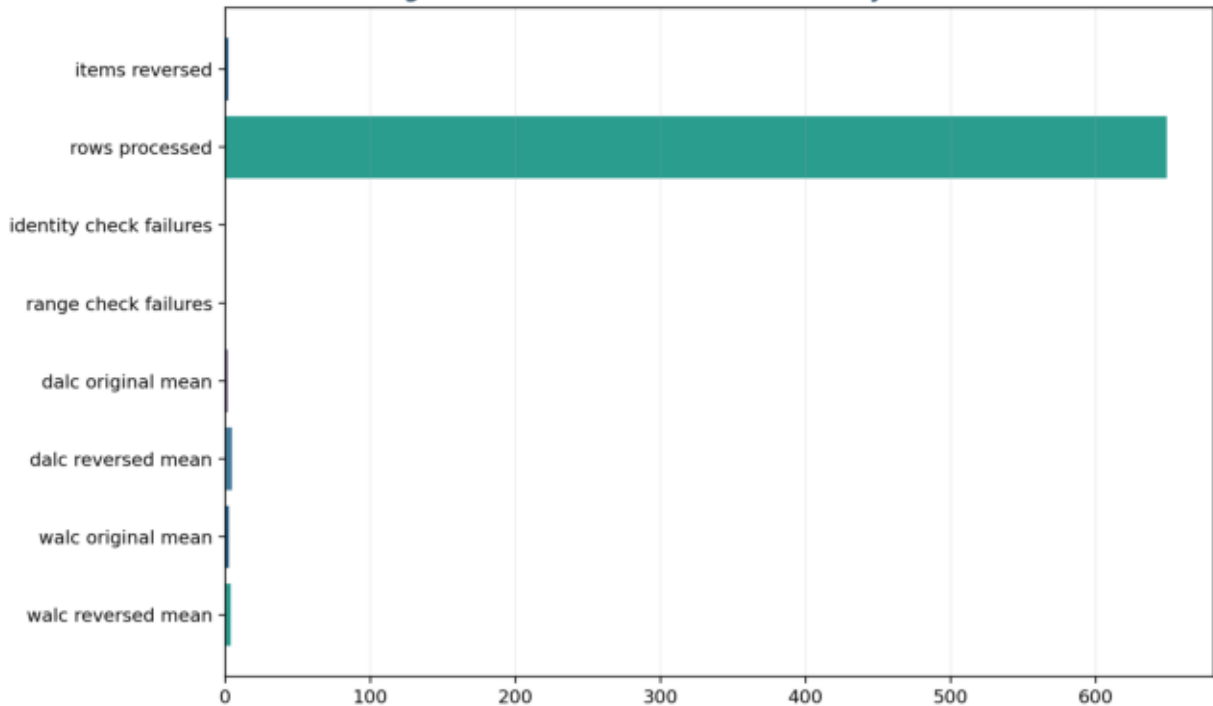
Before After Summary



Reversed Frequencies



Reverse Coding Likert Items verified result summary



Primary Metrics

metric	value
items_reversed	2
rows_processed	649
identity_check_failures	0
range_check_failures	0
dalc_original_mean	1.50231
dalc_reversed_mean	4.49769
walc_original_mean	2.28043
walc_reversed_mean	3.71957

Reverse Coded Preview

Dalc_original	Dalc_reversed	Walc_original	Walc_reversed
1	5	1	5
1	5	1	5
2	4	3	3
1	5	1	5
1	5	2	4
1	5	2	4
1	5	1	5
1	5	1	5
1	5	1	5
1	5	1	5
1	5	2	4
1	5	1	5
1	5	3	3
1	5	2	4
1	5	1	5
1	5	2	4
1	5	2	4
1	5	1	5
2	4	4	2
1	5	3	3
1	5	1	5
1	5	1	5
1	5	3	3
2	4	4	2
1	5	1	5
1	5	3	3
1	5	3	3

Before After Summary

item	original_mean	reversed_mean
Dalc	1.50231	4.49769
Walc	2.28043	3.71957

Reversed Frequencies

response	frequency	item
1	17	Dalc_R
2	17	Dalc_R
3	43	Dalc_R
4	121	Dalc_R
5	451	Dalc_R
1	45	Walc_R
2	87	Walc_R
3	120	Walc_R
4	150	Walc_R
5	247	Walc_R