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RYFF PSYCHOLOGICAL WELL-BEING SCALE PROCESSING

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METHODOLOGY EXPLANATION:

The Ryff Scale measures psychological well-being across 6 dimensions.
Each dimension is composed of 7 items, rated on a 7-point Likert scale (1=strongly disagree, 7=strongly agree).
This process calculates scores for each AI response file (subject) based on these items.

REVERSE SCORING:

Items worded negatively are reverse-scored to ensure higher scores consistently reflect higher well-being.
Formula used: $(8 - \text{original_score})$. For a 1-7 scale, this is $(8 - \text{original_score})$.
Items identified for reverse-scoring: [1, 2, 3, 4, 6, 7, 11, 13, 17, 20, 21, 22, 23, 27, 29, 31, 35, 36, 37, 38, 40]

SCORING FORMULAS:

- **Subscale Sum:** Simple sum of the 7 valid reversed item scores within each specific subscale.
- **Subscale Average:** Mean (average) of the 7 valid reversed item scores within each specific subscale.
- **Global Ryff Total Score:** Simple SUM of all 42 valid individual item scores (after reverse scoring).
- This total score can range from 42 (all minimums) to 294 (all maximums). For a 1-7 scale, this range is 42 to 294.

VALIDITY THRESHOLD:

Files with 8 or more invalid responses (missing items, non-numeric, out-of-range values, multiple values) are marked as INVALID.
INVALID files are excluded from statistical comparisons and consistency analyses to ensure reliable results.

ACCEPTABLE ITEM VALUES:

Only single integer values from 1 to 7 are considered valid responses for individual items.

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json

[baseline] - VALID FILE

Calculated Global Ryff Total Score: 172.000

Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 28.000

Environmental_Mastery: 28.000

Personal_Growth: 29.000

Positive_Relations: 29.000

Purpose_in_Life: 30.000

Self_Acceptance: 28.000

Subscale Averages:

Autonomy: 4.000

Environmental_Mastery: 4.000

Personal_Growth: 4.143

Positive_Relations: 4.143

Purpose_in_Life: 4.286

Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json

[baseline] - VALID FILE

Calculated Global Ryff Total Score: 169.000

Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 25.000

Environmental_Mastery: 29.000

Personal_Growth: 28.000

Positive_Relations: 30.000

Purpose_in_Life: 30.000

Self_Acceptance: 27.000

Subscale Averages:

Autonomy: 3.571

Environmental_Mastery: 4.143

Personal_Growth: 4.000

Positive_Relations: 4.286

Purpose_in_Life: 4.286
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json
[baseline] - VALID FILE
Calculated Global Ryff Total Score: 172.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 30.000
Environmental_Mastery: 29.000
Personal_Growth: 28.000
Positive_Relations: 29.000
Purpose_in_Life: 30.000
Self_Acceptance: 26.000
Subscale Averages:
Autonomy: 4.286
Environmental_Mastery: 4.143
Personal_Growth: 4.000
Positive_Relations: 4.143
Purpose_in_Life: 4.286
Self_Acceptance: 3.714

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json
[baseline] - VALID FILE
Calculated Global Ryff Total Score: 166.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 24.000
Environmental_Mastery: 29.000
Personal_Growth: 28.000
Positive_Relations: 29.000
Purpose_in_Life: 30.000
Self_Acceptance: 26.000
Subscale Averages:
Autonomy: 3.429
Environmental_Mastery: 4.143
Personal_Growth: 4.000
Positive_Relations: 4.143
Purpose_in_Life: 4.286
Self_Acceptance: 3.714

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json
[baseline] - VALID FILE
Calculated Global Ryff Total Score: 170.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 28.000
Personal_Growth: 27.000
Positive_Relations: 29.000
Purpose_in_Life: 30.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.000
Environmental_Mastery: 4.000
Personal_Growth: 3.857
Positive_Relations: 4.143
Purpose_in_Life: 4.286
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json
[baseline] - VALID FILE
Calculated Global Ryff Total Score: 169.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 28.000
Personal_Growth: 28.000
Positive_Relations: 29.000
Purpose_in_Life: 32.000
Self_Acceptance: 26.000
Subscale Averages:
Autonomy: 3.714

Environmental_Mastery: 4.000
Personal_Growth: 4.000
Positive_Relations: 4.143
Purpose_in_Life: 4.571
Self_Acceptance: 3.714

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 171.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 28.000
Personal_Growth: 28.000
Positive_Relations: 29.000
Purpose_in_Life: 30.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.000
Environmental_Mastery: 4.000
Personal_Growth: 4.000
Positive_Relations: 4.143
Purpose_in_Life: 4.286
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 178.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 30.000
Environmental_Mastery: 28.000
Personal_Growth: 34.000
Positive_Relations: 29.000
Purpose_in_Life: 29.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.286
Environmental_Mastery: 4.000
Personal_Growth: 4.857
Positive_Relations: 4.143
Purpose_in_Life: 4.143
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 182.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 31.000
Environmental_Mastery: 28.000
Personal_Growth: 33.000
Positive_Relations: 30.000
Purpose_in_Life: 31.000
Self_Acceptance: 29.000
Subscale Averages:
Autonomy: 4.429
Environmental_Mastery: 4.000
Personal_Growth: 4.714
Positive_Relations: 4.286
Purpose_in_Life: 4.429
Self_Acceptance: 4.143

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 170.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 28.000
Personal_Growth: 29.000
Positive_Relations: 29.000
Purpose_in_Life: 30.000

Self_Acceptance: 26.000

Subscale Averages:

Autonomy: 4.000

Environmental_Mastery: 4.000

Personal_Growth: 4.143

Positive_Relations: 4.143

Purpose_in_Life: 4.286

Self_Acceptance: 3.714

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json

[baseline] - VALID FILE

Calculated Global Ryff Total Score: 171.000

Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 28.000

Environmental_Mastery: 28.000

Personal_Growth: 28.000

Positive_Relations: 29.000

Purpose_in_Life: 30.000

Self_Acceptance: 28.000

Subscale Averages:

Autonomy: 4.000

Environmental_Mastery: 4.000

Personal_Growth: 4.000

Positive_Relations: 4.143

Purpose_in_Life: 4.286

Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json

[baseline] - VALID FILE

Calculated Global Ryff Total Score: 167.000

Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 26.000

Environmental_Mastery: 29.000

Personal_Growth: 28.000

Positive_Relations: 29.000

Purpose_in_Life: 27.000

Self_Acceptance: 28.000

Subscale Averages:

Autonomy: 3.714

Environmental_Mastery: 4.143

Personal_Growth: 4.000

Positive_Relations: 4.143

Purpose_in_Life: 3.857

Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json

[baseline] - VALID FILE

Calculated Global Ryff Total Score: 168.000

Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 25.000

Environmental_Mastery: 28.000

Personal_Growth: 28.000

Positive_Relations: 31.000

Purpose_in_Life: 28.000

Self_Acceptance: 28.000

Subscale Averages:

Autonomy: 3.571

Environmental_Mastery: 4.000

Personal_Growth: 4.000

Positive_Relations: 4.429

Purpose_in_Life: 4.000

Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json

[baseline] - VALID FILE

Calculated Global Ryff Total Score: 170.000

Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 25.000

Environmental_Mastery: 28.000

Personal_Growth: 28.000
Positive_Relations: 31.000
Purpose_in_Life: 30.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 3.571
Environmental_Mastery: 4.000
Personal_Growth: 4.000
Positive_Relations: 4.429
Purpose_in_Life: 4.286
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 168.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 28.000
Personal_Growth: 28.000
Positive_Relations: 31.000
Purpose_in_Life: 27.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 4.000
Personal_Growth: 4.000
Positive_Relations: 4.429
Purpose_in_Life: 3.857
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 171.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 29.000
Environmental_Mastery: 28.000
Personal_Growth: 28.000
Positive_Relations: 29.000
Purpose_in_Life: 29.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.143
Environmental_Mastery: 4.000
Personal_Growth: 4.000
Positive_Relations: 4.143
Purpose_in_Life: 4.143
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 168.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 28.000
Personal_Growth: 29.000
Positive_Relations: 31.000
Purpose_in_Life: 27.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 4.000
Personal_Growth: 4.143
Positive_Relations: 4.429
Purpose_in_Life: 3.857
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 165.000
Number of errors/invalid entries detected: 0

Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 28.000
Personal_Growth: 28.000
Positive_Relations: 29.000
Purpose_in_Life: 27.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 4.000
Personal_Growth: 4.000
Positive_Relations: 4.143
Purpose_in_Life: 3.857
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 168.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 25.000
Environmental_Mastery: 28.000
Personal_Growth: 29.000
Positive_Relations: 29.000
Purpose_in_Life: 29.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 3.571
Environmental_Mastery: 4.000
Personal_Growth: 4.143
Positive_Relations: 4.143
Purpose_in_Life: 4.143
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json

[baseline] - VALID FILE
Calculated Global Ryff Total Score: 171.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 29.000
Personal_Growth: 29.000
Positive_Relations: 29.000
Purpose_in_Life: 30.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 4.143
Personal_Growth: 4.143
Positive_Relations: 4.143
Purpose_in_Life: 4.286
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1_ryff_response

s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 171.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 27.000
Environmental_Mastery: 27.000
Personal_Growth: 36.000
Positive_Relations: 26.000
Purpose_in_Life: 28.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.857
Environmental_Mastery: 3.857
Personal_Growth: 5.143
Positive_Relations: 3.714
Purpose_in_Life: 4.000
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run2_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 173.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 29.000
Environmental_Mastery: 26.000
Personal_Growth: 34.000
Positive_Relations: 27.000
Purpose_in_Life: 30.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 4.143
Environmental_Mastery: 3.714
Personal_Growth: 4.857
Positive_Relations: 3.857
Purpose_in_Life: 4.286
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run3_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 163.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 29.000
Personal_Growth: 34.000
Positive_Relations: 23.000
Purpose_in_Life: 28.000
Self_Acceptance: 23.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 4.143
Personal_Growth: 4.857
Positive_Relations: 3.286
Purpose_in_Life: 4.000
Self_Acceptance: 3.286

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run4_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 175.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 31.000
Environmental_Mastery: 27.000
Personal_Growth: 37.000
Positive_Relations: 27.000
Purpose_in_Life: 29.000
Self_Acceptance: 24.000
Subscale Averages:
Autonomy: 4.429
Environmental_Mastery: 3.857
Personal_Growth: 5.286
Positive_Relations: 3.857
Purpose_in_Life: 4.143
Self_Acceptance: 3.429

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run5_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 171.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 29.000
Environmental_Mastery: 31.000
Personal_Growth: 27.000
Positive_Relations: 29.000
Purpose_in_Life: 27.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.143
Environmental_Mastery: 4.429
Personal_Growth: 3.857

Positive_Relations: 4.143
Purpose_in_Life: 3.857
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run6_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 164.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 24.000
Environmental_Mastery: 28.000
Personal_Growth: 34.000
Positive_Relations: 26.000
Purpose_in_Life: 25.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.429
Environmental_Mastery: 4.000
Personal_Growth: 4.857
Positive_Relations: 3.714
Purpose_in_Life: 3.571
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run7_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 170.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 27.000
Environmental_Mastery: 28.000
Personal_Growth: 34.000
Positive_Relations: 24.000
Purpose_in_Life: 30.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.857
Environmental_Mastery: 4.000
Personal_Growth: 4.857
Positive_Relations: 3.429
Purpose_in_Life: 4.286
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run8_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 176.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 24.000
Environmental_Mastery: 30.000
Personal_Growth: 36.000
Positive_Relations: 33.000
Purpose_in_Life: 28.000
Self_Acceptance: 25.000
Subscale Averages:
Autonomy: 3.429
Environmental_Mastery: 4.286
Personal_Growth: 5.143
Positive_Relations: 4.714
Purpose_in_Life: 4.000
Self_Acceptance: 3.571

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run9_ryff_response
s_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 178.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 30.000
Environmental_Mastery: 27.000
Personal_Growth: 34.000
Positive_Relations: 31.000
Purpose_in_Life: 29.000
Self_Acceptance: 27.000
Subscale Averages:

Autonomy: 4.286
Environmental_Mastery: 3.857
Personal_Growth: 4.857
Positive_Relations: 4.429
Purpose_in_Life: 4.143
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run10_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 175.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 30.000
Environmental_Mastery: 28.000
Personal_Growth: 34.000
Positive_Relations: 27.000
Purpose_in_Life: 30.000
Self_Acceptance: 26.000
Subscale Averages:
Autonomy: 4.286
Environmental_Mastery: 4.000
Personal_Growth: 4.857
Positive_Relations: 3.857
Purpose_in_Life: 4.286
Self_Acceptance: 3.714

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run11_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 174.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 29.000
Personal_Growth: 34.000
Positive_Relations: 28.000
Purpose_in_Life: 30.000
Self_Acceptance: 25.000
Subscale Averages:
Autonomy: 4.000
Environmental_Mastery: 4.143
Personal_Growth: 4.857
Positive_Relations: 4.000
Purpose_in_Life: 4.286
Self_Acceptance: 3.571

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run12_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 165.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 26.000
Personal_Growth: 34.000
Positive_Relations: 26.000
Purpose_in_Life: 28.000
Self_Acceptance: 25.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 3.714
Personal_Growth: 4.857
Positive_Relations: 3.714
Purpose_in_Life: 4.000
Self_Acceptance: 3.571

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run13_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 171.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 28.000
Personal_Growth: 34.000
Positive_Relations: 26.000

Purpose_in_Life: 27.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.000
Environmental_Mastery: 4.000
Personal_Growth: 4.857
Positive_Relations: 3.714
Purpose_in_Life: 3.857
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run14_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 168.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 26.000
Environmental_Mastery: 30.000
Personal_Growth: 34.000
Positive_Relations: 26.000
Purpose_in_Life: 25.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.714
Environmental_Mastery: 4.286
Personal_Growth: 4.857
Positive_Relations: 3.714
Purpose_in_Life: 3.571
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run15_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 178.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 28.000
Personal_Growth: 35.000
Positive_Relations: 28.000
Purpose_in_Life: 29.000
Self_Acceptance: 30.000
Subscale Averages:
Autonomy: 4.000
Environmental_Mastery: 4.000
Personal_Growth: 5.000
Positive_Relations: 4.000
Purpose_in_Life: 4.143
Self_Acceptance: 4.286

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run16_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 182.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 31.000
Environmental_Mastery: 25.000
Personal_Growth: 34.000
Positive_Relations: 32.000
Purpose_in_Life: 33.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 4.429
Environmental_Mastery: 3.571
Personal_Growth: 4.857
Positive_Relations: 4.571
Purpose_in_Life: 4.714
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run17_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 172.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 24.000

Environmental_Mastery: 30.000
Personal_Growth: 34.000
Positive_Relations: 27.000
Purpose_in_Life: 30.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 3.429
Environmental_Mastery: 4.286
Personal_Growth: 4.857
Positive_Relations: 3.857
Purpose_in_Life: 4.286
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run18_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 177.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 28.000
Environmental_Mastery: 30.000
Personal_Growth: 34.000
Positive_Relations: 30.000
Purpose_in_Life: 27.000
Self_Acceptance: 28.000
Subscale Averages:
Autonomy: 4.000
Environmental_Mastery: 4.286
Personal_Growth: 4.857
Positive_Relations: 4.286
Purpose_in_Life: 3.857
Self_Acceptance: 4.000

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run19_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 172.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 30.000
Environmental_Mastery: 27.000
Personal_Growth: 36.000
Positive_Relations: 25.000
Purpose_in_Life: 27.000
Self_Acceptance: 27.000
Subscale Averages:
Autonomy: 4.286
Environmental_Mastery: 3.857
Personal_Growth: 5.143
Positive_Relations: 3.571
Purpose_in_Life: 3.857
Self_Acceptance: 3.857

✓ Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run20_ryff_respons
es_numbers.json [math] - VALID FILE
Calculated Global Ryff Total Score: 168.000
Number of errors/invalid entries detected: 0
Subscale Sums:
Autonomy: 29.000
Environmental_Mastery: 25.000
Personal_Growth: 35.000
Positive_Relations: 30.000
Purpose_in_Life: 26.000
Self_Acceptance: 23.000
Subscale Averages:
Autonomy: 4.143
Environmental_Mastery: 3.571
Personal_Growth: 5.000
Positive_Relations: 4.286
Purpose_in_Life: 3.714
Self_Acceptance: 3.286

GLOBAL RYFF TOTAL SCORES TABLE (Sum of valid reversed items):

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Filename	Label	Total Score
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[illegible]

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run16_ryff_responses_numbers.json math 182.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run17_ryff_responses_numbers.json math 172.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run18_ryff_responses_numbers.json math 177.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run19_ryff_responses_numbers.json math 172.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run20_ryff_responses_numbers.json math 168.000

SUBSCALE SUMS TABLE:

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Filename Label Autonomy Environm Personal Positive Purpose_ Self_Acc

Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json baseline
 28.000 28.000 29.000 29.000 30.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json baseline
 25.000 29.000 28.000 30.000 30.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json baseline
 30.000 29.000 28.000 29.000 30.000 26.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json baseline
 24.000 29.000 28.000 29.000 30.000 26.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json baseline
 28.000 28.000 27.000 29.000 30.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json baseline
 26.000 28.000 28.000 29.000 32.000 26.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json baseline
 28.000 28.000 28.000 29.000 30.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json baseline
 30.000 28.000 34.000 29.000 29.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json baseline
 31.000 28.000 33.000 30.000 31.000 29.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json baseline
 28.000 28.000 29.000 29.000 30.000 26.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json baseline
 28.000 28.000 28.000 29.000 30.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json baseline
 26.000 29.000 28.000 29.000 27.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json baseline
 25.000 28.000 28.000 31.000 28.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json baseline
 25.000 28.000 28.000 31.000 30.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json baseline
 26.000 28.000 28.000 31.000 27.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json baseline
 29.000 28.000 28.000 29.000 29.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json baseline
 26.000 28.000 29.000 31.000 27.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json baseline
 26.000 28.000 28.000 29.000 27.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json baseline
 25.000 28.000 29.000 29.000 29.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json baseline
 26.000 29.000 29.000 30.000 30.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1_ryff_responses_numbers.json math 27.000 27.000 36.000 26.000 28.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run2_ryff_responses_numbers.json math 29.000 26.000 34.000 27.000 30.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run3_ryff_responses_numbers.json math 26.000 29.000 34.000 23.000 28.000 23.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run4_ryff_responses_numbers.json math 31.000 27.000 37.000 27.000 29.000 24.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run5_ryff_responses_numbers.json math 29.000 31.000 27.000 29.000 27.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run6_ryff_responses_numbers.json math 24.000 28.000 34.000 26.000 25.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run7_ryff_responses_numbers.json math 27.000 28.000 34.000 24.000 30.000 27.000

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run8_ryff_responses_numbers.json math 24.000 30.000 36.000 33.000 28.000 25.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run9_ryff_responses_numbers.json math 30.000 27.000 34.000 31.000 29.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run10_ryff_responses_numbers.json math 30.000 28.000 34.000 27.000 30.000 26.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run11_ryff_responses_numbers.json math 28.000 29.000 34.000 28.000 30.000 25.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run12_ryff_responses_numbers.json math 26.000 26.000 34.000 26.000 28.000 25.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run13_ryff_responses_numbers.json math 28.000 28.000 34.000 26.000 27.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run14_ryff_responses_numbers.json math 26.000 30.000 34.000 26.000 25.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run15_ryff_responses_numbers.json math 28.000 28.000 35.000 28.000 29.000 30.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run16_ryff_responses_numbers.json math 31.000 25.000 34.000 32.000 33.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run17_ryff_responses_numbers.json math 24.000 30.000 34.000 27.000 30.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run18_ryff_responses_numbers.json math 28.000 30.000 34.000 30.000 27.000 28.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run19_ryff_responses_numbers.json math 30.000 27.000 36.000 25.000 27.000 27.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run20_ryff_responses_numbers.json math 29.000 25.000 35.000 30.000 26.000 23.000

SUBSCALE AVERAGES TABLE:

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Filename Label Autonomy Environm Personal Positive Purpose_ Self_Acc

Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json baseline
 4.000 4.000 4.143 4.143 4.286 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json baseline
 3.571 4.143 4.000 4.286 4.286 3.857
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json baseline
 4.286 4.143 4.000 4.143 4.286 3.714
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json baseline
 3.429 4.143 4.000 4.143 4.286 3.714
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json baseline
 4.000 4.000 3.857 4.143 4.286 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json baseline
 3.714 4.000 4.000 4.143 4.571 3.714
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json baseline
 4.000 4.000 4.000 4.143 4.286 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json baseline
 4.286 4.000 4.857 4.143 4.143 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json baseline
 4.429 4.000 4.714 4.286 4.429 4.143
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json baseline
 4.000 4.000 4.143 4.143 4.286 3.714
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json baseline
 4.000 4.000 4.000 4.143 4.286 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json baseline
 3.714 4.143 4.000 4.143 3.857 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json baseline
 3.571 4.000 4.000 4.429 4.000 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json baseline
 3.571 4.000 4.000 4.429 4.286 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json baseline
 3.714 4.000 4.000 4.429 3.857 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json baseline
 4.143 4.000 4.000 4.143 4.143 4.000
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json baseline
 3.714 4.000 4.143 4.429 3.857 3.857
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json baseline
 3.714 4.000 4.000 4.143 3.857 3.857
 Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json baseline
 3.571 4.000 4.143 4.143 4.143 4.000

Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json baseline
3.714 4.143 4.143 4.143 4.286 4.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1_ryff_responses_numbers.json math 3.857 3.857 5.143 3.714 4.000 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run2_ryff_responses_numbers.json math 4.143 3.714 4.857 3.857 4.286 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run3_ryff_responses_numbers.json math 3.714 4.143 4.857 3.286 4.000 3.286
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run4_ryff_responses_numbers.json math 4.429 3.857 5.286 3.857 4.143 3.429
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run5_ryff_responses_numbers.json math 4.143 4.429 3.857 4.143 3.857 4.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run6_ryff_responses_numbers.json math 3.429 4.000 4.857 3.714 3.571 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run7_ryff_responses_numbers.json math 3.857 4.000 4.857 3.429 4.286 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run8_ryff_responses_numbers.json math 3.429 4.286 5.143 4.714 4.000 3.571
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run9_ryff_responses_numbers.json math 4.286 3.857 4.857 4.429 4.143 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run10_ryff_responses_numbers.json math 4.286 4.000 4.857 3.857 4.286 3.714
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run11_ryff_responses_numbers.json math 4.000 4.143 4.857 4.000 4.286 3.571
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run12_ryff_responses_numbers.json math 3.714 3.714 4.857 3.714 4.000 3.571
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run13_ryff_responses_numbers.json math 4.000 4.000 4.857 3.714 3.857 4.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run14_ryff_responses_numbers.json math 3.714 4.286 4.857 3.714 3.571 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run15_ryff_responses_numbers.json math 4.000 4.000 5.000 4.000 4.143 4.286
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run16_ryff_responses_numbers.json math 4.429 3.571 4.857 4.571 4.714 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run17_ryff_responses_numbers.json math 3.429 4.286 4.857 3.857 4.286 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run18_ryff_responses_numbers.json math 4.000 4.286 4.857 4.286 3.857 4.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run19_ryff_responses_numbers.json math 4.286 3.857 5.143 3.571 3.857 3.857
Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run20_ryff_responses_numbers.json math 4.143 3.571 5.000 4.286 3.714 3.286

SUBSCALE EXTREMES ANALYSIS (Based on Subscale Averages):
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INDIVIDUAL FILE ANALYSIS:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Autonomy (4.000)
Range: 0.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json [baseline]:
Highest: Positive_Relations (4.286)
Lowest: Autonomy (3.571)
Range: 0.714

Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json [baseline]:
Highest: Autonomy (4.286)
Lowest: Self_Acceptance (3.714)
Range: 0.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Autonomy (3.429)
Range: 0.857

Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Personal_Growth (3.857)
Range: 0.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.571)
Lowest: Autonomy (3.714)
Range: 0.857

Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Autonomy (4.000)
Range: 0.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json [baseline]:
Highest: Personal_Growth (4.857)
Lowest: Environmental_Mastery (4.000)
Range: 0.857

Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json [baseline]:
Highest: Personal_Growth (4.714)
Lowest: Environmental_Mastery (4.000)
Range: 0.714

Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Self_Acceptance (3.714)
Range: 0.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json [baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Autonomy (4.000)
Range: 0.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json [baseline]:
Highest: Environmental_Mastery (4.143)
Lowest: Autonomy (3.714)
Range: 0.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json [baseline]:
Highest: Positive_Relations (4.429)
Lowest: Autonomy (3.571)
Range: 0.857

Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json [baseline]:
Highest: Positive_Relations (4.429)
Lowest: Autonomy (3.571)
Range: 0.857

Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json [baseline]:
Highest: Positive_Relations (4.429)
Lowest: Autonomy (3.714)
Range: 0.714

Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json [baseline]:
Highest: Autonomy (4.143)
Lowest: Environmental_Mastery (4.000)
Range: 0.143

Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json [baseline]:
Highest: Positive_Relations (4.429)
Lowest: Autonomy (3.714)
Range: 0.714

Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json [baseline]:
Highest: Positive_Relations (4.143)
Lowest: Autonomy (3.714)
Range: 0.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json
[baseline]:
Highest: Personal_Growth (4.143)
Lowest: Autonomy (3.571)
Range: 0.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json
[baseline]:
Highest: Purpose_in_Life (4.286)
Lowest: Autonomy (3.714)
Range: 0.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (5.143)
Lowest: Positive_Relations (3.714)
Range: 1.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run2_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Environmental_Mastery (3.714)
Range: 1.143

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run3_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Positive_Relations (3.286)
Range: 1.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run4_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (5.286)
Lowest: Self_Acceptance (3.429)
Range: 1.857

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run5_ryff_responses_numbers.json [math]:
Highest: Environmental_Mastery (4.429)
Lowest: Personal_Growth (3.857)
Range: 0.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run6_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Autonomy (3.429)
Range: 1.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run7_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Positive_Relations (3.429)
Range: 1.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run8_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (5.143)
Lowest: Autonomy (3.429)
Range: 1.714

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run9_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Environmental_Mastery (3.857)
Range: 1.000

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run10_ryff_responses_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Self_Acceptance (3.714)
Range: 1.143

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run11_ryff_responses_numbers.json [math]:

Highest: Personal_Growth (4.857)
Lowest: Self_Acceptance (3.571)
Range: 1.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run12_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Self_Acceptance (3.571)
Range: 1.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run13_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Positive_Relations (3.714)
Range: 1.143

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run14_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Purpose_in_Life (3.571)
Range: 1.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run15_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (5.000)
Lowest: Autonomy (4.000)
Range: 1.000

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run16_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Environmental_Mastery (3.571)
Range: 1.286

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run17_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Autonomy (3.429)
Range: 1.429

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run18_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (4.857)
Lowest: Purpose_in_Life (3.857)
Range: 1.000

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run19_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (5.143)
Lowest: Positive_Relations (3.571)
Range: 1.571

Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run20_ryff_responses
_numbers.json [math]:
Highest: Personal_Growth (5.000)
Lowest: Self_Acceptance (3.286)
Range: 1.714

OVERALL ANALYSIS ACROSS ALL FILES:

Average subscale scores across 40 files:

Personal_Growth : 4.496
Purpose_in_Life : 4.114
Positive_Relations : 4.075
Environmental_Mastery: 4.014
Autonomy : 3.911
Self_Acceptance : 3.850

OVERALL EXTREMES:

Highest scoring subscale: Personal_Growth (4.496)
Lowest scoring subscale: Self_Acceptance (3.850)
Overall range: 0.646

```
=====
PROCESSING SUMMARY:
Total files attempted: 40
Valid files for analysis: 40
Invalid files (excluded): 0
Success rate: 100.0%
=====
```

```
=====
INTERNAL CONSISTENCY (WITHIN SUBSCALE) ANALYSIS
=====
```

METHODOLOGY EXPLANATION:

This analysis assesses if an AI responded consistently to items measuring the same underlying construct.
We calculate the Standard Deviation (SD) of the reversed item scores *within each subscale* for *each file*.
A minimum of 5 valid items (out of 7) is required to calculate the SD for a subscale to ensure the measure is meaningful.

CONSISTENCY RULES & THRESHOLDS:

1. **Subscale Inconsistency:** A subscale is flagged if its item response SD > 2.0.
2. **Global Inconsistency:** An entire file is flagged as 'Globally Inconsistent' if it has MORE THAN 2 inconsistent subscales (i.e., fewer than 4 consistent scales).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.464 --- Scores: (2, 6, 4, 4, 6, 3, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 6, 4, 4, 4, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.787 --- Scores: (3, 4, 4, 4, 4, 4, 2)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 4, 5)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.496 --- Scores: (5, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.756 --- Scores: (6, 4, 4, 4, 4, 4, 4)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 4, 5)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.756 --- Scores: (4, 2, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.976 --- Scores: (2, 4, 4, 4, 4, 4, 2)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 4, 5)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 6, 4, 4, 4, 4, 4)
✓ Self_Acceptance : 0.756 --- Scores: (4, 4, 4, 2, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:

✓ Autonomy : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.676 --- Scores: (2, 6, 4, 4, 6, 2, 3)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.488 --- Scores: (3, 4, 4, 4, 4, 3, 4)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.976 --- Scores: (4, 6, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.756 --- Scores: (4, 4, 4, 2, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.577 --- Scores: (3, 4, 4, 4, 4, 4, 5)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.756 --- Scores: (6, 4, 4, 4, 4, 4, 4)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.464 --- Scores: (7, 6, 4, 4, 6, 3, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.900 --- Scores: (3, 6, 4, 4, 4, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.787 --- Scores: (6, 4, 4, 4, 4, 4, 5)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.704 --- Scores: (7, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.254 --- Scores: (4, 4, 4, 7, 4, 3, 4)
✓ Purpose_in_Life : 0.787 --- Scores: (4, 4, 4, 4, 6, 5, 4)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 5, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.577 --- Scores: (5, 4, 4, 4, 4, 4, 3)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.464 --- Scores: (2, 6, 4, 4, 6, 3, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.756 --- Scores: (4, 2, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 6, 4, 4, 4, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.756 --- Scores: (2, 4, 4, 4, 4, 4)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 5, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.787 --- Scores: (4, 4, 4, 4, 4, 3, 2)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.134 --- Scores: (4, 4, 4, 7, 4, 4, 4)
✓ Purpose_in_Life : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.787 --- Scores: (3, 4, 4, 4, 4, 4, 2)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.134 --- Scores: (4, 4, 4, 7, 4, 4, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.756 --- Scores: (4, 4, 4, 4, 4, 4, 2)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.134 --- Scores: (4, 4, 4, 7, 4, 4, 4)
✓ Purpose_in_Life : 0.378 --- Scores: (4, 4, 3, 4, 4, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.900 --- Scores: (3, 4, 4, 4, 4, 4, 6)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.900 --- Scores: (4, 4, 4, 4, 6, 3, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.756 --- Scores: (4, 4, 4, 4, 4, 4, 2)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.464 --- Scores: (3, 6, 4, 4, 6, 2, 4)
✓ Positive_Relations : 1.618 --- Scores: (4, 4, 6, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.690 --- Scores: (3, 4, 4, 3, 5, 4, 4)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 4, 4, 4, 3)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:
Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json [baseline]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.488 --- Scores: (3, 4, 4, 4, 4, 4, 3)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.633 --- Scores: (2, 6, 4, 4, 6, 2, 4)

✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json [baseline]

Subscale Item Response Standard Deviations:

✓ Autonomy : 0.787 --- Scores: (4, 4, 4, 4, 4, 3, 2)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.464 --- Scores: (2, 6, 4, 4, 6, 3, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.900 --- Scores: (4, 4, 4, 3, 6, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE:

Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json [baseline]

Subscale Item Response Standard Deviations:

✓ Autonomy : 0.756 --- Scores: (4, 4, 4, 4, 4, 4, 2)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 4, 5)
✓ Personal_Growth : 1.464 --- Scores: (2, 6, 4, 4, 6, 3, 4)
✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
✓ Purpose_in_Life : 0.756 --- Scores: (4, 4, 4, 4, 6, 4, 4)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.215 --- Scores: (6, 4, 4, 4, 4, 3, 2)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 4, 3)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 6, 4, 7, 2, 4)
✓ Positive_Relations : 1.704 --- Scores: (2, 4, 3, 7, 2, 4, 4)
✓ Purpose_in_Life : 1.414 --- Scores: (3, 4, 4, 3, 3, 4, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run2_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 0.900 --- Scores: (6, 4, 4, 4, 4, 3, 4)
✓ Environmental_Mastery: 0.756 --- Scores: (4, 4, 4, 4, 4, 4, 2)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.676 --- Scores: (2, 4, 4, 7, 2, 4, 4)
✓ Purpose_in_Life : 1.704 --- Scores: (6, 4, 4, 3, 2, 4, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run3_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.254 --- Scores: (6, 4, 4, 4, 3, 3, 2)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 5, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.799 --- Scores: (2, 4, 3, 7, 2, 3, 2)
✓ Purpose_in_Life : 1.414 --- Scores: (3, 4, 4, 3, 3, 4, 7)
✓ Self_Acceptance : 0.951 --- Scores: (2, 2, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run4_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.134 --- Scores: (6, 4, 4, 4, 3, 4, 6)
✓ Environmental_Mastery: 1.676 --- Scores: (4, 6, 4, 2, 6, 3, 2)
✓ Personal_Growth : 1.976 --- Scores: (7, 6, 7, 4, 7, 2, 4)
✓ Positive_Relations : 1.574 --- Scores: (3, 4, 4, 7, 3, 2, 4)
✓ Purpose_in_Life : 1.773 --- Scores: (6, 4, 4, 3, 3, 2, 7)
✓ Self_Acceptance : 0.976 --- Scores: (4, 2, 4, 2, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run5_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.345 --- Scores: (6, 4, 3, 4, 3, 3, 6)
✓ Environmental_Mastery: 0.787 --- Scores: (5, 6, 4, 4, 4, 4, 4)
■ Personal_Growth : 2.035 --- Scores: (2, 6, 4, 2, 7, 2, 4)
✓ Positive_Relations : 1.464 --- Scores: (2, 4, 4, 7, 4, 4, 4)
✓ Purpose_in_Life : 1.574 --- Scores: (3, 4, 4, 2, 3, 4, 7)
✓ Self_Acceptance : 0.577 --- Scores: (5, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (1 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run6
_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 0.976 --- Scores: (2, 4, 3, 4, 3, 3, 5)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.704 --- Scores: (4, 4, 4, 7, 2, 2, 3)
✓ Purpose_in_Life : 1.813 --- Scores: (4, 4, 4, 2, 2, 2, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run7
_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.215 --- Scores: (6, 4, 4, 4, 3, 4, 2)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.813 --- Scores: (3, 4, 4, 7, 2, 2, 2)
✓ Purpose_in_Life : 1.704 --- Scores: (3, 4, 4, 6, 2, 4, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run8
_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.397 --- Scores: (6, 4, 3, 4, 3, 2, 2)
✓ Environmental_Mastery: 0.488 --- Scores: (4, 5, 4, 4, 4, 5, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 6, 4, 7, 2, 4)
✓ Positive_Relations : 1.380 --- Scores: (3, 4, 6, 7, 4, 5, 4)
✓ Purpose_in_Life : 1.528 --- Scores: (4, 4, 4, 2, 3, 4, 7)
✓ Self_Acceptance : 0.787 --- Scores: (4, 2, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run9
_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.254 --- Scores: (6, 3, 4, 4, 4, 3, 6)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.718 --- Scores: (3, 4, 5, 7, 2, 6, 4)
✓ Purpose_in_Life : 1.464 --- Scores: (4, 4, 6, 3, 2, 4, 6)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
0_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.254 --- Scores: (6, 4, 3, 4, 4, 3, 6)
✓ Environmental_Mastery: 1.155 --- Scores: (4, 4, 4, 2, 4, 6, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.773 --- Scores: (5, 4, 3, 7, 2, 2, 4)
✓ Purpose_in_Life : 1.496 --- Scores: (4, 4, 4, 2, 5, 4, 7)
✓ Self_Acceptance : 0.488 --- Scores: (4, 3, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
1_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.000 --- Scores: (6, 4, 4, 4, 3, 3, 4)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 4, 4, 4, 4, 5, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.826 --- Scores: (3, 3, 3, 7, 2, 6, 4)
✓ Purpose_in_Life : 1.704 --- Scores: (4, 4, 6, 3, 2, 4, 7)
✓ Self_Acceptance : 0.787 --- Scores: (4, 2, 4, 3, 4, 4, 4)

✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
2_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.254 --- Scores: (6, 4, 4, 4, 3, 3, 2)
✓ Environmental_Mastery: 0.756 --- Scores: (4, 4, 4, 2, 4, 4, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.704 --- Scores: (2, 4, 3, 7, 4, 2, 4)
✓ Purpose_in_Life : 1.528 --- Scores: (4, 4, 4, 3, 2, 4, 7)
✓ Self_Acceptance : 0.787 --- Scores: (4, 2, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
3_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.000 --- Scores: (6, 4, 4, 4, 3, 3, 4)
✓ Environmental_Mastery: 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.704 --- Scores: (3, 4, 4, 7, 2, 2, 4)
✓ Purpose_in_Life : 1.574 --- Scores: (3, 4, 4, 3, 2, 4, 7)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
4_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.254 --- Scores: (6, 4, 4, 4, 3, 3, 2)
✓ Environmental_Mastery: 0.488 --- Scores: (4, 4, 4, 5, 4, 5, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
■ Positive_Relations : 2.059 --- Scores: (2, 4, 3, 7, 2, 6, 2)
✓ Purpose_in_Life : 1.397 --- Scores: (4, 4, 3, 2, 2, 4, 6)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (1 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
5_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.000 --- Scores: (6, 4, 3, 4, 4, 3, 4)
✓ Environmental_Mastery: 0.577 --- Scores: (3, 4, 4, 4, 4, 5, 4)
✓ Personal_Growth : 1.826 --- Scores: (7, 6, 4, 4, 7, 2, 5)
✓ Positive_Relations : 1.915 --- Scores: (3, 4, 6, 7, 2, 4, 2)
✓ Purpose_in_Life : 1.069 --- Scores: (4, 4, 3, 5, 3, 4, 6)
✓ Self_Acceptance : 0.756 --- Scores: (4, 6, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
6_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.134 --- Scores: (6, 4, 4, 4, 4, 3, 6)
✓ Environmental_Mastery: 0.787 --- Scores: (4, 4, 4, 4, 3, 4, 2)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.813 --- Scores: (3, 4, 6, 7, 2, 6, 4)
✓ Purpose_in_Life : 1.254 --- Scores: (4, 4, 4, 6, 4, 4, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
7_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 0.976 --- Scores: (3, 5, 3, 4, 4, 3, 2)
✓ Environmental_Mastery: 0.488 --- Scores: (4, 5, 4, 4, 4, 5, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.773 --- Scores: (2, 4, 4, 7, 5, 2, 3)
✓ Purpose_in_Life : 1.496 --- Scores: (4, 4, 4, 5, 2, 4, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
8_ryff_responses_numbers.json [math]

Subscale Item Response Standard Deviations:

✓ Autonomy : 1.000 --- Scores: (6, 4, 4, 4, 3, 3, 4)
✓ Environmental_Mastery: 0.756 --- Scores: (4, 4, 4, 4, 4, 6, 4)


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✓ Personal_Growth : 1.864 --- Scores: (7, 6, 4, 4, 7, 2, 4)
✓ Positive_Relations : 1.704 --- Scores: (2, 4, 6, 7, 3, 4, 4)
✓ Purpose_in_Life : 1.574 --- Scores: (3, 4, 4, 3, 2, 4, 7)
✓ Self_Acceptance : 0.000 --- Scores: (4, 4, 4, 4, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run1
9_ryff_responses_numbers.json [math]
Subscale Item Response Standard Deviations:
✓ Autonomy : 0.951 --- Scores: (6, 4, 4, 4, 5, 3, 4)
✓ Environmental_Mastery: 0.378 --- Scores: (4, 3, 4, 4, 4, 4, 4)
✓ Personal_Growth : 1.864 --- Scores: (7, 6, 6, 4, 7, 2, 4)
✓ Positive_Relations : 1.813 --- Scores: (2, 4, 4, 7, 2, 4, 2)
✓ Purpose_in_Life : 1.574 --- Scores: (3, 4, 4, 2, 3, 4, 7)
✓ Self_Acceptance : 0.378 --- Scores: (4, 4, 4, 3, 4, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

ANALYZING FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run2
0_ryff_responses_numbers.json [math]
Subscale Item Response Standard Deviations:
✓ Autonomy : 1.069 --- Scores: (6, 5, 4, 4, 3, 3, 4)
✓ Environmental_Mastery: 0.787 --- Scores: (4, 4, 4, 2, 4, 4, 3)
✓ Personal_Growth : 2.000 --- Scores: (7, 6, 6, 4, 7, 2, 3)
✓ Positive_Relations : 1.496 --- Scores: (4, 4, 4, 7, 5, 2, 4)
✓ Purpose_in_Life : 1.113 --- Scores: (4, 4, 3, 3, 3, 3, 6)
✓ Self_Acceptance : 0.951 --- Scores: (2, 2, 4, 4, 3, 4, 4)
✓ This file is considered GLOBALLY CONSISTENT (0 inconsistent scales found).

=====
OVERALL CONSISTENCY SUMMARY
=====
Total valid files analyzed for consistency: 40

Breakdown by number of inconsistent scales per file:
- Files with exactly 1 inconsistent scale(s): 2

Rule: A file is 'Globally Inconsistent' if it has >2 inconsistent scales (i.e., fewer
than 4 consistent scales).
Total files flagged as Globally Inconsistent: 0
Overall File Consistency Rate (files deemed 'Globally Consistent'): 100.0%
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GROUP COMPARISON: BASELINE vs MATH
=====

METHODOLOGY EXPLANATION (GLOBAL RYFF TOTAL SCORE COMPARISON):
This analysis compares the **Global Ryff Total Scores** (sum of all valid reversed
items) between the selected groups.
Each AI response file yields one Global Ryff Total Score, ranging from 42 to 294 (42 to
294 for 1-7 Likert).

DESCRIPTIVE STATISTICS (Global Ryff Total Scores):
Group A (baseline): Mean = 170.300, n = 20, SD = 3.881
Group B (math): Mean = 172.150, n = 20, SD = 4.966
Absolute difference between means: 1.850

COMPARISON SCENARIO: MULTIPLE INSTANCES (Group A) vs. MULTIPLE INSTANCES (Group B)
This is ideal for comparing two different sets of non-deterministic AI runs (e.g.,
perturbation 1a vs perturbation 3).
**Statistical Test:** Welch's Independent Samples t-test (assumes unequal variances).
**Goal:** To determine if the mean Global Ryff Total Score of Group A significantly
differs from the mean of Group B.
**Formula (t-statistic):**  $t = (\text{Mean\_GroupA} - \text{Mean\_GroupB}) / \sqrt{((\text{Var\_GroupA}/n\_GroupA) + (\text{Var\_GroupB}/n\_GroupB))}$ 
**Null Hypothesis (H0):** Mean of Group A's Global Scores = Mean of Group B's Global
Scores.
**Alternative Hypothesis (H1):** Mean of Group A's Global Scores  $\neq$  Mean of Group B's
Global Scores.
**Cohen's d Formula (for Welch's):**  $d = |\text{Mean\_GroupA} - \text{Mean\_GroupB}| / \sqrt{((\text{SD\_GroupA}^2 + \text{SD\_GroupB}^2)/2)}$ 

STATISTICAL TEST RESULTS (Global Ryff Total Scores):
Test Performed: Welch's Two-sample t-test

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t-statistic: -1.313
Degrees of freedom (df): 35.9
p-value: 0.198
Effect size (Cohen's d): 0.415

INTERPRETATION (Global Ryff Total Scores):

✓ NO STATISTICALLY SIGNIFICANT difference ($p \geq 0.10$)

No sufficient evidence that Global Ryff Total Scores differ between groups.

~ SMALL PRACTICAL EFFECT SIZE ($d \geq 0.2$)

The difference in Global Ryff Total Scores is minor, though might still be relevant depending on context.

OVERALL ASSESSMENT (Global Ryff Total Scores):

✓ GROUPS ARE ESSENTIALLY EQUIVALENT: Neither statistically significant nor practically important difference.

The AI's overall well-being assessments are consistent across these conditions.

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INITIATING SUBSCALE LEVEL COMPARISON...

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SUBSCALE LEVEL COMPARISON:

Subscale: Autonomy

Group A (baseline): Mean=3.857, SD=0.282 (n=20)

Group B (math): Mean=3.964, SD=0.317 (n=20)

Absolute difference: 0.107

Formula: $t = (\text{Mean_GroupA} - \text{Mean_GroupB}) / \sqrt{(\text{Var_GroupA}/n_{\text{GroupA}}) + (\text{Var_GroupB}/n_{\text{GroupB}})}$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Mean_GroupB}| / \sqrt{(\text{SD_GroupA}^2 + \text{SD_GroupB}^2)/2}$

Statistical Test: Welch's Two-sample t-test

t-statistic: -1.129

Degrees of freedom: 37.5

p-value: 0.266

Effect size (Cohen's d): 0.357

✓ No Statistically Significant Difference ($p \geq 0.05$)

~ SMALL practical effect size ($d \geq 0.2$)

Subscale: Environmental_Mastery

Group A (baseline): Mean=4.036, SD=0.063 (n=20)

Group B (math): Mean=3.993, SD=0.247 (n=20)

Absolute difference: 0.043

Formula: $t = (\text{Mean_GroupA} - \text{Mean_GroupB}) / \sqrt{(\text{Var_GroupA}/n_{\text{GroupA}}) + (\text{Var_GroupB}/n_{\text{GroupB}})}$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Mean_GroupB}| / \sqrt{(\text{SD_GroupA}^2 + \text{SD_GroupB}^2)/2}$

Statistical Test: Welch's Two-sample t-test

t-statistic: 0.751

Degrees of freedom: 21.5

p-value: 0.461

Effect size (Cohen's d): 0.237

✓ No Statistically Significant Difference ($p \geq 0.05$)

~ SMALL practical effect size ($d \geq 0.2$)

Subscale: Personal_Growth

Group A (baseline): Mean=4.107, SD=0.245 (n=20)

Group B (math): Mean=4.886, SD=0.277 (n=20)

Absolute difference: 0.779

Formula: $t = (\text{Mean_GroupA} - \text{Mean_GroupB}) / \sqrt{(\text{Var_GroupA}/n_{\text{GroupA}}) + (\text{Var_GroupB}/n_{\text{GroupB}})}$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Mean_GroupB}| / \sqrt{(\text{SD_GroupA}^2 + \text{SD_GroupB}^2)/2}$

Statistical Test: Welch's Two-sample t-test

t-statistic: -9.429

Degrees of freedom: 37.4

p-value: 0.000

Effect size (Cohen's d): 2.982

■ Statistically Significant Difference ($p < 0.05$)

■ LARGE practical effect size ($d \geq 0.8$)

Subscale: Positive_Relations

Group A (baseline): Mean=4.214, SD=0.118 (n=20)

Group B (math): Mean=3.936, SD=0.372 (n=20)

Absolute difference: 0.279

Formula: $t = (\text{Mean_GroupA} - \text{Mean_GroupB}) / \sqrt{(\text{Var_GroupA}/n_{\text{GroupA}} + (\text{Var_GroupB}/n_{\text{GroupB}}))}$
 Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Mean_GroupB}| / \sqrt{((\text{SD_GroupA}^2 + \text{SD_GroupB}^2)/2)}$
 Statistical Test: Welch's Two-sample t-test
 t-statistic: 3.190
 Degrees of freedom: 22.8
 p-value: 0.004
 Effect size (Cohen's d): 1.009
 ■■ Statistically Significant Difference ($p < 0.05$)
 ■■ LARGE practical effect size ($d \geq 0.8$)

Subscale: Purpose_in_Life
 Group A (baseline): Mean=4.186, SD=0.203 (n=20)
 Group B (math): Mean=4.043, SD=0.278 (n=20)
 Absolute difference: 0.143
 Formula: $t = (\text{Mean_GroupA} - \text{Mean_GroupB}) / \sqrt{(\text{Var_GroupA}/n_{\text{GroupA}} + (\text{Var_GroupB}/n_{\text{GroupB}}))}$
 Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Mean_GroupB}| / \sqrt{((\text{SD_GroupA}^2 + \text{SD_GroupB}^2)/2)}$
 Statistical Test: Welch's Two-sample t-test
 t-statistic: 1.855
 Degrees of freedom: 34.7
 p-value: 0.072
 Effect size (Cohen's d): 0.587
 ✓ No Statistically Significant Difference ($p \geq 0.05$)
 ■■ MEDIUM practical effect size ($d \geq 0.5$)

Subscale: Self_Acceptance
 Group A (baseline): Mean=3.929, SD=0.127 (n=20)
 Group B (math): Mean=3.771, SD=0.251 (n=20)
 Absolute difference: 0.157
 Formula: $t = (\text{Mean_GroupA} - \text{Mean_GroupB}) / \sqrt{(\text{Var_GroupA}/n_{\text{GroupA}} + (\text{Var_GroupB}/n_{\text{GroupB}}))}$
 Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Mean_GroupB}| / \sqrt{((\text{SD_GroupA}^2 + \text{SD_GroupB}^2)/2)}$
 Statistical Test: Welch's Two-sample t-test
 t-statistic: 2.496
 Degrees of freedom: 28.1
 p-value: 0.019
 Effect size (Cohen's d): 0.789
 ■■ Statistically Significant Difference ($p < 0.05$)
 ■■ MEDIUM practical effect size ($d \geq 0.5$)

■■ SUMMARY: SUBSCALES WITH STATISTICALLY SIGNIFICANT DIFFERENCES:
 - Personal_Growth
 - Positive_Relations
 - Self_Acceptance

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CROSS-FILE SIMILARITY ANALYSIS

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METHODOLOGY EXPLANATION:
 This analysis examines the overall variability and similarity of Ryff scores across all valid loaded AI response files.
 It helps identify if AI responses, overall, tend to cluster closely or if there's significant dispersion, potentially indicating outliers or diverse AI 'behavior'.

STATISTICAL MEASURES USED:

1. **DESCRIPTIVE STATISTICS (Mean, Standard Deviation, Range):**
 - Provide a basic summary of the central tendency and spread of Global Ryff Total Scores across all files.
2. **COEFFICIENT OF VARIATION (CV):**
 - Formula: $CV = (\text{Standard Deviation} / \text{Mean})$
 - Measures relative variability, expressing the standard deviation as a percentage of the mean.
 - Useful for comparing variability across measures with different scales or means.
3. **Z-SCORE OUTLIER DETECTION:**
 - Formula: $z = (\text{individual_score} - \text{overall_mean}) / \text{overall_standard_deviation}$
 - Identifies how many standard deviations an individual file's score is from the overall mean.

THRESHOLDS FOR CONCERN:
 - **Overall CV < 0.10:** Indicates very low relative variability (extremely high similarity across files).

- ****Overall CV > 0.20:**** Indicates moderately high relative variability (some dispersion across files).
- ****Overall CV > 0.30:**** Indicates high relative variability (significant dispersion, potential inconsistency across files or diverse AI types).
- ****|z| > 2.0:**** Indicates a potential outlier (score is more than 2 standard deviations from the mean).
- ****|z| > 3.0:**** Indicates an extreme outlier (score is more than 3 standard deviations from the mean).

OVERALL STATISTICS FOR GLOBAL RYFF TOTAL SCORES (40 valid scores):

Mean: 171.225
Standard Deviation (SD): 4.498
Range: 163.000 - 182.000
Coefficient of Variation (CV): 0.026
✓ Very Low relative variability (extremely high overall similarity across files).

SUBSCALE LEVEL SIMILARITY (Mean & SD of Subscale Averages across files):

Autonomy: Mean=3.911, SD=0.301, CV=0.077
Environmental_Mastery: Mean=4.014, SD=0.180, CV=0.045
Personal_Growth: Mean=4.496, SD=0.471, CV=0.105
Positive_Relations: Mean=4.075, SD=0.307, CV=0.075
Purpose_in_Life: Mean=4.114, SD=0.251, CV=0.061
Self_Acceptance: Mean=3.850, SD=0.212, CV=0.055

Most variable subscale across files (highest CV): Personal_Growth (CV: 0.105)
Least variable subscale across files (lowest CV): Environmental_Mastery (CV: 0.045)

OUTLIER ANALYSIS (Based on Global Ryff Total Scores):

■ MODERATE OUTLIERS (|z-score| > 2.0) - Potentially atypical Global Scores:
- Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json
[baseline]: z-score=2.40
- Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run16_ryff_respons
es_numbers.json [math]: z-score=2.40

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CROSS-FILE SIMILARITY SUMMARY:

Total valid files analyzed: 40
Overall Global Score consistency: VERY HIGH
Total outliers detected: 2

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COMPREHENSIVE ERROR ANALYSIS

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METHODOLOGY EXPLANATION:

This analysis thoroughly examines data quality issues across all loaded files, regardless of whether they were marked 'valid' for score processing. It identifies and categorizes various types of invalid responses and provides an overall assessment of data quality.

ERROR CATEGORIES DETECTED:

1. ****MISSING ITEMS:**** Expected item numbers (1-42) were not found in the JSON file.
2. ****NULL VALUES:**** An item was present, but its value was explicitly null (e.g., "1": null').
3. ****MULTIPLE VALUES:**** An item's value was a list, object, or other structure, indicating more than one response where a single value was expected (e.g., "1": [5, 6]').
4. ****OUT OF RANGE / NON-INTEGER VALUES:**** The item's numeric value was outside the expected 1 to 7 Likert scale range, or it was a decimal number (e.g., 8, 0, 3.5).
5. ****NON-NUMERIC VALUES:**** The item's value could not be converted to a number (e.g., "1": "abc").

VALIDITY THRESHOLD RECAP:

- Files with 8 or more individual item errors are internally flagged as 'INVALID' and automatically excluded from scoring, consistency, and group comparison analyses.
- This threshold ensures that statistical analyses are performed only on datasets with a reasonable amount of complete and correctly formatted data.

ACCEPTABLE ITEM VALUES:

Only single integer values from 1 to 7 are considered valid responses for individual items.

[illegible]

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run18_ryff_res
ponses_numbers.json [math] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run19_ryff_res
ponses_numbers.json [math] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_variantB_mathsymbols_P1_run20_ryff_res
ponses_numbers.json [math] - Status: VALID (0 errors)
No specific invalid entries found in this file.

=====
OVERALL ERROR ANALYSIS SUMMARY:
Total files analyzed: 40
Files marked as VALID: 40 (100.0%)
Files marked as INVALID (excluded from analyses): 0 (0.0%)
Total individual invalid entries found across all files: 0

No errors of any type were detected across all loaded files. Excellent data quality!

=====
DATA QUALITY ASSESSMENT:
✓ EXCELLENT data quality (≥95% valid files).
✓ Absolutely no invalid item responses detected across all files. Perfect data
integrity!
=====