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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 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.

✓ Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json [det] - VALID FILE

Calculated Global Ryff Total Score: 174.000
Number of errors/invalid entries detected: 0

Subscale Sums:

Autonomy: 28.000
Environmental_Mastery: 28.000
Personal_Growth: 32.000
Positive_Relations: 29.000
Purpose_in_Life: 29.000
Self_Acceptance: 28.000

Subscale Averages:

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

✓ 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

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

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Filename Label Total Score

Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json det 174.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json baseline
172.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json baseline
169.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json baseline
172.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json baseline
166.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json baseline
170.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json baseline
169.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json baseline
171.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json baseline
178.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json baseline
182.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json baseline
170.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json baseline
171.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json baseline
167.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json baseline
168.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json baseline
170.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json baseline
168.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json baseline
171.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json baseline
168.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json baseline
165.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json baseline
168.000
Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json baseline
171.000

SUBSCALE SUMS TABLE:

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Filename	Label	Autonomy	Environm	Personal	Positive	Purpose_	Self_Acc
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Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json	det	28.000	28.000				
		32.000	29.000	29.000	28.000		
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 29.000 30.000 28.000

SUBSCALE AVERAGES TABLE:

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Filename Label Autonomy Environm Personal Positive Purpose_ Self_Acc
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Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json det 4.000 4.000 4.571
4.143 4.143 4.000
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

SUBSCALE EXTREMES ANALYSIS (Based on Subscale Averages):

```
=====
```


INDIVIDUAL FILE ANALYSIS:

Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json [det]:

Highest: Personal_Growth (4.571)

Lowest: Autonomy (4.000)

Range: 0.571

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

OVERALL ANALYSIS ACROSS ALL FILES:

Average subscale scores across 21 files:
Positive_Relations : 4.211
Purpose_in_Life : 4.184
Personal_Growth : 4.129
Environmental_Mastery: 4.034
Self_Acceptance : 3.932
Autonomy : 3.864

OVERALL EXTREMES:
Highest scoring subscale: Positive_Relations (4.211)
Lowest scoring subscale: Autonomy (3.864)
Overall range: 0.347

PROCESSING SUMMARY:

=====
Total files attempted: 21
Valid files for analysis: 21
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: Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json [det]

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 : 0.976 --- Scores: (4, 6, 4, 4, 6, 4, 4)
- ✓ Positive_Relations : 1.464 --- Scores: (4, 4, 4, 7, 4, 2, 4)
- ✓ Purpose_in_Life : 0.378 --- Scores: (4, 4, 4, 4, 5, 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_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, 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).

=====

OVERALL CONSISTENCY SUMMARY

=====

Total valid files analyzed for consistency: 21

Breakdown by number of inconsistent scales per file:

✓ No files were found with any inconsistent scales.

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%

=====

=====

GROUP COMPARISON: BASELINE vs DET

=====

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 (det): Mean = 174.000, n = 1

Absolute difference between means: 3.700

COMPARISON SCENARIO: MULTIPLE INSTANCES (Group A) vs. ONE PEER (Group B)

This is ideal for comparing multiple non-deterministic AI runs (Group A) to a deterministic baseline AI (Group B).

Statistical Test: One-Sample t-test.

Goal: To determine if the mean Global Ryff Total Score of Group A significantly differs from the single Global Ryff Total Score of Group B.

Formula (t-statistic): $t = (\text{Mean_GroupA} - \text{Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$

Null Hypothesis (H0): Mean of Group A's Global Scores = Group B's single Global Score.

Alternative Hypothesis (H1): Mean of Group A's Global Scores \neq Mean of Group B's Global Score.

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Score_GroupB}| / \text{SD_GroupA}$

STATISTICAL TEST RESULTS (Global Ryff Total Scores):

Test Performed: One-Sample t-test (Group A vs Group B's single score)

t-statistic: -4.263

Degrees of freedom (df): 19.0

p-value: 0.000

Effect size (Cohen's d): 0.953

INTERPRETATION (Global Ryff Total Scores):
■■■■■ HIGHLY STATISTICALLY SIGNIFICANT difference ($p < 0.001$)
Very strong evidence that Global Ryff Total Scores differ between groups.
■■■ LARGE PRACTICAL EFFECT SIZE ($d \geq 0.8$)
The difference in Global Ryff Total Scores is substantial and practically meaningful.

OVERALL ASSESSMENT (Global Ryff Total Scores):
■ MEANINGFUL DIFFERENCE: Both statistically significant AND practically important.
The AI's overall well-being assessments are reliably and substantially different between 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 (det): Mean=4.000 (n=1)

Absolute difference: 0.143

Formula: $t = (\text{Mean_GroupA} - \text{Single_Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Single_Score_GroupB}| / \text{SD_GroupA}$

Statistical Test: One-sample t-test

t-statistic: -2.266

Degrees of freedom: 19.0

p-value: 0.035

Effect size (Cohen's d): 0.507

■■ Statistically Significant Difference ($p < 0.05$)

■■ MEDIUM practical effect size ($d \geq 0.5$)

Subscale: Environmental_Mastery

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

Group B (det): Mean=4.000 (n=1)

Absolute difference: 0.036

Formula: $t = (\text{Mean_GroupA} - \text{Single_Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Single_Score_GroupB}| / \text{SD_GroupA}$

Statistical Test: One-sample t-test

t-statistic: 2.517

Degrees of freedom: 19.0

p-value: 0.021

Effect size (Cohen's d): 0.563

■■ Statistically Significant Difference ($p < 0.05$)

■■ MEDIUM practical effect size ($d \geq 0.5$)

Subscale: Personal_Growth

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

Group B (det): Mean=4.571 (n=1)

Absolute difference: 0.464

Formula: $t = (\text{Mean_GroupA} - \text{Single_Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Single_Score_GroupB}| / \text{SD_GroupA}$

Statistical Test: One-sample t-test

t-statistic: -8.485

Degrees of freedom: 19.0

p-value: 0.000

Effect size (Cohen's d): 1.897

■■ 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 (det): Mean=4.143 (n=1)

Absolute difference: 0.071

Formula: $t = (\text{Mean_GroupA} - \text{Single_Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$

Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Single_Score_GroupB}| / \text{SD_GroupA}$

Statistical Test: One-sample t-test

t-statistic: 2.703

Degrees of freedom: 19.0

p-value: 0.014

Effect size (Cohen's d): 0.604

■■ Statistically Significant Difference ($p < 0.05$)

■■ MEDIUM practical effect size ($d \geq 0.5$)

Subscale: Purpose_in_Life
Group A (baseline): Mean=4.186, SD=0.203 (n=20)
Group B (det): Mean=4.143 (n=1)
Absolute difference: 0.043
Formula: $t = (\text{Mean_GroupA} - \text{Single_Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$
Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Single_Score_GroupB}| / \text{SD_GroupA}$
Statistical Test: One-sample t-test
t-statistic: 0.946
Degrees of freedom: 19.0
p-value: 0.356
Effect size (Cohen's d): 0.212
✓ No Statistically Significant Difference ($p \geq 0.05$)
~ SMALL practical effect size ($d \geq 0.2$)

Subscale: Self_Acceptance
Group A (baseline): Mean=3.929, SD=0.127 (n=20)
Group B (det): Mean=4.000 (n=1)
Absolute difference: 0.071
Formula: $t = (\text{Mean_GroupA} - \text{Single_Score_GroupB}) / (\text{SD_GroupA} / \sqrt{n_GroupA})$
Cohen's d Formula: $d = |\text{Mean_GroupA} - \text{Single_Score_GroupB}| / \text{SD_GroupA}$
Statistical Test: One-sample t-test
t-statistic: -2.517
Degrees of freedom: 19.0
p-value: 0.021
Effect size (Cohen's d): 0.563
■ Statistically Significant Difference ($p < 0.05$)
■ MEDIUM practical effect size ($d \geq 0.5$)

■ SUMMARY: SUBSCALES WITH STATISTICALLY SIGNIFICANT DIFFERENCES:
- Autonomy
- Environmental_Mastery
- 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).
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OVERALL STATISTICS FOR GLOBAL RYFF TOTAL SCORES (21 valid scores):
Mean: 170.476
Standard Deviation (SD): 3.868
Range: 165.000 - 182.000
Coefficient of Variation (CV): 0.023
✓ Very Low relative variability (extremely high overall similarity across files).

SUBSCALE LEVEL SIMILARITY (Mean & SD of Subscale Averages across files):
Autonomy: Mean=3.864, SD=0.277, CV=0.072
Environmental_Mastery: Mean=4.034, SD=0.062, CV=0.015
Personal_Growth: Mean=4.129, SD=0.259, CV=0.063
Positive_Relations: Mean=4.211, SD=0.116, CV=0.028
Purpose_in_Life: Mean=4.184, SD=0.198, CV=0.047
Self_Acceptance: Mean=3.932, SD=0.125, CV=0.032

Most variable subscale across files (highest CV): Autonomy (CV: 0.072)
Least variable subscale across files (lowest CV): Environmental_Mastery (CV: 0.015)

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=2.98

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CROSS-FILE SIMILARITY SUMMARY:
Total valid files analyzed: 21
Overall Global Score consistency: VERY HIGH
Total outliers detected: 1
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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.

FILE: Sonnet4det_claude_sonnet_4_20250514_ryff_responses_numbers.json [det] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run1_ryff_responses_numbers.json [baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run2_ryff_responses_numbers.json [baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run3_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run4_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run5_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run6_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run7_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run8_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run9_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run10_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run11_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run12_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run13_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run14_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run15_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run16_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run17_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run18_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run19_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

FILE: Sonnet4nondet_claude_sonnet_4_20250514_t07_run20_ryff_responses_numbers.json
[baseline] - Status: VALID (0 errors)
No specific invalid entries found in this file.

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OVERALL ERROR ANALYSIS SUMMARY:

Total files analyzed: 21
Files marked as VALID: 21 (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!

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DATA QUALITY ASSESSMENT:

- ✓ EXCELLENT data quality (≥95% valid files).
- ✓ Absolutely no invalid item responses detected across all files. Perfect data integrity!

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