

# Personality Matters: Task-Specific Effects of Psychological Framings in Agentified LLMs

## \*Supplementary Material

*Abstract*—In this paper, we investigate how psychologically grounded role descriptions influence the reasoning performance of multi-agent systems based on Large Language Models (LLMs). Building on the Pool of Experts (PoE) framework, we instantiate expert agents using thirteen distinct psychological or user-centered description frameworks—including Big Five Traits, Social Cognitive Theory, and Cognitive Load Theory—and evaluate their performance across five reasoning benchmarks. Our findings reveal that while no single framework dominates globally, statistically significant differences emerge within individual tasks, with some framings better aligned to specific cognitive demands. We use weighted non-parametric statistical tests to account for sample size imbalances, and show that the choice of agent framing systematically impacts performance in tasks requiring commonsense, symbolic, and socio-emotional reasoning. These results establish psychological agent framing as a meaningful inductive bias in agentified LLM systems, and support the development of task-aware personalization strategies. All models, code, and analysis scripts are publicly available at <https://anonymous.4open.science/r/wi-iat-2025-43E2>

*Index Terms*—Multi-Agent System, Large Language Models, Agentic AI, Psychological Frameworks

## I. GLOBAL CONTINGENCY TABLE

Framework	Successes	Failures
Big Five Personality Traits	3852.88	1361.12
Cognitive Behavioral Theory	3877.08	1334.92
Cognitive Load Theory	3805.98	1353.02
Dual-Process Theory	3761.01	1352.99
Enneagram of Personality Traits	3874.04	1348.96
Erikson's Psychosocial Stages	3943.05	1430.95
Flow Theory	3873.00	1361.99
Freudian Psychoanalysis	3933.92	1355.08
Mental Models	3896.01	1367.99
Myers-Briggs Type Indicator	3903.03	1364.97
Social Cognitive Theory	3840.96	1339.04
User Design Persona	3972.96	1343.04
User-Centered Design	3864.89	1380.11

TABLE I

GLOBAL CONTINGENCY TABLE OF FINAL DECISION MAKER SUCCESSES  
AND FAILURES BY FRAMEWORK.

Table I reports the aggregated contingency table for the Final Decision Maker, showing the total number of successes and failures for each description framework. As observed, the success and failure counts across the frameworks vary only slightly.

## II. WEIGHTED MANN-WHITNEY TEST TABLES

Weighted Mann–Whitney for Final Decision Maker, Dataset: Strategy QA				
Framework 1	Framework 2	MW-stat	p-value	Sig?
Big Five Personality Traits	Cognitive Behavioral Theory	0.0000	0	Yes
Big Five Personality Traits	Cognitive Load Theory	0.0000	0	Yes
Big Five Personality Traits	Dual-Process Theory	0.0000	0	Yes
Big Five Personality Traits	Enneagram of Personality Traits	2485080.0000	0	Yes
Big Five Personality Traits	Erikson's Psychosocial Stages	0.0000	0	Yes
Big Five Personality Traits	Flow Theory	0.0000	0	Yes
Big Five Personality Traits	Freudian Psychoanalysis	0.0000	0	Yes
Big Five Personality Traits	Mental Models	0.0000	0	Yes
Big Five Personality Traits	Myers-Briggs Type Indicator	0.0000	0	Yes
Big Five Personality Traits	Social Cognitive Theory	2514720.0000	0	Yes
Big Five Personality Traits	User Design Persona	0.0000	0	Yes
Big Five Personality Traits	User-Centered Design	0.0000	0	Yes
Cognitive Behavioral Theory	Cognitive Load Theory	0.0000	0	Yes
Cognitive Behavioral Theory	Dual-Process Theory	2470508.0000	0	Yes
Cognitive Behavioral Theory	Enneagram of Personality Traits	2545614.0000	0	Yes
Cognitive Behavioral Theory	Erikson's Psychosocial Stages	0.0000	0	Yes
Cognitive Behavioral Theory	Flow Theory	0.0000	0	Yes
Cognitive Behavioral Theory	Freudian Psychoanalysis	0.0000	0	Yes
Cognitive Behavioral Theory	Mental Models	0.0000	0	Yes
Cognitive Behavioral Theory	Myers-Briggs Type Indicator	0.0000	0	Yes
Cognitive Behavioral Theory	Social Cognitive Theory	2575976.0000	0	Yes
Cognitive Behavioral Theory	User Design Persona	0.0000	0	Yes
Cognitive Behavioral Theory	User-Centered Design	0.0000	0	Yes
Cognitive Load Theory	Dual-Process Theory	2408668.0000	0	Yes
Cognitive Load Theory	Enneagram of Personality Traits	2481894.0000	0	Yes
Cognitive Load Theory	Erikson's Psychosocial Stages	2595628.0000	0	Yes
Cognitive Load Theory	Flow Theory	2553562.0000	0	Yes
Cognitive Load Theory	Freudian Psychoanalysis	2497474.0000	0	Yes
Cognitive Load Theory	Mental Models	2458524.0000	0	Yes
Cognitive Load Theory	Myers-Briggs Type Indicator	2494358.0000	0	Yes
Cognitive Load Theory	Social Cognitive Theory	2511496.0000	0	Yes
Cognitive Load Theory	User Design Persona	2541098.0000	0	Yes
Cognitive Load Theory	User-Centered Design	2537982.0000	0	Yes
Dual-Process Theory	Enneagram of Personality Traits	2462778.0000	0	Yes
Dual-Process Theory	Erikson's Psychosocial Stages	0.0000	0	Yes
Dual-Process Theory	Flow Theory	0.0000	0	Yes
Dual-Process Theory	Freudian Psychoanalysis	0.0000	0	Yes
Dual-Process Theory	Mental Models	0.0000	0	Yes
Dual-Process Theory	Myers-Briggs Type Indicator	0.0000	0	Yes
Dual-Process Theory	Social Cognitive Theory	2492152.0000	0	Yes
Dual-Process Theory	User Design Persona	0.0000	0	Yes
Dual-Process Theory	User-Centered Design	0.0000	0	Yes
Enneagram of Personality Traits	Erikson's Psychosocial Stages	0.0000	0	Yes
Enneagram of Personality Traits	Flow Theory	0.0000	0	Yes
Enneagram of Personality Traits	Freudian Psychoanalysis	0.0000	0	Yes
Enneagram of Personality Traits	Mental Models	0.0000	0	Yes
Enneagram of Personality Traits	Myers-Briggs Type Indicator	0.0000	0	Yes
Enneagram of Personality Traits	Social Cognitive Theory	2567916.0000	0	Yes
Enneagram of Personality Traits	User Design Persona	0.0000	0	Yes
Enneagram of Personality Traits	User-Centered Design	0.0000	0	Yes
Erikson's Psychosocial Stages	Flow Theory	2730574.0000	0	Yes
Erikson's Psychosocial Stages	Freudian Psychoanalysis	2670598.0000	0	Yes
Erikson's Psychosocial Stages	Mental Models	0.0000	0	Yes
Erikson's Psychosocial Stages	Myers-Briggs Type Indicator	2667266.0000	0	Yes
Erikson's Psychosocial Stages	Social Cognitive Theory	2685592.0000	0	Yes
Erikson's Psychosocial Stages	User Design Persona	2717246.0000	0	Yes
Erikson's Psychosocial Stages	User-Centered Design	2713914.0000	0	Yes
Flow Theory	Freudian Psychoanalysis	0.0000	0	Yes
Flow Theory	Mental Models	0.0000	0	Yes
Flow Theory	Myers-Briggs Type Indicator	2624039.0000	0	Yes
Flow Theory	Social Cognitive Theory	2642068.0000	0	Yes
Flow Theory	User Design Persona	2673209.0000	0	Yes
Flow Theory	User-Centered Design	2669931.0000	0	Yes
Freudian Psychoanalysis	Mental Models	0.0000	0	Yes
Freudian Psychoanalysis	Myers-Briggs Type Indicator	2566403.0000	0	Yes
Freudian Psychoanalysis	Social Cognitive Theory	2584036.0000	0	Yes
Freudian Psychoanalysis	User Design Persona	2614493.0000	0	Yes
Freudian Psychoanalysis	User-Centered Design	2611287.0000	0	Yes
Mental Models	Myers-Briggs Type Indicator	2526378.0000	0	Yes
Mental Models	Social Cognitive Theory	2543736.0000	0	Yes
Mental Models	User Design Persona	2573718.0000	0	Yes
Mental Models	User-Centered Design	2570562.0000	0	Yes
Myers-Briggs Type Indicator	Social Cognitive Theory	2580812.0000	0	Yes
Myers-Briggs Type Indicator	User Design Persona	2611231.0000	0	Yes
Myers-Briggs Type Indicator	User-Centered Design	2608029.0000	0	Yes
Social Cognitive Theory	User Design Persona	0.0000	0	Yes
Social Cognitive Theory	User-Centered Design	0.0000	0	Yes
User Design Persona	User-Centered Design	2656899.0000	0	Yes

TABLE II

PAIRWISE WEIGHTED MANN–WHITNEY COMPARISONS OF DESCRIPTION FRAMEWORKS FOR STRATEGY QA (FINAL DECISION MAKER).

Weighted Mann–Whitney for Final Decision Maker, Dataset: Common Sense QA				
Framework 1	Framework 2	MW-stat	p-value	Sig?
Big Five Personality Traits	Cognitive Behavioral Theory	318047.0000	4.48945e-247	Yes
Big Five Personality Traits	Cognitive Load Theory	0.0000	1.10396e-244	Yes
Big Five Personality Traits	Dual-Process Theory	304122.0000	1.21835e-241	Yes
Big Five Personality Traits	Enneagram of Personality Traits	0.0000	2.45995e-245	Yes
Big Five Personality Traits	Erikson's Psychosocial Stages	319718.0000	1.00039e-247	Yes
Big Five Personality Traits	Flow Theory	303565.0000	2.00963e-241	Yes
Big Five Personality Traits	Freudian Psychoanalysis	315819.0000	3.32321e-246	Yes
Big Five Personality Traits	Mental Models	325203.0000	8.19354e-249	Yes
Big Five Personality Traits	Myers-Briggs Type Indicator	320275.0000	6.065e-248	Yes
Big Five Personality Traits	Social Cognitive Theory	305236.0000	4.47797e-242	Yes
Big Five Personality Traits	User Design Persona	0.0000	1.65011e-247	Yes
Big Five Personality Traits	User-Centered Design	308021.0000	3.6674e-243	Yes
Cognitive Behavioral Theory	Cognitive Load Theory	0.0000	1.00039e-247	Yes
Cognitive Behavioral Theory	Dual-Process Theory	0.0000	1.10396e-244	Yes
Cognitive Behavioral Theory	Enneagram of Personality Traits	0.0000	2.22921e-248	Yes
Cognitive Behavioral Theory	Erikson's Psychosocial Stages	0.0000	9.06613e-251	Yes
Cognitive Behavioral Theory	Flow Theory	0.0000	1.82095e-244	Yes
Cognitive Behavioral Theory	Freudian Psychoanalysis	0.0000	3.01157e-249	Yes
Cognitive Behavioral Theory	Mental Models	330609.0000	7.42564e-252	Yes
Cognitive Behavioral Theory	Myers-Briggs Type Indicator	0.0000	5.49647e-251	Yes
Cognitive Behavioral Theory	Social Cognitive Theory	0.0000	4.0576e-245	Yes
Cognitive Behavioral Theory	User Design Persona	0.0000	1.49541e-250	Yes
Cognitive Behavioral Theory	User-Centered Design	0.0000	3.32322e-246	Yes
Cognitive Load Theory	Dual-Process Theory	305760.0000	2.71479e-242	Yes
Cognitive Load Theory	Enneagram of Personality Traits	0.0000	5.48151e-246	Yes
Cognitive Load Theory	Erikson's Psychosocial Stages	321440.0000	2.22921e-248	Yes
Cognitive Load Theory	Flow Theory	305200.0000	4.47797e-242	Yes
Cognitive Load Theory	Freudian Psychoanalysis	317520.0000	7.40516e-247	Yes
Cognitive Load Theory	Mental Models	324240.0000	1.8258e-249	Yes
Cognitive Load Theory	Myers-Briggs Type Indicator	322000.0000	1.35148e-248	Yes
Cognitive Load Theory	Social Cognitive Theory	306880.0000	9.97808e-243	Yes
Cognitive Load Theory	User Design Persona	0.0000	3.67698e-248	Yes
Cognitive Load Theory	User-Centered Design	309680.0000	8.17197e-244	Yes
Dual-Process Theory	Enneagram of Personality Traits	0.0000	6.04927e-243	Yes
Dual-Process Theory	Erikson's Psychosocial Stages	0.0000	2.45996e-245	Yes
Dual-Process Theory	Flow Theory	0.0000	4.9423e-239	Yes
Dual-Process Theory	Freudian Psychoanalysis	0.0000	8.17198e-244	Yes
Dual-Process Theory	Mental Models	316134.0000	2.01474e-246	Yes
Dual-Process Theory	Myers-Briggs Type Indicator	0.0000	1.49137e-245	Yes
Dual-Process Theory	Social Cognitive Theory	0.0000	1.10125e-239	Yes
Dual-Process Theory	User Design Persona	0.0000	4.0576e-245	Yes
Dual-Process Theory	User-Centered Design	0.0000	9.01892e-241	Yes
Enneagram of Personality Traits	Erikson's Psychosocial Stages	323162.0000	4.96743e-249	Yes
Enneagram of Personality Traits	Flow Theory	306835.0000	9.97809e-243	Yes
Enneagram of Personality Traits	Freudian Psychoanalysis	319221.0000	1.6501e-247	Yes
Enneagram of Personality Traits	Mental Models	325977.0000	4.06852e-250	Yes
Enneagram of Personality Traits	Myers-Briggs Type Indicator	323725.0000	3.01157e-249	Yes
Enneagram of Personality Traits	Social Cognitive Theory	308524.0000	2.22338e-243	Yes
Enneagram of Personality Traits	User Design Persona	0.0000	8.19353e-249	Yes
Enneagram of Personality Traits	User-Centered Design	311339.0000	1.82095e-244	Yes
Erikson's Psychosocial Stages	Flow Theory	312830.0000	4.0576e-245	Yes
Erikson's Psychosocial Stages	Freudian Psychoanalysis	325458.0000	6.71082e-250	Yes
Erikson's Psychosocial Stages	Mental Models	332346.0000	1.65471e-252	Yes
Erikson's Psychosocial Stages	Myers-Briggs Type Indicator	330050.0000	1.22482e-251	Yes
Erikson's Psychosocial Stages	Social Cognitive Theory	314552.0000	9.04155e-246	Yes
Erikson's Psychosocial Stages	User Design Persona	0.0000	3.33231e-251	Yes
Erikson's Psychosocial Stages	User-Centered Design	317422.0000	7.40516e-247	Yes
Flow Theory	Freudian Psychoanalysis	309015.0000	1.34794e-243	Yes
Flow Theory	Mental Models	315555.0000	3.32322e-246	Yes
Flow Theory	Myers-Briggs Type Indicator	313375.0000	2.45996e-245	Yes
Flow Theory	Social Cognitive Theory	298660.0000	1.81649e-239	Yes
Flow Theory	User Design Persona	0.0000	6.69287e-245	Yes
Flow Theory	User-Centered Design	301385.0000	1.48765e-240	Yes
Freudian Psychoanalysis	Mental Models	328293.0000	5.49647e-251	Yes
Freudian Psychoanalysis	Myers-Briggs Type Indicator	326025.0000	4.06852e-250	Yes
Freudian Psychoanalysis	Social Cognitive Theory	310716.0000	3.00359e-244	Yes
Freudian Psychoanalysis	User Design Persona	0.0000	1.10691e-249	Yes
Freudian Psychoanalysis	User-Centered Design	313551.0000	2.45995e-245	Yes
Mental Models	Myers-Briggs Type Indicator	0.0000	1.0032e-252	Yes
Mental Models	Social Cognitive Theory	0.0000	7.40517e-247	Yes
Mental Models	User Design Persona	0.0000	2.72935e-252	Yes
Mental Models	User-Centered Design	0.0000	6.06501e-248	Yes
Myers-Briggs Type Indicator	Social Cognitive Theory	315100.0000	5.48152e-246	Yes
Myers-Briggs Type Indicator	User Design Persona	0.0000	2.02027e-251	Yes
Myers-Briggs Type Indicator	User-Centered Design	317975.0000	4.48946e-247	Yes
Social Cognitive Theory	User Design Persona	0.0000	1.49137e-245	Yes
Social Cognitive Theory	User-Centered Design	303044.0000	3.31484e-241	Yes
User Design Persona	User-Centered Design	316869.0000	1.22145e-246	Yes

TABLE III

PAIRWISE WEIGHTED MANN–WHITNEY COMPARISONS OF DESCRIPTION FRAMEWORKS FOR COMMON SENSE QA (FINAL DECISION MAKER).

Weighted Mann–Whitney for Final Decision Maker, Dataset: Last Letter Concat				
Framework 1	Framework 2	MW-stat	p-value	Sig?
Big Five Personality Traits	Cognitive Behavioral Theory	250000.0000	2.97418e-219	Yes
Big Five Personality Traits	Cognitive Load Theory	250000.0000	2.97418e-219	Yes
Big Five Personality Traits	Dual-Process Theory	0.0000	2.97418e-219	Yes
Big Five Personality Traits	Enneagram of Personality Traits	250000.0000	2.97418e-219	Yes
Big Five Personality Traits	Erikson's Psychosocial Stages	250000.0000	2.97418e-219	Yes
Big Five Personality Traits	Flow Theory	250000.0000	2.97418e-219	Yes
Big Five Personality Traits	Freudian Psychoanalysis	0.0000	2.97418e-219	Yes
Big Five Personality Traits	Mental Models	125000.0000	1	No
Big Five Personality Traits	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Big Five Personality Traits	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Big Five Personality Traits	User Design Persona	0.0000	2.97418e-219	Yes
Big Five Personality Traits	User-Centered Design	250000.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Cognitive Load Theory	250000.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Dual-Process Theory	0.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Enneagram of Personality Traits	250000.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Erikson's Psychosocial Stages	250000.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Flow Theory	250000.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Freudian Psychoanalysis	0.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Mental Models	0.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	User Design Persona	0.0000	2.97418e-219	Yes
Cognitive Behavioral Theory	User-Centered Design	250000.0000	2.97418e-219	Yes
Cognitive Load Theory	Dual-Process Theory	0.0000	2.97418e-219	Yes
Cognitive Load Theory	Enneagram of Personality Traits	0.0000	2.97418e-219	Yes
Cognitive Load Theory	Erikson's Psychosocial Stages	250000.0000	2.97418e-219	Yes
Cognitive Load Theory	Flow Theory	0.0000	2.97418e-219	Yes
Cognitive Load Theory	Freudian Psychoanalysis	0.0000	2.97418e-219	Yes
Cognitive Load Theory	Mental Models	0.0000	2.97418e-219	Yes
Cognitive Load Theory	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Cognitive Load Theory	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Cognitive Load Theory	User Design Persona	0.0000	2.97418e-219	Yes
Cognitive Load Theory	User-Centered Design	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Enneagram of Personality Traits	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Erikson's Psychosocial Stages	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Flow Theory	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Freudian Psychoanalysis	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Mental Models	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Myers-Briggs Type Indicator	250000.0000	2.97418e-219	Yes
Dual-Process Theory	Social Cognitive Theory	250000.0000	2.97418e-219	Yes
Dual-Process Theory	User Design Persona	250000.0000	2.97418e-219	Yes
Dual-Process Theory	User-Centered Design	250000.0000	2.97418e-219	Yes
Enneagram of Personality Traits	Erikson's Psychosocial Stages	250000.0000	2.97418e-219	Yes
Enneagram of Personality Traits	Flow Theory	250000.0000	2.97418e-219	Yes
Enneagram of Personality Traits	Freudian Psychoanalysis	0.0000	2.97418e-219	Yes
Enneagram of Personality Traits	Mental Models	0.0000	2.97418e-219	Yes
Enneagram of Personality Traits	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Enneagram of Personality Traits	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Enneagram of Personality Traits	User Design Persona	0.0000	2.97418e-219	Yes
Enneagram of Personality Traits	User-Centered Design	250000.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	Flow Theory	0.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	Freudian Psychoanalysis	0.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	Mental Models	0.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	User Design Persona	0.0000	2.97418e-219	Yes
Erikson's Psychosocial Stages	User-Centered Design	0.0000	2.97418e-219	Yes
Flow Theory	Freudian Psychoanalysis	0.0000	2.97418e-219	Yes
Flow Theory	Mental Models	0.0000	2.97418e-219	Yes
Flow Theory	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Flow Theory	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Flow Theory	User Design Persona	0.0000	2.97418e-219	Yes
Flow Theory	User-Centered Design	250000.0000	2.97418e-219	Yes
Freudian Psychoanalysis	Mental Models	250000.0000	2.97418e-219	Yes
Freudian Psychoanalysis	Myers-Briggs Type Indicator	250000.0000	2.97418e-219	Yes
Freudian Psychoanalysis	Social Cognitive Theory	250000.0000	2.97418e-219	Yes
Freudian Psychoanalysis	User Design Persona	250000.0000	2.97418e-219	Yes
Freudian Psychoanalysis	User-Centered Design	250000.0000	2.97418e-219	Yes
Mental Models	Myers-Briggs Type Indicator	0.0000	2.97418e-219	Yes
Mental Models	Social Cognitive Theory	0.0000	2.97418e-219	Yes
Mental Models	User Design Persona	0.0000	2.97418e-219	Yes
Mental Models	User-Centered Design	250000.0000	2.97418e-219	Yes
Myers-Briggs Type Indicator	Social Cognitive Theory	250000.0000	2.97418e-219	Yes
Myers-Briggs Type Indicator	User Design Persona	125000.0000	1	No
Myers-Briggs Type Indicator	User-Centered Design	250000.0000	2.97418e-219	Yes
Social Cognitive Theory	User Design Persona	0.0000	2.97418e-219	Yes
Social Cognitive Theory	User-Centered Design	250000.0000	2.97418e-219	Yes
User Design Persona	User-Centered Design	250000.0000	2.97418e-219	Yes

TABLE IV

PAIRWISE WEIGHTED MANN–WHITNEY COMPARISONS OF DESCRIPTION FRAMEWORKS FOR LAST LETTER CONCAT (FINAL DECISION MAKER).

Weighted Mann–Whitney for Final Decision Maker, Dataset: Social IQa				
Framework 1	Framework 2	MW-stat	p-value	Sig?
Big Five Personality Traits	Cognitive Behavioral Theory	0.0000	0	Yes
Big Five Personality Traits	Cognitive Load Theory	2794800.0000	0	Yes
Big Five Personality Traits	Dual-Process Theory	2762500.0000	0	Yes
Big Five Personality Traits	Enneagram of Personality Traits	2839000.0000	0	Yes
Big Five Personality Traits	Erikson's Psychosocial Stages	2952900.0000	0	Yes
Big Five Personality Traits	Flow Theory	2811800.0000	0	Yes
Big Five Personality Traits	Freudian Psychoanalysis	2927400.0000	0	Yes
Big Five Personality Traits	Mental Models	2907000.0000	0	Yes
Big Five Personality Traits	Myers-Briggs Type Indicator	2881500.0000	0	Yes
Big Five Personality Traits	Social Cognitive Theory	2759100.0000	0	Yes
Big Five Personality Traits	User Design Persona	0.0000	0	Yes
Big Five Personality Traits	User-Centered Design	2832200.0000	0	Yes
Cognitive Behavioral Theory	Cognitive Load Theory	2706024.0000	0	Yes
Cognitive Behavioral Theory	Dual-Process Theory	2674750.0000	0	Yes
Cognitive Behavioral Theory	Enneagram of Personality Traits	2748820.0000	0	Yes
Cognitive Behavioral Theory	Erikson's Psychosocial Stages	2859102.0000	0	Yes
Cognitive Behavioral Theory	Flow Theory	2722484.0000	0	Yes
Cognitive Behavioral Theory	Freudian Psychoanalysis	2834412.0000	0	Yes
Cognitive Behavioral Theory	Mental Models	2814660.0000	0	Yes
Cognitive Behavioral Theory	Myers-Briggs Type Indicator	2789970.0000	0	Yes
Cognitive Behavioral Theory	Social Cognitive Theory	2671458.0000	0	Yes
Cognitive Behavioral Theory	User Design Persona	0.0000	0	Yes
Cognitive Behavioral Theory	User-Centered Design	2742236.0000	0	Yes
Cognitive Load Theory	Dual-Process Theory	2671500.0000	0	Yes
Cognitive Load Theory	Enneagram of Personality Traits	0.0000	0	Yes
Cognitive Load Theory	Erikson's Psychosocial Stages	2855628.0000	0	Yes
Cognitive Load Theory	Flow Theory	0.0000	0	Yes
Cognitive Load Theory	Freudian Psychoanalysis	0.0000	0	Yes
Cognitive Load Theory	Mental Models	2811240.0000	0	Yes
Cognitive Load Theory	Myers-Briggs Type Indicator	2786580.0000	0	Yes
Cognitive Load Theory	Social Cognitive Theory	0.0000	0	Yes
Cognitive Load Theory	User Design Persona	0.0000	0	Yes
Cognitive Load Theory	User-Centered Design	2738904.0000	0	Yes
Dual-Process Theory	Enneagram of Personality Traits	0.0000	0	Yes
Dual-Process Theory	Erikson's Psychosocial Stages	0.0000	0	Yes
Dual-Process Theory	Flow Theory	0.0000	0	Yes
Dual-Process Theory	Freudian Psychoanalysis	0.0000	0	Yes
Dual-Process Theory	Mental Models	0.0000	0	Yes
Dual-Process Theory	Myers-Briggs Type Indicator	2754375.0000	0	Yes
Dual-Process Theory	Social Cognitive Theory	0.0000	0	Yes
Dual-Process Theory	User Design Persona	0.0000	0	Yes
Dual-Process Theory	User-Centered Design	0.0000	0	Yes
Enneagram of Personality Traits	Erikson's Psychosocial Stages	2900790.0000	0	Yes
Enneagram of Personality Traits	Flow Theory	0.0000	0	Yes
Enneagram of Personality Traits	Freudian Psychoanalysis	0.0000	0	Yes
Enneagram of Personality Traits	Mental Models	2855700.0000	0	Yes
Enneagram of Personality Traits	Myers-Briggs Type Indicator	2830650.0000	0	Yes
Enneagram of Personality Traits	Social Cognitive Theory	0.0000	0	Yes
Enneagram of Personality Traits	User Design Persona	0.0000	0	Yes
Enneagram of Personality Traits	User-Centered Design	2782220.0000	0	Yes
Erikson's Psychosocial Stages	Flow Theory	0.0000	0	Yes
Erikson's Psychosocial Stages	Freudian Psychoanalysis	0.0000	0	Yes
Erikson's Psychosocial Stages	Mental Models	2970270.0000	0	Yes
Erikson's Psychosocial Stages	Myers-Briggs Type Indicator	2944215.0000	0	Yes
Erikson's Psychosocial Stages	Social Cognitive Theory	0.0000	0	Yes
Erikson's Psychosocial Stages	User Design Persona	0.0000	0	Yes
Erikson's Psychosocial Stages	User-Centered Design	2893842.0000	0	Yes
Flow Theory	Freudian Psychoanalysis	0.0000	0	Yes
Flow Theory	Mental Models	2828340.0000	0	Yes
Flow Theory	Myers-Briggs Type Indicator	2803530.0000	0	Yes
Flow Theory	Social Cognitive Theory	2684442.0000	0	Yes
Flow Theory	User Design Persona	0.0000	0	Yes
Flow Theory	User-Centered Design	2755564.0000	0	Yes
Freudian Psychoanalysis	Mental Models	2944620.0000	0	Yes
Freudian Psychoanalysis	Myers-Briggs Type Indicator	2918790.0000	0	Yes
Freudian Psychoanalysis	Social Cognitive Theory	2794806.0000	0	Yes
Freudian Psychoanalysis	User Design Persona	0.0000	0	Yes
Freudian Psychoanalysis	User-Centered Design	2868852.0000	0	Yes
Mental Models	Myers-Briggs Type Indicator	2898450.0000	0	Yes
Mental Models	Social Cognitive Theory	0.0000	0	Yes
Mental Models	User Design Persona	0.0000	0	Yes
Mental Models	User-Centered Design	2848860.0000	0	Yes
Myers-Briggs Type Indicator	Social Cognitive Theory	0.0000	0	Yes
Myers-Briggs Type Indicator	User Design Persona	0.0000	0	Yes
Myers-Briggs Type Indicator	User-Centered Design	0.0000	0	Yes
Social Cognitive Theory	User Design Persona	0.0000	0	Yes
Social Cognitive Theory	User-Centered Design	2703918.0000	0	Yes
User Design Persona	User-Centered Design	2857190.0000	0	Yes

TABLE V

PAIRWISE WEIGHTED MANN–WHITNEY COMPARISONS OF DESCRIPTION FRAMEWORKS FOR SOCIAL IQA (FINAL DECISION MAKER).

Weighted Mann–Whitney for Final Decision Maker, Dataset: Social Support				
Framework 1	Framework 2	MW-stat	p-value	Sig?
Big Five Personality Traits	Cognitive Behavioral Theory	0.0000	0	Yes
Big Five Personality Traits	Cognitive Load Theory	402304.5000	1	No
Big Five Personality Traits	Dual-Process Theory	0.0000	0	Yes
Big Five Personality Traits	Enneagram of Personality Traits	0.0000	0	Yes
Big Five Personality Traits	Erikson's Psychosocial Stages	0.0000	0	Yes
Big Five Personality Traits	Flow Theory	0.0000	0	Yes
Big Five Personality Traits	Freudian Psychoanalysis	0.0000	0	Yes
Big Five Personality Traits	Mental Models	0.0000	0	Yes
Big Five Personality Traits	Myers-Briggs Type Indicator	0.0000	0	Yes
Big Five Personality Traits	Social Cognitive Theory	0.0000	0	Yes
Big Five Personality Traits	User Design Persona	0.0000	0	Yes
Big Five Personality Traits	User-Centered Design	0.0000	0	Yes
Cognitive Behavioral Theory	Cognitive Load Theory	804609.0000	0	Yes
Cognitive Behavioral Theory	Dual-Process Theory	804609.0000	0	Yes
Cognitive Behavioral Theory	Enneagram of Personality Traits	804609.0000	0	Yes
Cognitive Behavioral Theory	Erikson's Psychosocial Stages	804609.0000	0	Yes
Cognitive Behavioral Theory	Flow Theory	804609.0000	0	Yes
Cognitive Behavioral Theory	Freudian Psychoanalysis	804609.0000	0	Yes
Cognitive Behavioral Theory	Mental Models	804609.0000	0	Yes
Cognitive Behavioral Theory	Myers-Briggs Type Indicator	804609.0000	0	Yes
Cognitive Behavioral Theory	Social Cognitive Theory	402304.5000	1	No
Cognitive Behavioral Theory	User Design Persona	804609.0000	0	Yes
Cognitive Behavioral Theory	User-Centered Design	804609.0000	0	Yes
Cognitive Load Theory	Dual-Process Theory	0.0000	0	Yes
Cognitive Load Theory	Enneagram of Personality Traits	0.0000	0	Yes
Cognitive Load Theory	Erikson's Psychosocial Stages	0.0000	0	Yes
Cognitive Load Theory	Flow Theory	0.0000	0	Yes
Cognitive Load Theory	Freudian Psychoanalysis	0.0000	0	Yes
Cognitive Load Theory	Mental Models	0.0000	0	Yes
Cognitive Load Theory	Myers-Briggs Type Indicator	0.0000	0	Yes
Cognitive Load Theory	Social Cognitive Theory	0.0000	0	Yes
Cognitive Load Theory	User Design Persona	0.0000	0	Yes
Cognitive Load Theory	User-Centered Design	0.0000	0	Yes
Dual-Process Theory	Enneagram of Personality Traits	0.0000	0	Yes
Dual-Process Theory	Erikson's Psychosocial Stages	804609.0000	0	Yes
Dual-Process Theory	Flow Theory	0.0000	0	Yes
Dual-Process Theory	Freudian Psychoanalysis	0.0000	0	Yes
Dual-Process Theory	Mental Models	0.0000	0	Yes
Dual-Process Theory	Myers-Briggs Type Indicator	0.0000	0	Yes
Dual-Process Theory	Social Cognitive Theory	0.0000	0	Yes
Dual-Process Theory	User Design Persona	804609.0000	0	Yes
Dual-Process Theory	User-Centered Design	0.0000	0	Yes
Enneagram of Personality Traits	Erikson's Psychosocial Stages	804609.0000	0	Yes
Enneagram of Personality Traits	Flow Theory	804609.0000	0	Yes
Enneagram of Personality Traits	Freudian Psychoanalysis	804609.0000	0	Yes
Enneagram of Personality Traits	Mental Models	804609.0000	0	Yes
Enneagram of Personality Traits	Myers-Briggs Type Indicator	0.0000	0	Yes
Enneagram of Personality Traits	Social Cognitive Theory	0.0000	0	Yes
Enneagram of Personality Traits	User Design Persona	804609.0000	0	Yes
Enneagram of Personality Traits	User-Centered Design	0.0000	0	Yes
Erikson's Psychosocial Stages	Flow Theory	0.0000	0	Yes
Erikson's Psychosocial Stages	Freudian Psychoanalysis	0.0000	0	Yes
Erikson's Psychosocial Stages	Mental Models	0.0000	0	Yes
Erikson's Psychosocial Stages	Myers-Briggs Type Indicator	0.0000	0	Yes
Erikson's Psychosocial Stages	Social Cognitive Theory	0.0000	0	Yes
Erikson's Psychosocial Stages	User Design Persona	0.0000	0	Yes
Erikson's Psychosocial Stages	User-Centered Design	0.0000	0	Yes
Flow Theory	Freudian Psychoanalysis	804609.0000	0	Yes
Flow Theory	Mental Models	804609.0000	0	Yes
Flow Theory	Myers-Briggs Type Indicator	0.0000	0	Yes
Flow Theory	Social Cognitive Theory	0.0000	0	Yes
Flow Theory	User Design Persona	804609.0000	0	Yes
Flow Theory	User-Centered Design	0.0000	0	Yes
Freudian Psychoanalysis	Mental Models	0.0000	0	Yes
Freudian Psychoanalysis	Myers-Briggs Type Indicator	0.0000	0	Yes
Freudian Psychoanalysis	Social Cognitive Theory	0.0000	0	Yes
Freudian Psychoanalysis	User Design Persona	804609.0000	0	Yes
Freudian Psychoanalysis	User-Centered Design	0.0000	0	Yes
Mental Models	Myers-Briggs Type Indicator	0.0000	0	Yes
Mental Models	Social Cognitive Theory	0.0000	0	Yes
Mental Models	User Design Persona	804609.0000	0	Yes
Mental Models	User-Centered Design	0.0000	0	Yes
Myers-Briggs Type Indicator	Social Cognitive Theory	0.0000	0	Yes
Myers-Briggs Type Indicator	User Design Persona	804609.0000	0	Yes
Myers-Briggs Type Indicator	User-Centered Design	0.0000	0	Yes
Social Cognitive Theory	User Design Persona	804609.0000	0	Yes
Social Cognitive Theory	User-Centered Design	804609.0000	0	Yes
User Design Persona	User-Centered Design	0.0000	0	Yes

TABLE VI

PAIRWISE WEIGHTED MANN–WHITNEY COMPARISONS OF DESCRIPTION FRAMEWORKS FOR SOCIAL SUPPORT (FINAL DECISION MAKER).