

Definition

Post-G Intelligence

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Definition: *Post-G Intelligence* refers to a theoretical extension of Spearman's *g*-factor, formulated to account for cognitive capacities that are not adequately described by conventional models of general intelligence. While *g* effectively models the shared variance among diverse cognitive tasks, it becomes insufficient when characterizing reasoning processes marked by ultra-high abstraction, non-verbal meta-representational thinking, and compressed inferential synthesis across novel, uncertain, and multidimensional problem spaces.

Background: Since its inception, *g* has served as the dominant latent construct in psychometric theory, offering a statistically robust predictor of broad cognitive functioning. However, empirical observations and performance patterns among individuals with exceptional intellectual profiles—particularly those operating at or beyond the normative ceilings of standardized assessments—suggest the existence of qualitatively distinct modes of cognition. These include recursive abstraction, ideational self-reference, domain-transcendent integration, and anticipatory reasoning that emerge under conditions of extreme novelty and complexity. Such capacities appear to operate outside the explanatory scope of current *g*-centric models, necessitating a refined conceptual framework.

Application: Post-G Intelligence is particularly relevant to theoretical and applied contexts involving: (1) the assessment of ultra-high IQ or cognitive singularity phenomena; (2) the modeling of advanced metacognitive systems; (3) alignment challenges between human and artificial general intelligence (AGI); and (4) domains requiring reasoning under minimal prior constraints. As a construct, it facilitates a deeper investigation of post-normative intelligence structures and supports the development of extended psychometric models in contexts where traditional assumptions of distributional continuity and metric invariance break down.

Declarations

Potential competing interests: No potential competing interests to declare.