Adaptive Reasoning (CARA)

The Cliquidity Adaptive Reasoning Assessment assesses cognitive constructs using graphic, visual-spatial (non-verbal) item content. It is an adaptive assessment in which the items reflect increasing levels of complexity, starting with items that require dealing with separate elements, sequentially followed by items that require linear reasoning, then tangible systems thinking where elements interact with one another, and finally dynamic and complex systems thinking. Test candidates are exited from the assessment after the system has established an appropriate level of complexity for that candidate.

Cognitive Complexity

Separate Elements
- single, separate elements in a highly structured environment
- at times, a focus on irrelevant / decontextualized information
- a preference for tangible and concrete information; a somewhat fragmented approach

Relationships and Linear Causality
- linear sequences / causality; either-or tree structures
- categorisation of symptoms for purposes of diagnosis
- a tangible focus

Tangible Systems
- planning and structuring, generating plans and alternatives
- co-ordination of structural elements within a system
- interactions between tangible events

Dynamic and Interactive Systems
- coordination across systems and contexts; planning and structuring
- dealing with dynamics, vagueness, and intangibles
- constructing theoretical models; a process approach

Completion Time
20-30 minutes

VOLUME ASSESSMENT

Example Report

Cognitive Processing Skills

Speed	❖ The general speed / pace of solving unfamiliar problems; the overall speed in completing the assessment
Logical-Analytical	Analysis ❖ Inferring, transferring and applying rules in a detailed, precise, systematic and process-based manner Structuring ❖ Carefully ordering information in terms of certain criteria; creating coherent / meaningful information structures Logical reasoning ❖ Looking for logical evidence; applying a convergent and/or divergent reasoning approach
Learning	❖ An adaptable, open-minded and flexible approach; the continuous improvement of problem-solving skills
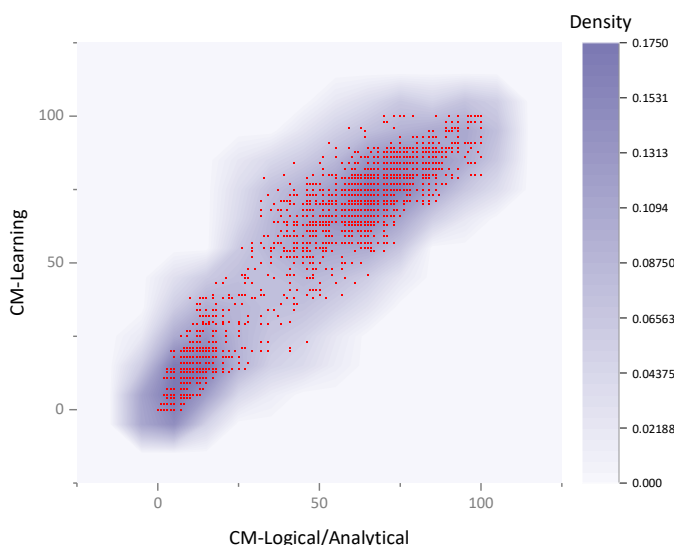
CARA Analytics

The plot on the left shows a kernel density plot of the relationship between Learning and Logical/Analytical processing scores, indicating overall trend and conjoint data densities.

If we were to look solely at the summary Pearson correlation which indexes monotonicity, the value computed between Logical-Analytical and Learning scores would be taken as showing 'near identity' (0.97), when in fact as we can see from the bivariate score density plot, this is not the case at all except when we index monotonic relationship rather than absolute agreement between the observed score magnitudes.

So, we can see 'by eye' that the magnitudes are definitely positively related, but certainly not "near identical".