Learning Orientation Index (LOI)

Standard Report for Cognasud

STRICTLY CONFIDENTIAL

NAME:
JUAN DEMO

LOI NUMBER:
LOI-011129

ASSESSMENT DATE:
2017-11-04

SECTION 1

Introduction

The LOI

The Learning Orientation Index (LOI) is a computerised assessment exercise that has been designed to measure aspects of cognition and information processing of school, college and university leavers. Unlike conventional ability and IQ tests, the LOI measures how people think, deal with information and go about problem-solving. The LOI does this by externalising and tracking the different processes people apply when working through exercises. The results can be used as part of a battery of assessments to inform career guidance, selection and placement as well as development initiatives in tertiary educational and work environments.

Note: This report has been compared against the V2 norm group (1555 results), which represents a diverse sample of people of the ages 18 to 27 years.

Cognitive constructs reported on by the LOI

- Complexity and unit of information
- Cognitive styles
  - Applied cognitive styles
  - Underutilised cognitive styles
- Rank order of cognitive modes
- Speed and power
- Cognitive competencies
- Metacognitive areas
  - Metacognitive developmental guidelines
- External structuring

Biographical information

Full name:	JUAN DEMO Smith
Gender:	Male
Date assessed:	2017-11-04
Report date:	2017-11-06
Unique test number:	LOI-011129
Date of birth:	1994-04-28
Nationality:	Chile
Ethnicity:	Caucasian / White European
Highest education:	Degree
Discipline:	Commerce / Business Science

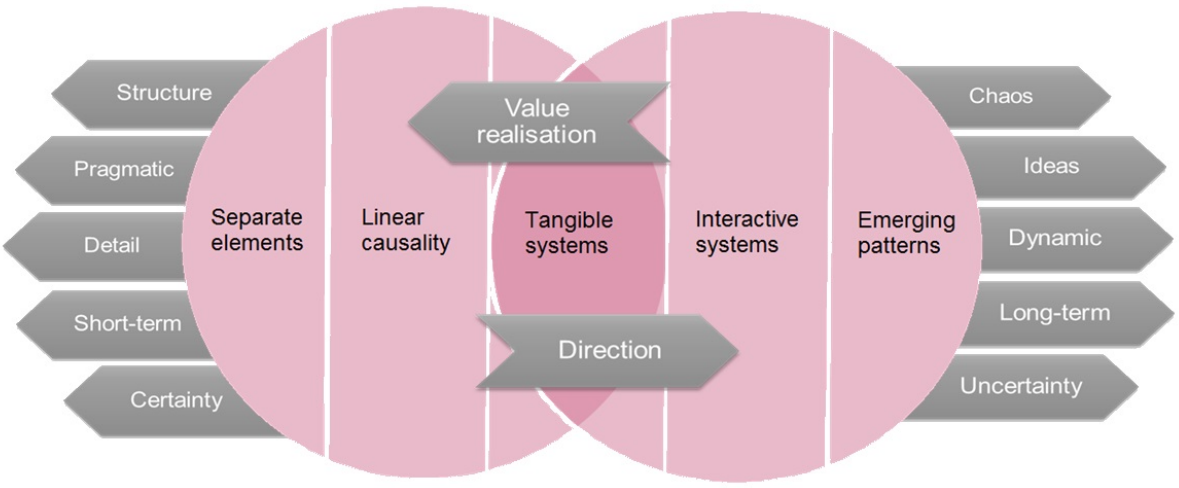
SECTION 2

Complexity and unit of information

The manner in which individuals process information reflects, amongst other factors: previous exposure and learning experiences, personal preferences, cognitive flexibility and modifiability, capability and preference for dealing with complexity and vagueness and confidence in own intuitive insights. Based on a combination of these factors, the individual can be expected to function best in various environments of increasing complexity. The complexity of a task reflects the number of elements involved, the degree of interactivity between elements, the level of abstraction and the vagueness and dynamic or static nature of the information involved.

Jonathan Acuña's current and potential preferences in terms of cognitive complexity:

	Separate elements	Linear causality	Tangible systems	Interactive systems	Emerging patterns
					
Information Application Context	Clear, concrete information Operational application (routine contexts, structured tasks, quick feedback / short time frames)	Technical-specialist information Unfamiliar practical problems Rule-based, linear-causal problem-solving Diagnosis according to either-or / if-then investigations	Specialist and generalist information Interactive elements of tangible systems Application of theoretical models Creating alternative solutions Planning to ensure efficiencies	Integrative approach Vague theoretical information Work with dynamic, interactive systems Innovation, strategy lignment, creating models Ensuring viability of complex and dynamic solutions	Intuitive approach Philosophical trends Emerging patterns in chaotic contexts Simultaneous consideration of micro and macro aspects
Current unit of information					
Potential unit of information					



SECTION 3

Cognitive styles

Cognitive styles describe response tendencies and preferences in approaching and solving problems. These preferences are related to personality and motivational factors and may also reflect previous learning exposure.

Most individuals show distinct information processing preferences and habits. Someone with an Intuitive style may, for example, capitalise on “gut feel” whereas someone who prefers a Structured approach may tend to gather and organise information. The different ways that people or team members process information may cause interpersonal misunderstanding and frustration, but it may also enrich the outcome of the problem-solving process.

Applied cognitive styles

JUAN DEMO seems to prefer applying the following cognitive approaches or styles:

TRIAL-AND-ERROR

- Has a vague and unsystematic approach to problem-solving
- Tends not to plan or monitor information processing approach
- May show an undirected action approach
- Not likely to be focused on the task or goal
- May lack self-awareness, motivation or flexibility
- Likely to prefer structured and familiar information or environments
- May not systematically analyse, structure or reason about issues

REACTIVE

- Likely to work quickly but inaccurately
- May be impulsive or show quick closure
- May respond emotionally rather than rationally
- May not identify or focus on the most relevant aspects of a problem
- May not spend sufficient time on complex cognitive challenges
- Could lack motivation
- Likely to be sensitive and/or experience performance anxiety
- May find it difficult to deal with unfamiliar cognitive challenges

EXPLORATIVE

- Tends to investigate issues
- Thoroughly explores different types of information
- Checks information carefully and precisely
- Tries to understand the task requirements
- Focuses on finding information relevant to the problem
- May get confused by over-exploring and checking too much
- May repeatedly explore the same information without moving forward

CREATIVE

- May view situations from different perspectives
- May have an abstract or symbolic approach
- May combine elements of information in new and unusual ways
- May formulate unusual ideas to integrate discrepant information
- May create mental pictures to represent an idea

Underutilised cognitive styles

JUAN DEMO does not appear to prefer applying this cognitive style and may benefit from developing this approach:

STRUCTURED

A tendency to categorise, order and externally represent tangible information meaningfully.

Metacognitive criteria: “order”, “meaning”, “representation”, “level”, “core”

JUAN DEMO may want to develop the ability to order and structure information by applying effective representational skills. These skills contribute to understanding when dealing with complexity. It is also useful when having to clarify vague information.

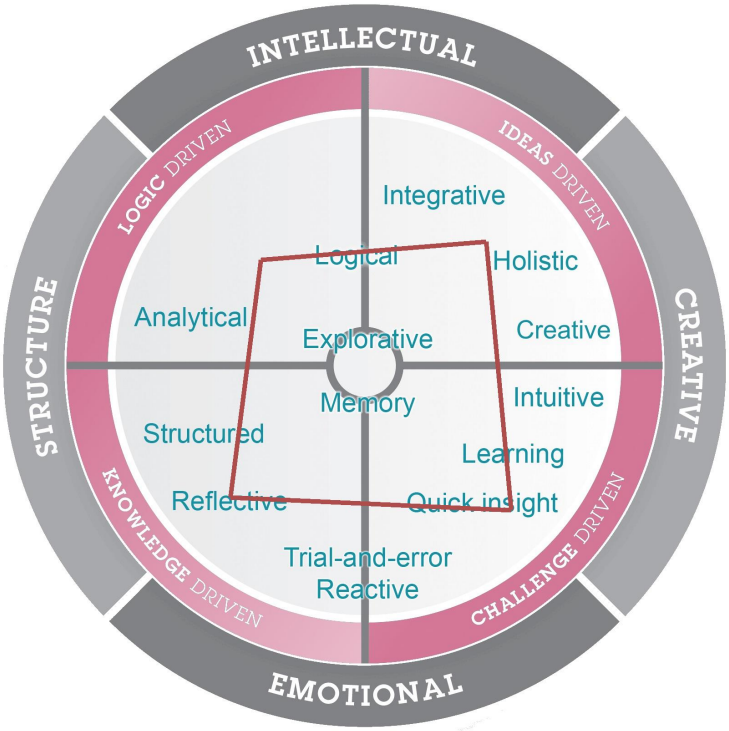
SECTION 4

Rank order of cognitive modes

A person's Cognitive mode preference indicates the types of information and problem-solving contexts that are best suited to their learning preferences. The various modes can broadly be organised into four categories that are often referred to as a "left-" or "right-brain" orientation, which is either intellectually or emotionally driven.

Of the four orientations, JUAN DEMO was found to have the following order of preferences:

Rank	Cognitive mode	Description
1	Challenge Driven	This preference can be described as flexible, open-minded awareness, curiosity and learning. It may well be characterised by an emotionally driven tendency to become bored and / or to challenge oneself and others. In the case of this approach, the acquisition of detailed information is less important than understanding the issue. Such a learning orientation is often characterised by a need for stimulation, novelty and variety
2	Knowledge / Structure Driven	This refers to a structured approach relying on memory and reflection. This mode is characterised by a preference for clear, familiar and well-ordered information. Applied, it may involve creating checklists and a reliance on technical guidelines and existing practices. This preference is driven by a need for certainty and emotional security
3	Ideas Driven	This mode is descriptive of integrative, holistic, intuitive and creative approaches. It is a preference for discrepant, theoretical, and conceptual information which has to be interpreted meaningfully. It may involve brainstorming, creating models, and coming up with creative conceptualisations and innovative solutions
4	Logic Driven	This refers to the logical, analytical – commonly referred to as "left-brain" approaches. It involves a preference for logical problem-solving that involves the rigorous application of theoretical information. Logic driven environments are characterised by information-rich theoretical, technical and professional problem-solving activities



Speed and power are separate constructs in cognition. JUAN DEMO shows the following preferences in terms of the speed-related dimensions measured.

Speed and power

Dimension	Description	Score
Speed of Work	The speed by which unfamiliar cognitive tasks are completed	51
Quick Insight	The rate of grasping and understanding concepts	31
Pace Control	The tendency to spend most time on the most difficult task requirements	27
Quick Closure	The tendency to jump to conclusions and make assumptions	66

SECTION 6

Cognitive competencies

These competencies represent the person's overall information processing functioning. The various processing categories do not follow one another up linearly but are structured holonically (a dynamic, soft hierarchy). This information can be used to facilitate developmental programmes and to match the person to suitable work or educational environments.

Dimension	Sub-dimension	Score
Memory	Use of memory	44
	Checking	44
	Memory strategies	36
Exploration	Effectiveness of exploration	35
	Degree of exploration	53
Analysis	Detailed identification of relationships	47
	Systematic and rule-based linking	36
Structuring	Tendency to structure	48
	Integration	45
	Complexity	43
Transformation	Logical reasoning	43
	Lateral creation	50
Learning	Quick insight learning	39
	Gradual improvement learning	40
Metacognition	Intuition	41
	Metacognition	42
	Activity	43

SECTION 7

Metacognitive areas

Metacognition guides a person's thinking and it is a crucial component of intellectual functioning. It also plays a critical role in the development of thinking skills. Jonathan Acuña's metacognitive criteria were tracked in the assessment and specific areas of strength and further development are given below.

Construct	Description	Metacognitive criteria or "meta-voices"	Areas of development	Areas of strength
Exploration	Extent of exploration	Do I need to explore and **investigate** further?		
	Focus on relevant aspects	What is **relevant** and **important**?		
	Seeking clarity	Is this **clear** to me? Do I have **clarity** on this?		
Analysis	Awareness of rules	What are the **rules**? Am I being **systematic**?		
	Detail orientation	How **detailed** and precise should I be?		
	Focus on relationships	What are the **relationships** between the elements?		
Structuring	Ordering and representing information	How can I order, **structure** and **represent** the information?		
Integration	Synchronising fragmented elements	Is this **meaningful** and does it make sense? Is it **coherent** or fragmented?		
Creativity	Lateral creation	What **changes** are required and how **creative** are these?		
Logical reasoning	Follow through	Are rule-based arguments followed through **rigorously**? What are the **implications**, **consequences** and applications here?		
	Purposeful transformation	How **purposeful** is this? Will this solution achieve the goals?		
Learning	Using feedback effectively	What can I **learn** from this? How can I correct and **improve** my approach?		
Intuition	Capitalising on gut feel	What is my **gut feel** and intuitive insight?		

Metacognitive developmental guidelines

Effective thinkers continuously, and almost automatically, ask themselves certain questions to guide their thinking and problem-solving processes. These critical questions are generally referred to as “metacognitive criteria”.

Using and developing metacognitive criteria is the most effective way to improve problem-solving, this is because it requires that the person ask themselves additional questions, which brings their attention to aspects of a problem that were previously ignored or missed.

Based on the areas of development given above, JUAN DEMO will most rapidly be able to improve his thinking by addressing the following areas:

Learning potential

It is difficult to predict a person’s future and potential cognitive functioning based on current performance, given the long-term impact of variables such as emotionality, motivation, educational and work exposure. Cognitive performance is evaluated in depth to identify indicators of cognitive modifiability.

Jonathan Acuña’s current cognitive functioning can be improved through mentoring, experiential learning and multi-skilling within operational environments, as well as through formal training and education.

Focus on relevant aspects

Deciding between relevant and irrelevant information is a crucial prerequisite for problem-solving. All problems have core aspects that you will need to focus on in order to solve the problem and less important elements, which will only confuse and cloud the issue. Removing irrelevant aspects can help you to think more clearly, quicker and more accurately.

This skill should be refined through reflection. Once a problem is solved, you can ask yourself what information you have gathered and worked with was of little value in solving the problem.

Questions to ask yourself include:

- Is this relevant to finding the answer?
- Is this important information or just noise and extra clutter?
- Has my thinking become unfocused or have I gone off-topic?

Awareness of rules

An analytical or logical problem-solving process normally involves the application of rules or rule-based arguments. The interrelationships between elements also reflect certain rules. The degree to which one needs to focus on the rules of the task differs from situation to situation.

The questions that can guide your thinking include:

- What are the rules here?
- Am I being systematic?

Purposeful transformation

This involves logical reasoning and is the disciplined application of a process approach.

Integrating feedback

Learning and skill acquisition involves being exposed to new and unfamiliar information, applying certain strategies to master the material, receiving feedback on own performance, and improving and monitoring one’s own approach.

Questions to ask yourself include:

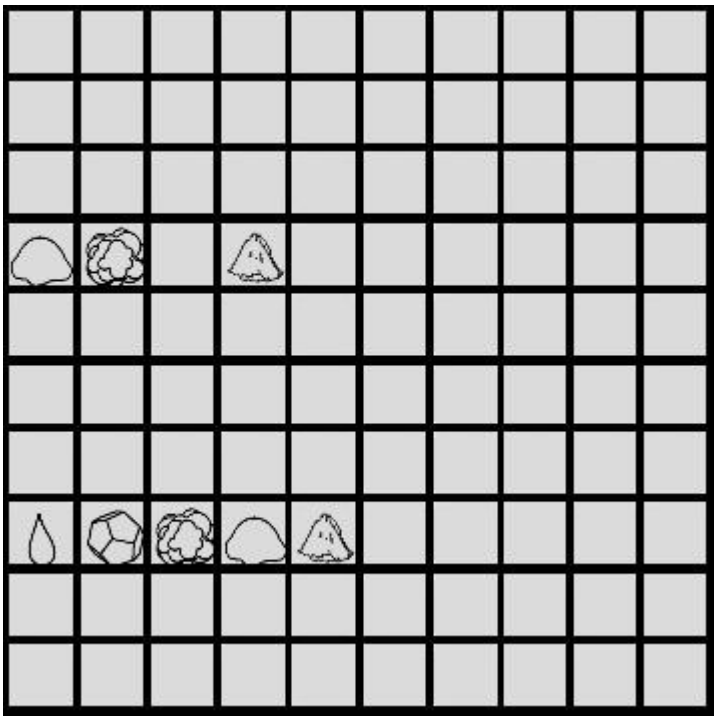
- What is new here?
- What can I learn from the feedback?
- Did I make a mistake?
- Where did I go wrong?
- How can I improve my approach?
- How can I apply this new skill in other situations?

External structuring

Please note that the LOI assesses a person's understanding of the underlying structure of the LOI task in many different ways besides the construction of a table as depicted below. This table is only one aspect that is measured as part of the "Structuring" competency. Some individuals, however, prefer keeping all the information in mind rather than to represent it in a table.

This table indicates the degree to, and the comprehensiveness that, the person structures and represents unfamiliar information in terms of the various elements, the categories of information, the interrelationships between elements, flow processes and interactive / matrix effects. This tendency and skill may indicate the way in which JUAN DEMO structures complex information in everyday life by compiling lists, diarising and visually representing ideas and plans.

JUAN DEMO ordered the elements dealt with during the game in the following way:



Final comments

The LOI is a psychological assessment technique distributed by Cognadev. For more information on the LOI and other assessments offered by Cognadev, please visit the website:
http://www.cognadev.com

The LOI is a complex instrument that requires comprehensive training. Feedback on this report should always be done by an accredited LOI practitioner.

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