

COGNITIVE DIVERSITY AND ITS ROLE IN COLLECTIVE INTELLIGENCE.

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Cognitive diversity has become a focus of attention for many organisations in recent years. When managed correctly, *cognitive diversity* can lead to increased performance, more robust problem solving, the ability to innovate and adapt more effectively, and greater resilience. However, it is vital to note that *cognitive diversity* is not the same as *demographic diversity* or *neurodiversity*, which can be a common misconception for many organisations.



If your goal is to have people who behave and think in different ways, you should focus less on their gender, nationality, and ethnicity, and more on how they behave and think.

Dr Tomas Chamorro-Premuzic



Demographic diversity

Where a diverse range of demographics exists within a group. Most commonly, these are associated with gender, age, ethnicity and social background.



Neurodiversity

Where a diverse range of neurological differences exist within a group. Conditions such as autism, dyslexia and dyscalculia are recognised and respected like other human variations.



Cognitive diversity

Where a diverse range of cognitive styles exists within a group. A cognitive style is defined as 'a person's mode of perceiving, thinking, remembering and problem-solving.'

There is often a misconception that *demographically diverse* and *neurologically diverse* teams will automatically have a high degree of *cognitive diversity*. Although there is a small overlap, the correlation with cognitive diversity is largely overestimated.

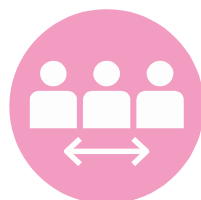
In practice, this means that a team comprised of people of varying age, gender, ethnicity and social background may not necessarily display high

levels of cognitive diversity. Conversely, a group of individuals with similar demographic profiles may well display high levels of cognitive diversity if there is a wide enough variety of *cognitive styles* present within the group.

In the same way that *demographic* and *neurological* diversity can help organisations to harness wider skillsets, perspectives

and better ways of working, *cognitive diversity* brings its own unique benefits, but only when nurtured and managed well.

Currently, cognitive diversity is generally misunderstood and difficult to measure. Our research aims to address this, so that organisations can add value by achieving and maintaining cognitive diversity in a *structured, measurable way*.



Demographically diverse group

Does not 'automatically' ensure cognitive diversity.



Neurologically diverse group

Does not 'automatically' ensure cognitive diversity.



Cognitively diverse group

Requires a range of different cognitive styles.

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COGNITIVE STYLES: THE 7 SPECTRA

The individual unit of cognitive diversity is 'cognitive style'.

The distribution of these styles within a chosen group is how we measure cognitive diversity.

An individual's ability to move between styles shows that person's 'cognitive versatility'.

The group's ability to apply different styles at different times is the group's cognitive versatility.








Cognitive diversity is dependent upon the individuals within a group displaying a wide range of *cognitive styles*. These styles are defined as differences in information-processing, perspectives, preferences, thinking, and how information is applied. Our research has identified 7 different *cognitive spectra*. Although individuals may tend to display certain dominant styles, they will also be able to draw upon other styles at various levels when required.

1	Structuring	The degree of structure and process in one's thinking
2	Evolving	The degree to which one's thinking is untested, radical and novel
3	Focusing	The degree of focus and commitment to a single concept or strand of thinking
4	Collaborating	The degree of impact interaction has on stimulating one's thinking
5	Directing	The degree of personal experience and independence present in one's thinking
6	Inquiring	The degree to which one rebuilds their thinking from scratch and free of assumption
7	Synthesising	The degree of complexity and interconnectedness of concepts in one's thinking

THE 5 CHARACTERS

In addition, our research has identified the most common cognitive style constellations among individuals, which led us to the discovery of the 5 archetypes, called *Characters*.

				
Innovator	Pragmatist	Connector	Traditionalist	Supporter
Innovators seek to challenge, drive change, connect to the bigger picture and lead with their own ideas, typically in a fluid, intuitive and often freewheeling manner	Pragmatists build structure and order in their approach and complete one thing at a time, valuing simplicity and avoiding overcomplication, yet may treat situations as distinct and unique	Connectors build networks, both with other people and information around them, exposing themselves to as much knowledge and as many perspectives as they can in order to build the 'big picture'	Traditionalists seek to maintain consistency and predictability in their approach, reapplying learnings and principles picked up from prior experiences to secure positive results and security in how tasks are completed	Supporters tend to be considered in their approach, adopting and elaborating on others' ideas while looking to keep focused on the greater good and avoiding unnecessary disruption and challenge

MOVING FROM COGNITIVE DIVERSITY TO COLLECTIVE INTELLIGENCE



In high trust organisations, a trust 'dividend' enables things to happen up to 60% faster and with significantly less cost.

The ability to establish, grow, extend and restore trust with all stakeholders is the key leadership competency of the new global economy.

'The Speed of Trust'
Stephen MR Covey

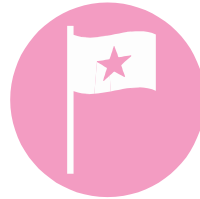


Creating *cognitive diversity* does not immediately lead to *collective intelligence*. Simply assembling a cognitively diverse team is not enough – the diversity of thinking needs to be nurtured, managed and utilised well, otherwise it will deplete over time. Gradually, dominant styles take over, leading to 'groupthink'. To maintain diversity, organisations need to create *environments* that provide psychological safety, and *cultures* that champion different thinking styles.



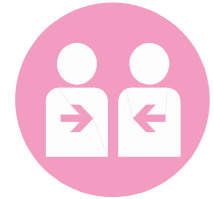
Recruitment/Selection

Organisations incorporate more techniques and processes to intentionally create more cognitively diverse teams – as opposed to assuming that demographic diversity will deliver diversity of thinking.



Culture

There needs to be an openness, understanding and appreciation of different cognitive styles. Cognitive diversity may lead to teams 'failing harder' (which is ultimately a benefit), but robust conflict management needs to be in place to manage this.



Management

Managers need to acquire the skills and knowledge to leverage the benefits of cognitive diversity, and to manage relationships between colleagues who have differing cognitive styles.

For cognitive diversity to thrive, the organisational culture needs to be geared around trust, and the assumption that all voices will be heard and all opinions matter equally. In practice, this can be a challenge.

Social sensitivity allows different styles to co-exist in constructive and positive ways. With careful management, people can understand, empathise and value each other's ways of thinking. Creating an environment of psychological safety and trust enables all team members to

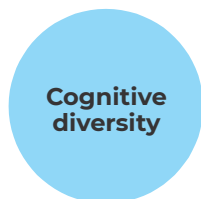
express their views openly and effectively, leading to better group performance.

The value for organisations is to enhance the ability to be creative, innovative, bring a wider range of perspectives (and potential solutions) to every challenge, utilise more robust and complex problem-solving techniques, challenge the status quo in more productive ways, celebrate diversity and inclusion, promote learning, and, ultimately, harness the benefits of *collective*

intelligence.

When *cognitive diversity* flourishes, employees learn from each other. This develops a higher degree of *collective intelligence*, propelling organisations to be at the forefront of change and innovation.

By unlocking the value within cognitive diversity, it's possible to bring cultural richness, energy and different kinds of wisdom to the workplace.



Cognitive diversity

Social sensitivity

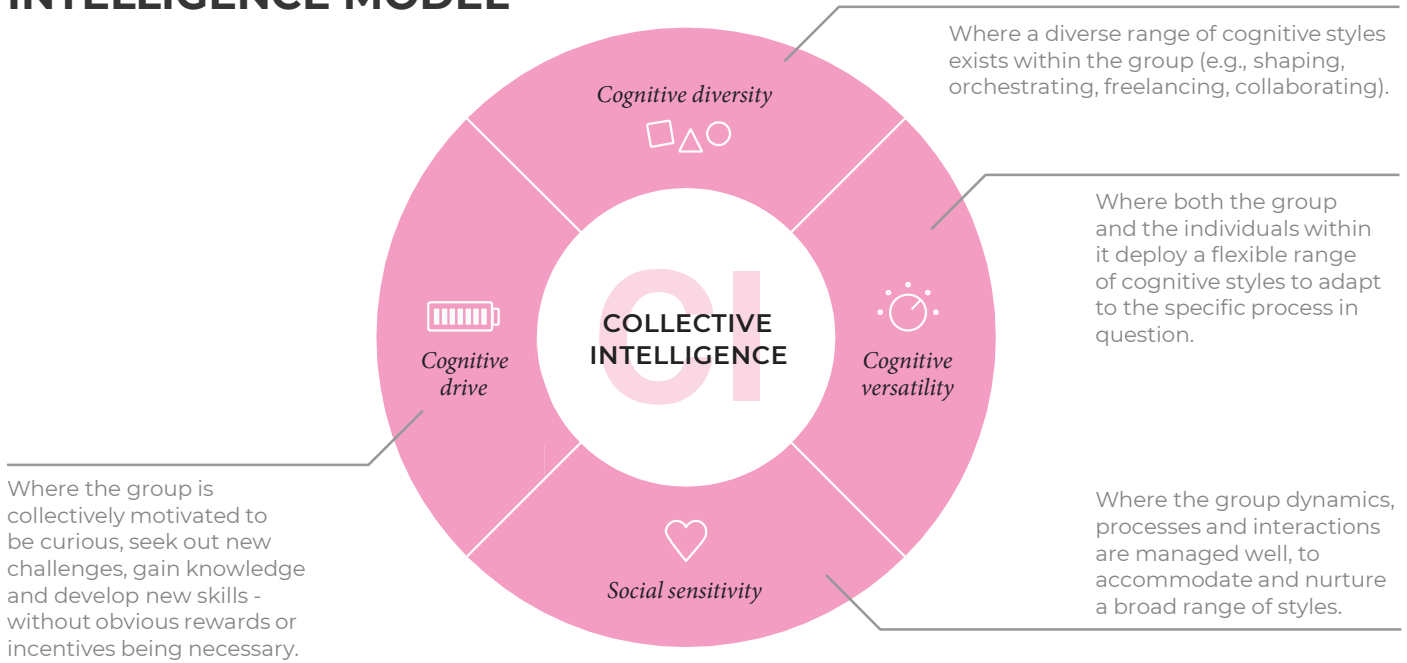
→ Unlocks potential through good management



Collective intelligence

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THE COLLECTIVE INTELLIGENCE MODEL



Collective intelligence encompasses a number of psychological factors, including cognitive diversity. Importantly, the benefits of cognitive diversity are enabled through collective intelligence; poorly managed, cognitive diversity will have little benefit, and may even be detrimental to group performance.

Collective intelligence is the psychological composition of a team, derived from group structure, attitude and mindset.

Interestingly, individual IQ is *not* a primary factor in collective intelligence. We surmise that a group consisting only of individuals with high (or low) IQs may have a negative effect on collective intelligence, whereas a broader distribution of IQs is less likely to result in these negative correlations.

In our model, *collective intelligence* is achieved when four key components are present:

1. Cognitive diversity
This is achieved when we see a diverse range of cognitive styles within the group (e.g., *structuring, collaborating, inquiring*).

2. Cognitive versatility

At an individual level, people are likely to have multiple cognitive styles which they deploy at different times. Collective *cognitive versatility* is achieved when the group allows and exercises a flexible range of cognitive styles, by adapting to the specific process at hand.

3. Cognitive drive

Intrinsic motivation is the drive for individuals to have spontaneous tendencies to be curious, exercise and hone their skills and knowledge, and seek out challenges, even in the absence of obvious rewards (eg. promotions, bonuses or salary increases). When the group displays this behaviour, we call it *cognitive drive*. It can be seen as the force that helps organisations to constantly evolve through an innate

tendency to *explore, question and experiment*.

4. Social sensitivity

Social sensitivity is the ability of the group to manage its individual relationships, enabling different cognitive styles to flourish, helping the group to apply different styles when necessary and facilitating spontaneous and productive curiosity. Poorly managed group dynamics and processes can lead to lower performance. Well managed group dynamics create a sense of group resilience – where individuals are ‘carried’ in an altruistic way (when required) for the benefit of the organisation as a whole. *Social sensitivity* is the ‘oil that lubricates the gears’, unlocking the performance potential that lies within *cognitive diversity*.

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