

## Science and Myth of Noncognitive Assessment

### Act I: Scene I



*What's in a name? That which we call a rose  
By any other word would smell as sweet*

*Romeo and Juliet, Act II, Scene ii*

Is finding the consensual name for noncognitive skills (which I take to mean anything not assessed by traditional cognitive skills), worth the frequent air time it is given in media articles, blog posts, tweets, even published academic papers?

At the risk of being labelled a wanton hypocrite: I think not. But this is a cyclical event in my business-academic life, almost as consistent across the past two decades as the passing of time; the four seasons year after year. And in the interests of advancing the field, I really do hope it can stop.

Let me back up just a little and lay out the issue. Virtually every 2-3 months a noted thought leader in his or her domain will question the existing label for these skills. In the workforce, soft skills currently leads the pack; in economic policy models noncognitive has often – but not always -- won out; while in education, social and emotional learning (SEL) skills appears the soup de jour. And in offering up a new label, I believe we may be inadvertently causing obfuscation, shining the spotlight away from key issues, such as how important it is to focus on the sum-total of these attributes, how they can be measured, and how they can be meaningfully enhanced.

Indeed, coming up with a clear term has – and as far as I can see – will always be a major distraction. The reason? No one term will do it for all the key stakeholders. SEL is a great term for educators but appears to have gained little to no traction in the workforce today. Clearly, like soft skills, it appears warm and fluffy. I hear one of my work colleagues muttering under their breath: “What do you mean I need to improve my social and emotional skills, I am the most popular employee at my company”? If you think I exaggerate how many different labels are out there for something as tangible as any rose, here is a short list I compiled off the top of my head, in 15 minutes. I am sure I could ferret out another 30 or so with the expenditure of time. Indeed, some experts replace skills with competencies, qualities, dispositions, traits, or characteristics so the list is at least manifold as long. No wait, some people believe in one trick ponies -- like resilience -- so we are literally talking of hundreds of labels ostensibly meaning the same thing.

But I digress, here goes my brainstorm (happy to site source references, many appear in several books I have co-edited):

Adaptive skills

Behavioral skills (which also requires cross-cutting skills to be mentioned)

Twenty-first (C21) skills

Character skills

Citizenship skills

Core skills

Durable human qualities

Emotional intelligence

Lifelong learning skills

Metacognitive skills

Mission skills

Non-academic skills

Noncognitive skills

Personal skills (sometimes leading to bifurcation: inter- and intra-personal skills, and/or people skills)

Power skills

Professional dispositions (the professional is often replaced with the profession, so for example, teacher dispositions)

Psychoeducational skills

Social and emotional learning (SEL) skills

Soft skills

Transversal skills

Worker styles

Workforce readiness skills

I will always have a slight preference for noncognitive skills, the only criticism I have heard that seems sound is that using this label assumes something like teamwork or creativity does not have a cognitive component (when clearly it does). But that misses a wider point: It assumes cognitive skills are the equivalent of a chemical element, without the influence of motivational and affective states. When I use noncognitive it is very operational: All skills not currently measured by traditional cognitive assessments. But I acknowledge we may never get at a unified, singularity, so I like to introduce any discussion of what I am measuring with a simple, introductory paragraph aligned with this post. My basic goal in doing this is pretty simple: Whatever you want to call "it", I think you get "it", let's not split hairs and move on.

Actually, the same problem plagues those working in the cognitive testing industry, though I seldom see frequent posts arguing over the need for a single, unifying term. For example, I/O psychologists will call it the g-factor (especially in selection applications); major individual tests

of psychoeducational function use the intelligence (or cognitive ability) label; and the military will call them vocational aptitudes. Major testing companies avoid attaching any meaning to the cognitive test: The "A" in SAT no longer stands for aptitude, achievement, or any number of interesting alternatives that might have been conjured up with the passage of time (e.g., access). In the end, what these cognitive tests measure is constructs: Things like speaking, reading, writing, mathematics, reasoning. The same is true of noncognitive assessments: Work ethic, teamwork, sociability, stress tolerance. A noncognitive assessment with a clearly articulated theory of action, reliability and validity evidence consistent with these claims will measure one or more of these attributes. Rest assured of one thing I firmly believe: If the pioneers of cognitive testing had spent this much time arguing over the label as it pertains to cognitive skills, there would have been far less progress in the field.

And thus, in the end, whatever your nomenclatural preference I can abide it. All are synonyms for a non-monolithic set of core behavioral skills that can be enhanced. And having them at some critical level likely confers lifelong advantages to the individual regardless of race, gender, or class.

Act I, Scene ii follows