



**Self-regulation
Uses and meanings**

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Why uses and meanings?

A few years ago, my nephew's report card began including a grade in "self-regulation" — without clearly explaining how he might improve

Said my nephew, shrugging: **"what can I do?"**

My own intuition, speaking as a non-parent (albeit one with domain-relevant knowledge), was that clarifying the meaning of this term would make it easier for us to help him

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We launched the Canadian Self-Regulation Initiative (www.self-regulation.ca) at around the same time

I noticed then that what teachers understood of our discussions often differed from what my team's (Stuart Shanker's) researchers and clinicians meant

This in turn suggested why I was so unsuccessful in on-boarding partners for the large multi-sited studies we needed to generalize our clinical research with children with autism, to fulfill a request from George Abbott (then BC's Minister of Education)

So the first step was clarity





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This clarity then had an additional benefit,
but for the scientists studying self-regulation:

**"...in psychology there are experimental
methods and conceptual confusion....
The existence of the experimental method
makes us think we have the means of
solving the problems that trouble us;
though problem and method pass one
another by."**

Ludwig Wittgenstein (1953/2009),
Philosophy of Psychology—A Fragment, §371



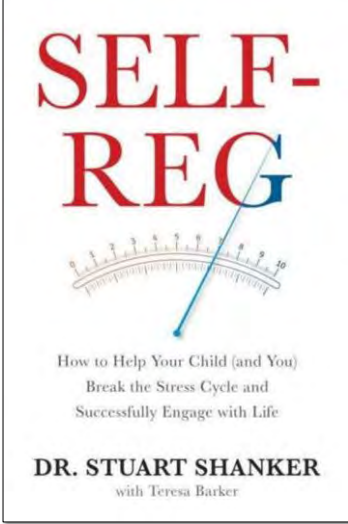
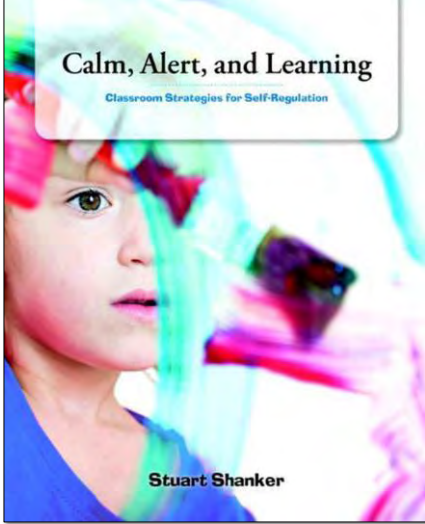
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My primary goal has therefore been three-fold:

1. Help kids (especially Gregory)
2. Help teachers to understand the assumptions
and perspectives informing new work on self-
regulation (so kids benefit, even after fashions change)
3. Help scientists to recognize that the different
approaches reported in the scientific literature
aren't in fundamental conflict with each other
(including our own non-behaviouristic, physiologically-
informed, contextual, child-centred approach)

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Related readings



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But my intent here is not to sell books, or the new certification (in which I'm not involved)

Rather, my hope is to show you why the basic message is worth your consideration

We confuse cause and consequence, and then act poorly as a result: **"there is no such thing as a bad, lazy, or stupid kid"**

I'd also like to take that message apart, so we can understand more clearly what to do to help



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Two pre-conference downloads

- › The first download is a peer-reviewed article published in *Child Development* in 2015
- › The second is a pamphlet published by the Ministry of Education in Ontario that attempts to “knowledge mobilize” our article’s findings
- › My goal—in this talk—is to guide you through some of the work behind these two documents, and then extend them with new material from a sequel presently in preparation



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Lack of clarity in education?

“Self-regulation is a term used widely by educators; however, there is very little agreement about what it actually means. What do educators need to understand about self-regulation, and how can they support self-regulation in students?”

Tranter & Kerr, 2016, p. 1
(Pre-conference download #2)



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Lack of clarity in science?

The definitions provided in scientific discussions are also themselves vague and abstract

- > **"management of the self, by the self"**
- > **"control over the self, by the self"**
- > **"regulation of the self, by the self"**

It even seems that different authors mean very different things by related terms (e.g., "grit")

And there is very little precision regarding how the science should connect with how we can help



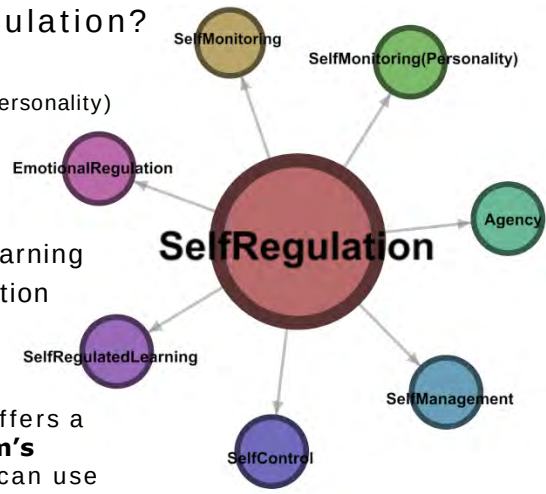
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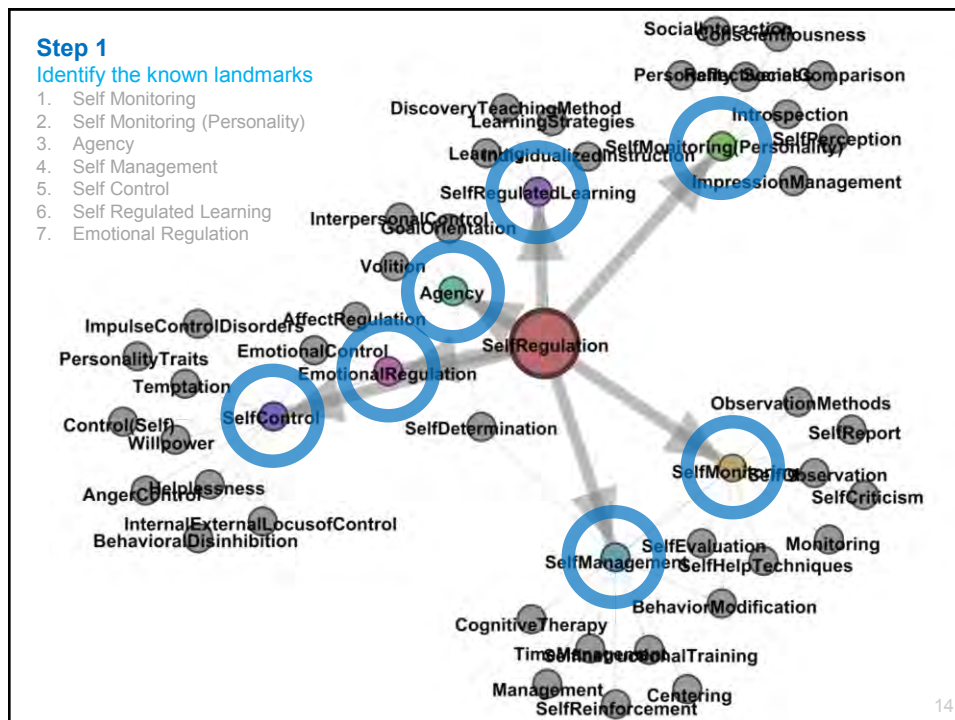
Defining terms more precisely using the APA's system of controlled vocabulary

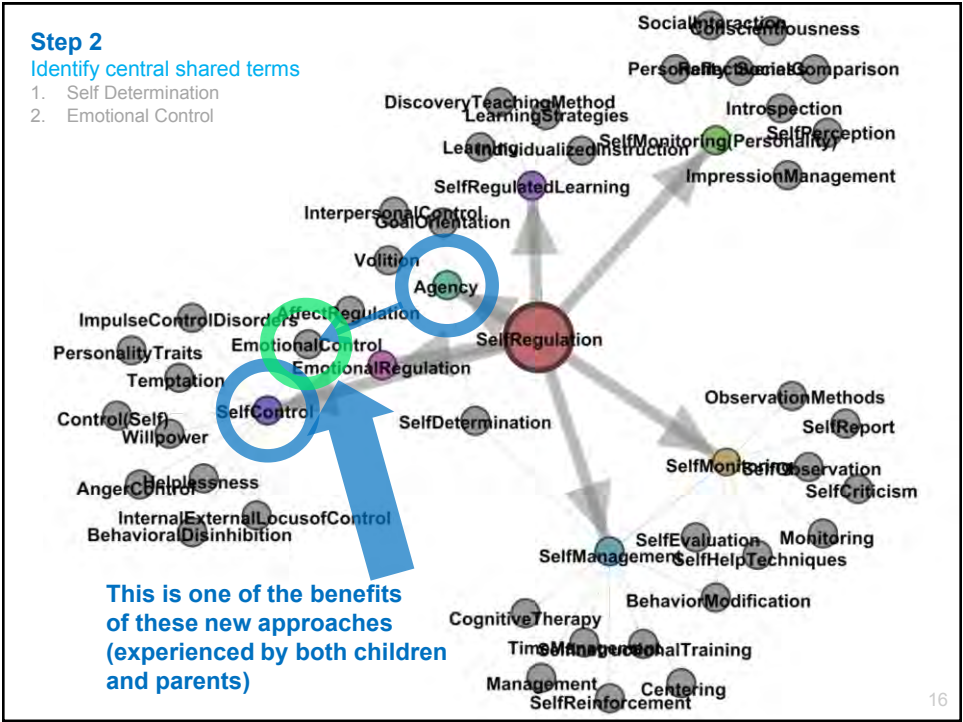
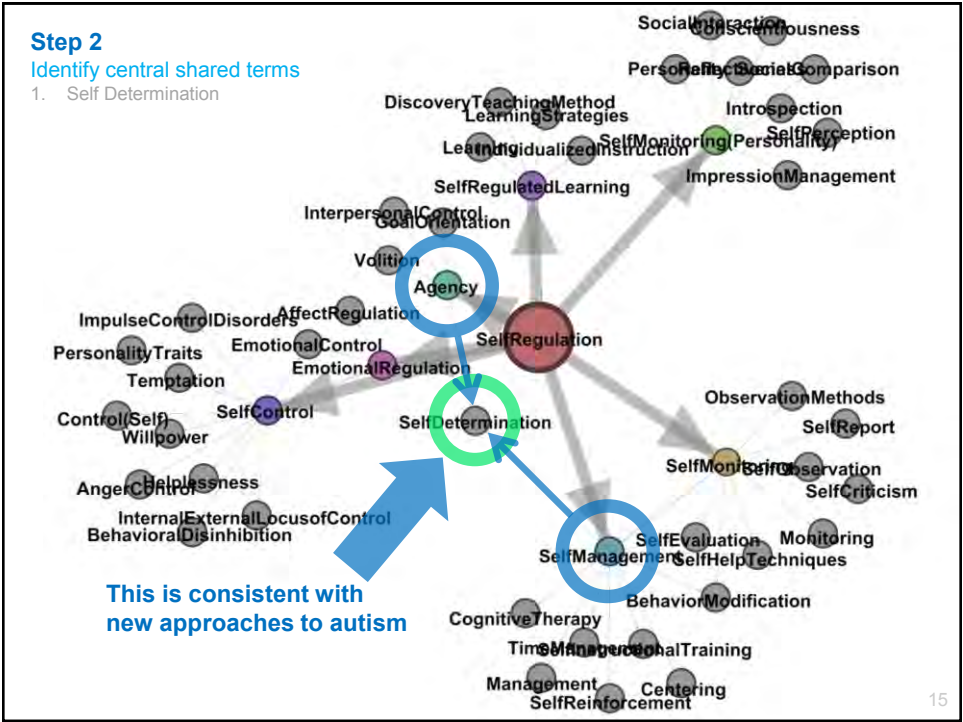
What is self-regulation?

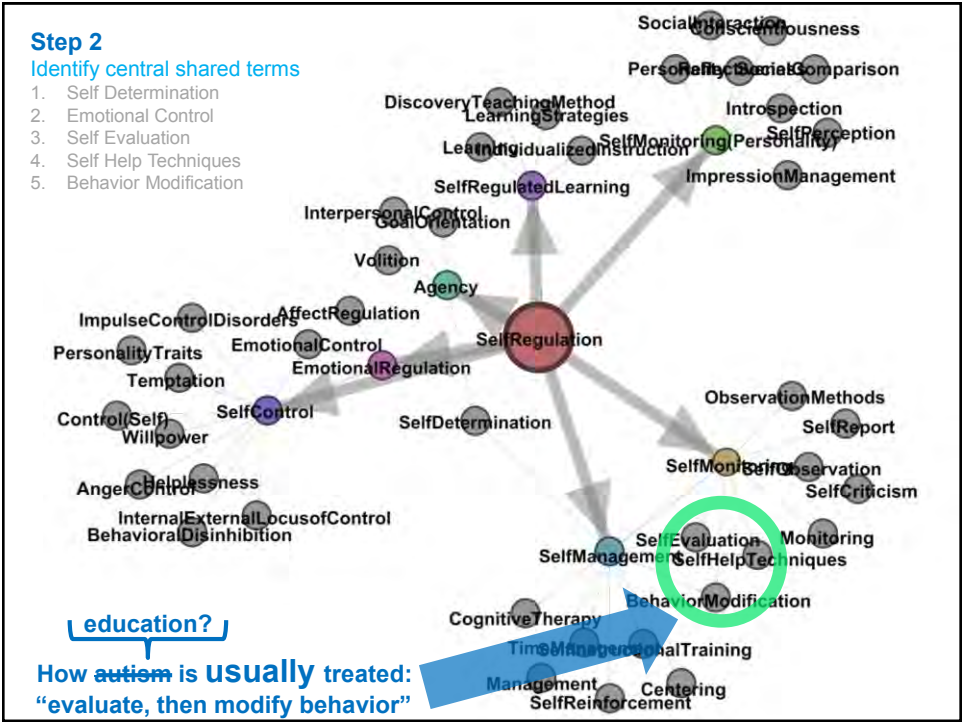
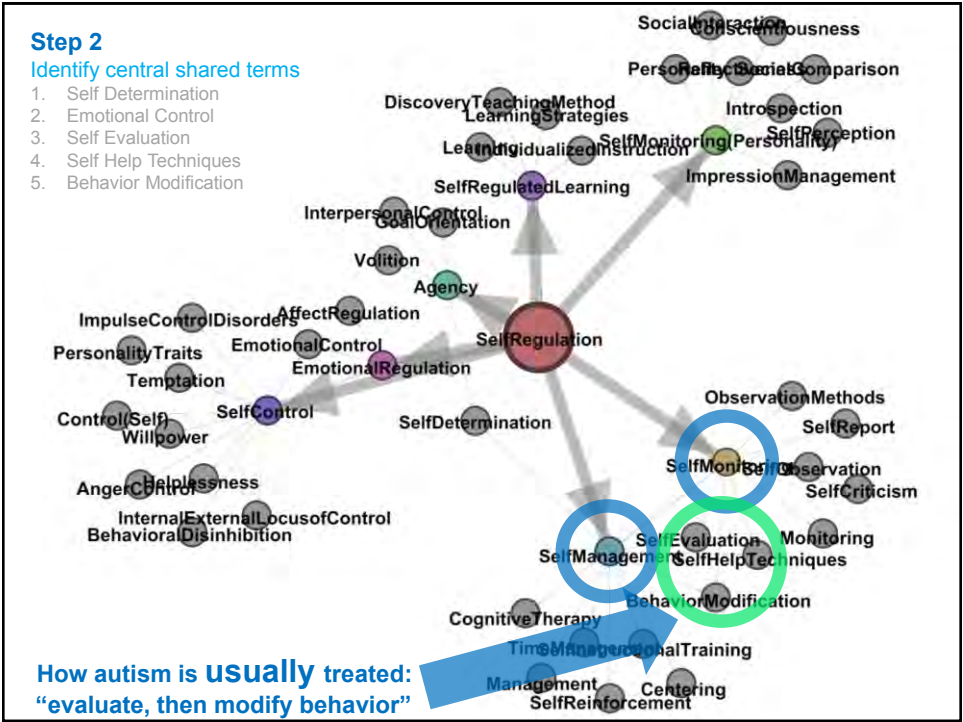
1. Self Monitoring
2. Self Monitoring (Personality)
3. Agency
4. Self Management
5. Self Control
6. Self Regulated Learning
7. Emotional Regulation

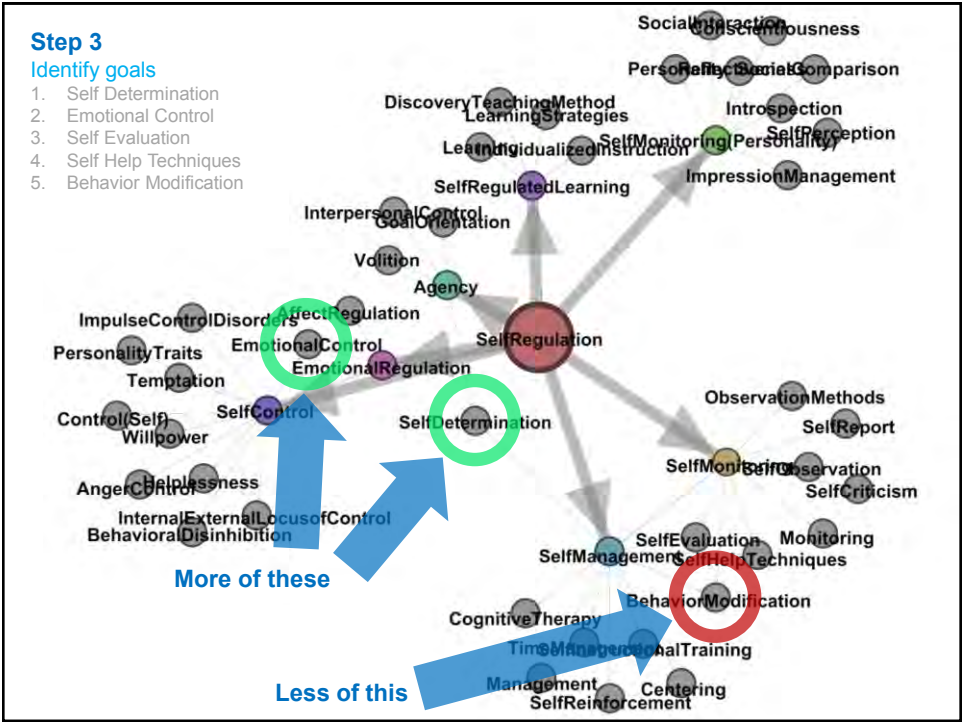


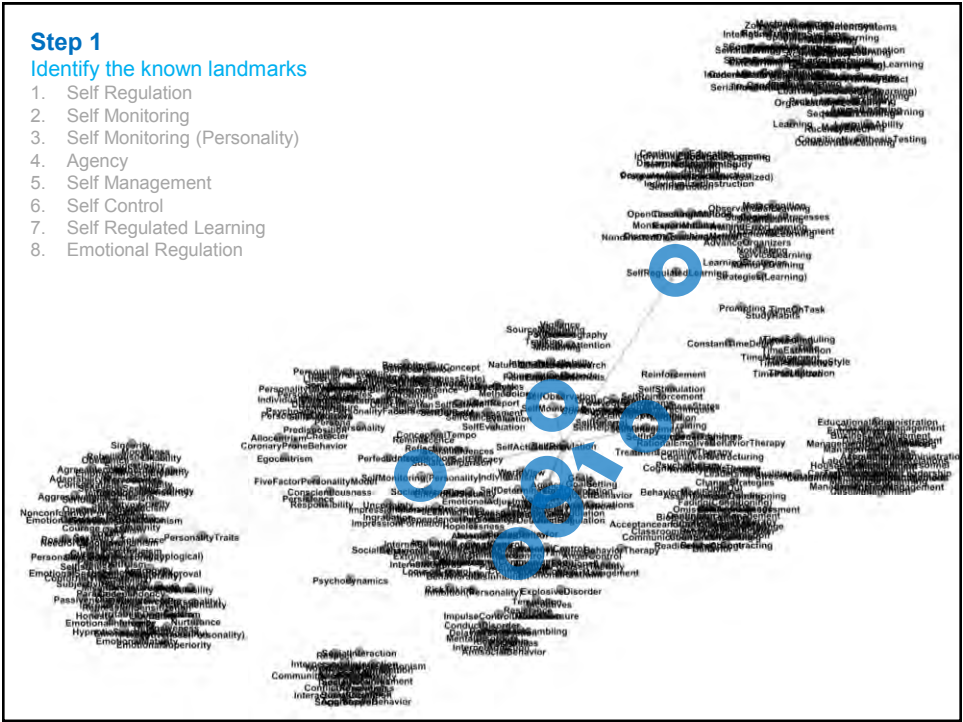
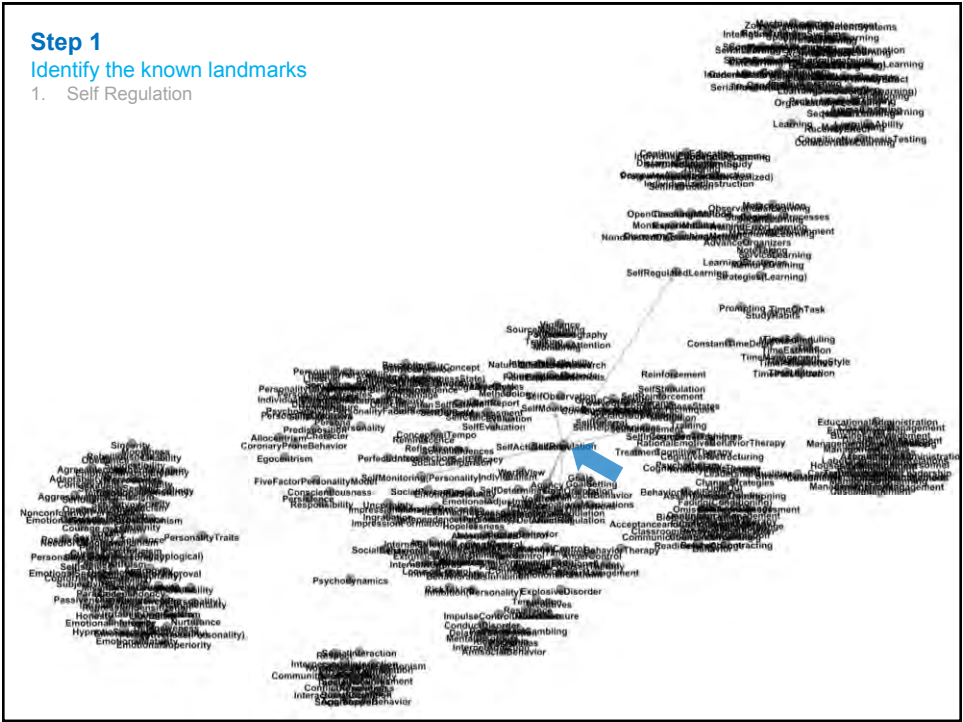
Mapping these relations offers a new way to **parse the term's** meaning in ways that we can use

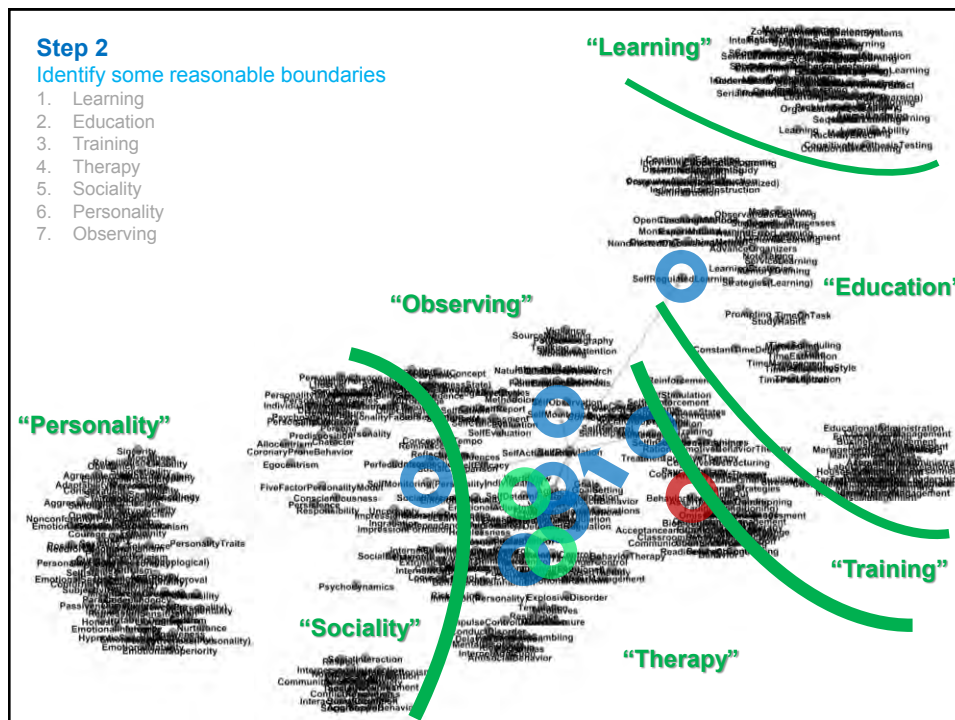


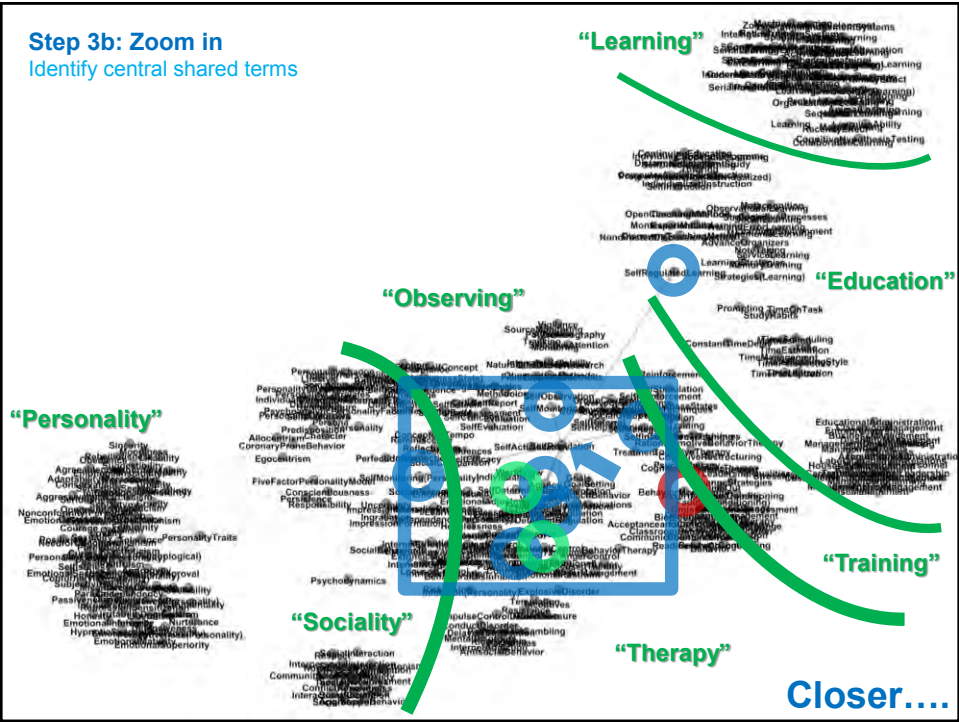
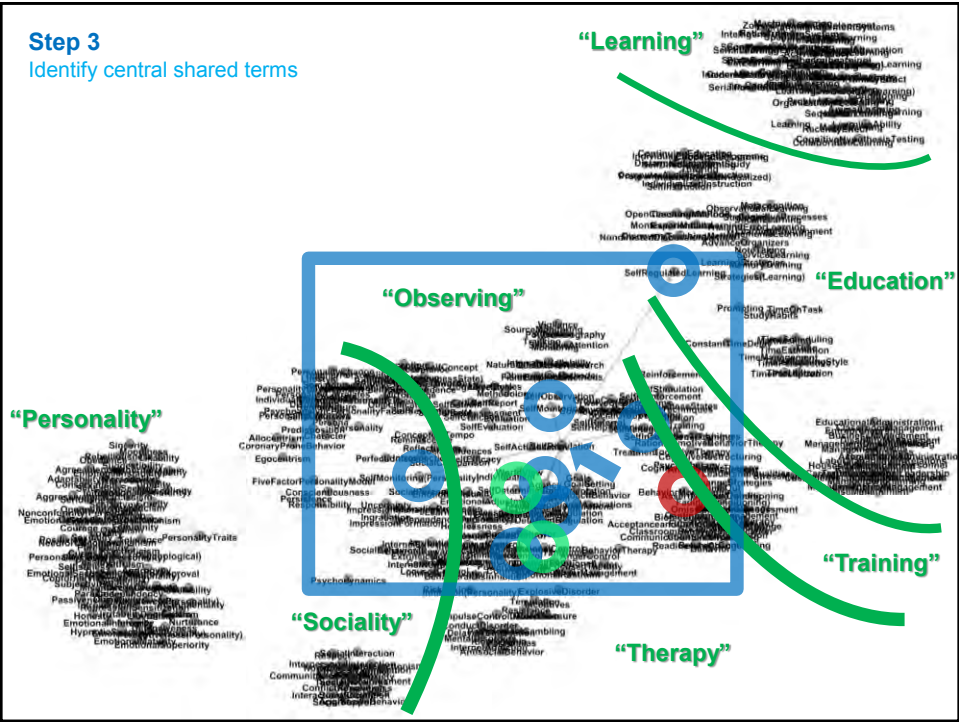


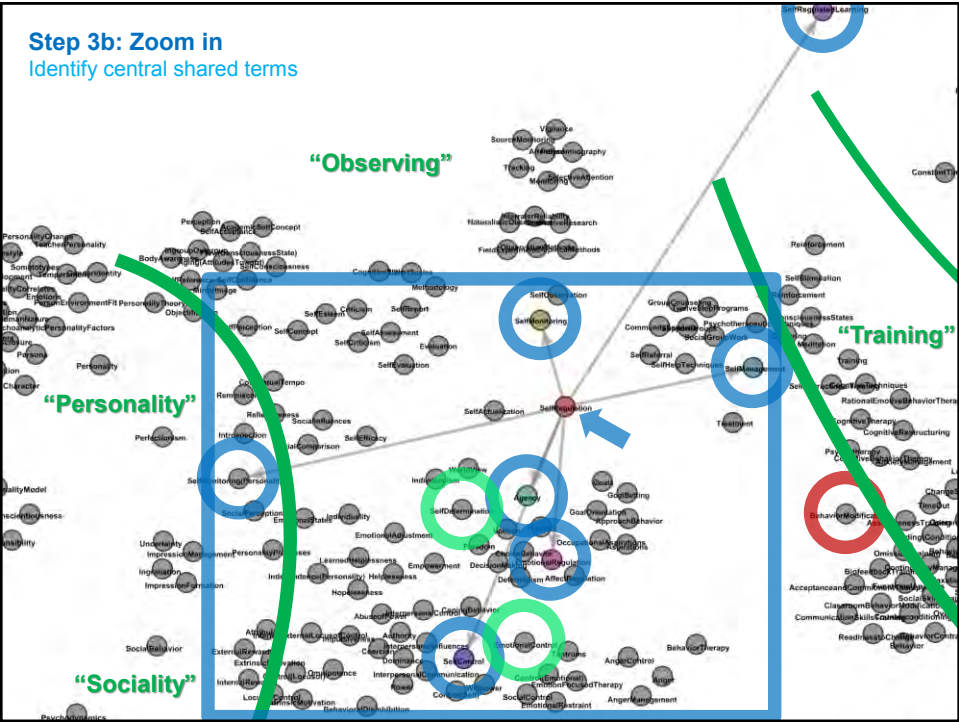
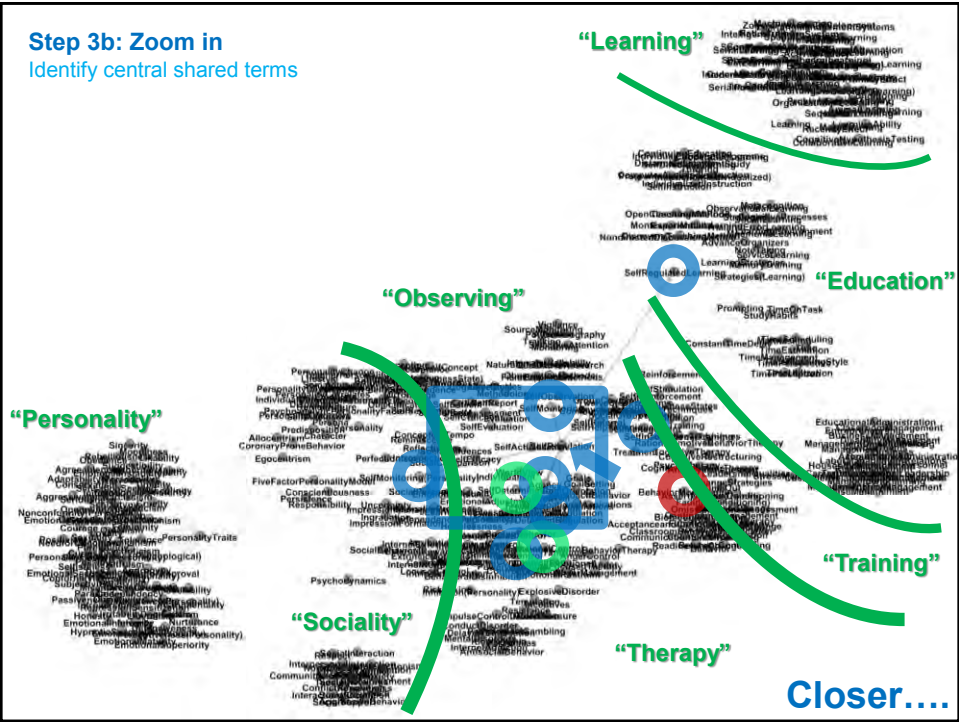


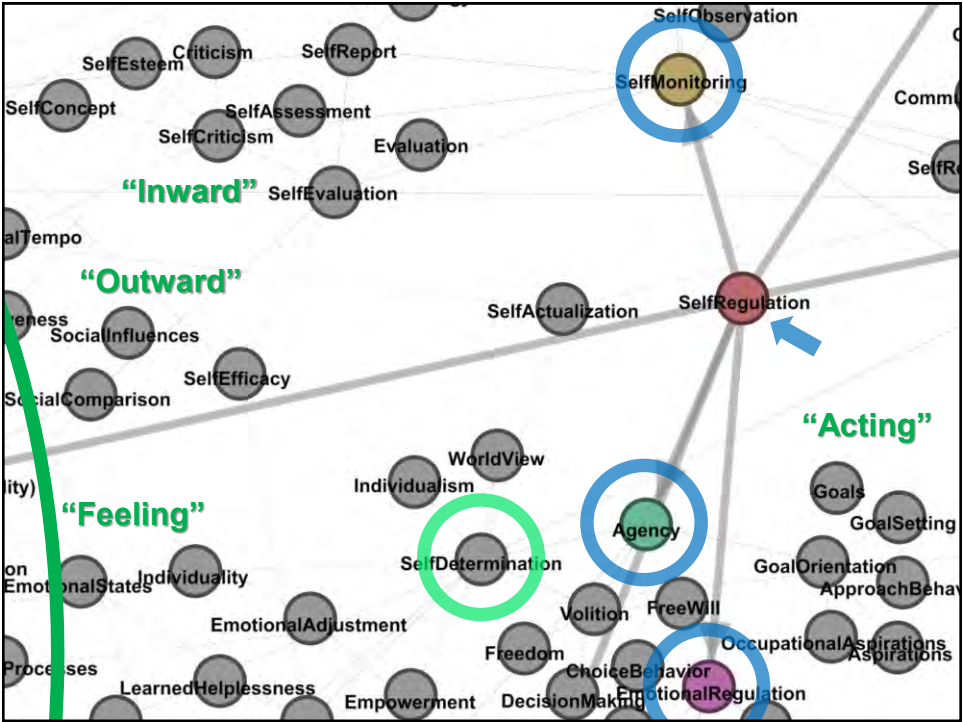
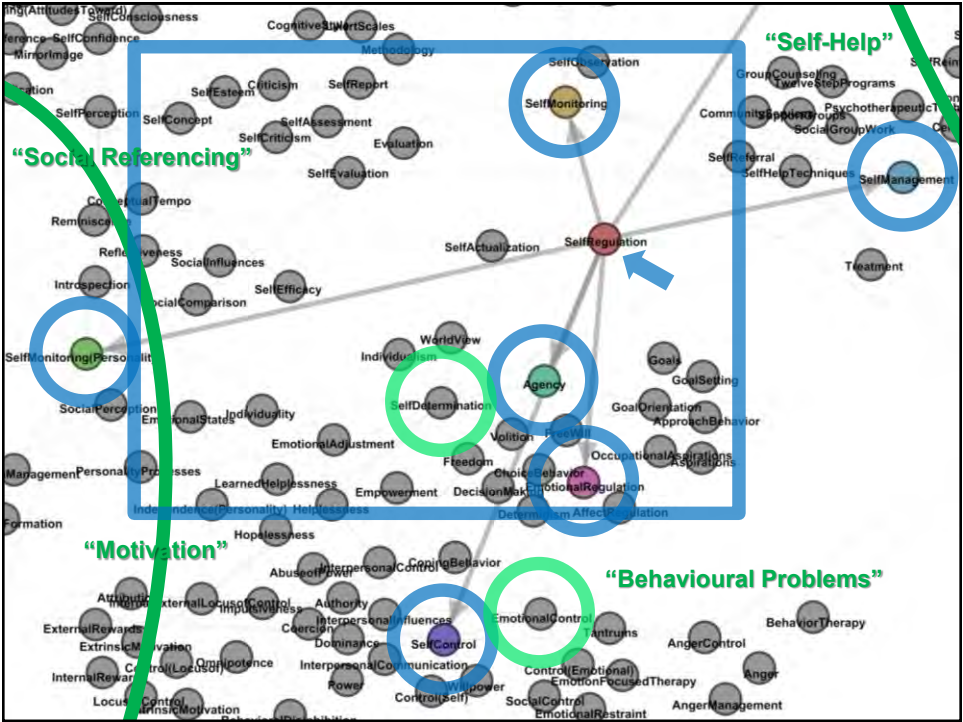


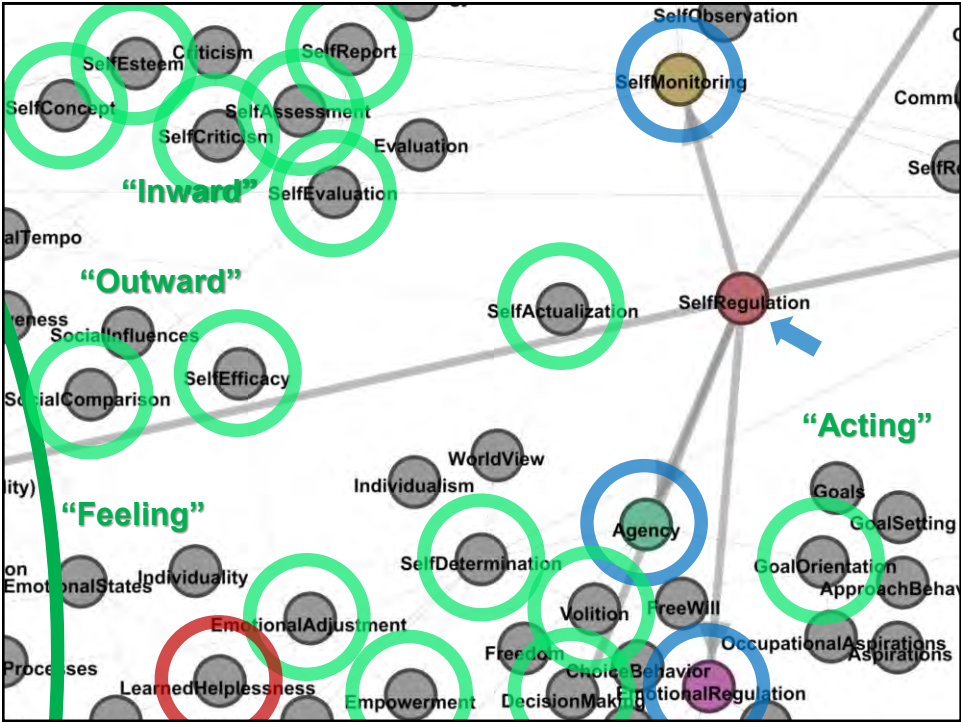














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These meanings define goals

We want children to have more and better... to...

- Self Actualization: **achieve their highest aspirations**
- Decision Making & Volition: **think clearly & well, then act**
- Goal Orientation: **pursue valuable, achievable targets**
- Self Determination: **set, revise, and achieve their own goals**
- Self Assessment: **notice when things aren't going to plan**
- Emotional Adjustment & Empowerment: **be resilient, then give'r**
- Self Efficacy: **believe in themselves and their abilities**
- Social Comparison & Self Eval: **think clearly about positioning**
- Self Criticism & Self Report: **identify weaknesses and seek help**
- Self Concept & Self Esteem: **accept help constructively**

And we want children to have less... to...

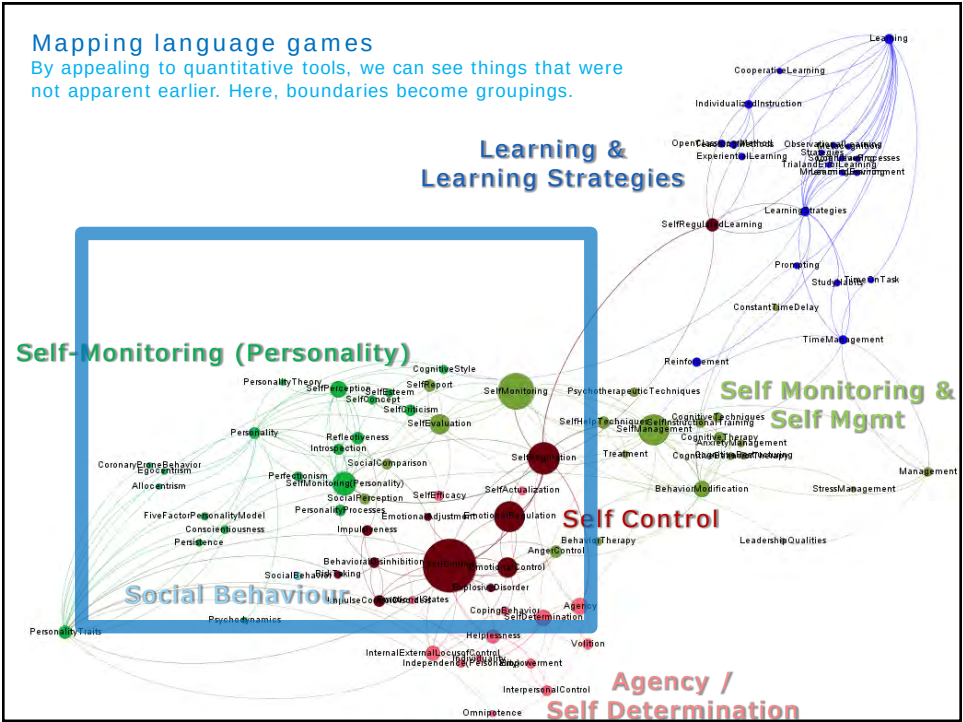
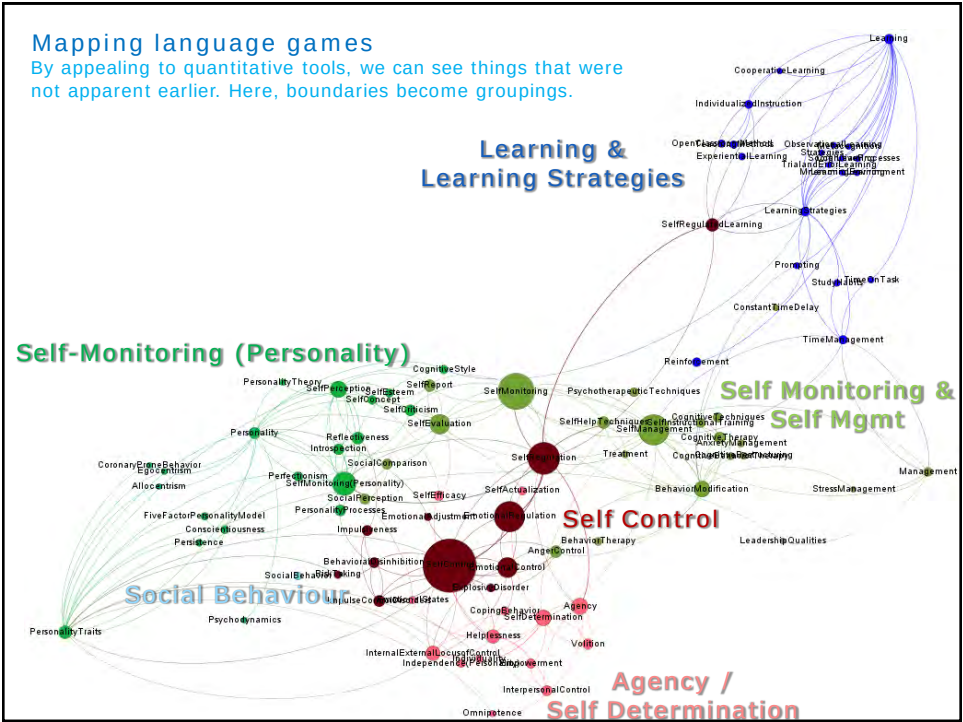
- Learned Helplessness: **not try, because "it's hopeless"**

The influence of each meaning can also be determined from its connectedness

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Mapping language games

By appealing to quantitative tools, we can see things that were not apparent earlier. Here, boundaries become groupings.



From this, we see some surprising things

Most notably...
the primary meaning
of “self-regulation” is
“self-control”

The network diagram illustrates the relationships between various psychological concepts. The nodes are represented by circles of different sizes and colors (green, red, blue). The connections are lines of varying thickness. A large blue arrow points from the text 'self-control' towards a cluster of nodes including 'Self-Regulation', 'Emotional Regulation', 'Behavioral Inhibition', and 'Self-Control'.

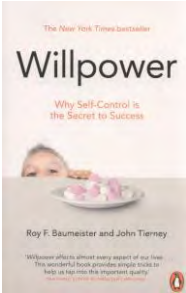


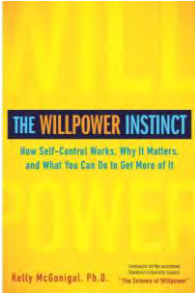
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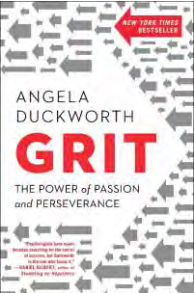
Discourses of self-control

This primacy is no doubt responsible for the success of related “popular science”

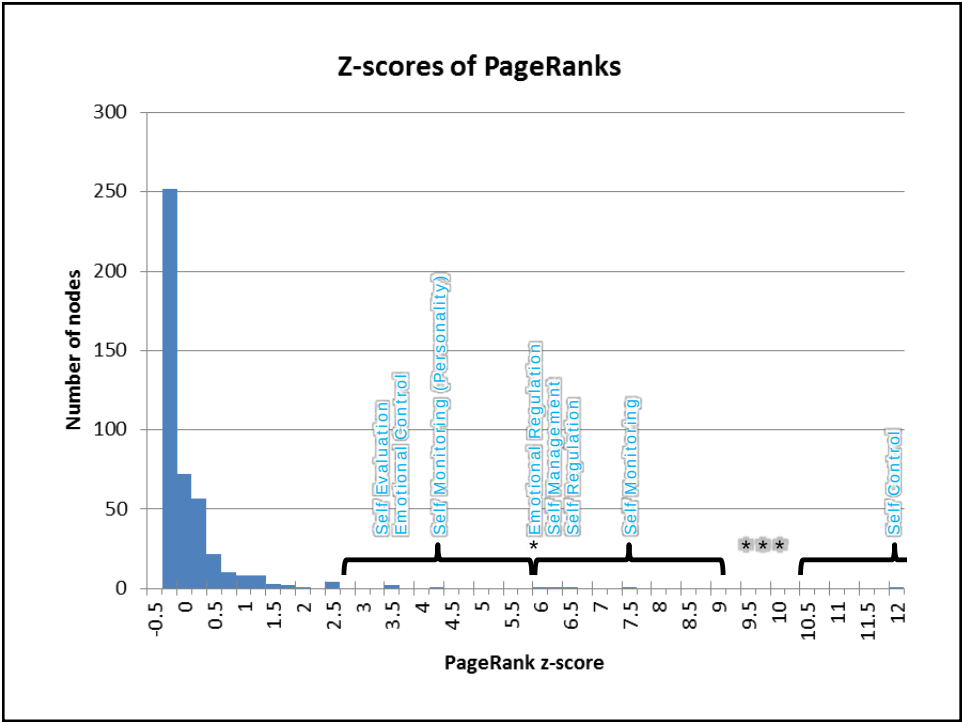








But this focus also ignores many other highly-significant alternative meanings





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How scientists use self-regulation

In journal articles published in English, scientists who say “self-regulation” often also talk about...

- Motivation (396)
- Self Control (250)
- Self Efficacy (216)
- Academic Achievement (209)
- Childhood Development (202)
- Goals (191)
- Interventions (160)
- Emotional Regulation (159)
- Emotional States (156)

But how do all of these pubs relate to each other?

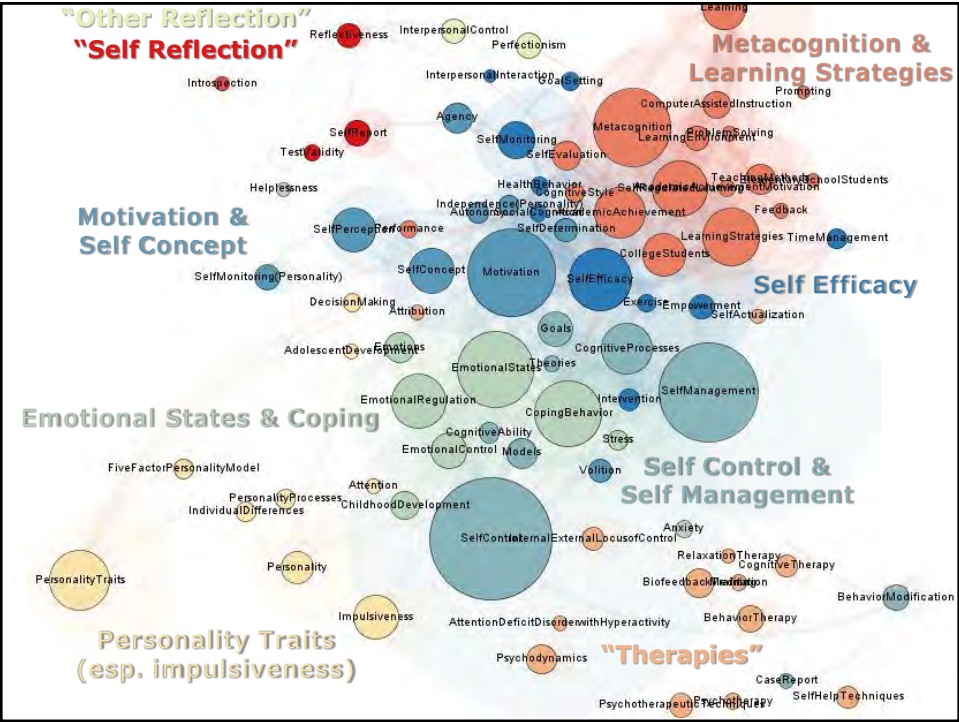
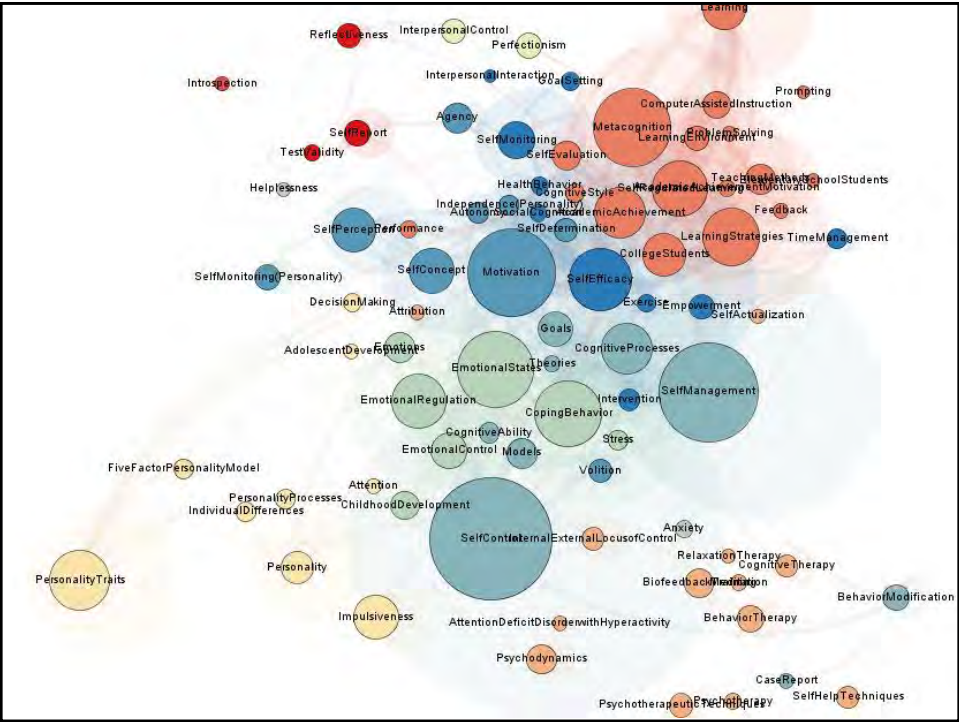


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Note also that several of these terms are not directly related to the meaning of self-regulation

- › Our map already includes: Self Control, Self Efficacy, Emotional Regulation, Emotional states
- › But it does not include: Motivation, Academic Achievement, Childhood Development, Goals, Interventions

Yet these are things that scientists care about (parents and teachers do too), so what do we see when we add them?





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The science of self-regulation

Six basic areas receive the most attention:

- › Self Control & Self Management
- › Motivation & Self Concept
- › Metacognition & Learning Strategies
- › Emotional States & Coping
- › Self Efficacy
- › Personality Traits (esp. impulsiveness)

For when these fail, scientists also look at

- › Therapies



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Self Control & Self Management

- › Cognitive processes
- › Goals
- › Models (method)
- › Theories (method)
- › Cognitive ability
- › Behaviour modification
- › Case report (method)

A continuum of Thinking & Reasoning vs.
Misbehaving, resulting in success or failure



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Motivation & Self Concept

- › Self Perception
- › Agency
- › Self Monitoring (Personality)
- › Volition
- › Self Determination
- › Autonomy
- › Independence (Personality)

How you see yourself, and how you respond to challenges in pursuing your vision



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Metacognition & Learning Strategies

- › Self Regulated Learning
- › Academic Achievement
- › College Students (population group)
- › Learning
- › Teaching Methods
- › Self Evaluation
- › Computer Assisted Instruction
- › Learning Environment
- › Cognitive Style
- › Problem Solving
- › Feedback
- › Performance
- › Secondary School Students (population group)

“Education”
(broadly conceived)



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Emotional States & Coping

- > Emotional Regulation
- > Emotional Control
- > Emotions
- > Childhood Development (population)
- > Stress
- > Anxiety
- > Helplessness

Affective development



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Self Efficacy

- > Self Monitoring
- > Empowerment
- > Social Cognition
- > Time Management
- > Goal Setting
- > Exercise
- > Health Behaviour
- > Interpersonal Interaction
- > Interventions (method)

**Not “believe in yourself” (as it is often portrayed)
but the choices you make given many alternatives**

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Personality Traits (esp. impulsiveness)

- › Personality
- › Individual differences
- › Personality processes
- › Decision making
- › Five Factor personality model
- › Attention
- › Adolescent development (population)

Individual differences related to higher cognitive development

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Therapies

- › Psychodynamics
- › Biofeedback Training
- › Behaviour Therapy
- › Cognitive Therapy
- › Internal-External Locus of Control
- › Psychotherapeutic Techniques
- › Self Help Techniques
- › Relaxation Therapy
- › Psychotherapy
- › Meditation
- › ADHD
- › Self Actualization

Not shown on the map:

- › Psychoanalytic Theory
- › Anger Control

“Helping”
(broadly conceived)



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How scientists study self-regulation

- › Thinking & Reasoning vs. Misbehaving
- › How you see yourself, and how you respond
- › The choices you make, given alternatives
- › Affective development
- › Cognitive development
- › Everything else related to “teaching”
- › Everything else related to “helping”



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How scientists study self-regulation

- › Thinking & Reasoning vs. Misbehaving
- › How you see yourself, and how you respond
- › The choices you make, given alternatives
- › Affective development
- › Cognitive development
- › Everything else related to “teaching”
- › Everything else related to “helping”

} “Executive Function”

Disconnects and potential conflicts

The way in which these concepts are studied is not identical with what the words mean

Psychological science is much more “behaviourist” and “cognitive” than outsiders expect it will be, and less focused on willpower

This is baggage that virtually every researcher will bring to a project, and—depending on their openness—they will be skeptical of alternatives

On collaborating with scientists

When we are trying to help kids, as educators and parents, we ought to focus on the areas that have been shown to matter most

But if an intuition about what might help isn't “behaviourist” or “cognitive,” there may be no evidence for it (one way or another)

Studies need to be carefully designed and implemented so we can be sure they actually help, and also that resources are well-used

Final thoughts

Our goal is to help kids

Science's goal is to understand

These motivations can come into conflict, such that each group seems—to the other—to miss the point sometimes

The issues are also complex and multi-faceted, but now we see this and so should be better able to work together (to help kids)



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Thank you

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