The future of development is complex

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Vallerand (last night, 2016)

Current evolution in positive psychology (PP) is for theories to become more complex - at least in the sense of describing processes using more factors, more contingencies, more mediators and more moderators.

Last night, for those of you who were able to attend, R Vallerand talked a little bit about the current evolution of theories in positive psychology. He said that they were becoming more comprehensive and more complex and expected that this would be a big part of the future.

Since what he said was actually in my planned introduction I would like to second his opinion!

History of science

- There is, actually, a well known trend across sciences in which progress is first made on “simple” problems and then expanded.

First of all, “simple” does not mean easy! Simple means that you can describe or quantify relationships between pairs of variables.

Warren Weaver (1974)

- Problems of simplicity
  - Two variable relationships with simple relationships
- Problems of disorganized complexity
  - Relationships with large numbers (maybe billions) of variables.
- Problems of organized complexity
  - The primary issue is one of the interrelationship of multiple factors.

Warren Weaver made this classification some time ago partly to explain why certain types of theory would emerge in order - and to argue for the development of better ways of thinking about the “problems of organized complexity”

His point was that problems of simplicity we know how to solve - we just need to pay attention to which variables matter for our question and learn how to describe the relationships that are predictable.

We sometimes know how to handle problems of disorganized complexity. Usually using statistics. For example, hospital admissions and traffic jams in large cities are highly predictable - even though the events depend on 1000s or millions of people making decisions or experiencing random events.

Positive psychology

- Problems of simplicity
  - e.g. Happiness = PERMA-V
  - e.g. Strengths lead to SWB
- Problems of disorganized complexity
  - e.g. Economic equality is associated with higher average happiness and well being.
- Problems of organized complexity
  - may not be any examples
  - potentially Broaden-and-build, etc…?

Nothing wrong with simple theories. They are easy to understand and broadly effective!

Broaden-and-build suggests that cognitive resources are built through a feedback loop. So it is a simple theory describing a potentially complex process.

One more distinction

- Sigmund Kvaloy Saetreng (1974) argued that there is a difference between complication and complexity.

Complexity is organic coherence achieved through diversity in structure, function and communication.

Complication is the result of trying to grasp complex systems through multi-factorial quantification.

Complexity is inherent in living systems and the natural world.

Complication is what happens when you try to treat a complex system using the methods for simple problems - you get lots of terms and relationships but do not capture the actual dynamic!

Complex theories

- Complication is bad - theories with many parts are difficult to work with, learn from, or even falsify.

- From this point of view, a complex theory
  - needs to be based in simple observables
  - needs to show how the phenomena of interest are created through interactions

Positive institution research

- If we use Weaver's description to make a prediction, then theories about positive institutions will be rare and hard to create using the methods that helped us with "simple" problems.

- The prediction is that theories to help us really transform institutions will be hard to build.

This is because institutions are complex!

Simple meets complex

- Simple changes do not have simple scalable effects on complex systems
  - e.g. try a gratitude intervention
    - a) 1 / day
    - b) 1 hr / day
    - c) 18 hrs / day
- Complex systems require understanding.

We do not have adequate theories for how to change complex systems

In fact, all around the world right now there are interdisciplinary research centres for studies in complexity. They are studying everything from how ants manage to have a social structure despite not very many neurones to how best to organize the economy.

But none of them, as far as I know, are working on making positive institutions for change!

Local school turns positive…

Here is an example of applying a simple theory to a complicated institution.

Now, the school my children attend has taken a somewhat positive turn. For example, they printed out tear-off compliment cards and placed them all over the school - making it easier to give compliments and maybe reminding people to do so.

It is not clear if the school will have incorporated enough of these changes to make a sustainable difference.That is, I don’t know how serious they really are or how much sustained effort they will put in.

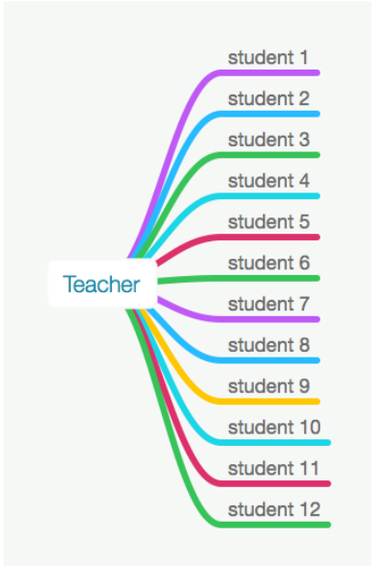
Other schools have seen fantastic progress. What is missing is an appreciation of which other factors matter.

Russian school turns complex…

Shchetenin’s school at Tekos, Russia.

This is an image of one of the best schools on the planet. It was constructed by students. Students teach each other. They also handle the daily maintenance, cooking, etc. And they pass university entrance exams generally by 15 yrs!

What is complex here?



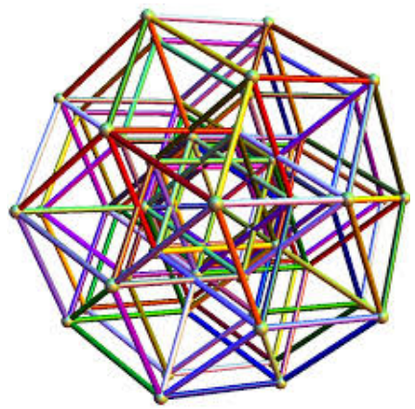


Image from Wikipedia (6 cube)

In traditional schools students are mostly prevented from interacting. Too many people interacting is seen as complication that prevents the important flow of information - teacher to student.

At TEKOS the social dynamic between students is unleashed. But they are able to do it is a very positive way.
They have a comprehensive values enculturation what precedes the academic work.

Missing: positive institution research

- positive institutions are held to be one of the pillars of positive psychology (e.g. Seligman & Csikzentmihalyi, 2000)
- parenting research is rare (as per Waters, last night!)
- positive institution research is typically “simple”

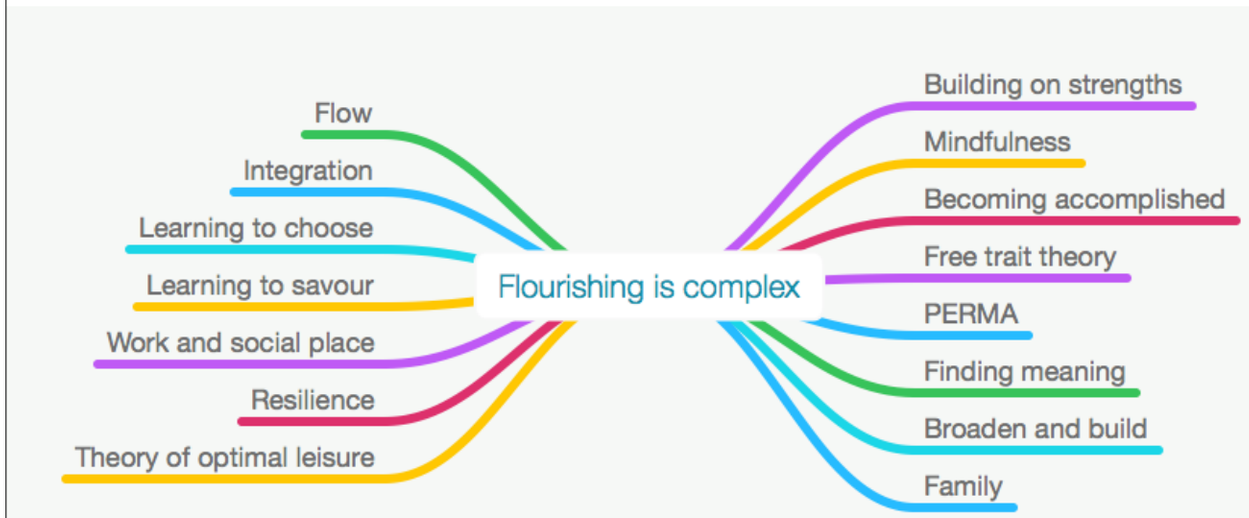
What I really want to point out is that there are no theories that I know of that would guide someone to successfully transform an institution like a school in such a way that it aligns with the complexities of development.

Missing: positive institution research

- positive institution research is typically “simple”
  - often applies “simple” interventions to as many people as you can get; or considers personal factors of resilience; or leadership.
- Theories about complex institutional dynamics are rare or at least hard to find.

If you remove the keywords for leadership, resiliance, and intervention there are rather few substantive articles on positive institutions and their theories.

Human flourishing



This is great news. However, it also means that we can expect that great theories of flourishing will be a little difficult to accomplish.

However, this may mean that you need to wait a little while before institutions to help you thrive will be developed.

Any questions?