

What does it mean for a person to change? Lessons from modern idiographic personality approaches

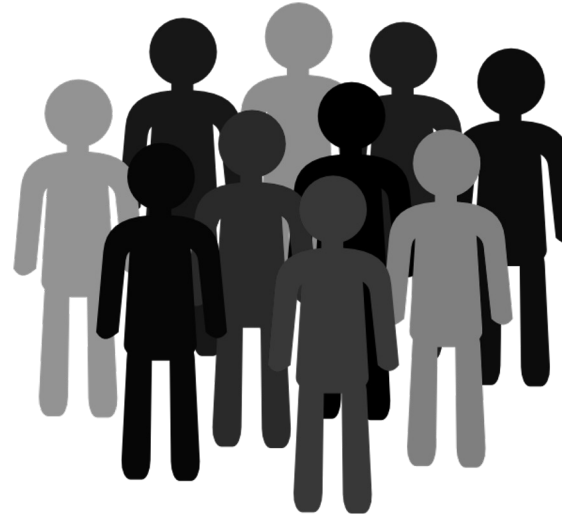
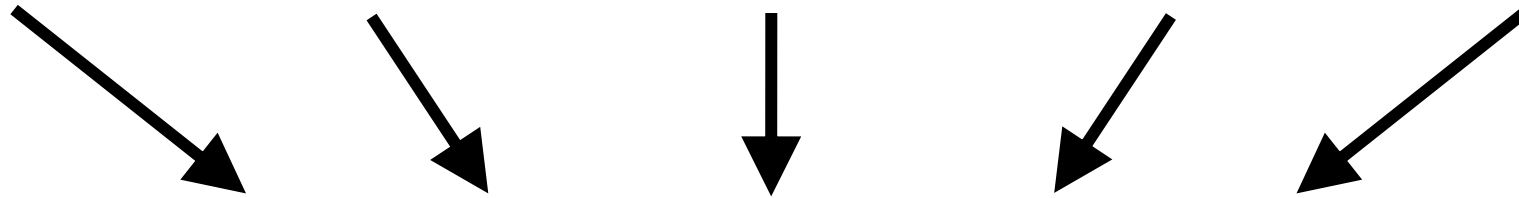
Emorie D. Beck, Ph.D

University of California, Davis


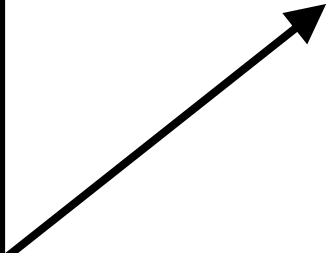
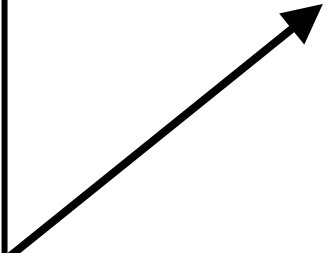
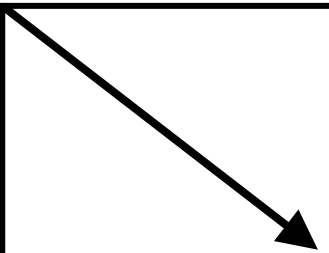






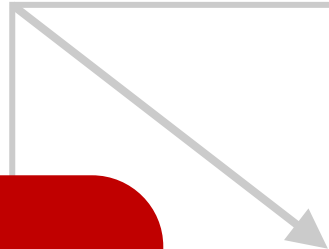

@EmorieBeck





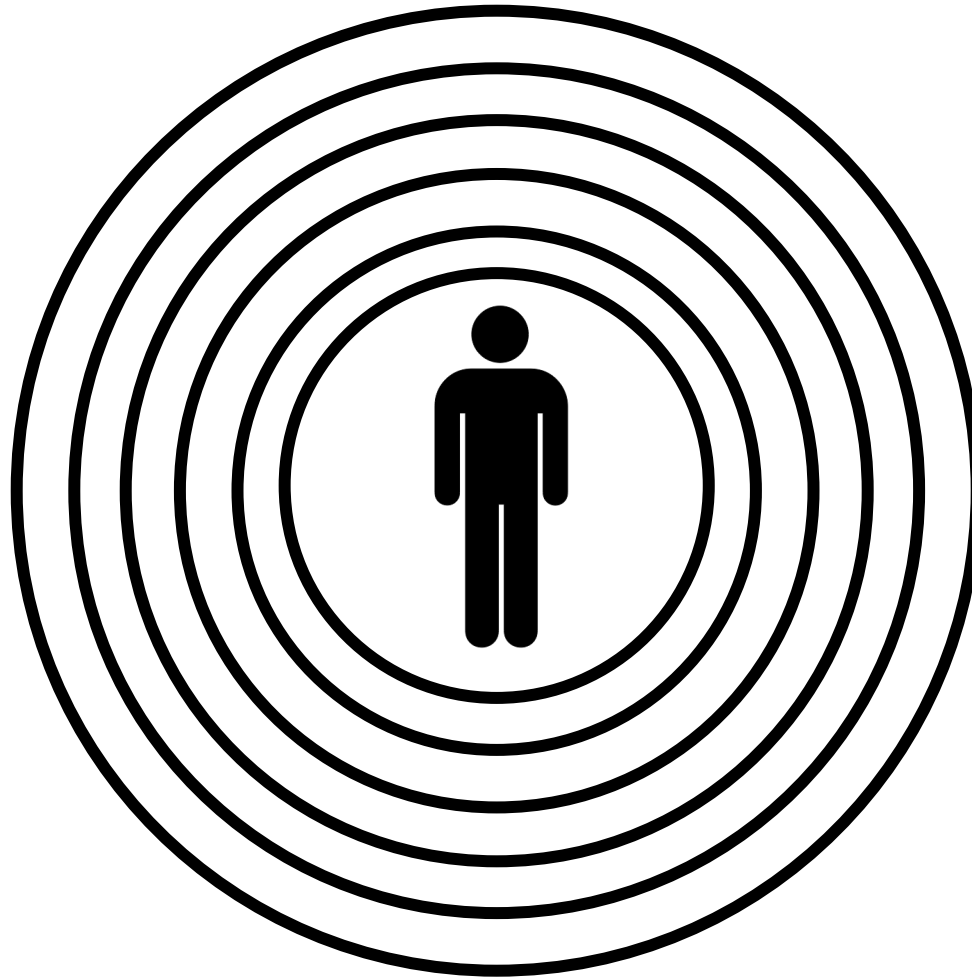
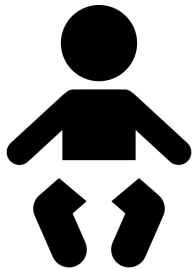
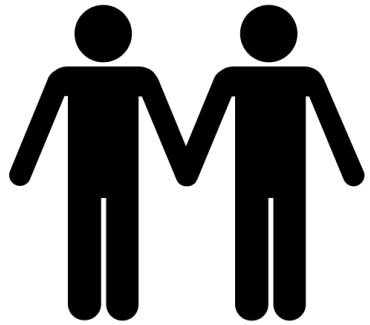
Nomothetic
Between-Person
Variable Centered

The Big 5		Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Direction						
Magnitude		--	.6 SD	1 SD	-.8 SD	.4 SD
Timing		--	Lifespan	Lifespan	10-35	10-20

The Big 5	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Direction					
Magnitude				.5 SD	.4 SD
Timing	--	Lifespan	Lifespan	10-35	10-20

Why?

Persons in Context

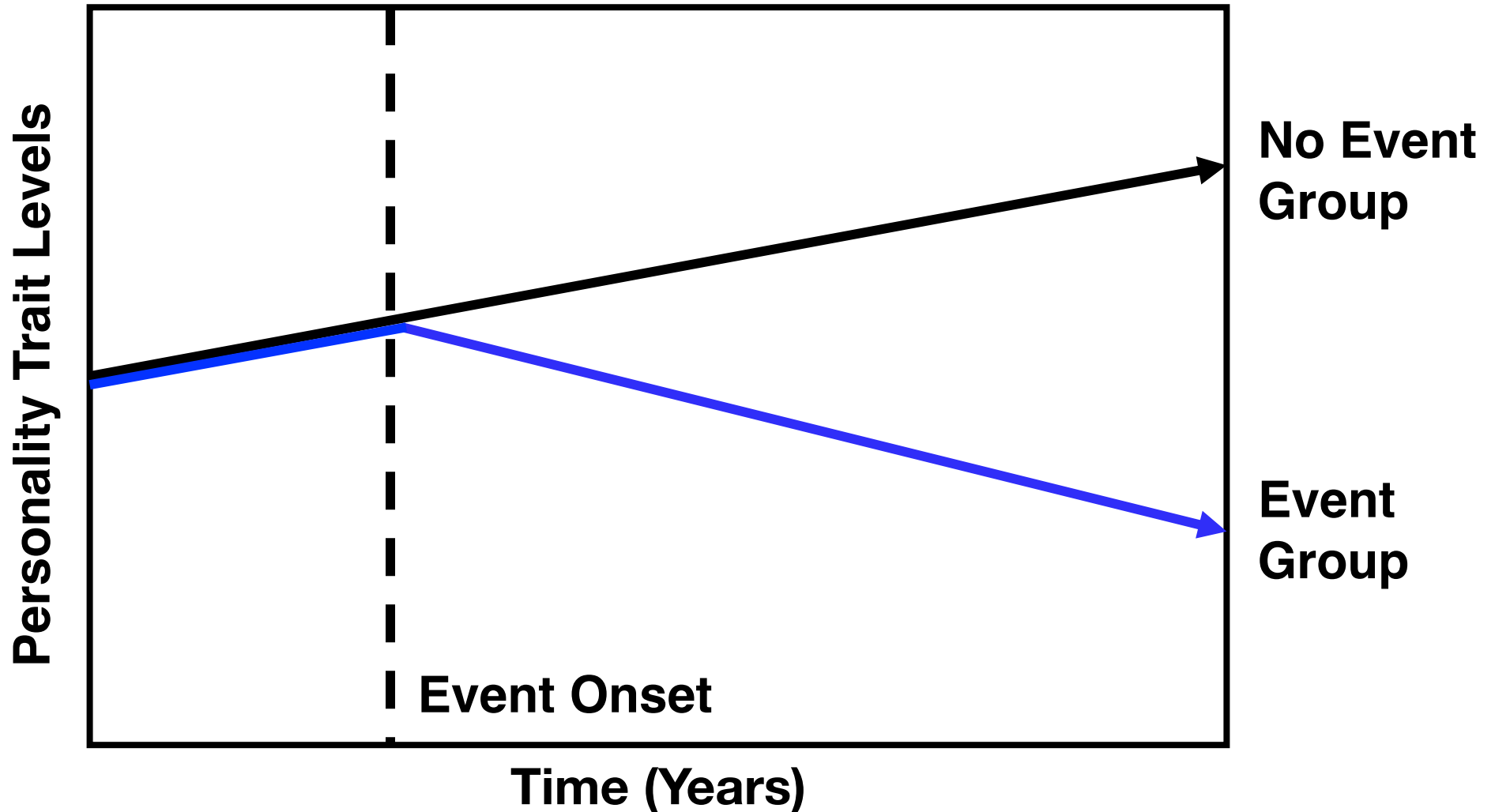


Persons in Context

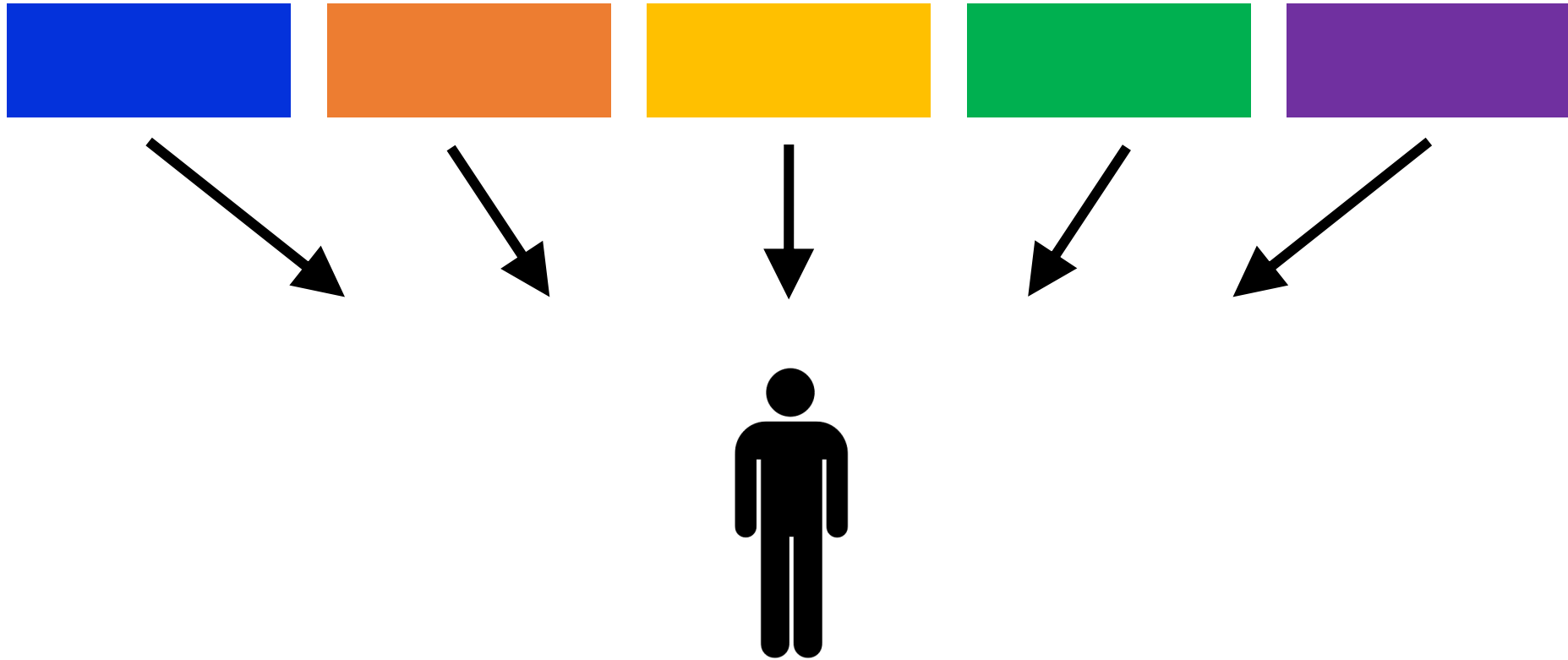
There is limited and inconsistent evidence that life events result in normative patterns of personality trait change.

This may be because of an overemphasis of traits and normative, population-level trends

Persons in Context

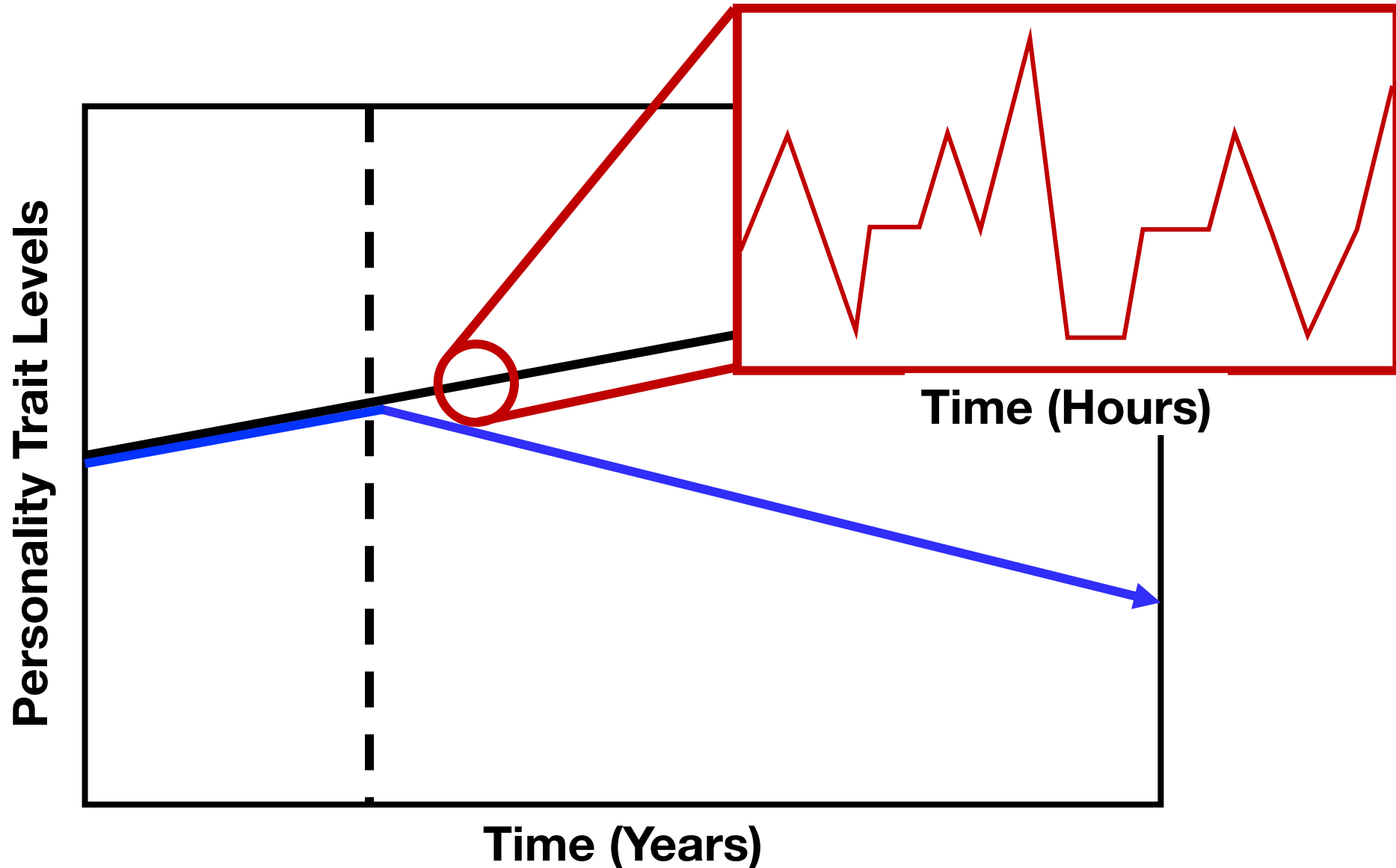


The “Second Science” of Personality



**Idiographic
Person-Specific**

Systems Perspectives: Persons in Context



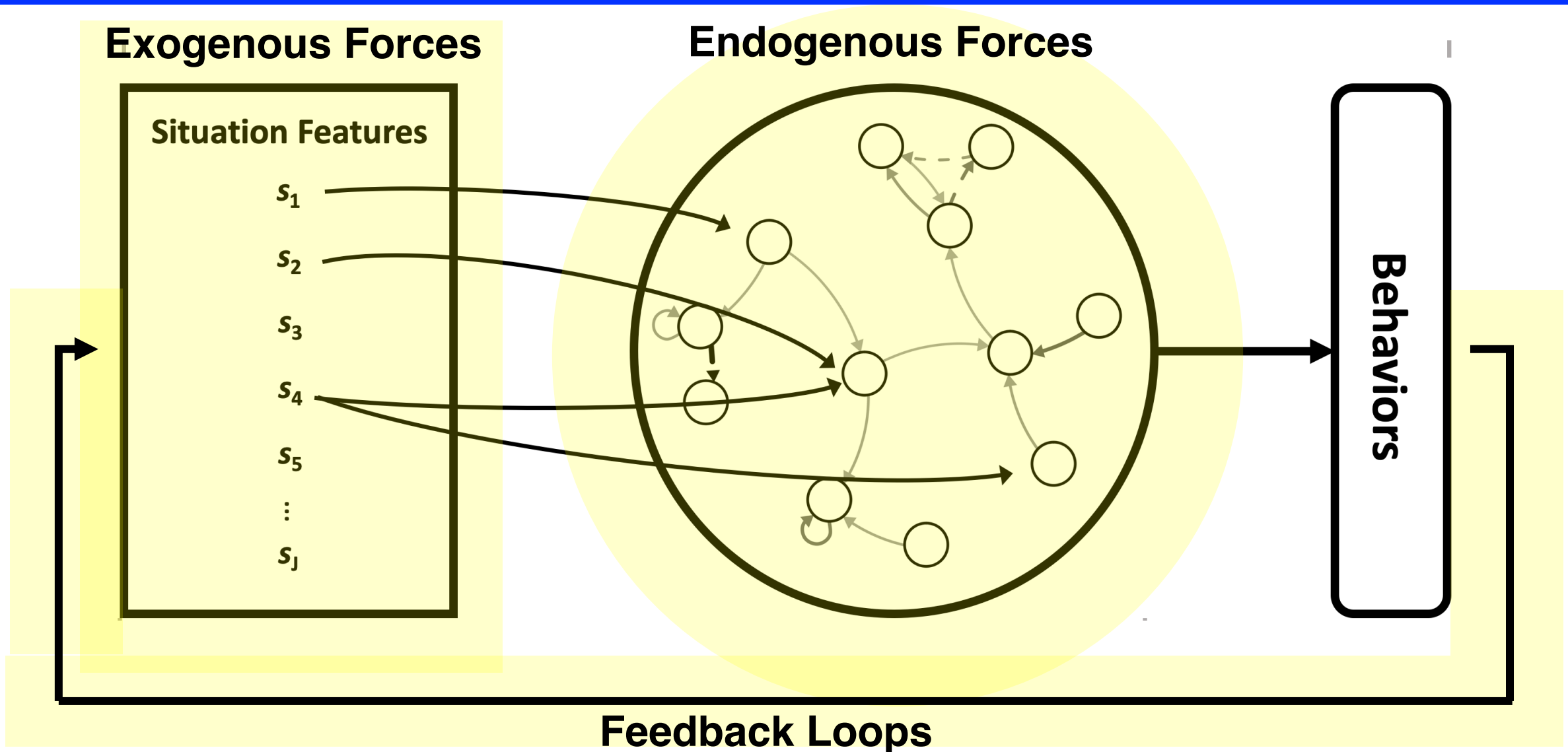
Systems Perspectives: Persons in Context

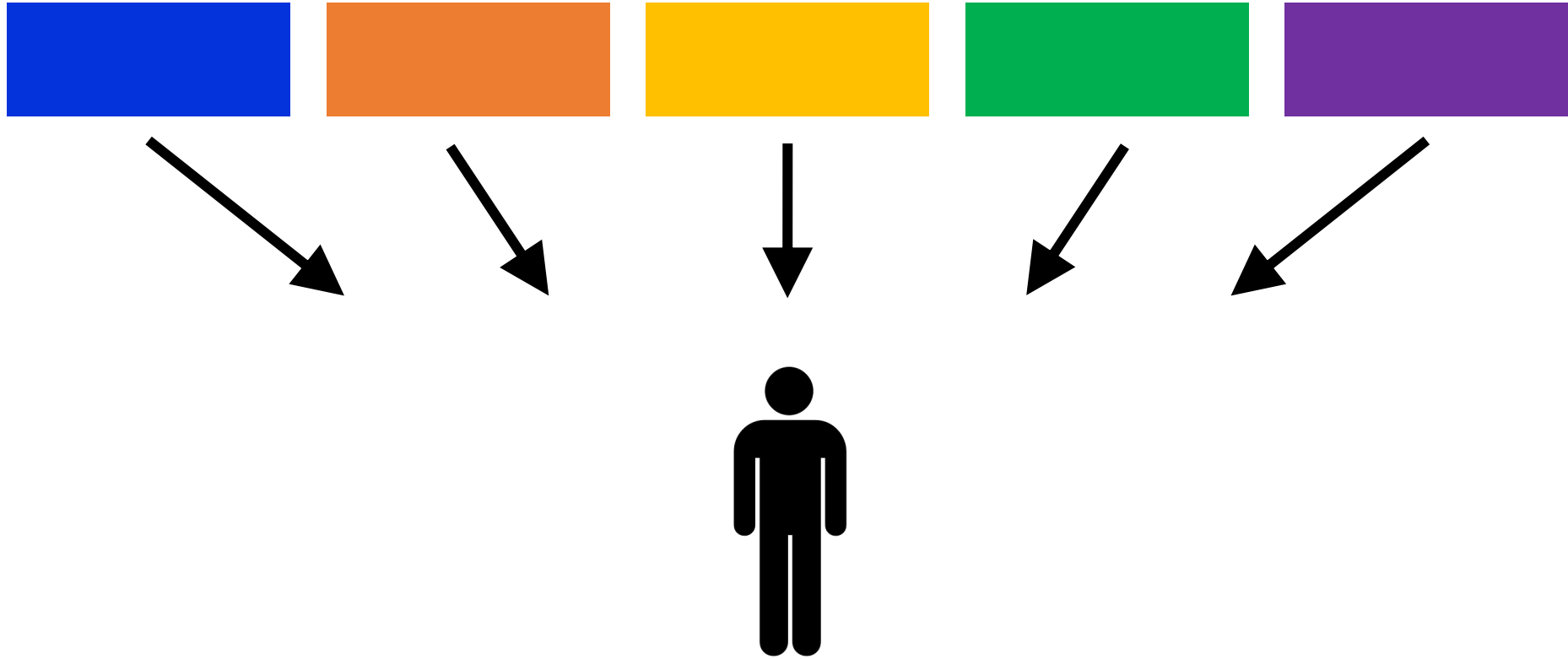
Adopting a systems perspectives requires a more nuanced perspective in how changes are unfolding within and across units, time, and people.

Pers

Time (Years)

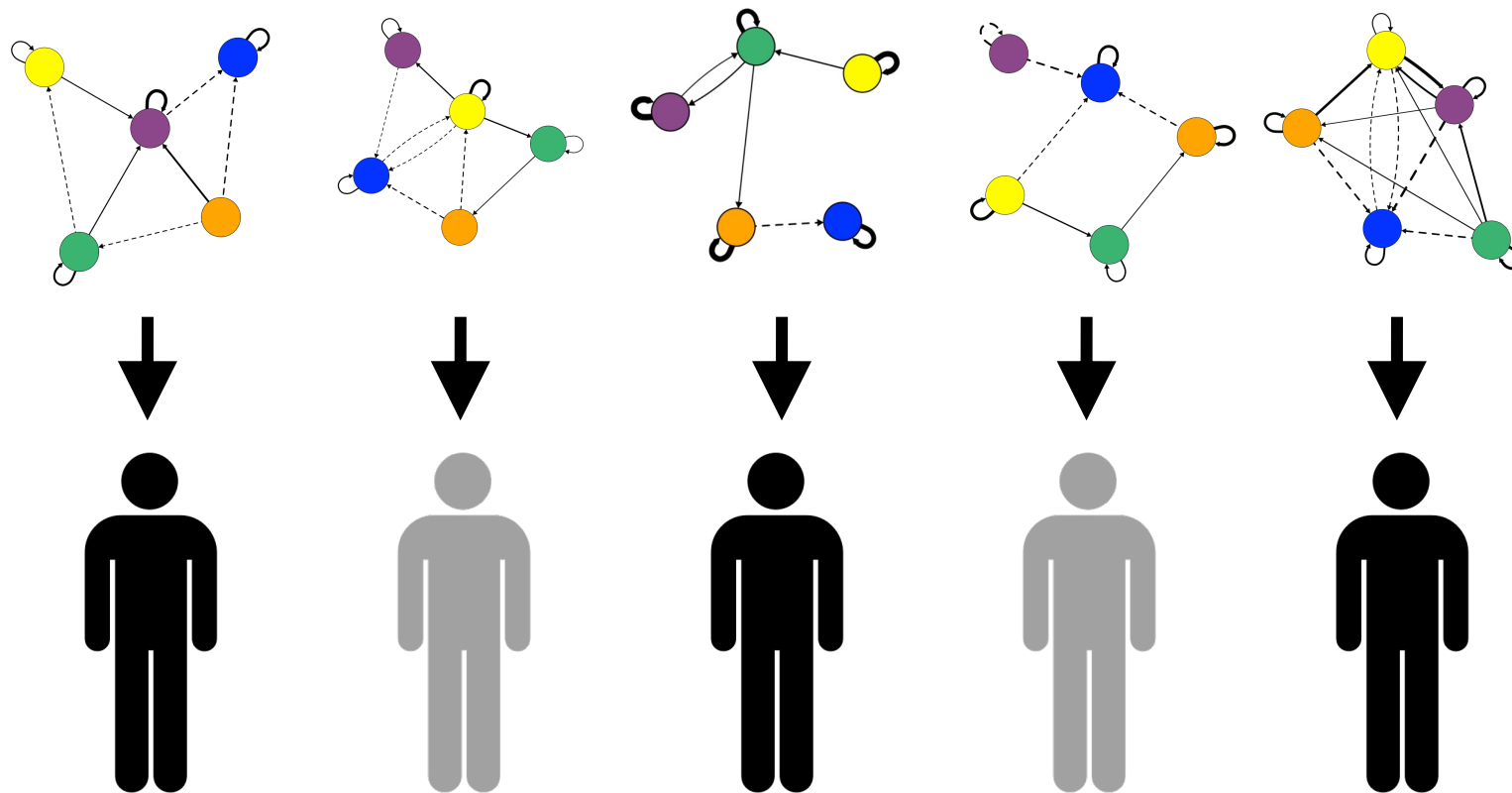
Personality as a Cognitive Affective Personality System (CAPS)





**Idiographic
Person-Specific**

e.g., Beck & Jackson, 2020a, *JPSP*; 2020b, *CDPS*



Idiographic Person-Specific

e.g., Beck & Jackson, 2020a, *JPSP*; 2020b, *CDPS*



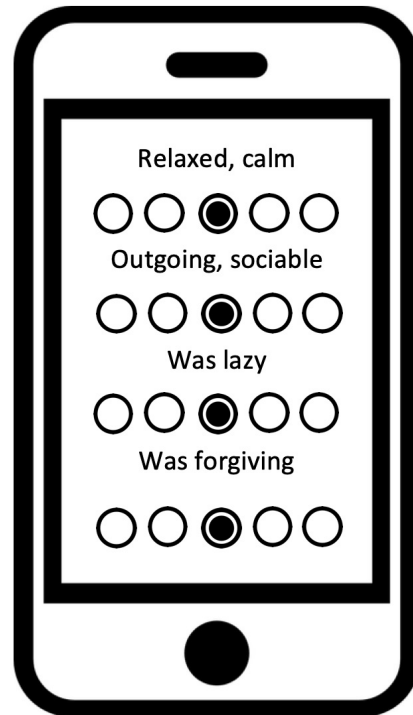
Understanding a person as a dynamic system provides a new opportunity to understand both a person and how they change over time.

**Idiographic
Person-Specific**

e.g., Beck & Jackson, 2020a, *JPSP*; 2020b, *CDPS*

ESM / EMA

Mobile
Sensing



Research Questions

1

Capturing systems and testing their longitudinal consistency

2

Associations between person-specific systems and longitudinal trait change

Methods

2 years of ESM responses from the Personality and Interpersonal Roles Study (PAIRS)

N = 372 Wash U undergrads, total assessments N = 17,715

Measures

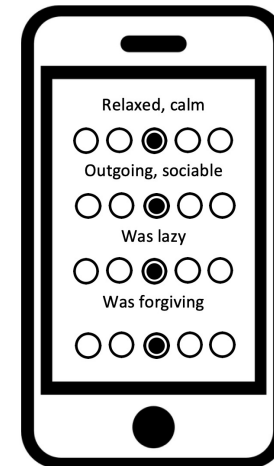
9 items from the Big Five Inventory (BFI)

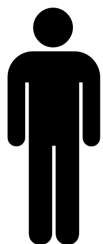
Procedure

4 assessments / day for 15 days

Modeling

Graphical vector autoregression





time	E	A	C	N	O
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

	E	A	C	N	O
E					
A	0.02				
C	-0.05	0.08			
N	0.64	-0.12	-0.10		
O	0.26	-0.27	0.43	0.07	

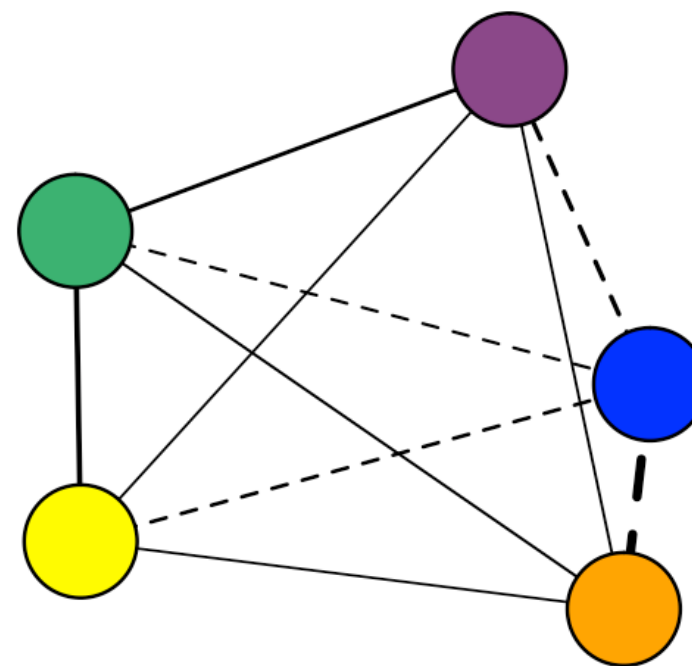
Contemporaneous: Within Time-Points

$$X_{it} \leftrightarrow X_{jt}$$

(Beck & Jackson, 2020a)



time	E	A	C	N	O
1	4	2	3	2	4
2	2	3	4	1	4
3	3	3	2	2	4
4	3	1	3	2	3
5	4	4	3	2	2
6	4	1	2	3	4
7	2	2	2	2	1
8	4	2	3	3	4
9	3	2	2	1	2
10	4	2	3	3	3
11	3	1	3	2	5

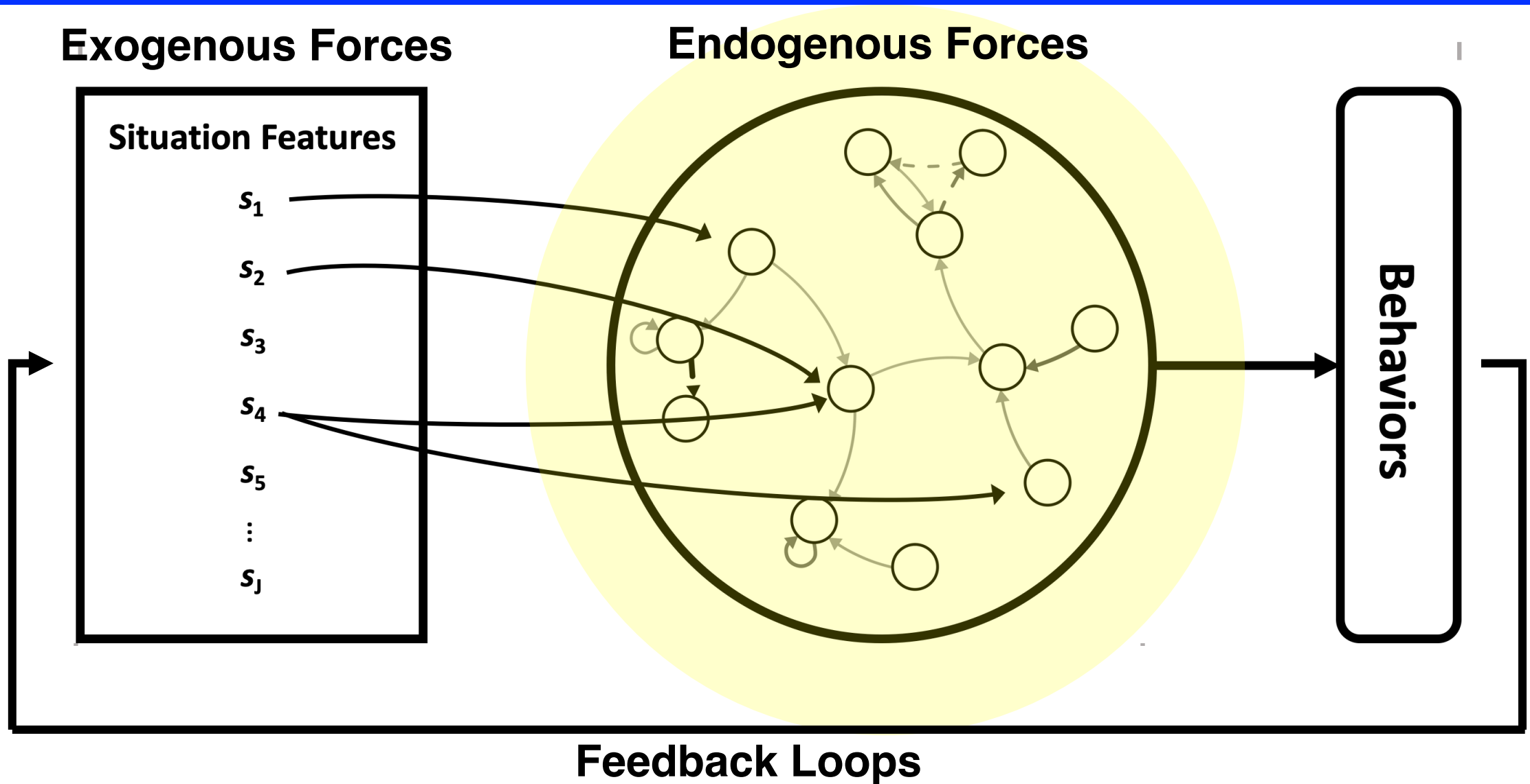


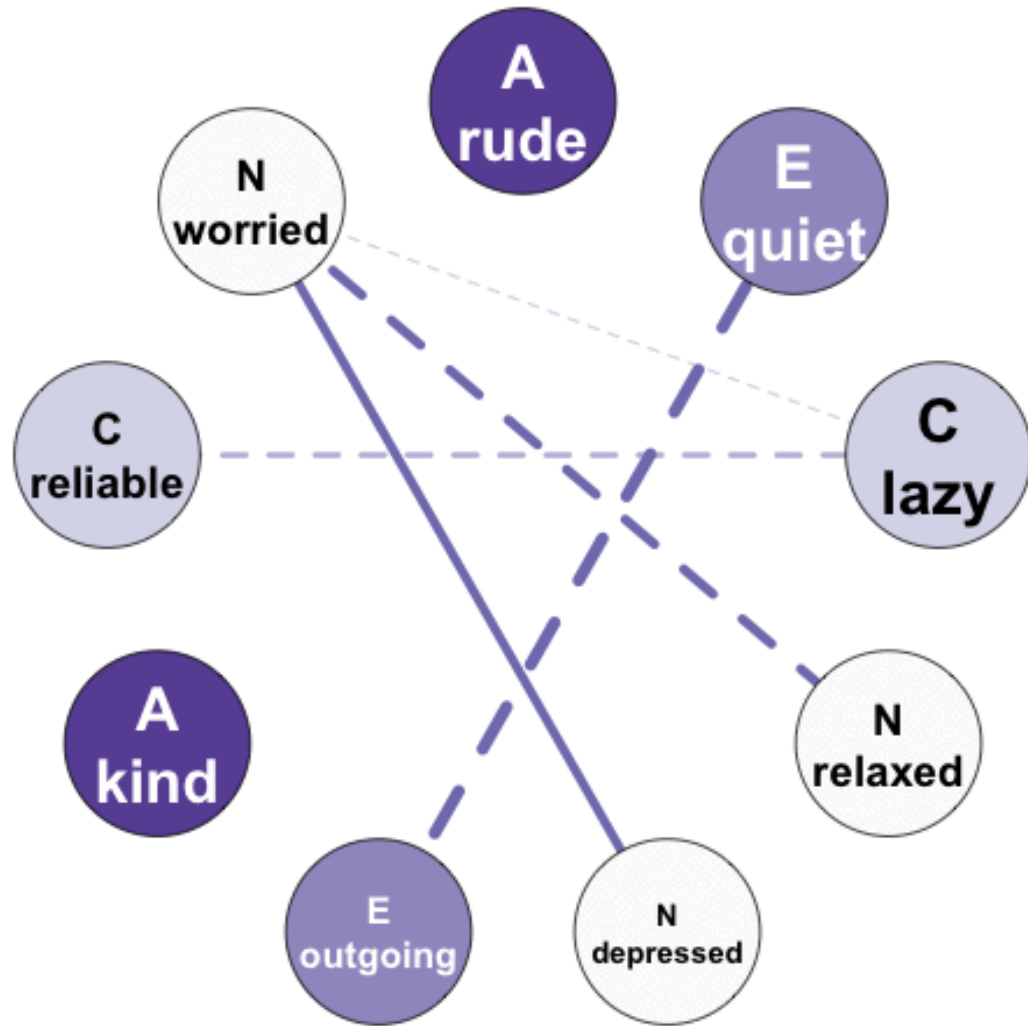
Contemporaneous: Within Time-Points

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(Beck & Jackson, 2020a)

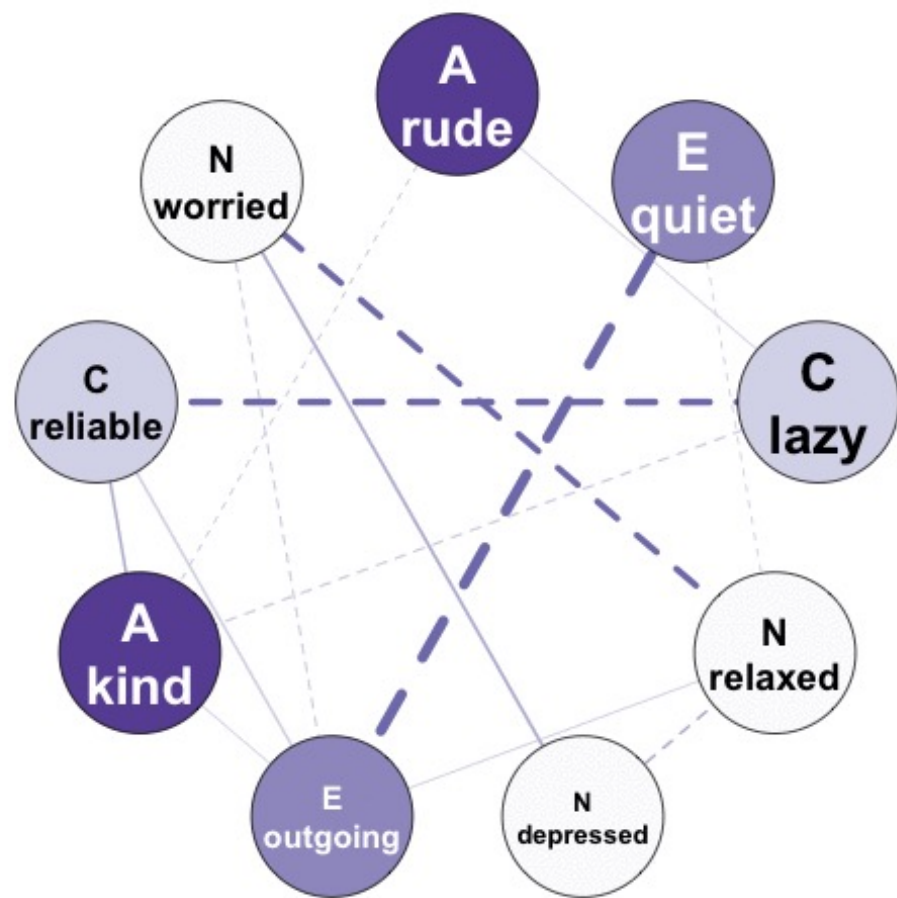
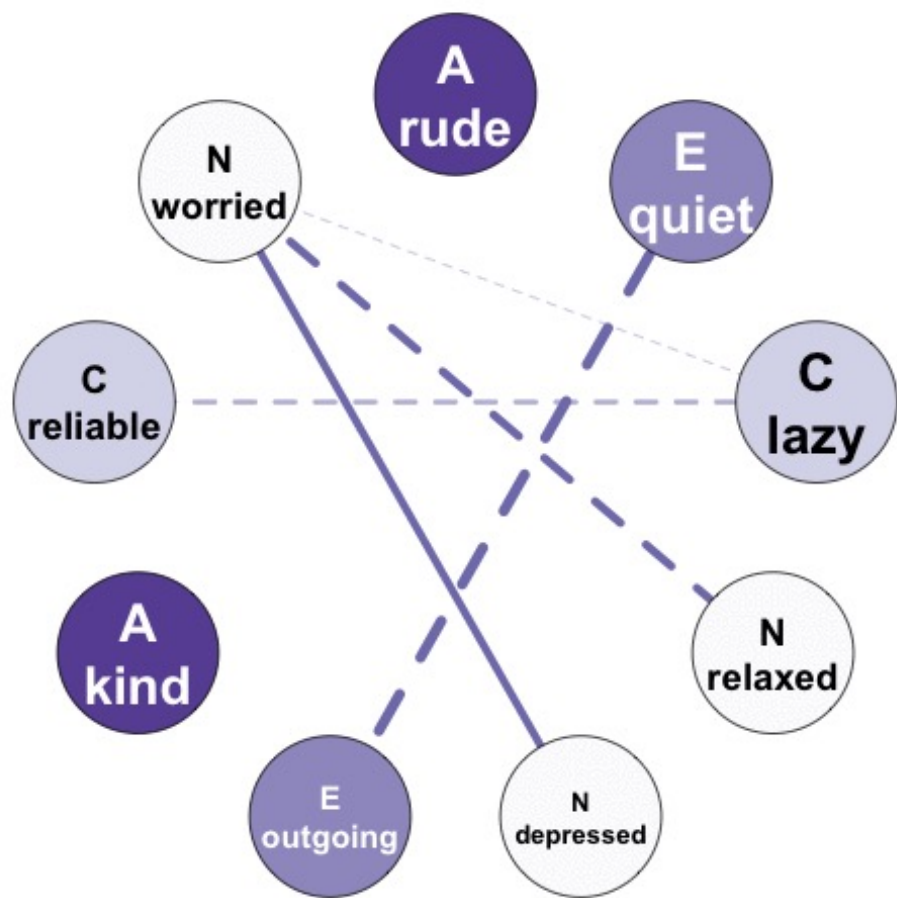
Personality as a Cognitive Affective Personality System (CAPS)





The systems differ across people.

But do they show expected longitudinal consistency?





How consistent is idiographic personality across two years?

Idiographic Personality is consistent over two years

As well as global events and a number of life events.

Beck & Jackson (2021; 2022)

Beck & Jackson (2020a)

Research Questions

1

Systems are unique but longitudinally consistent, on average

2

Associations between person-specific systems and longitudinal trait change

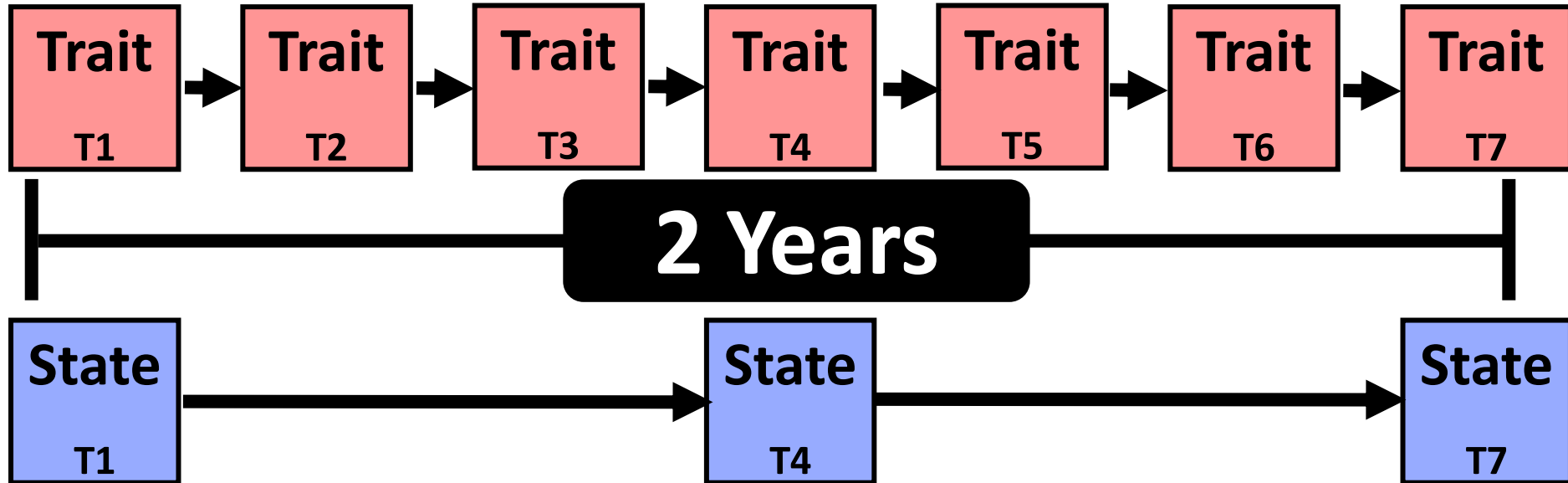
Extraversion

Agreeableness

Conscientiousness

Neuroticism

Openness



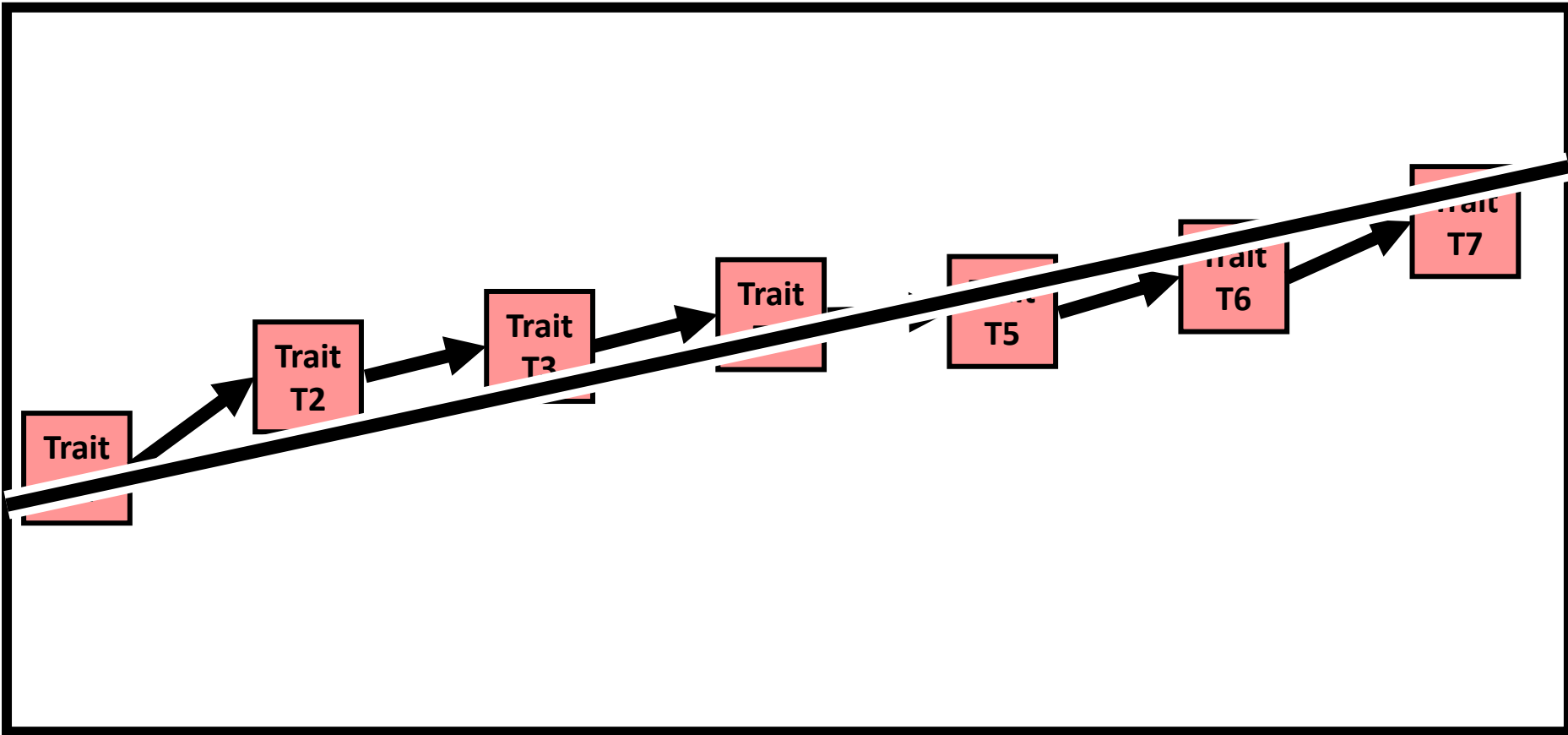
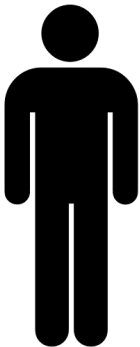
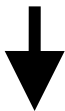
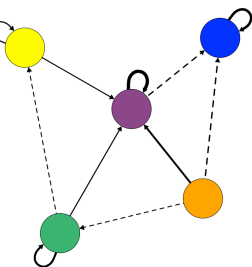
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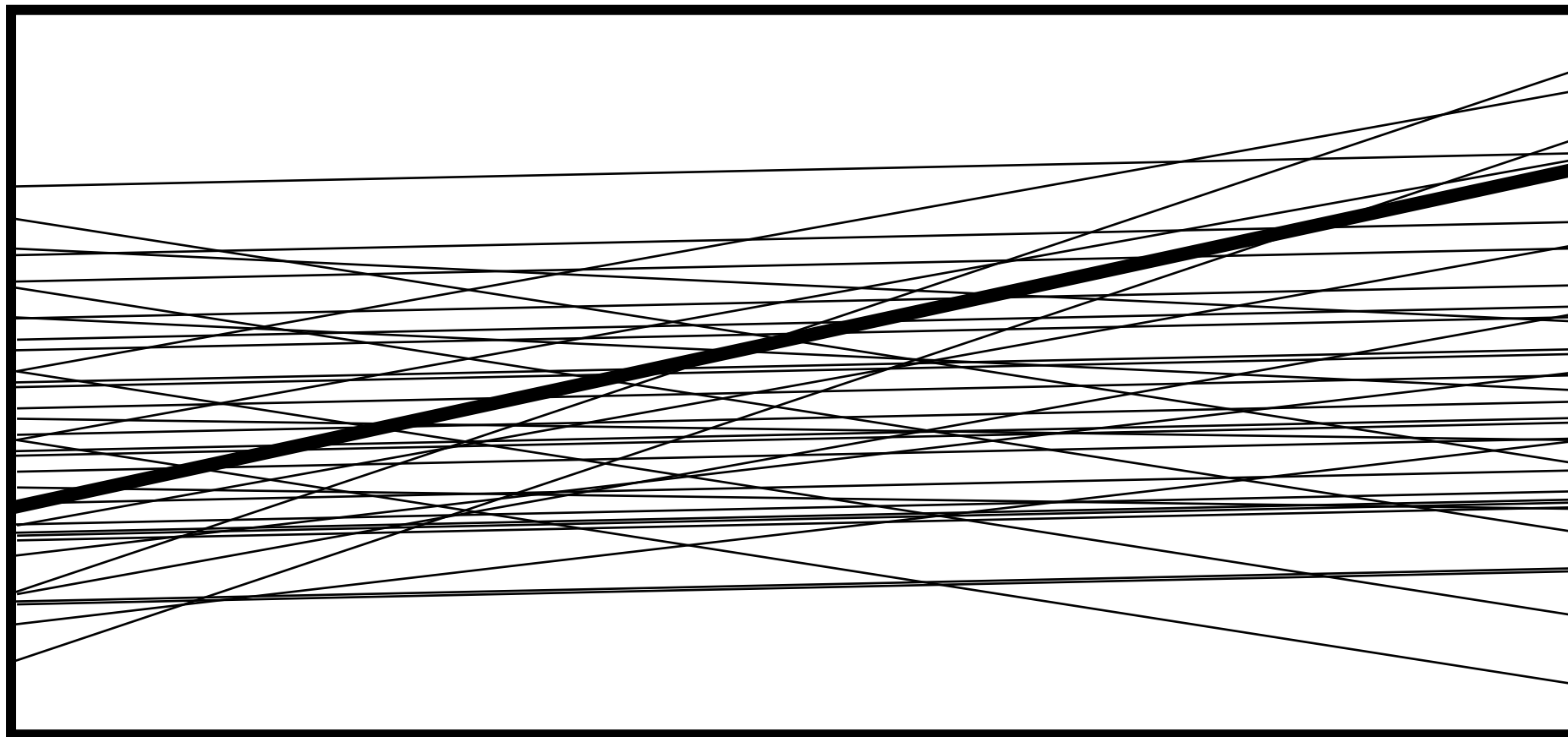
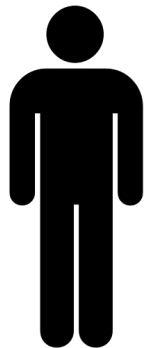
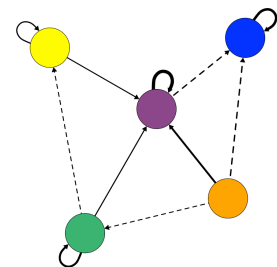
Extraversion

Agreeableness

Conscientiousness

Neuroticism

Openness



Research Framework

Properties of Idiographic Personality Networks:

Density

Dense systems are unstable

Entropy

Interdependency can lead to cascading effects

Ipsative (network)
consistency

Inconsistency should be reflected in mean-levels

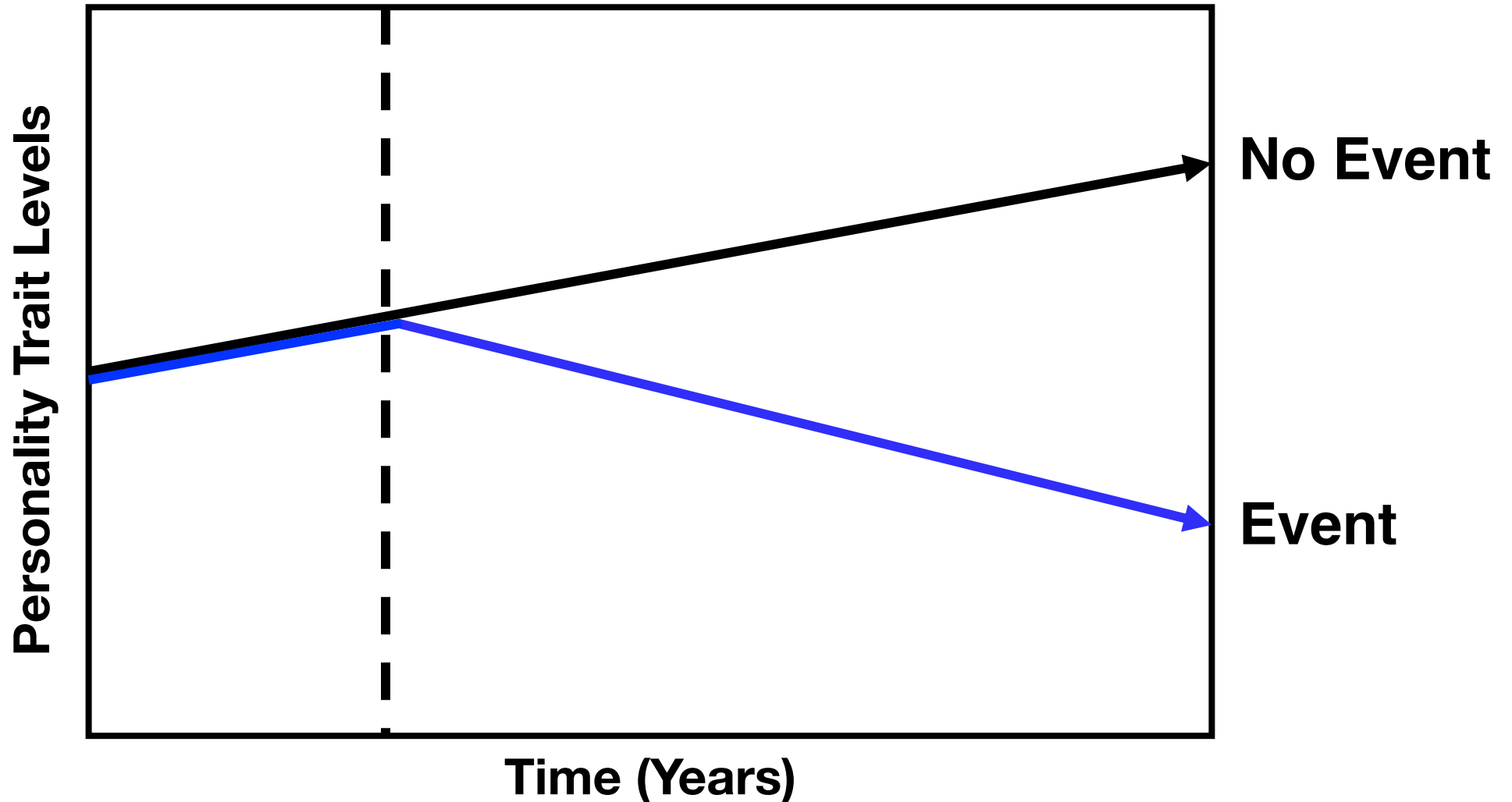
Total Correlation

Total shared information may reflect susceptibility to perturbations

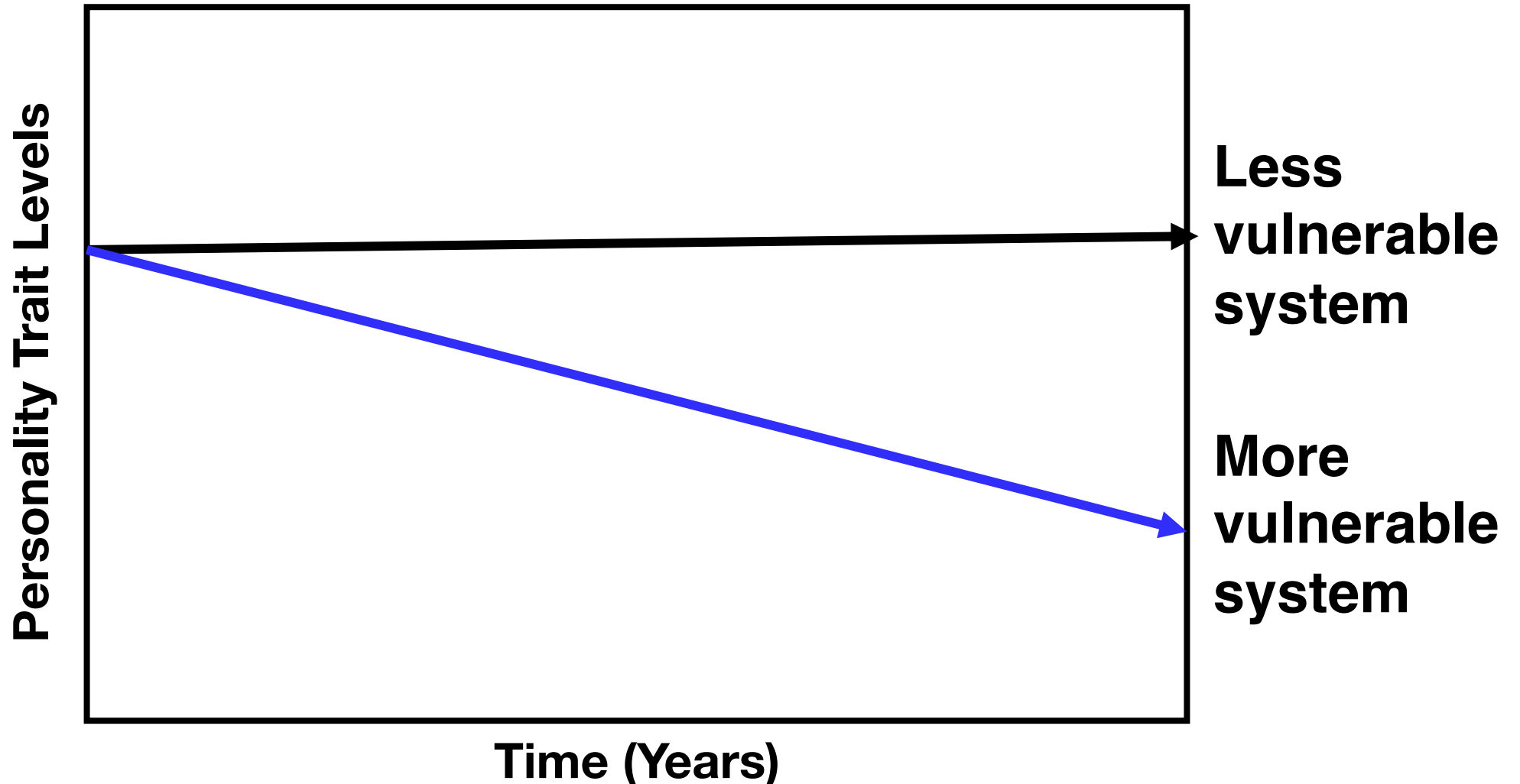
NMI

The Big Five structure may reflect exogenous forces (i.e. attractors)

Systems Perspectives: Persons in Context

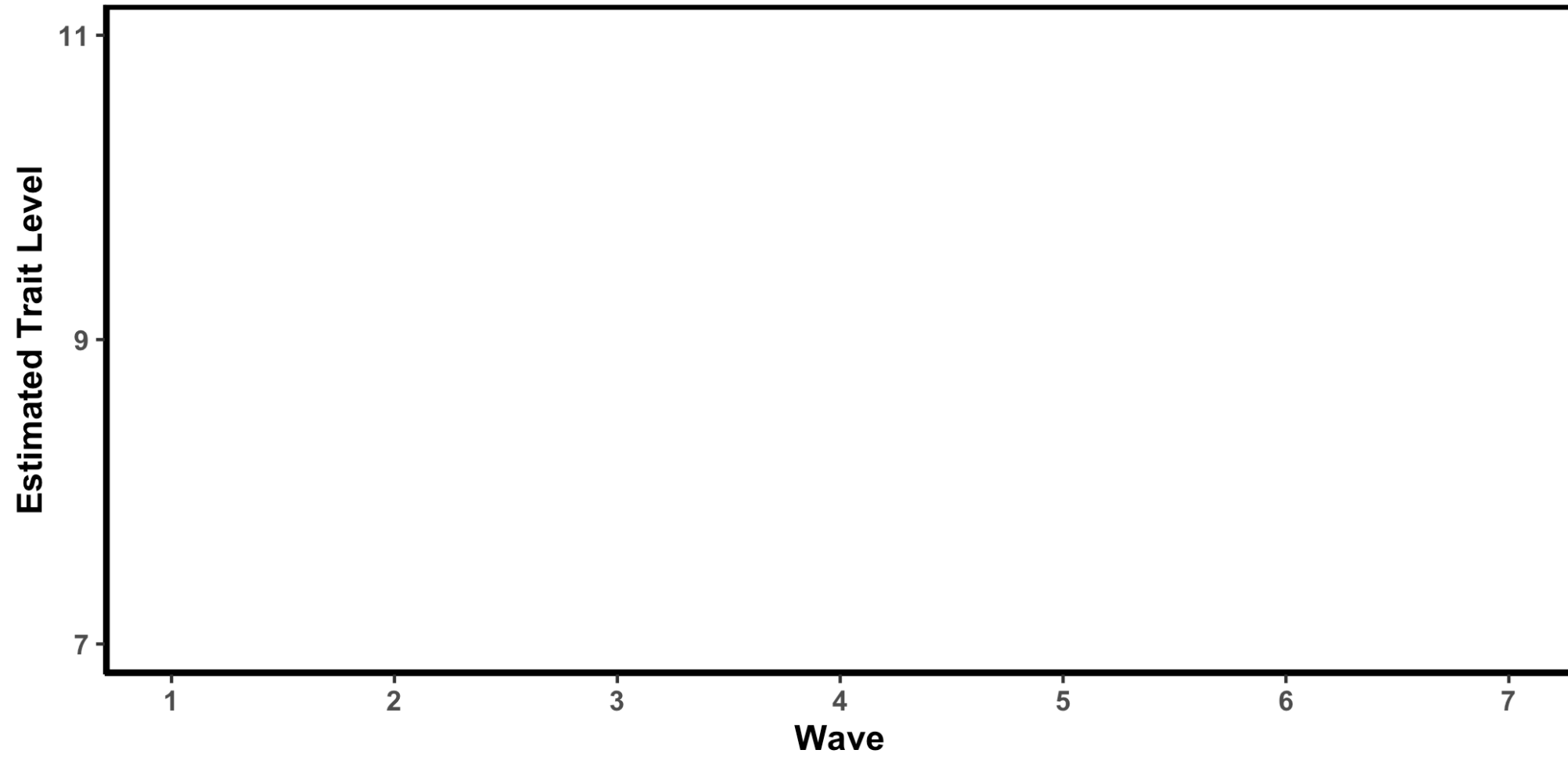


Systems Perspectives: Persons in Context



(Extended) Basic Multilevel Growth Model

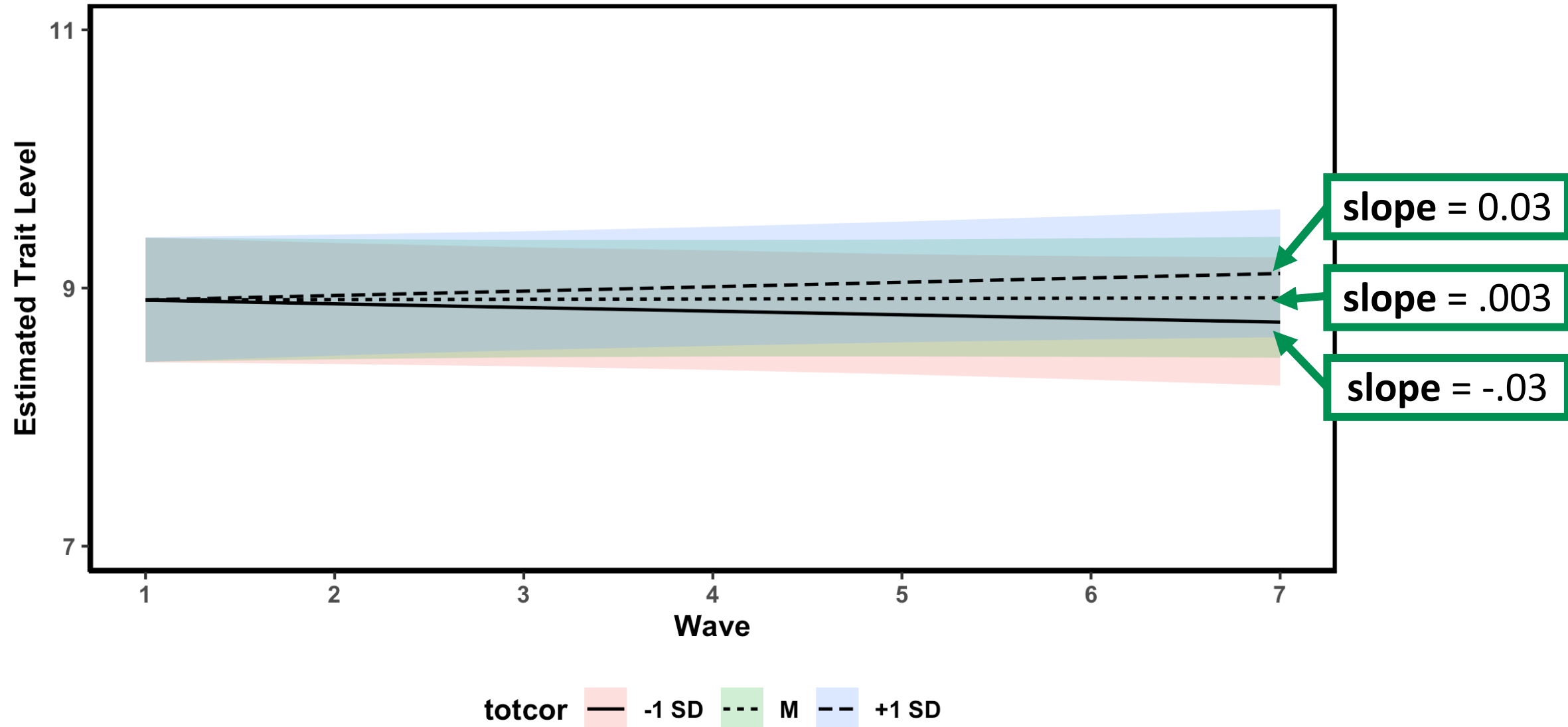
Extraversion



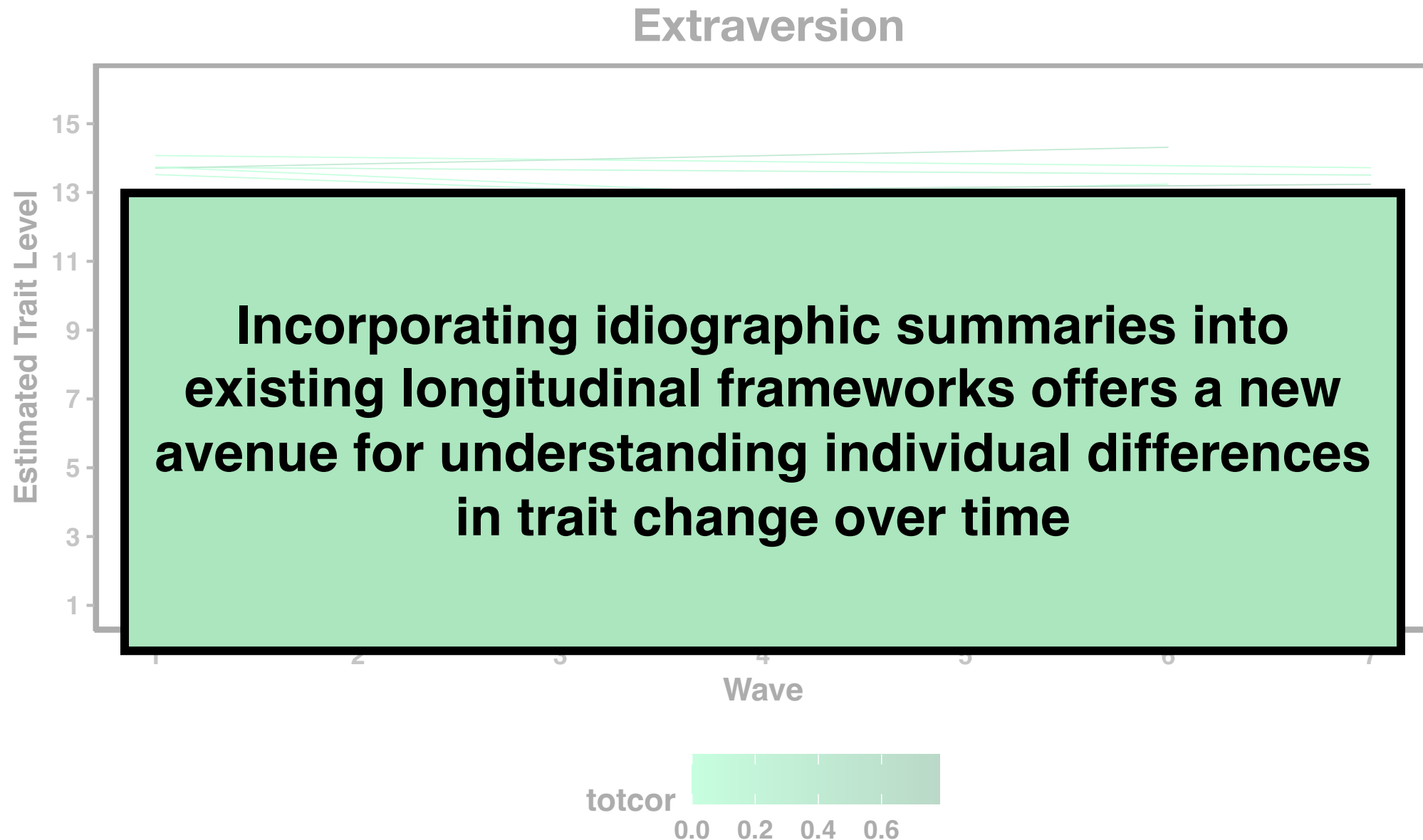
totcor — -1 SD --- M -- +1 SD

(Extended) Basic Multilevel Growth Model

Extraversion



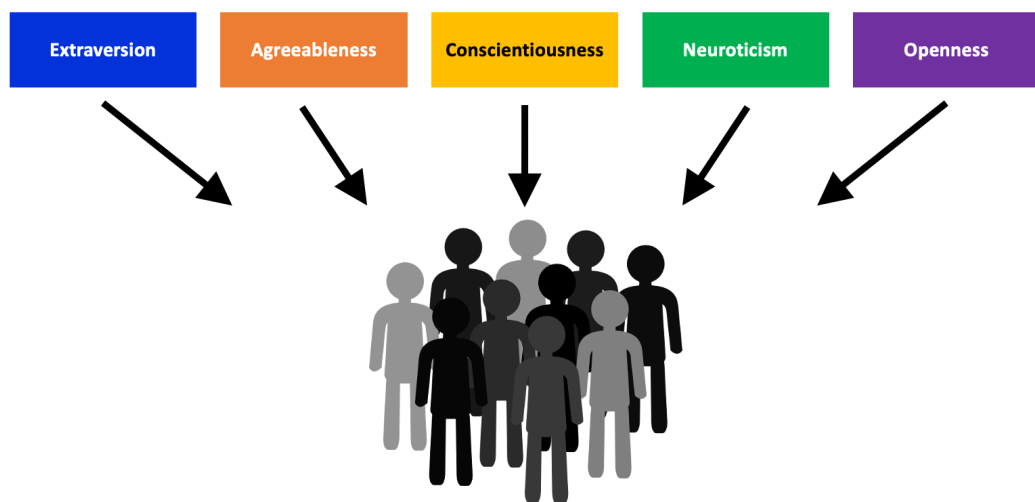
(Extended) Basic Multilevel Growth Model



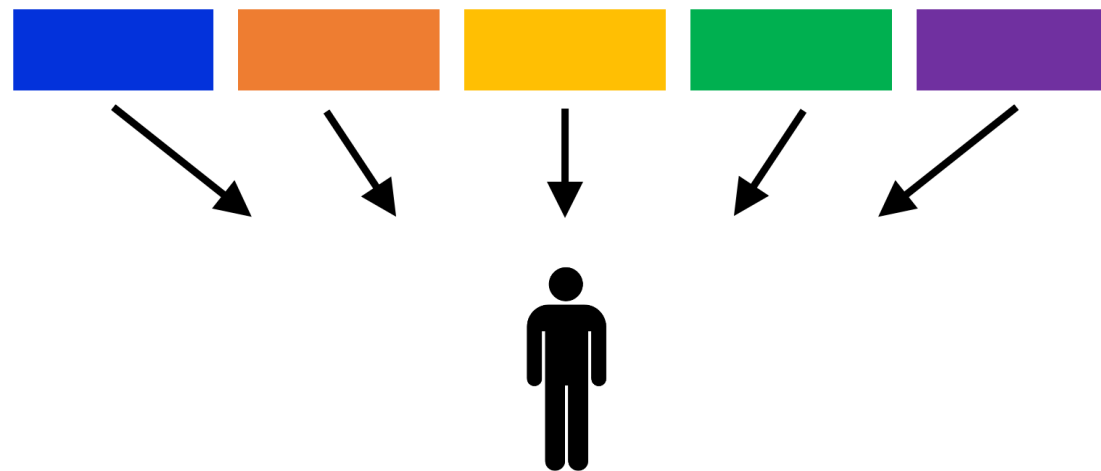
So what does it mean for a person to change?

Change is more than mean levels, and understanding change requires more than mean levels, too.

It's time to move beyond two sciences of personality.



**Nomothetic
Between-Person
Variable Centered**



**Idiographic
Person-Specific**

So what does it mean for a person to change?

Lingering Challenges

Measurement

Ensuring measures are optimized to detect change

Longitudinal Designs

Longitudinal burst designs to for short- and long-term change

Experimental Designs

Tailored interventions & N = 1 Trials

Folk Theories of Change

**Open ended surveys and narrative methods
(How do understand change?)**

Statistical Models

Examining changing dynamics, not just changing levels

Thank You!

Materials & Contact



<https://psyarxiv.com/pb92q/>



<https://osf.io/fyxza/>



https://emoriebeck.shinyapps.io/pairs_graphicalvar/



<https://osf.io/rkunv>



edbeck@ucdavis.edu



@EmorieBeck

Coauthors of presented work:

Joshua J. Jackson
Adam Nissen

The What is Personality? Lab



UCDAVIS
UNIVERSITY OF CALIFORNIA