

The Person in Psychology

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@EmorieBeck



History

**The study of
the past**

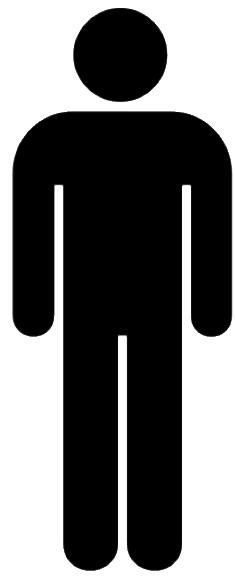
Historiography

**The study of the
writing of history**

Description

Prediction

Explanation



Thoughts

Feelings

Behaviors

Description

Prediction

Explanation



Thoughts

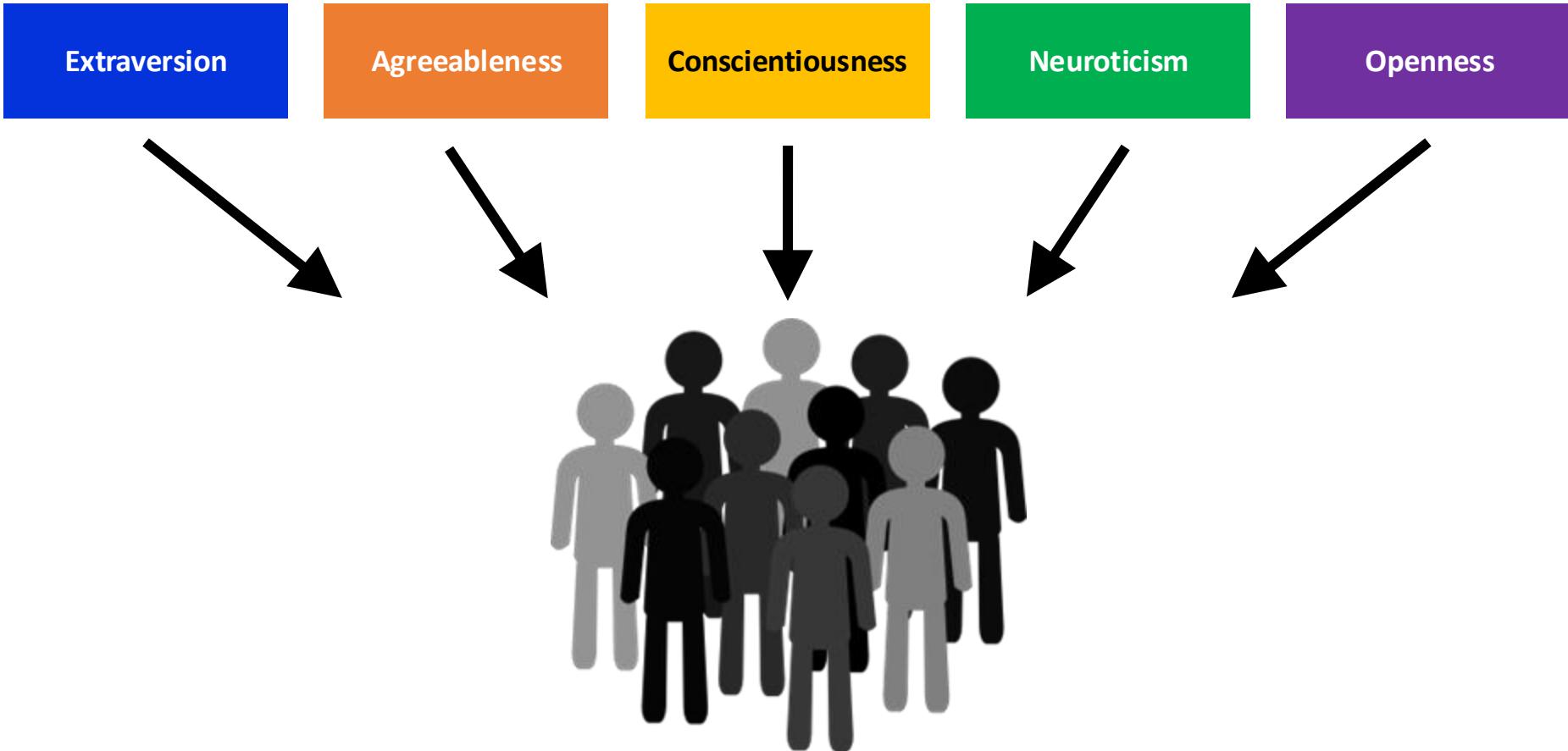
Feelings

Behaviors

What is personality?

“Personality refers to those **characteristics** of the person that account for **consistent patterns of feelings, thinking, and behaving.**”

(Pervin, Cervone & John, 2005, p. 6)



**Nomothetic
Between-Person
Variable Centered**

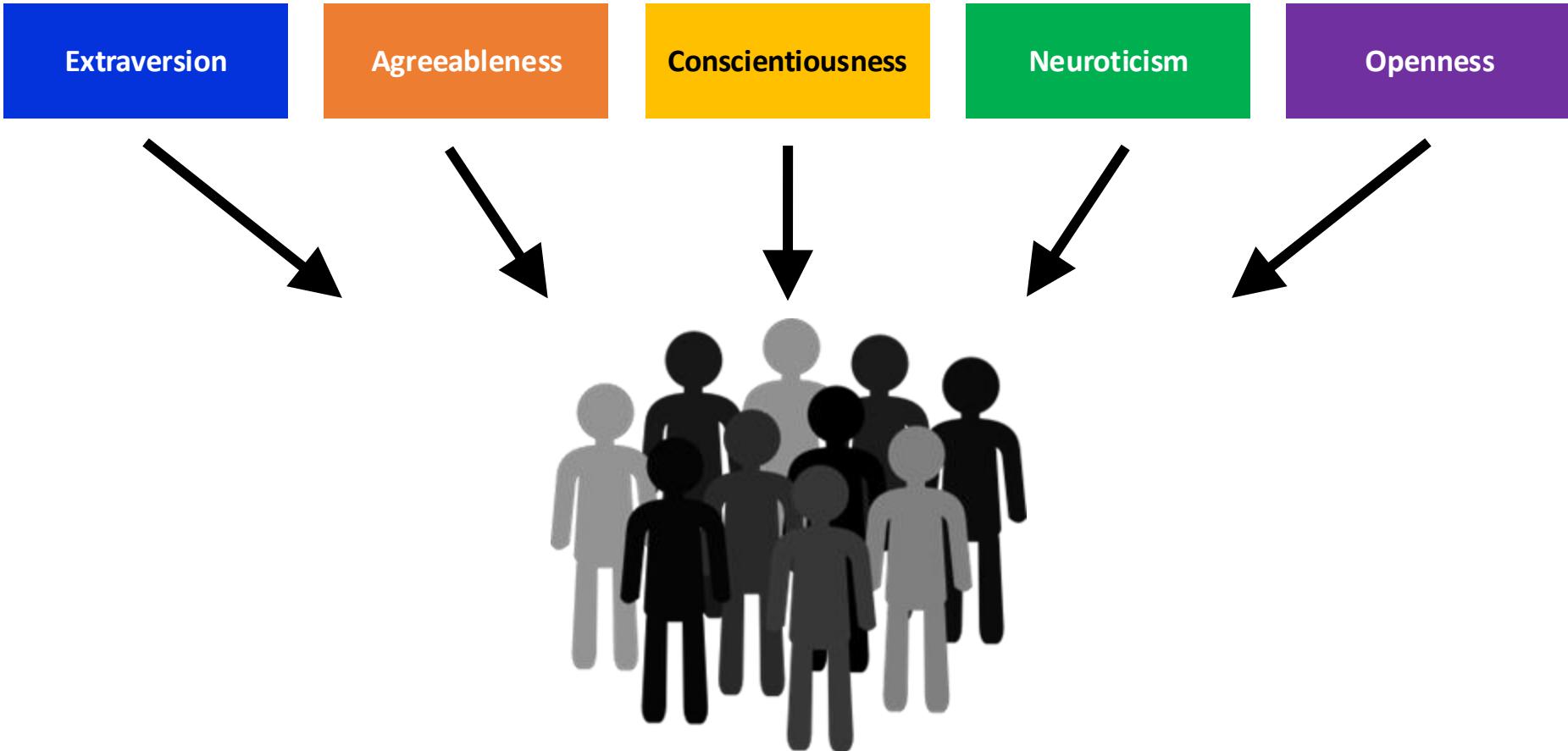


EJP
@EJPBlog

"We assessed personality with the Big Five - As seductive as it is to make such statements, they are only a bit true... personality is not just the Big Five." Read [@rauthmann](#) blog post and memes here. ejp-blog.com/blog/2024/9/17...



12:07 PM · Sep 17, 2024 · 275 Views

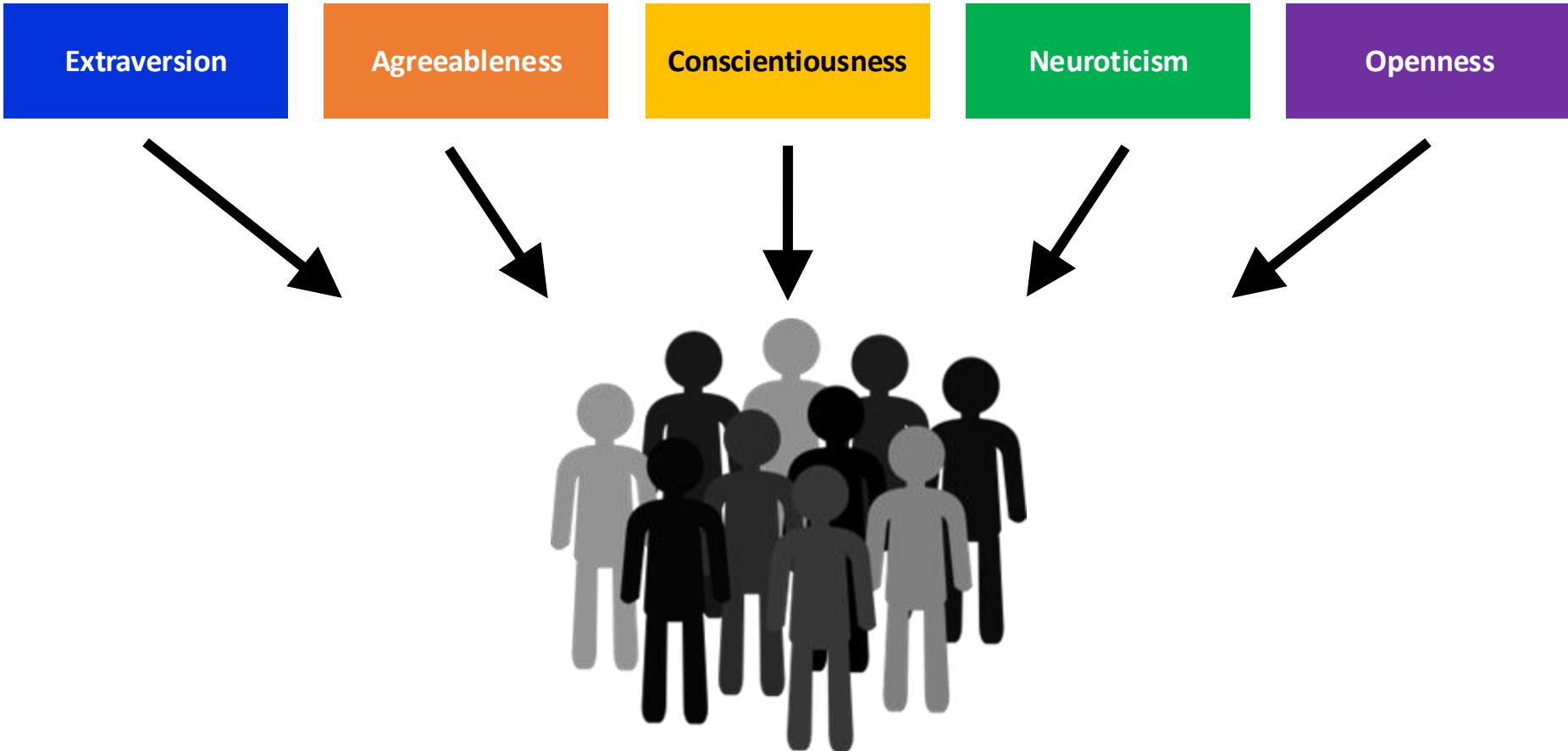


**Nomothetic
Between-Person
Variable Centered**

What is personality?

Personality is what personality tests test.

(Jack C. Wright, personal communication, 2013)



**Nomothetic
Between-Person
Variable Centered**



FAMILIAL TRENDS IN PERSONALITY

JUNE E. DOWNEY

University of Wyoming

The following paper is a brief report on the applications of one of the current personality inventories to a family group of ten brothers and sisters, a group of which the writer is a member. In writing it, two questions were in the foreground. Would the standardized questionnaire procedure give any added insight into the personalities of individuals who were already intimately known; and, conversely, would the results illuminate in any way the inventory itself?



FAMILIAL TRENDS IN PERSONALITY



A Psychology of the Stranger

Dan P. McAdams

*School of Education and Social Policy
Northwestern University*

ardized questionnaire procedure give any added insight into the personalities of individuals who were already intimately known; and, conversely, would the results illuminate in any way the inventory itself?

s of one
of ten
ber. In
e stand-

What is personality?

“Personality is the **dynamic organization** within the individual of those **psychophysical systems** that determine his **unique adjustments to the environment**.”



(Allport, 1937, p. 32)

e.g., Allport, 1937, 1961, 1968

What is personality?

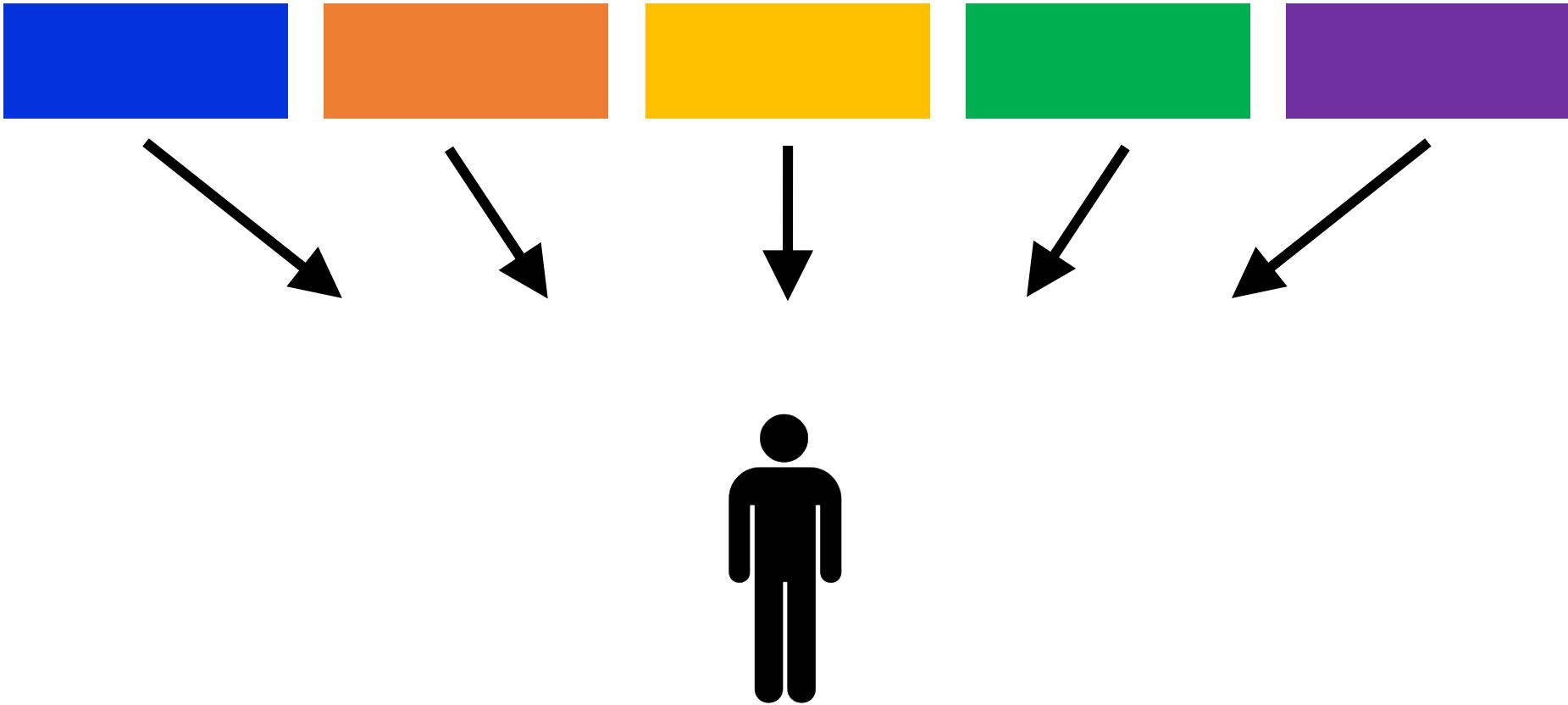
Personality is what personality tests test.

(Jack Wright, personal communication, 2013)

Individuals
(idiographic)

Contexts & Time

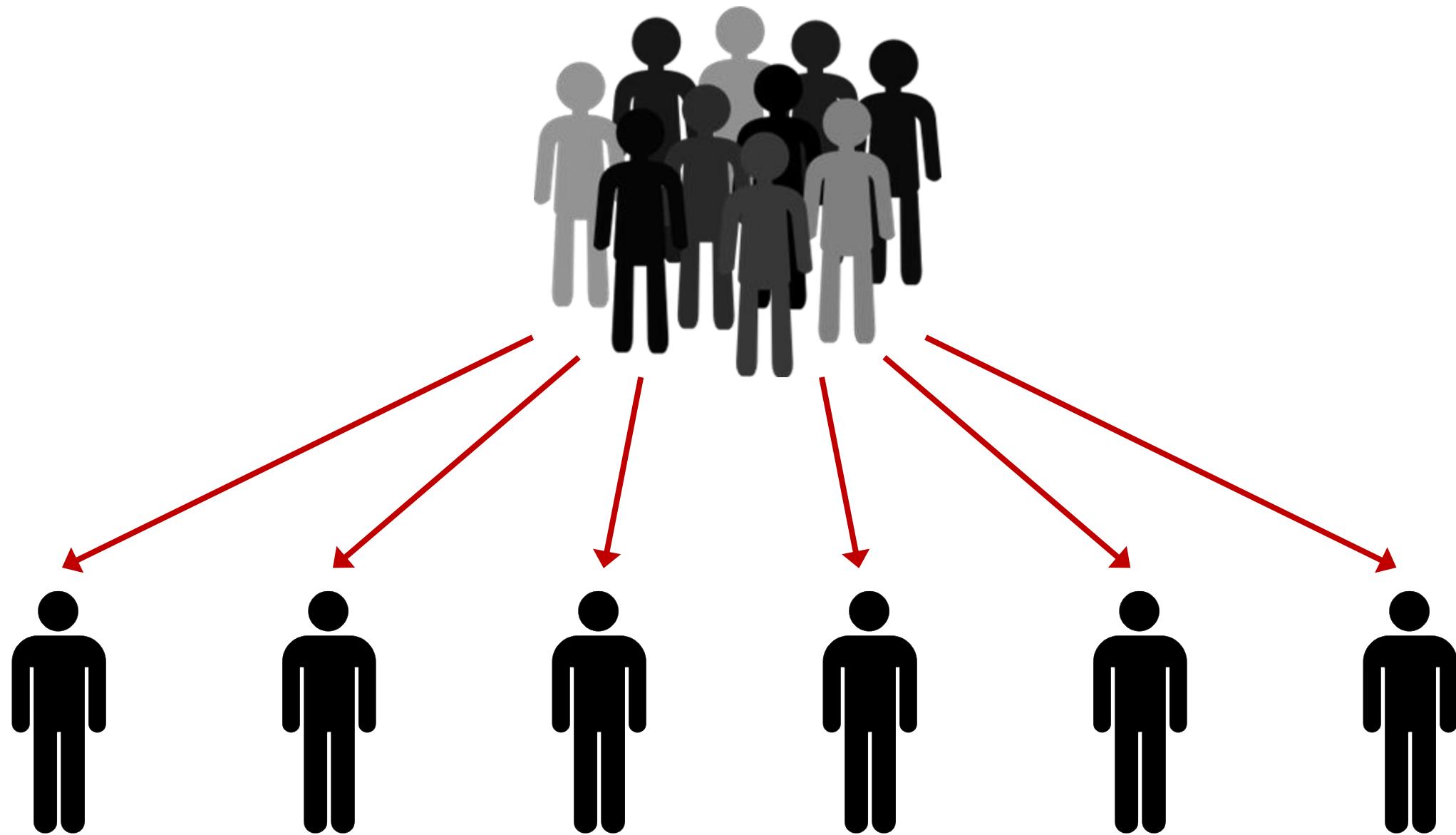
Dynamics &
Systems



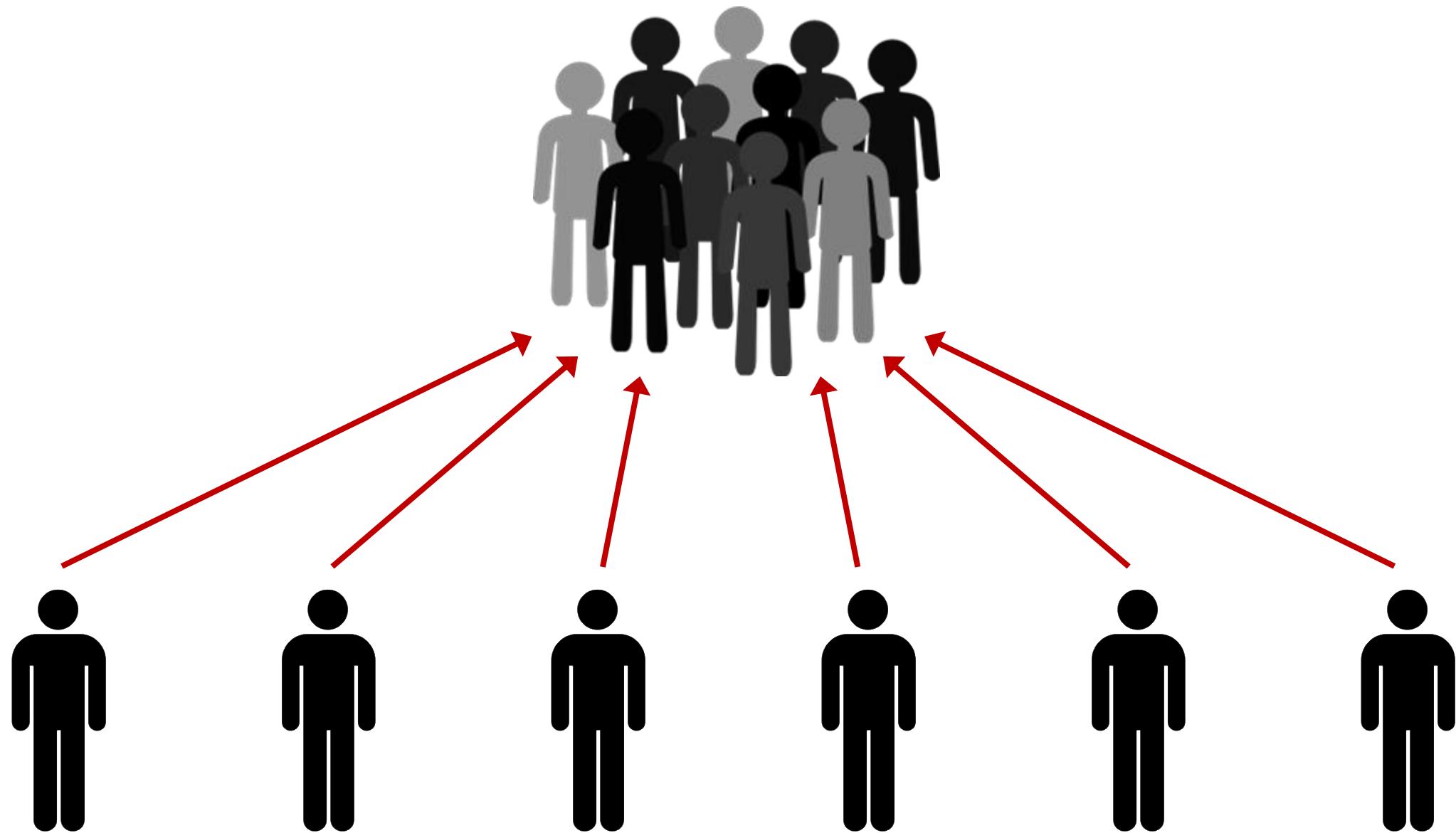
**Idiographic
Person-Specific
 $N = 1$**

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

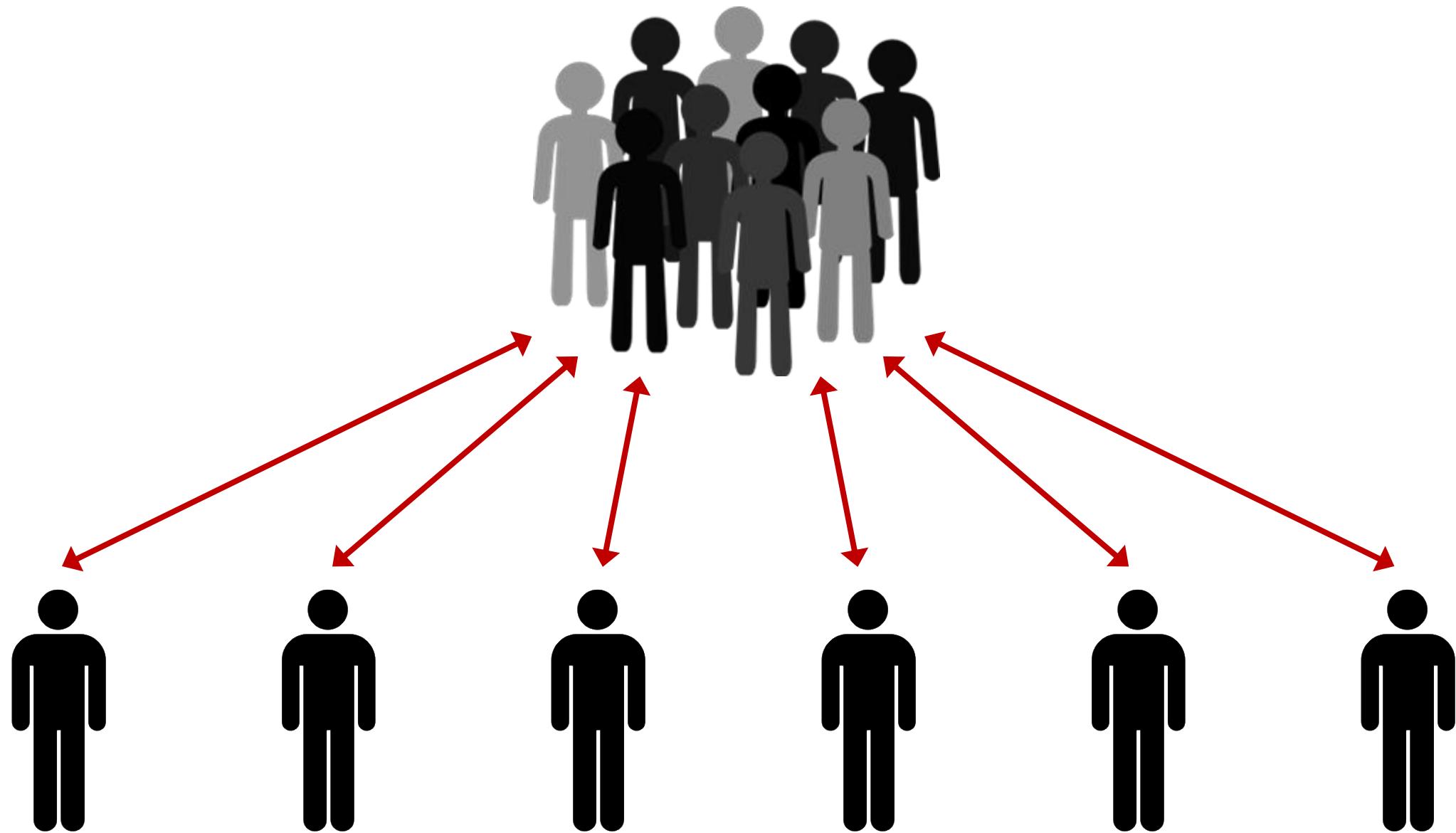
Bottom-Up Psychological Science



Bottom-Up Psychological Science



Bottom-Up Psychological Science

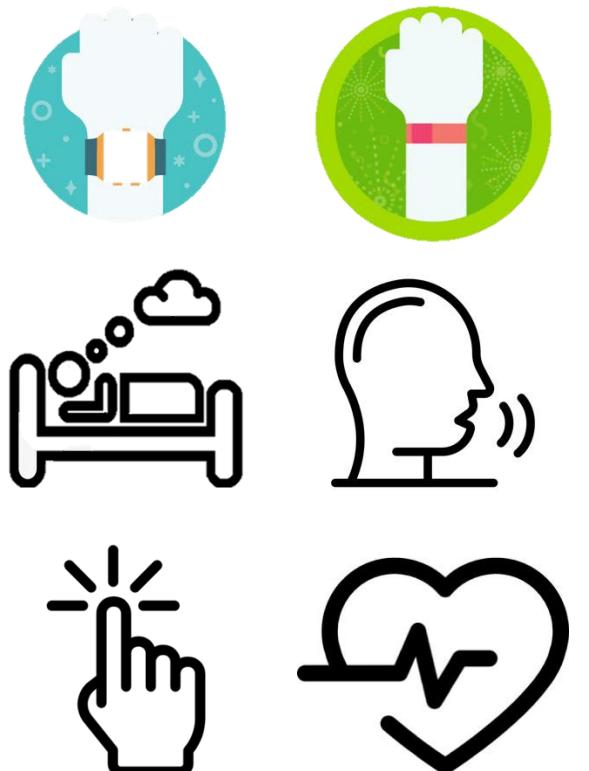
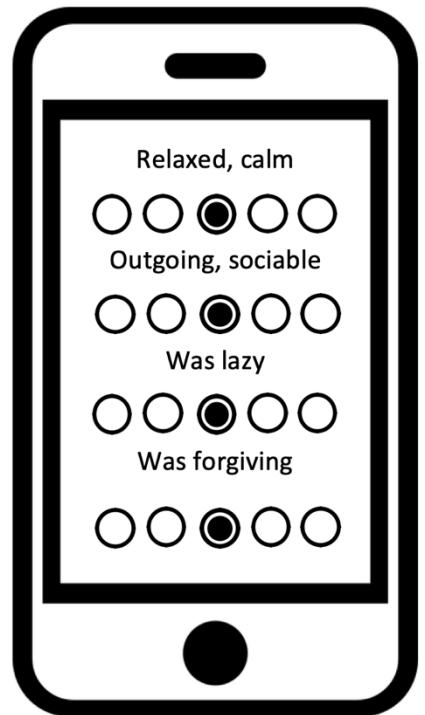




Modern Opportunities for $N = 1$ Research

ESM / EMA

Mobile Sensing



**Graphology as an early
representation of
behavioral traces (i.e.
personality residue) in
everyday life**

Graphology and the Psychology of Handwriting

By

JUNE E. DOWNEY

Professor of Psychology, University of Wyoming



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BALTIMORE
WARWICK & YORK, Inc.
1919

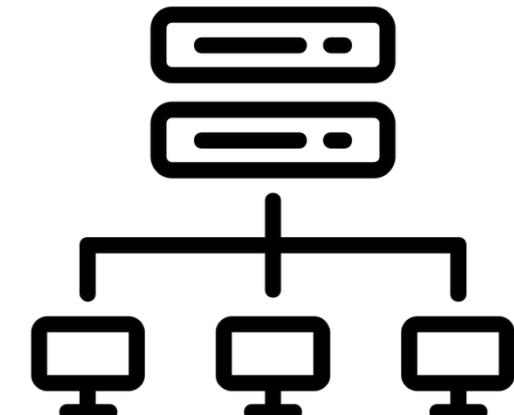
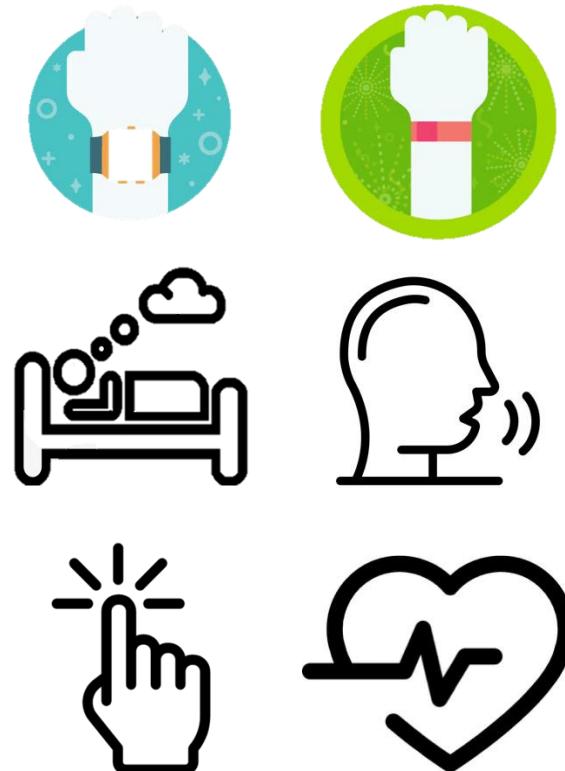
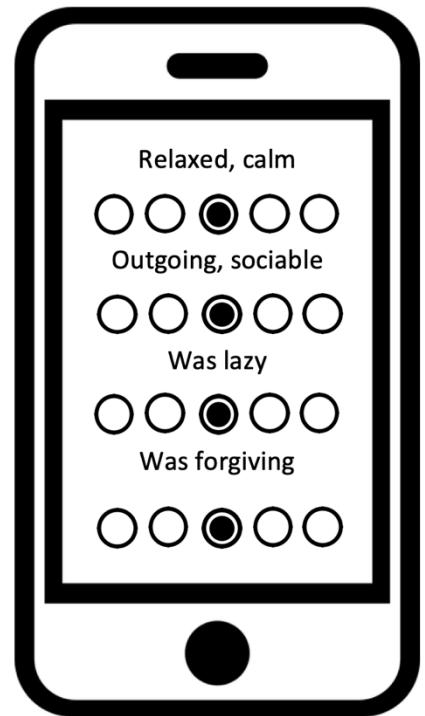
Modern Opportunities for $N = 1$ Research

ESM / EMA

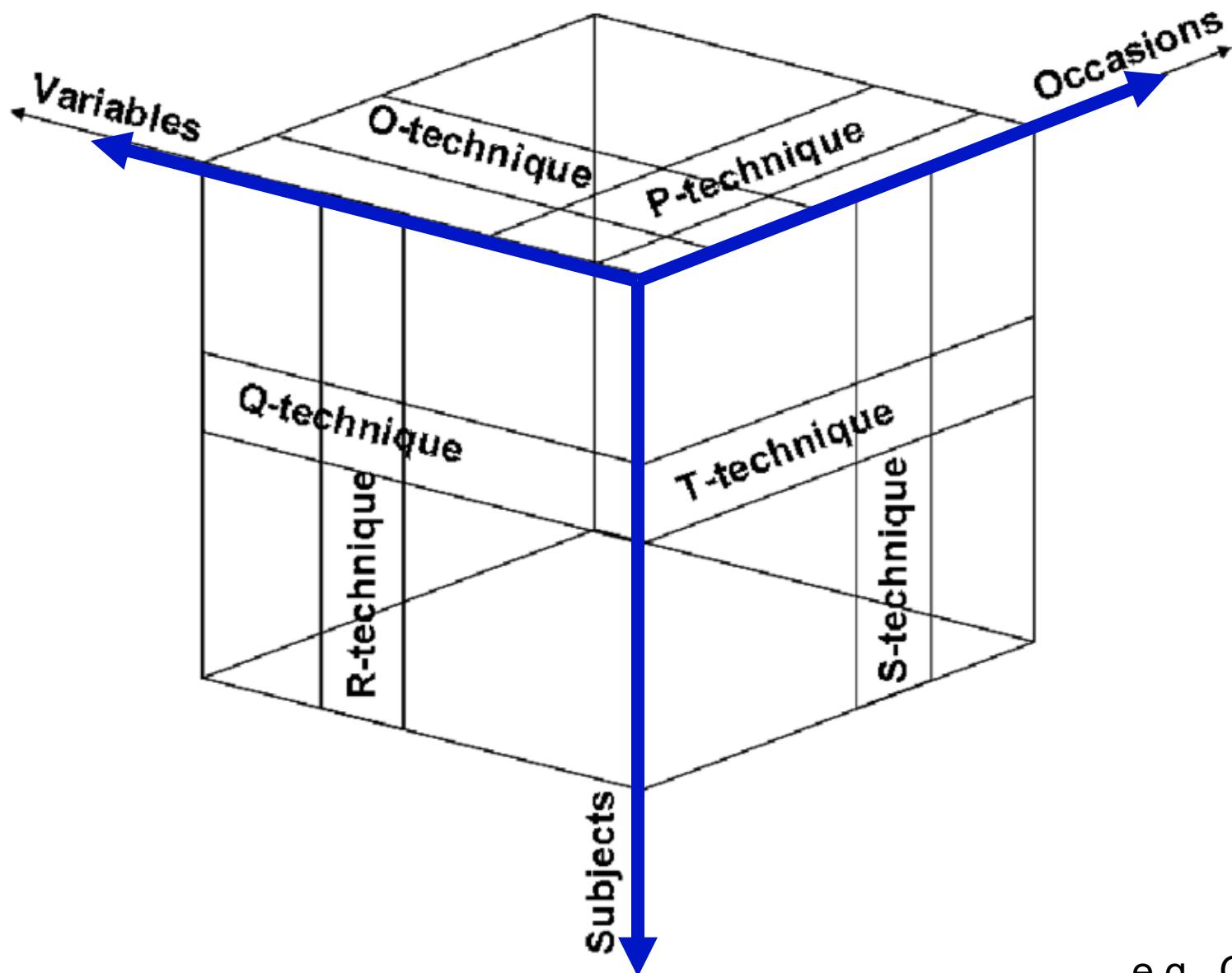
Mobile Sensing

Open-Ended
Responses

Computing
Power

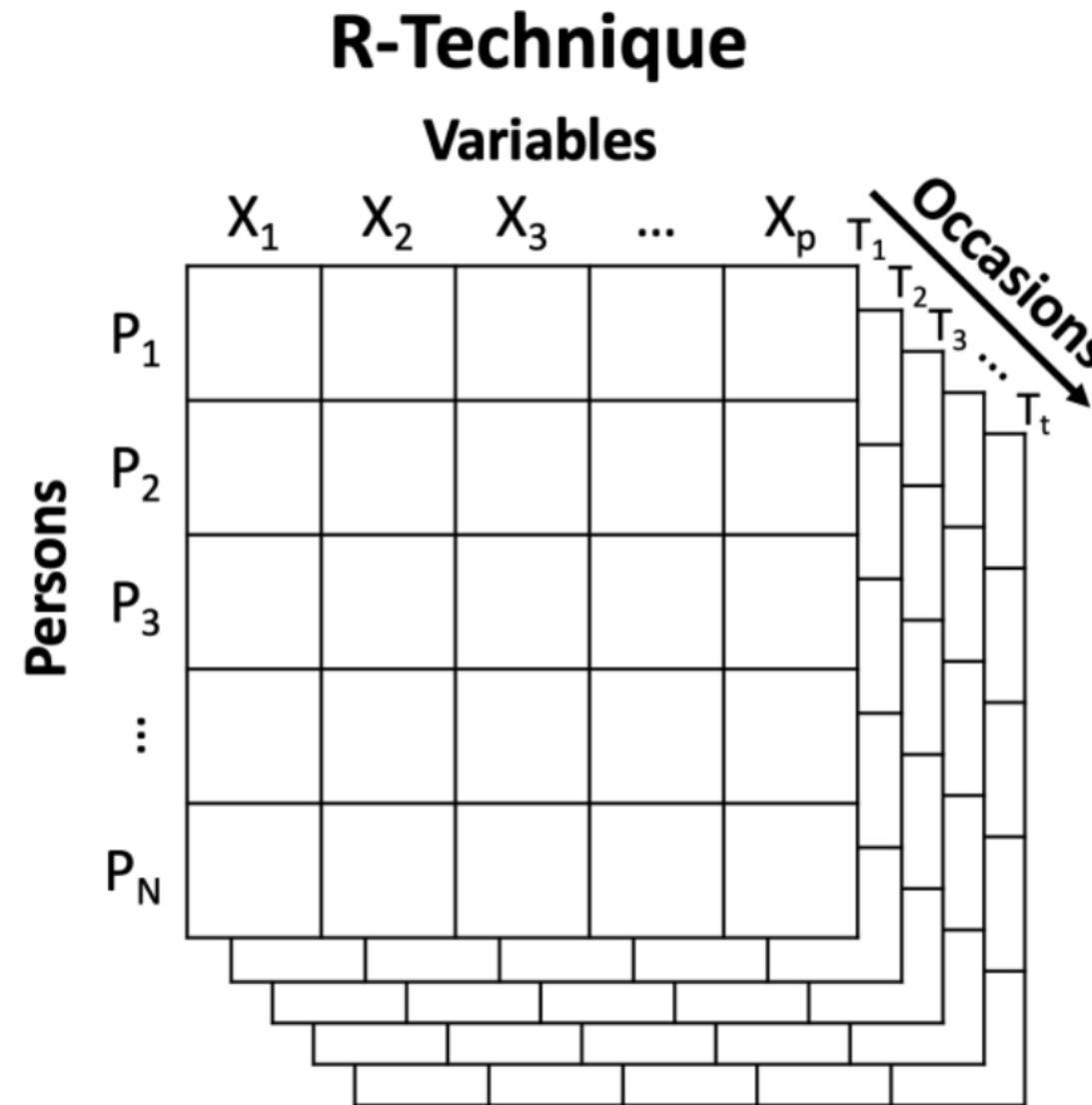


What is personality?



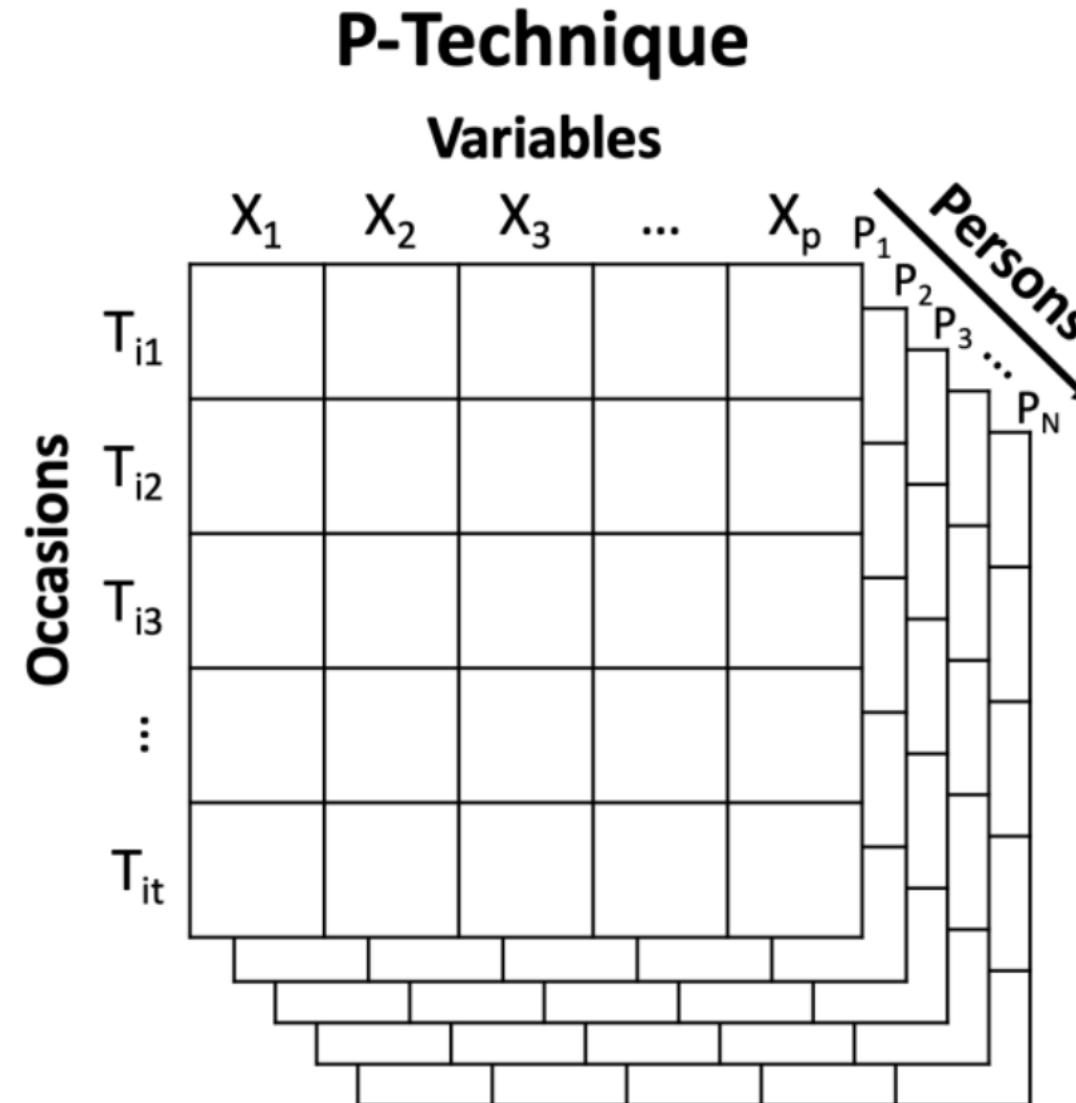
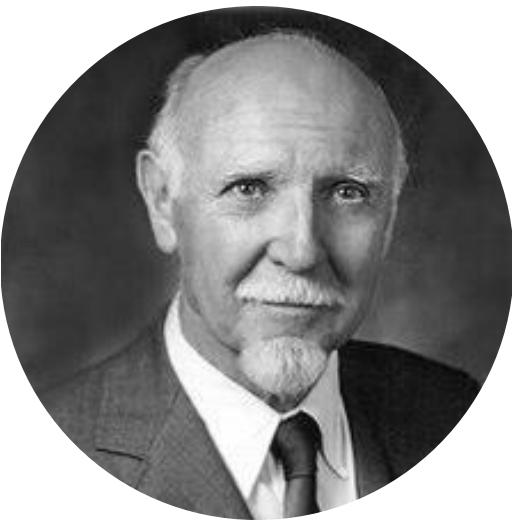
e.g., Cattell, 1943, 1946, 1957

What is personality?



e.g., Cattell, 1943, 1946, 1957

What is personality?



e.g., Cattell, 1943, 1946, 1957



What is personality?

if

...

then

Context

Situation perception

Experience

Etc.

Behavior

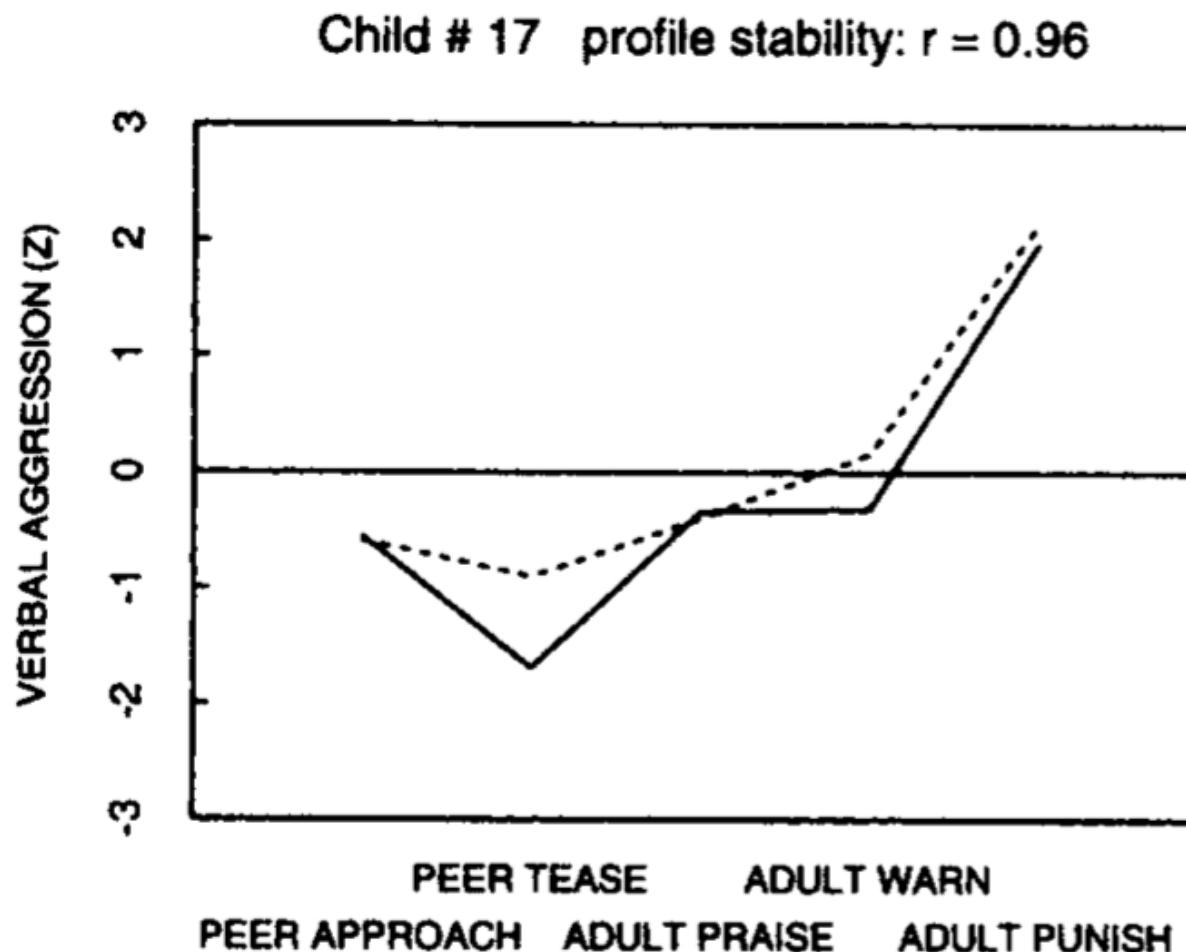
Experience

Etc.

e.g., Mischel & Shoda, 2005; Wright & Mischel, 1987;
Shoda, Mischel, & Wright, 1993; Mischel, 1973



What is personality?



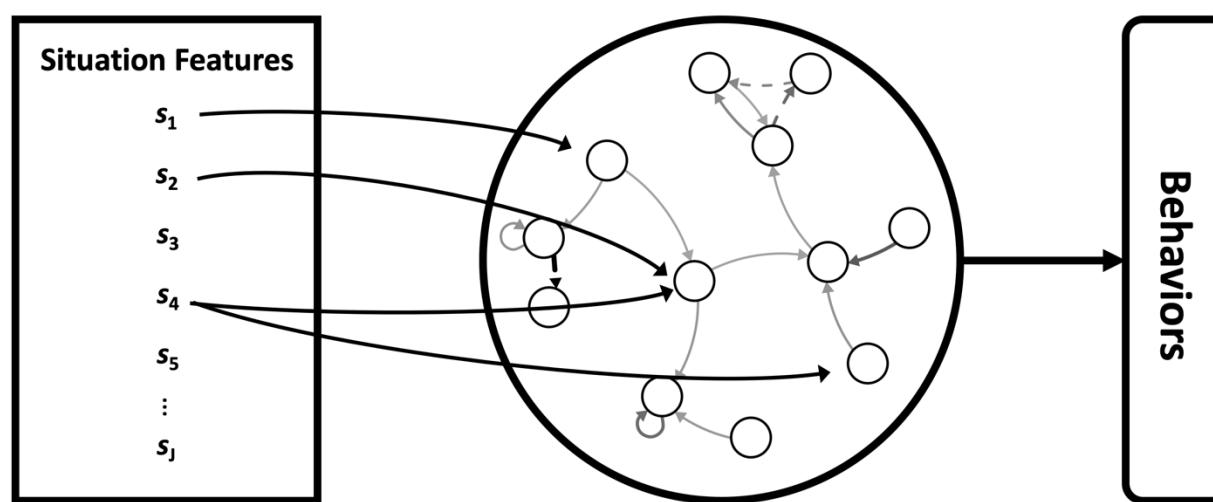
e.g., Mischel & Shoda, 2005; Wright & Mischel, 1987;
Shoda, Mischel, & Wright, 1993; Mischel, 1973

Persons in Context: Systems Theories

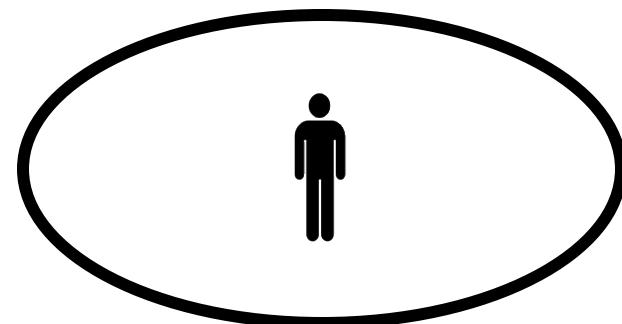
Ecological Systems Theory
(e.g., Bronfenbrenner, 1979)



Cognitive Affective Personality System
(e.g., Mischel & Shoda, 1995)



Field Theory
(e.g., Lewin, 1936)

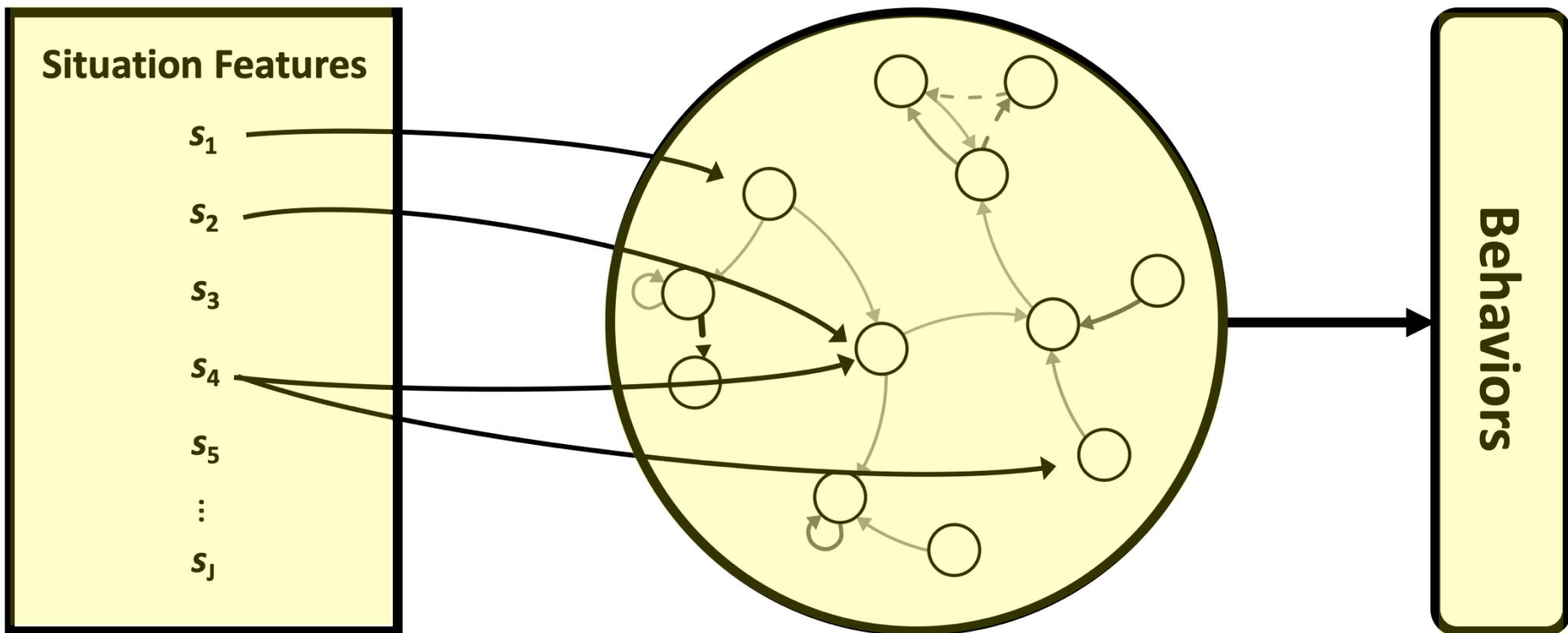


e.g., Lewin, 1936

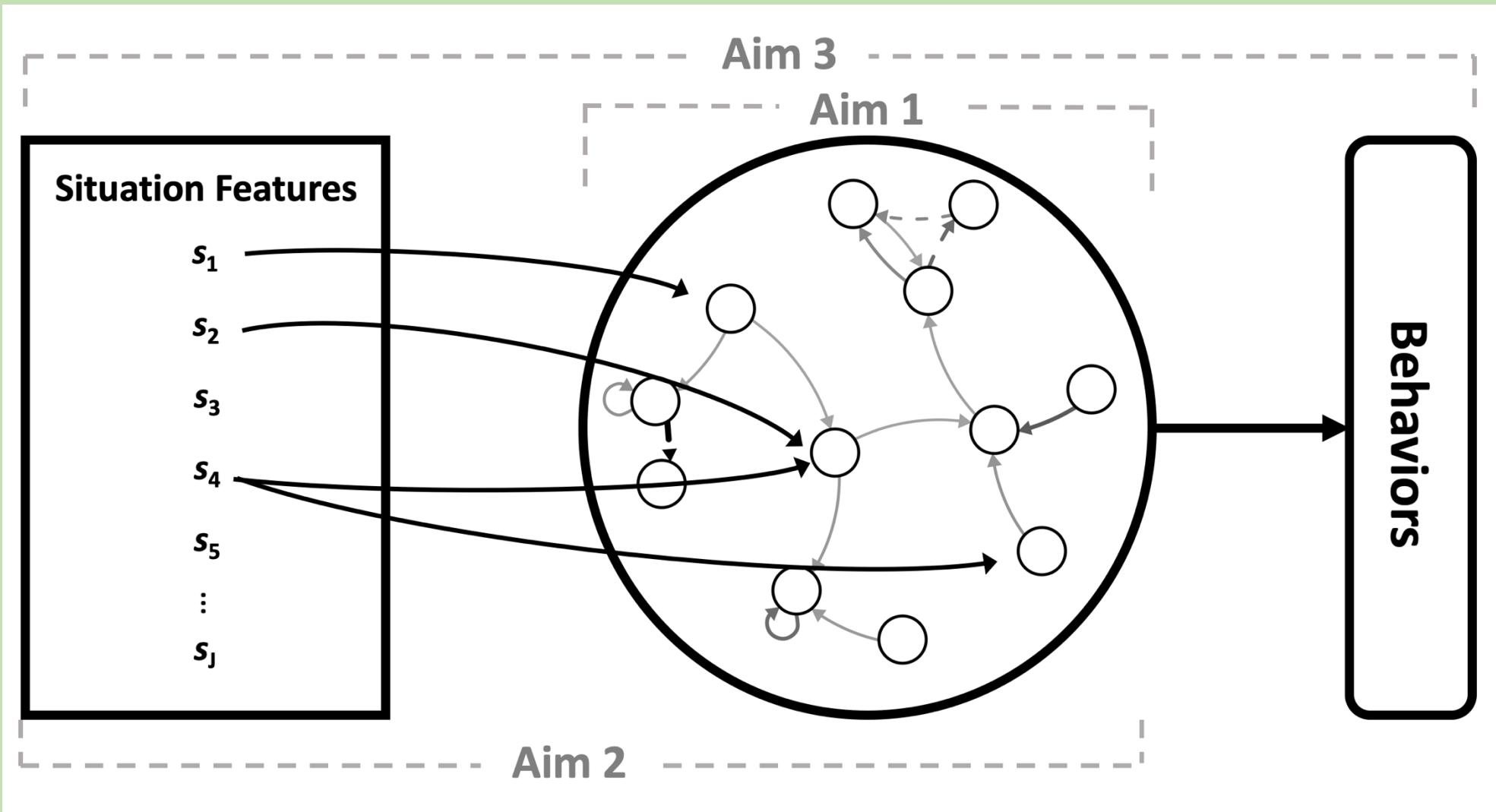


What is personality?

A Cognitive Affective Processing System (CAPS)



e.g., Mischel & Shoda, 2005; Wright & Mischel, 1987;
Shoda, Mischel, & Wright, 1993; Mischel, 1973



Aim 1: Bringing the individual back in the study of personality structure and change.

Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)

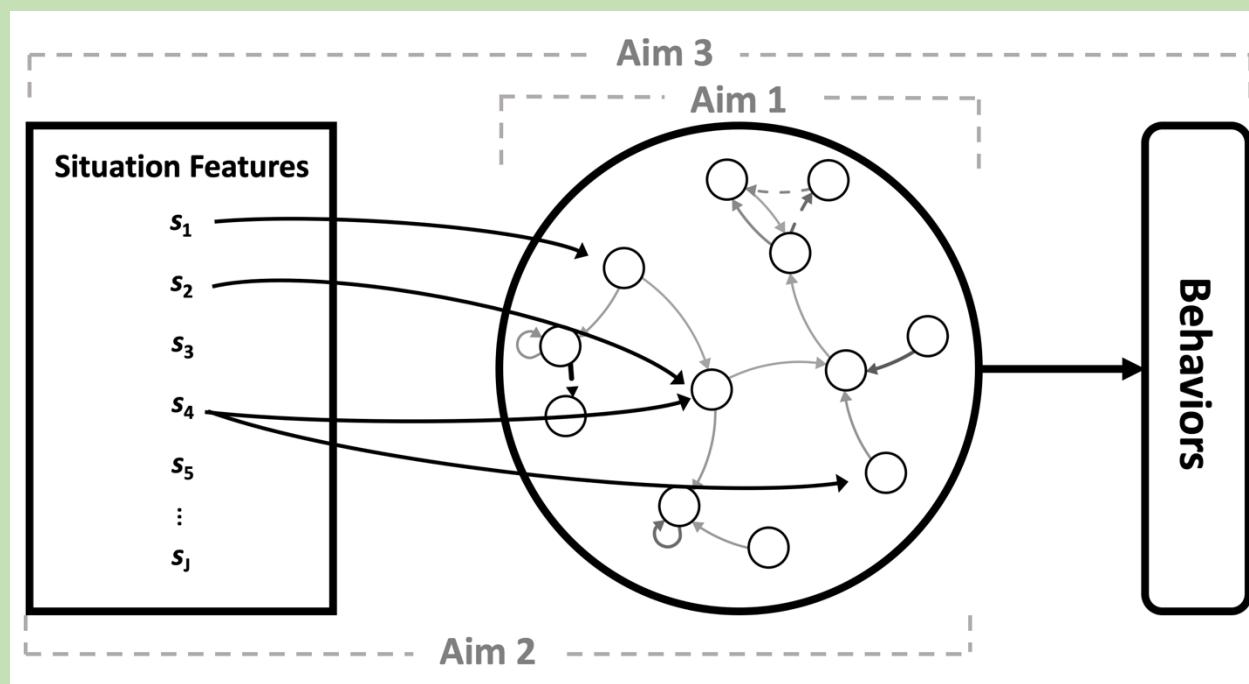
Aim 2: Using longitudinal data to understand how well-being unfolds across contexts.

Beck, et al.
(2025, *Nature Human Behaviour*)

Aim 3: Predicting behavior using machine learning.

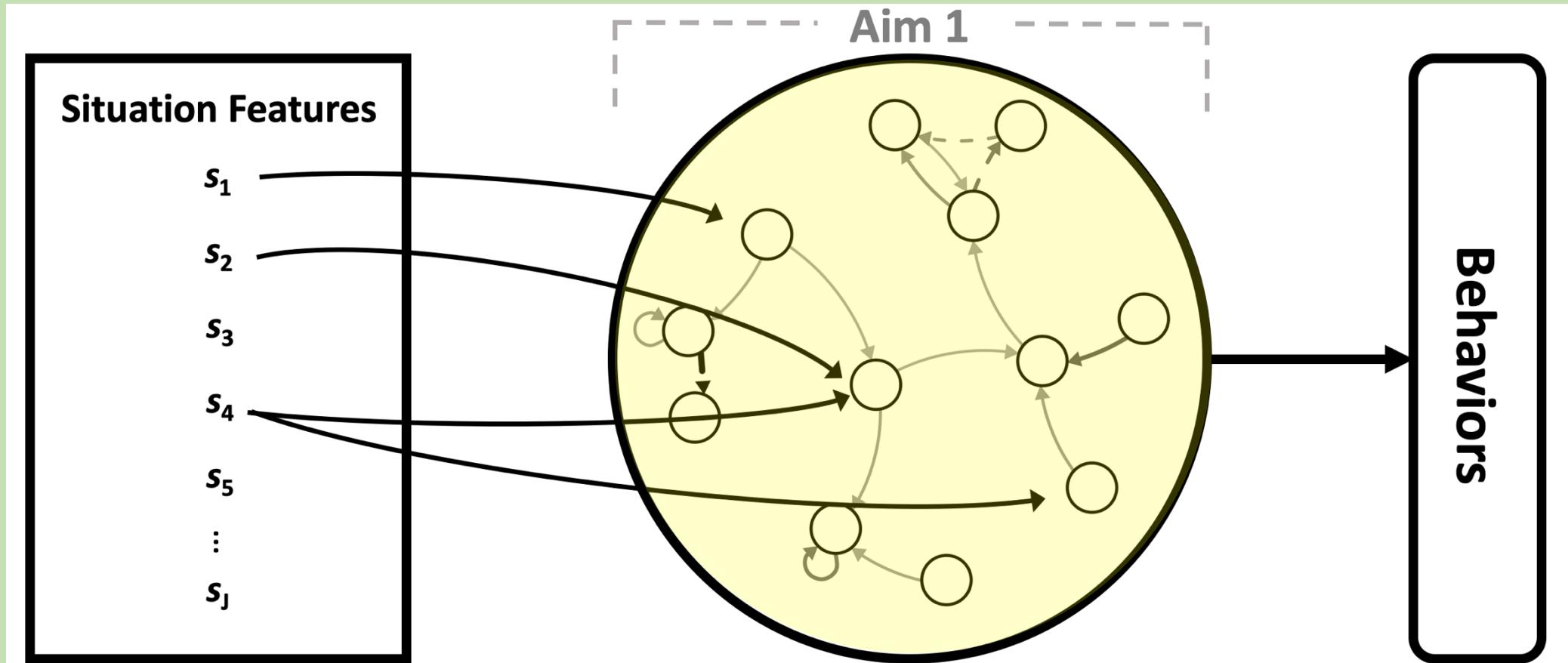
Beck & Jackson
(2023, *Psych Science*)

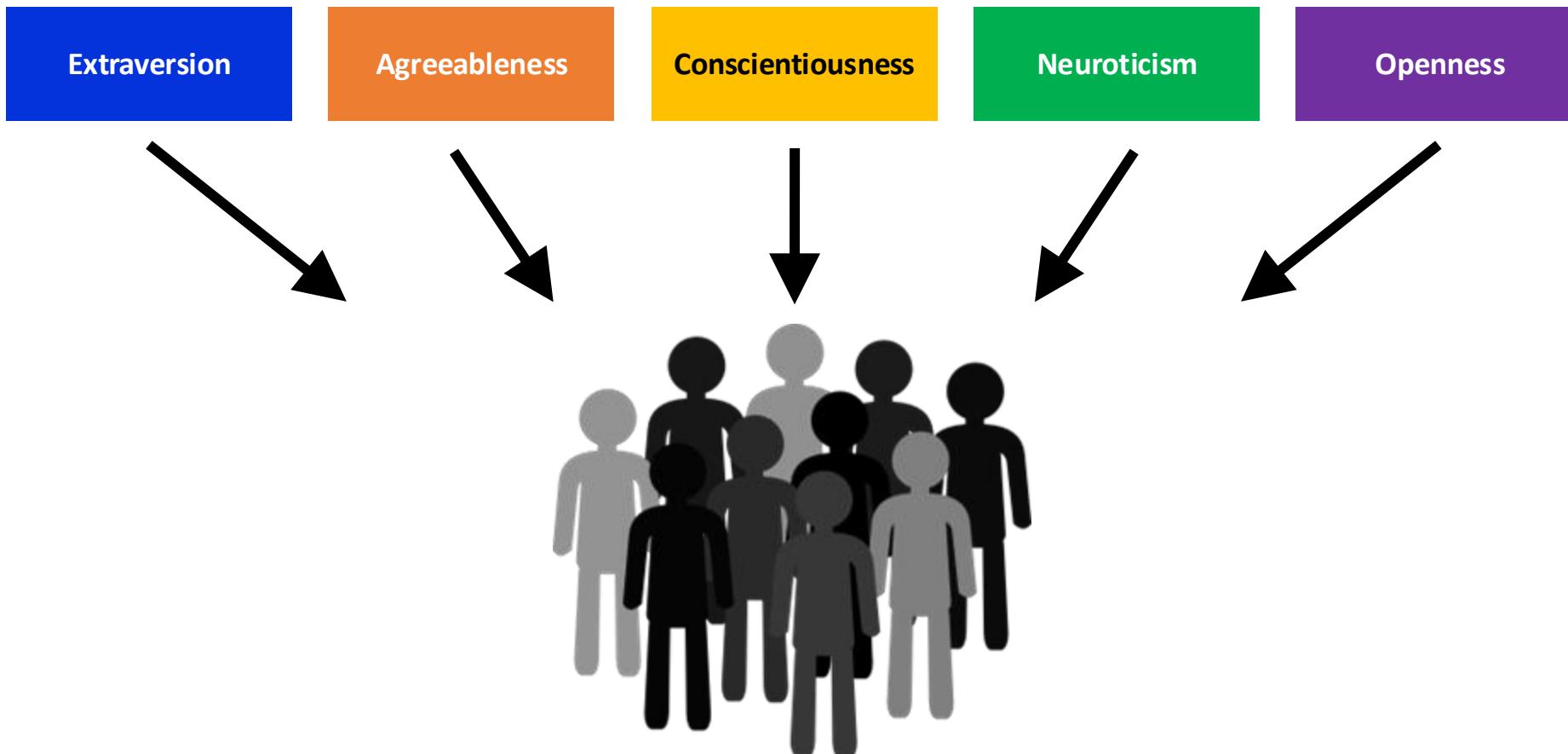
Ongoing Directions



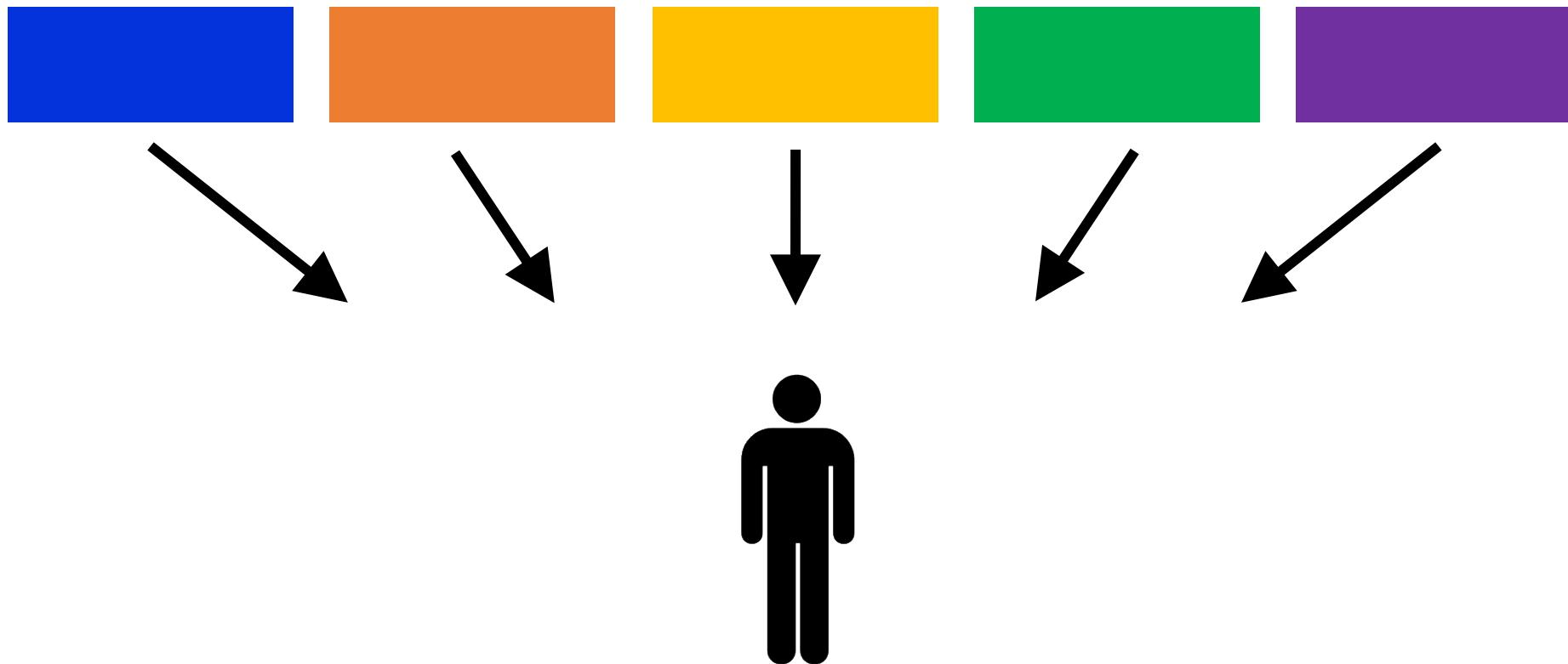
Aim 1: Bringing the individual back in the study of personality structure and change.

Beck & Jackson
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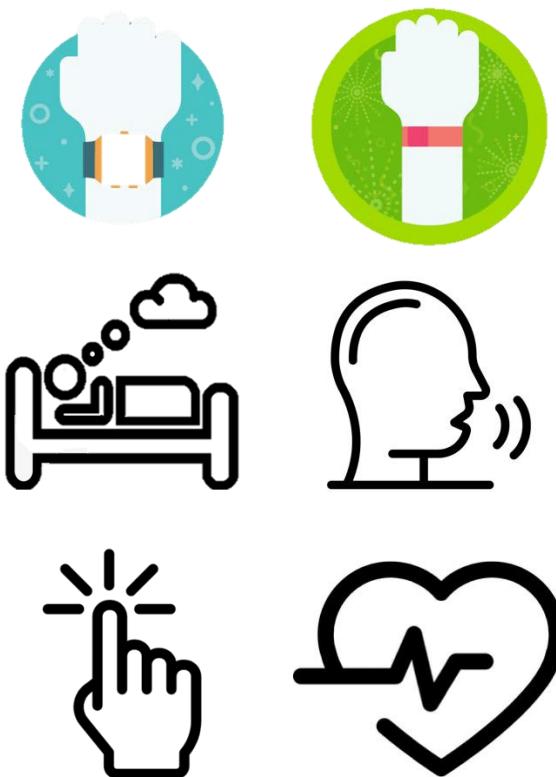
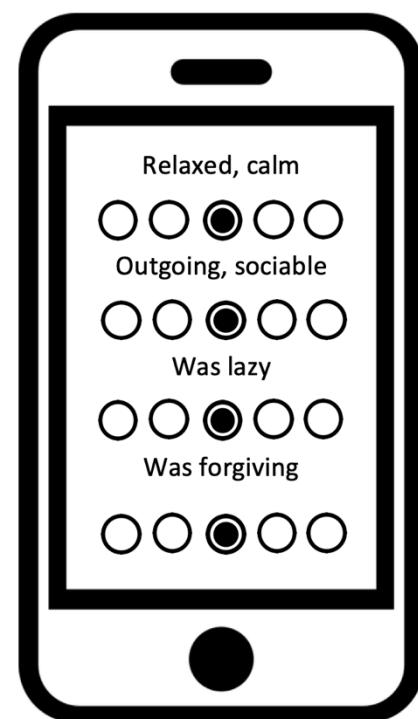
**Nomothetic
Variable-Centered**



**Idiographic
Person-Specific**

ESM / EMA

Mobile Sensing



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

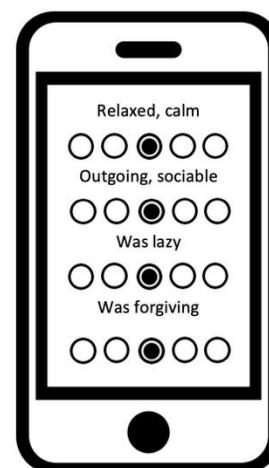
9 items from the Big Five Inventory (BFI)

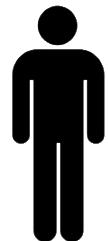
Procedure

4 assessments / day for 15 days

Modeling

Graphical vector autoregression

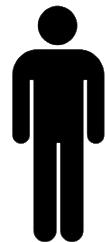




time	E	A	C	N	O
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

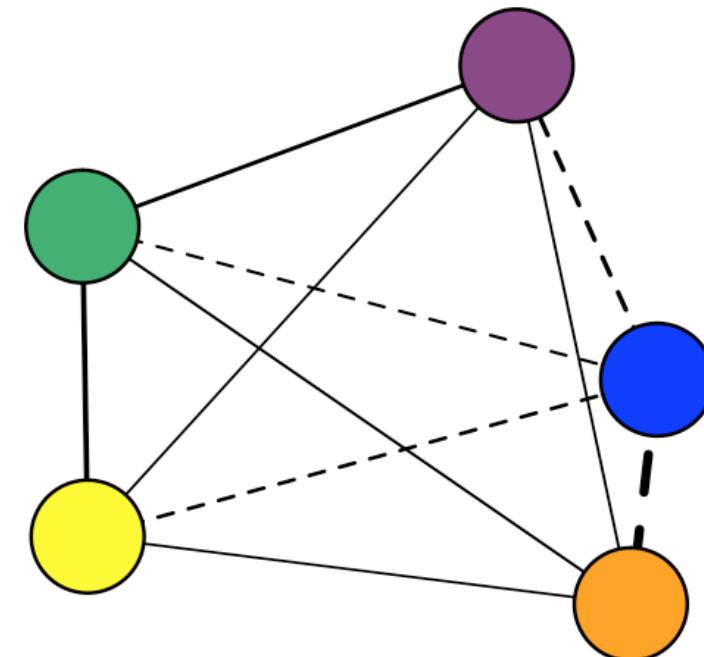
E				
A	0.02			
C	-0.05	0.08		
N	0.64	-0.12	-0.10	
O	0.26	-0.27	0.43	0.07

Contemporaneous: Within Time-Points
 $x_{it} \leftrightarrow x_{jt}$

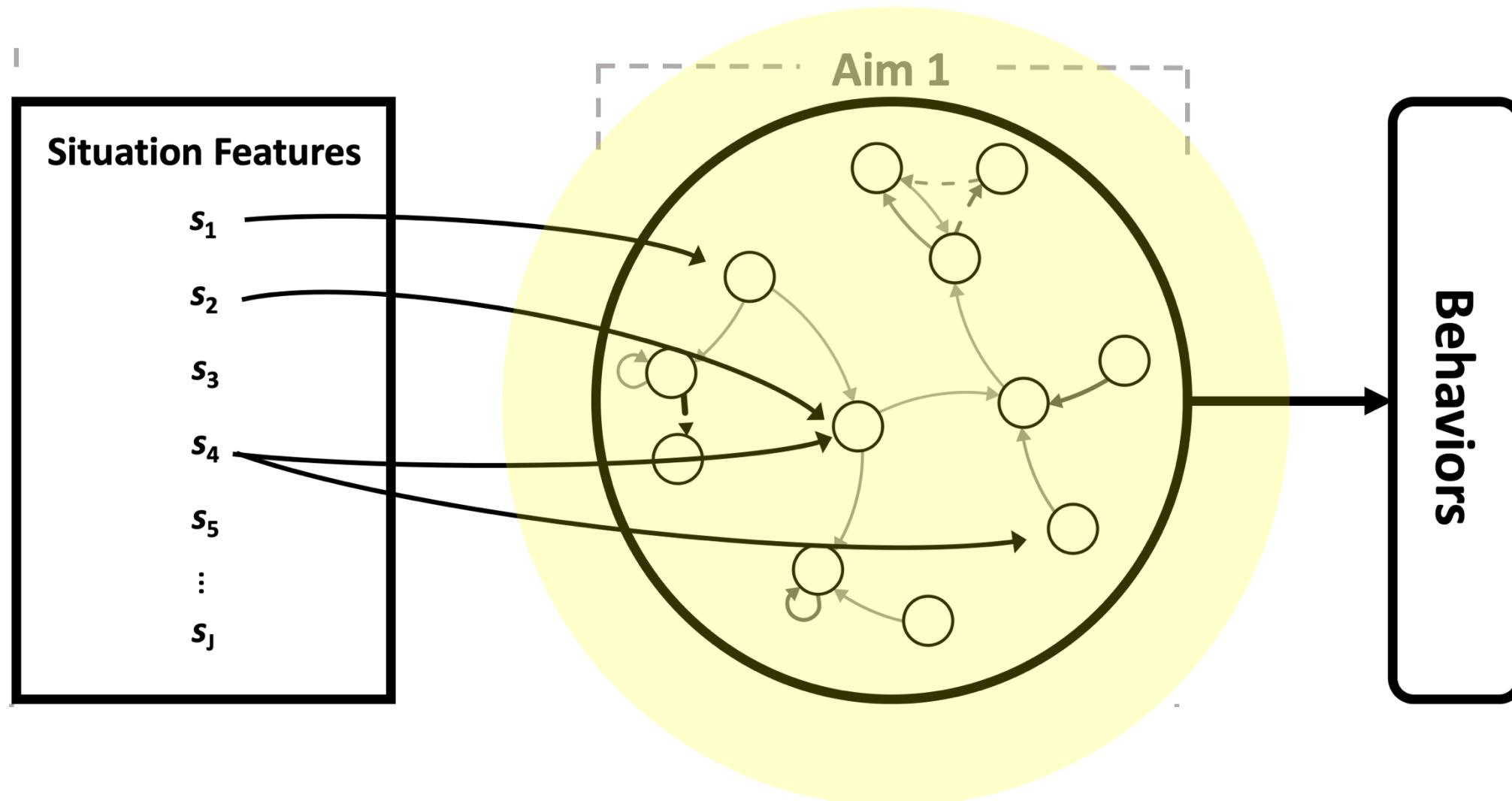


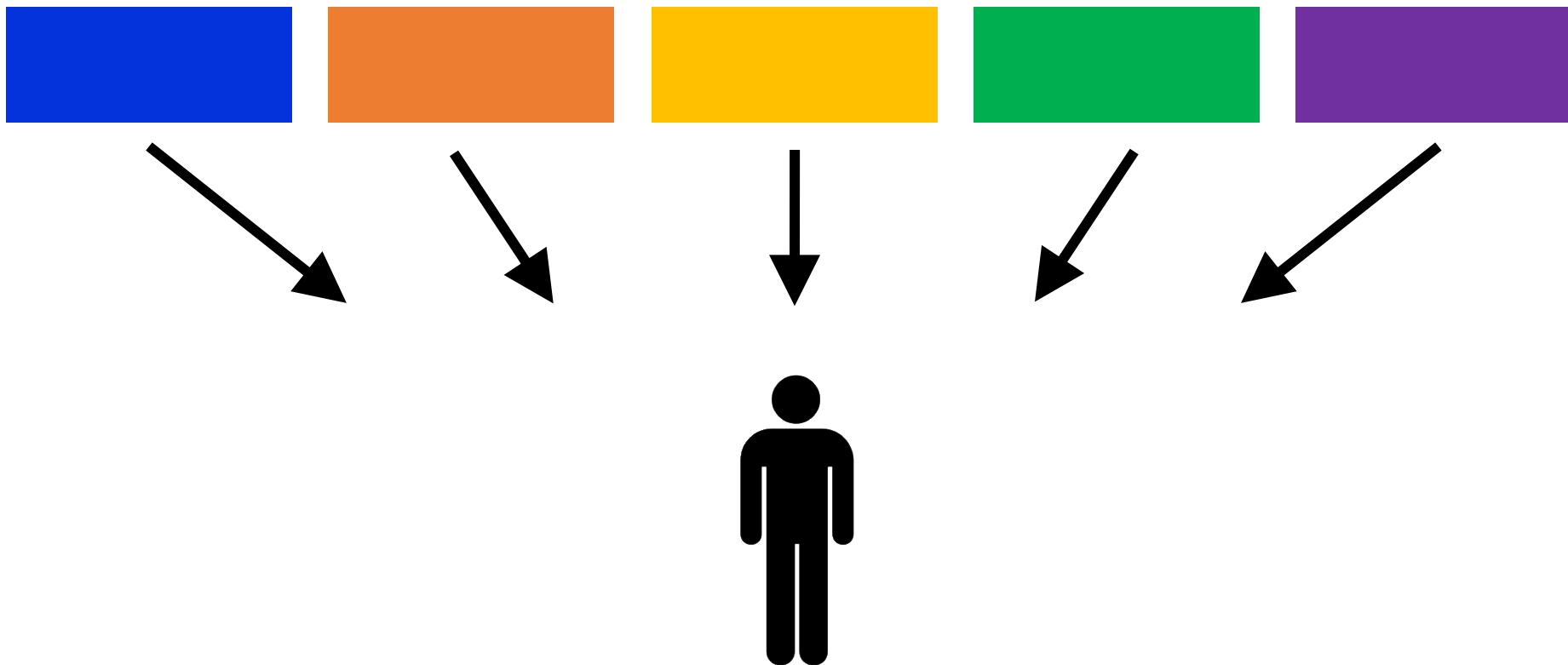
time **E A C N O**

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

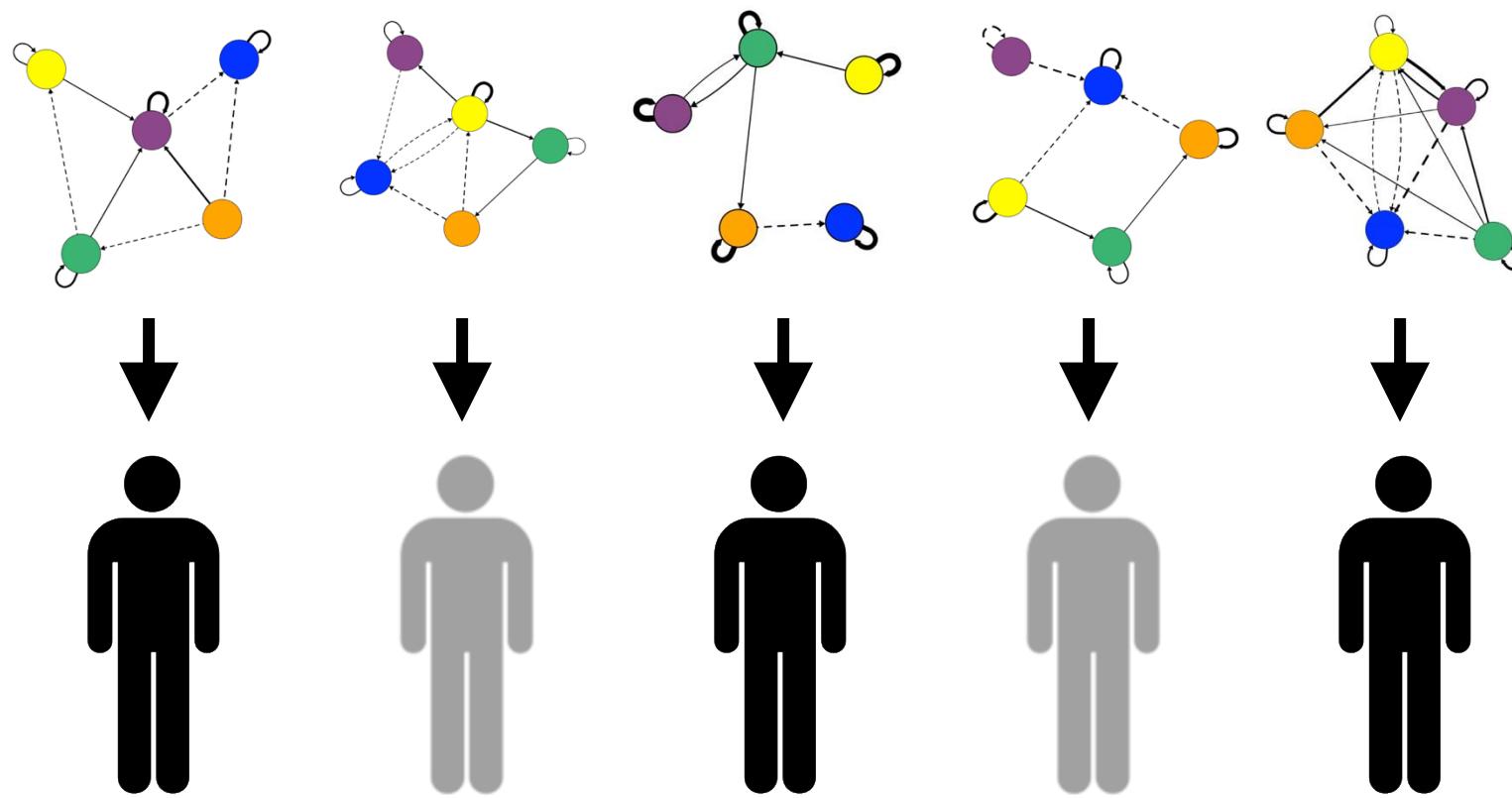


Contemporaneous: Within Time-Points
 $x_{it} \leftrightarrow x_{jt}$





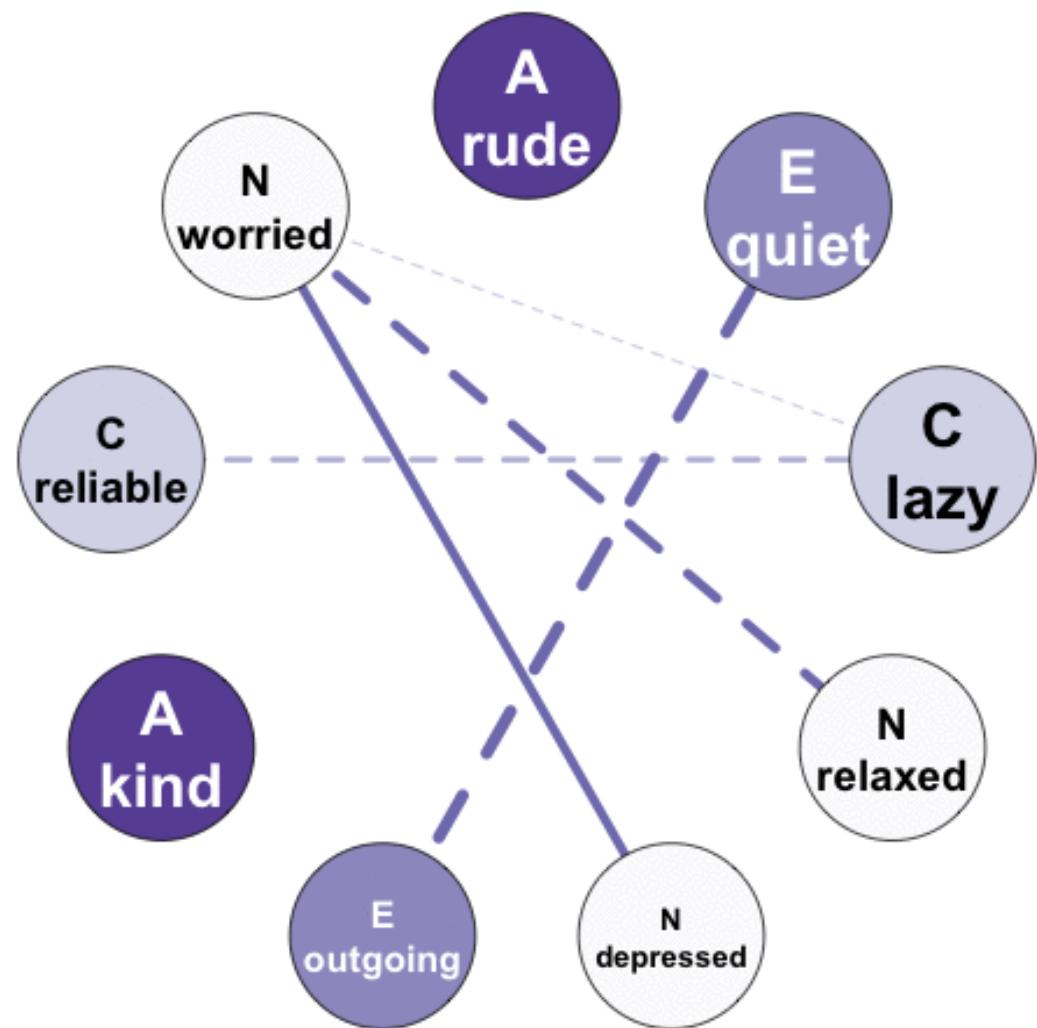
**Idiographic
Person-Specific**

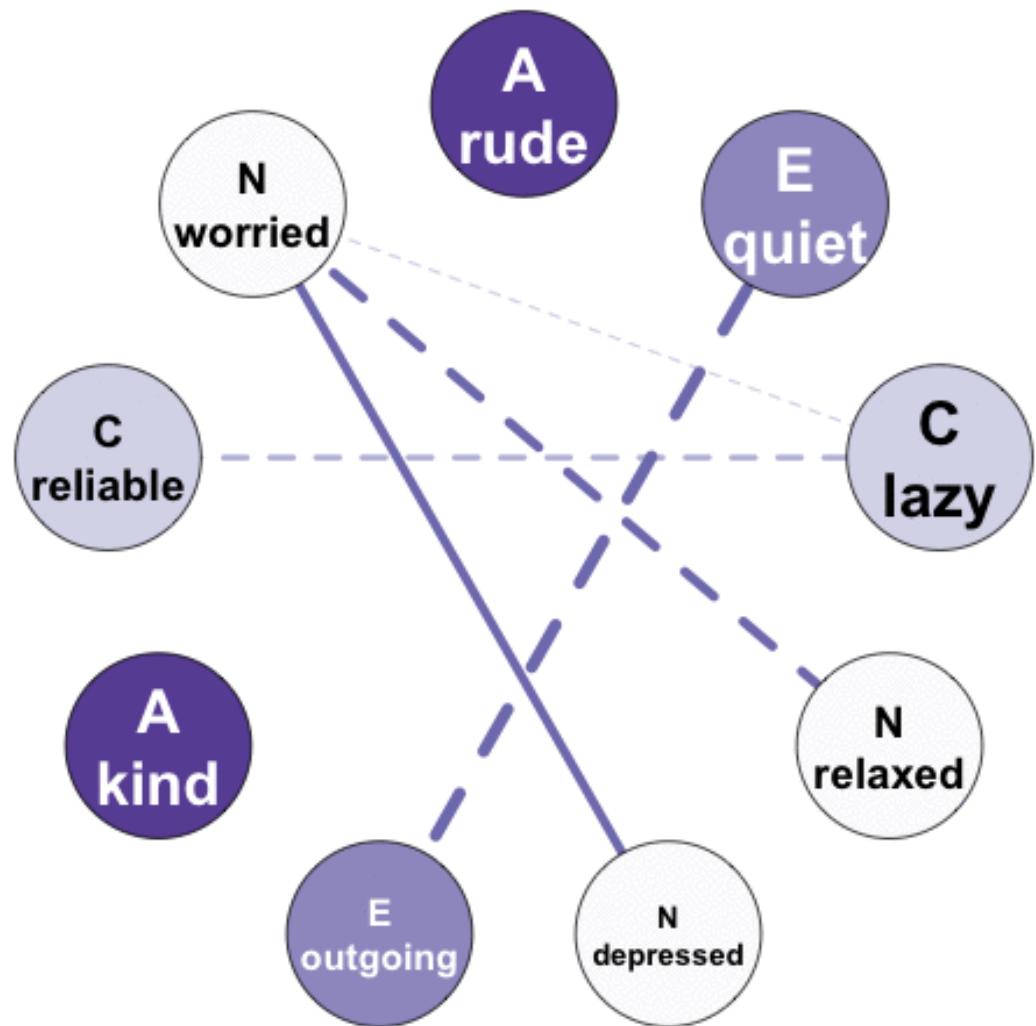


Idiographic Person-Specific

RESULTS

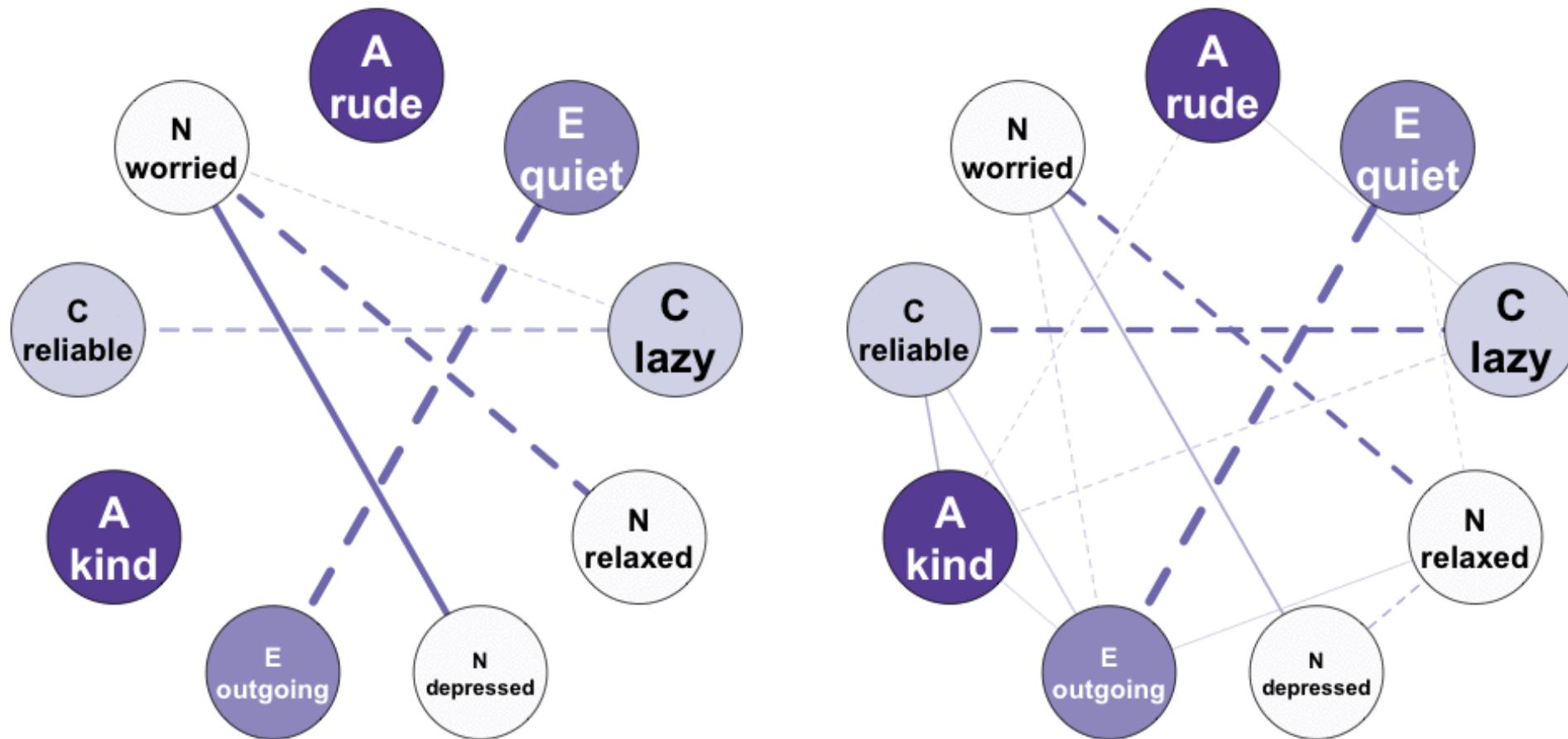
Aim 1

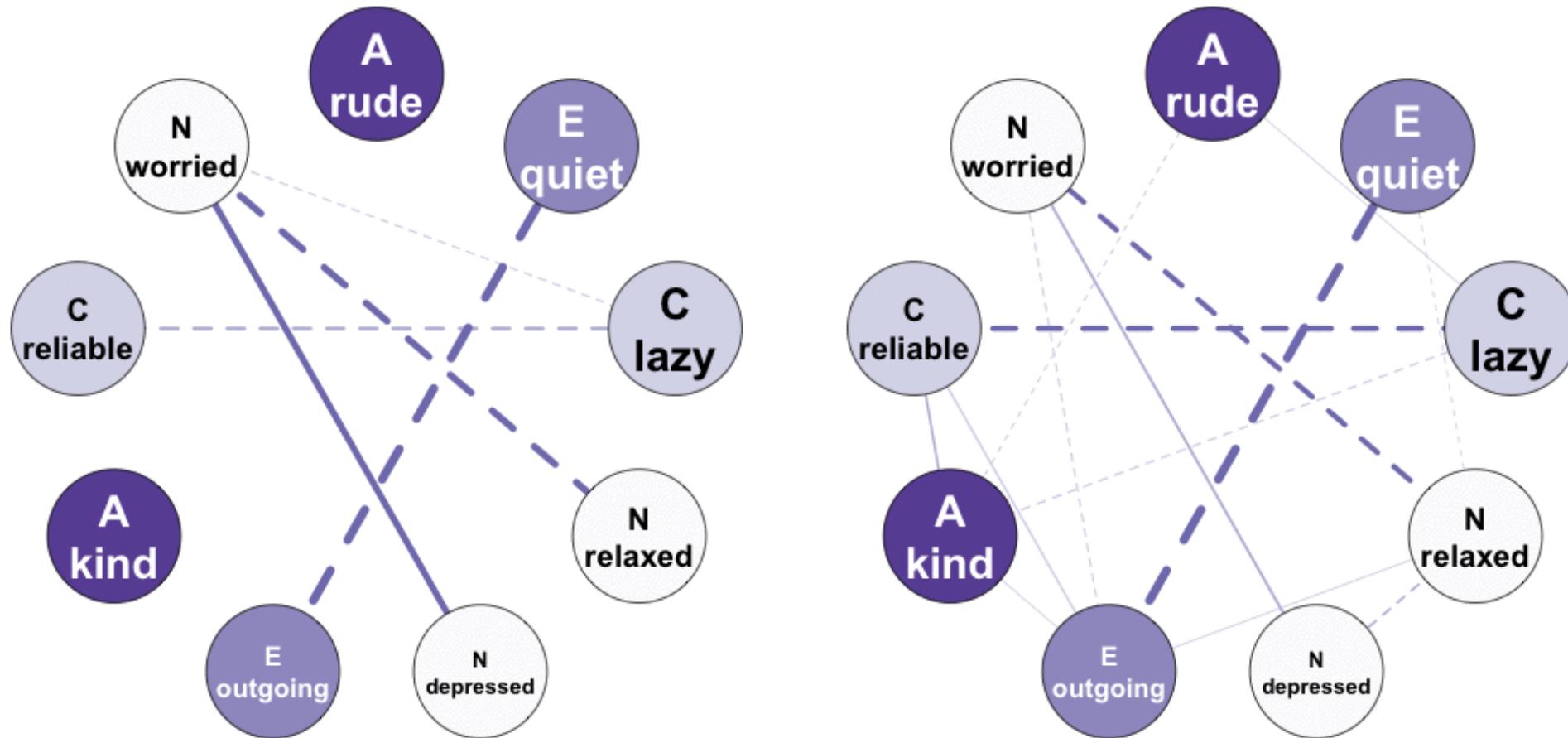


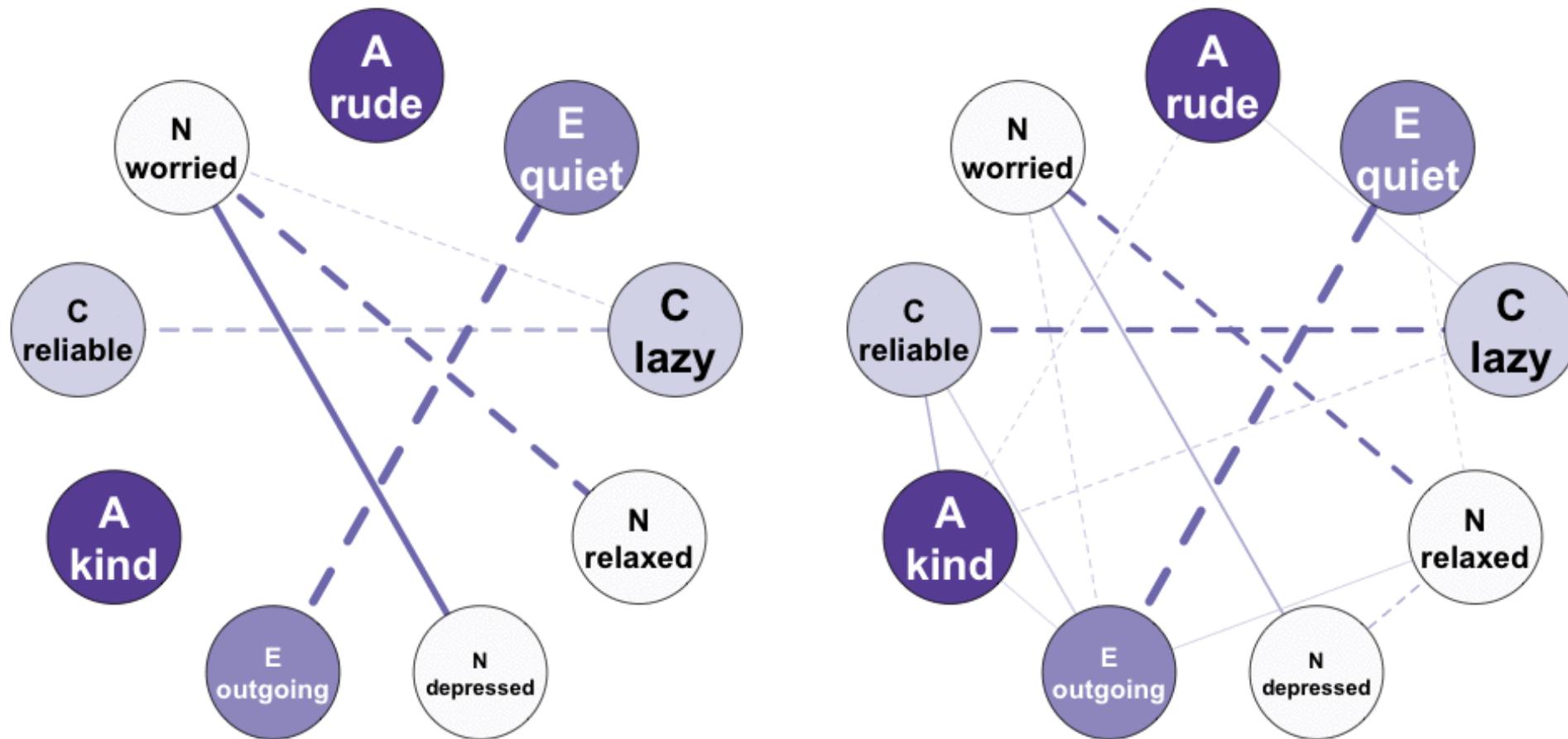


The structures differ across people.

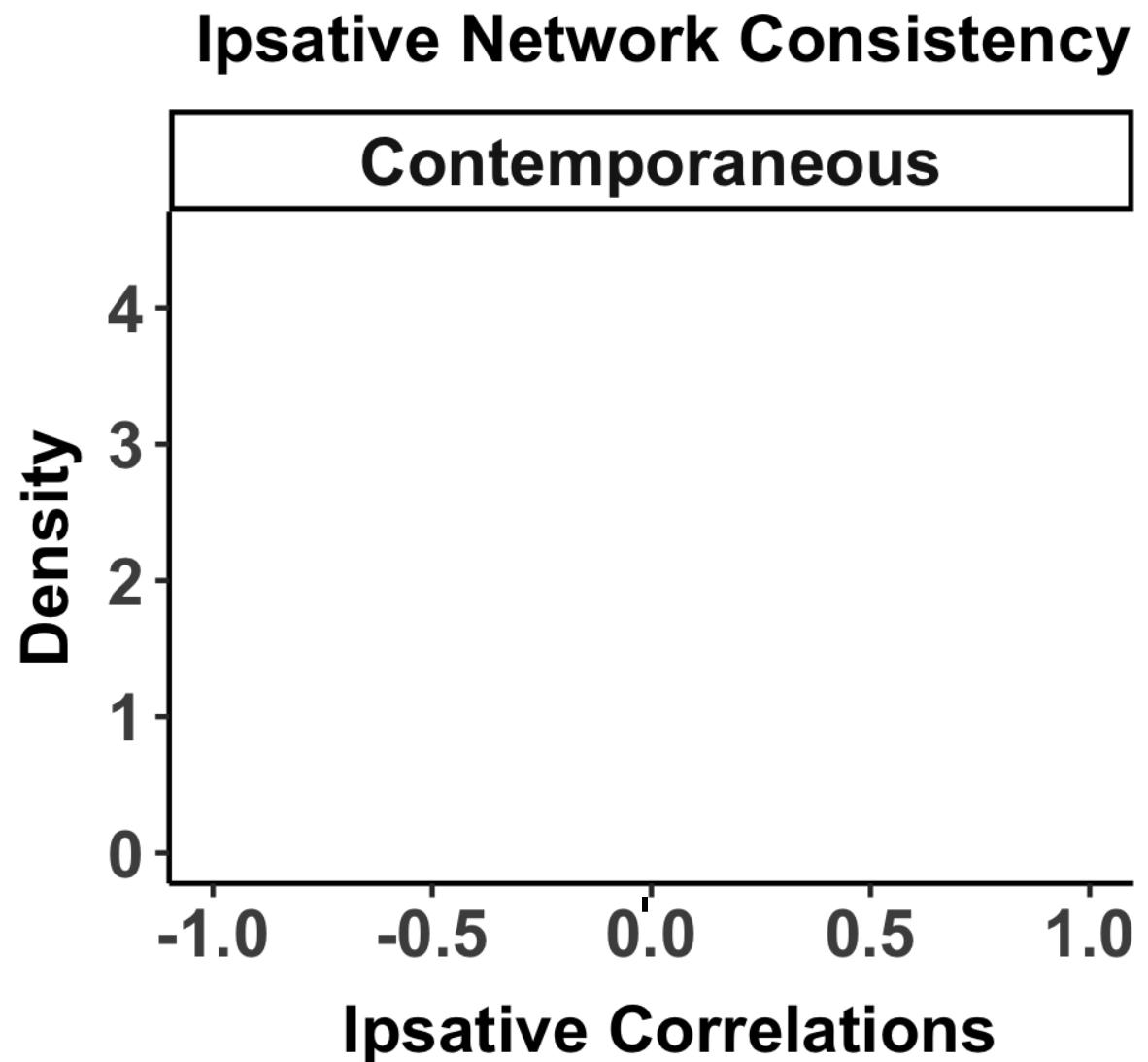
But do they show expected longitudinal consistency?







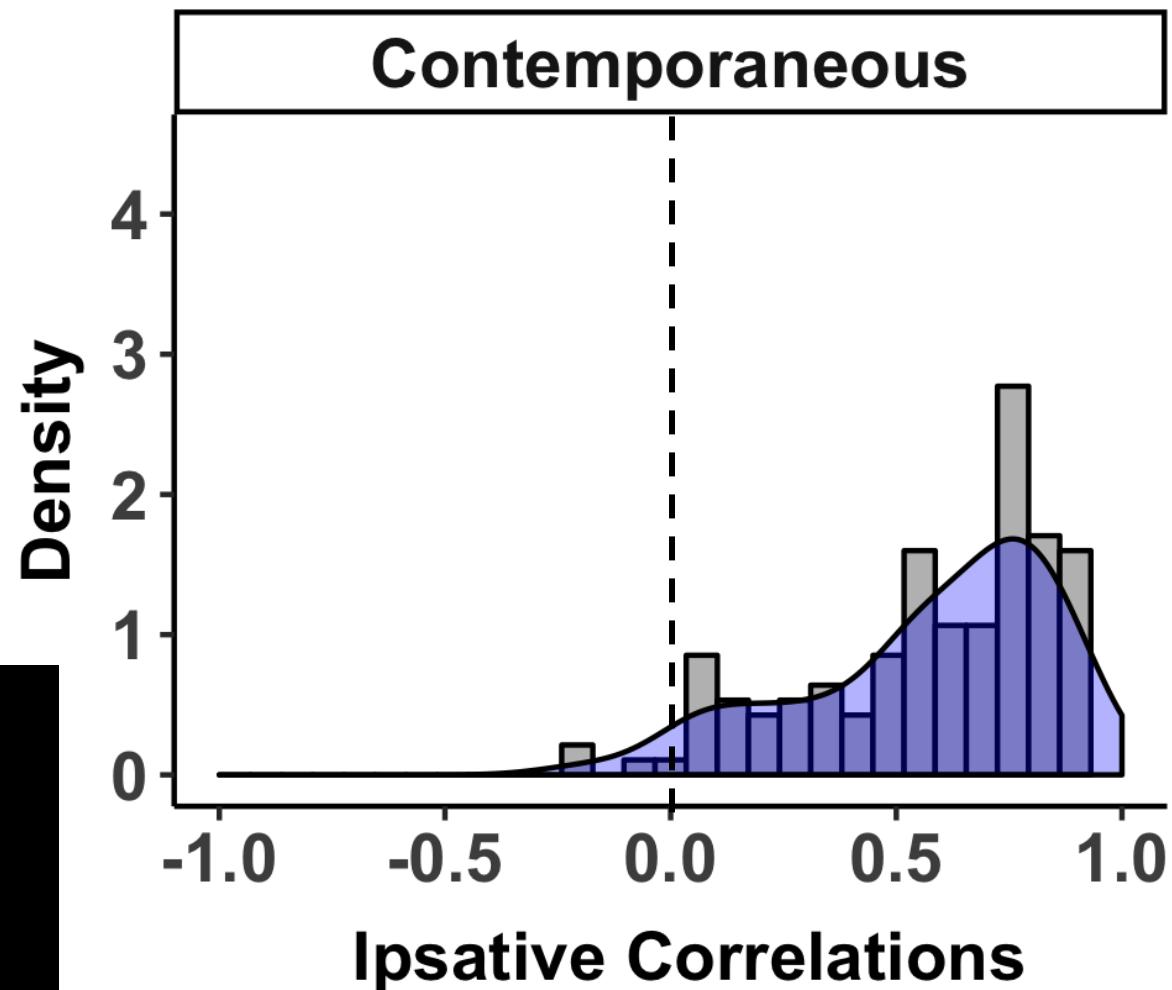
How consistent is
idiographic personality
across two
years?



How consistent is
idiographic personality
across two
years?

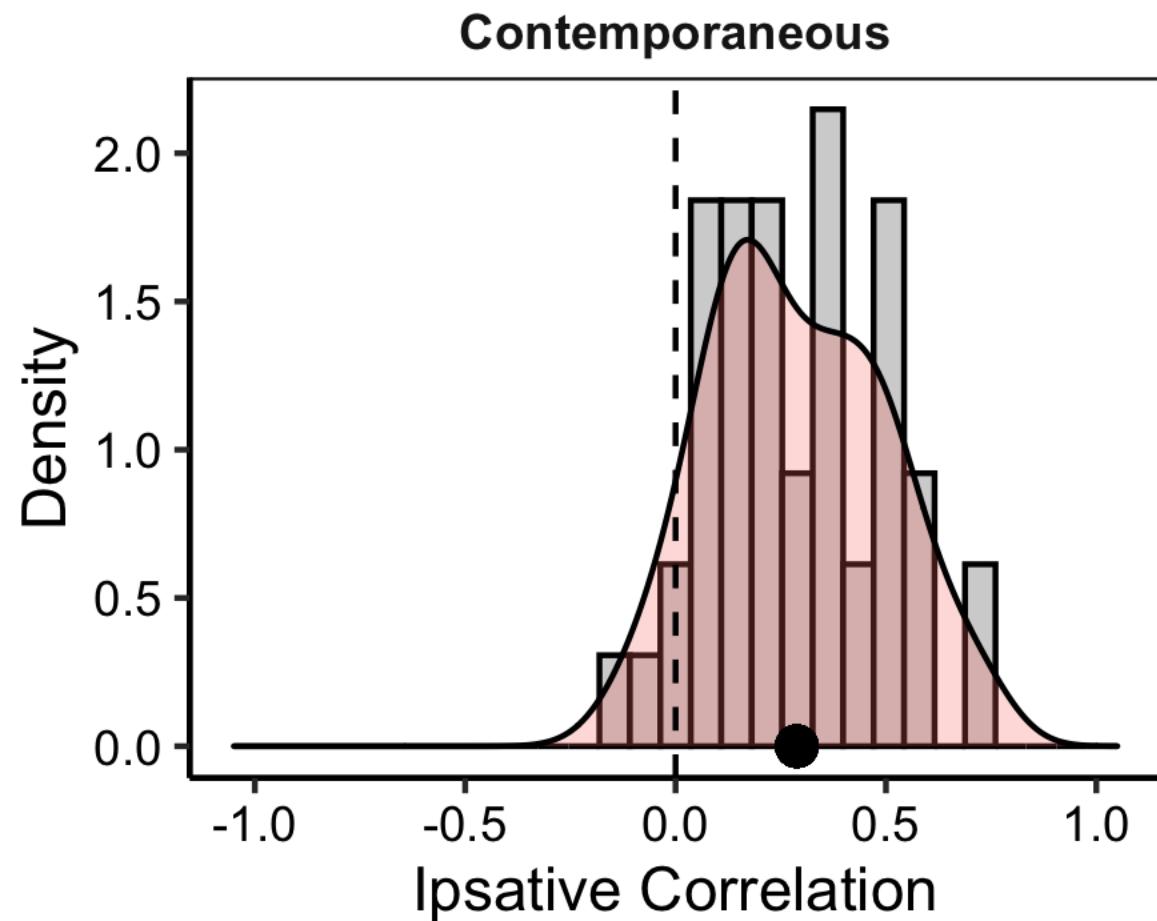
Idiographic Personality is
consistent over two years.

Ipsative Network Consistency



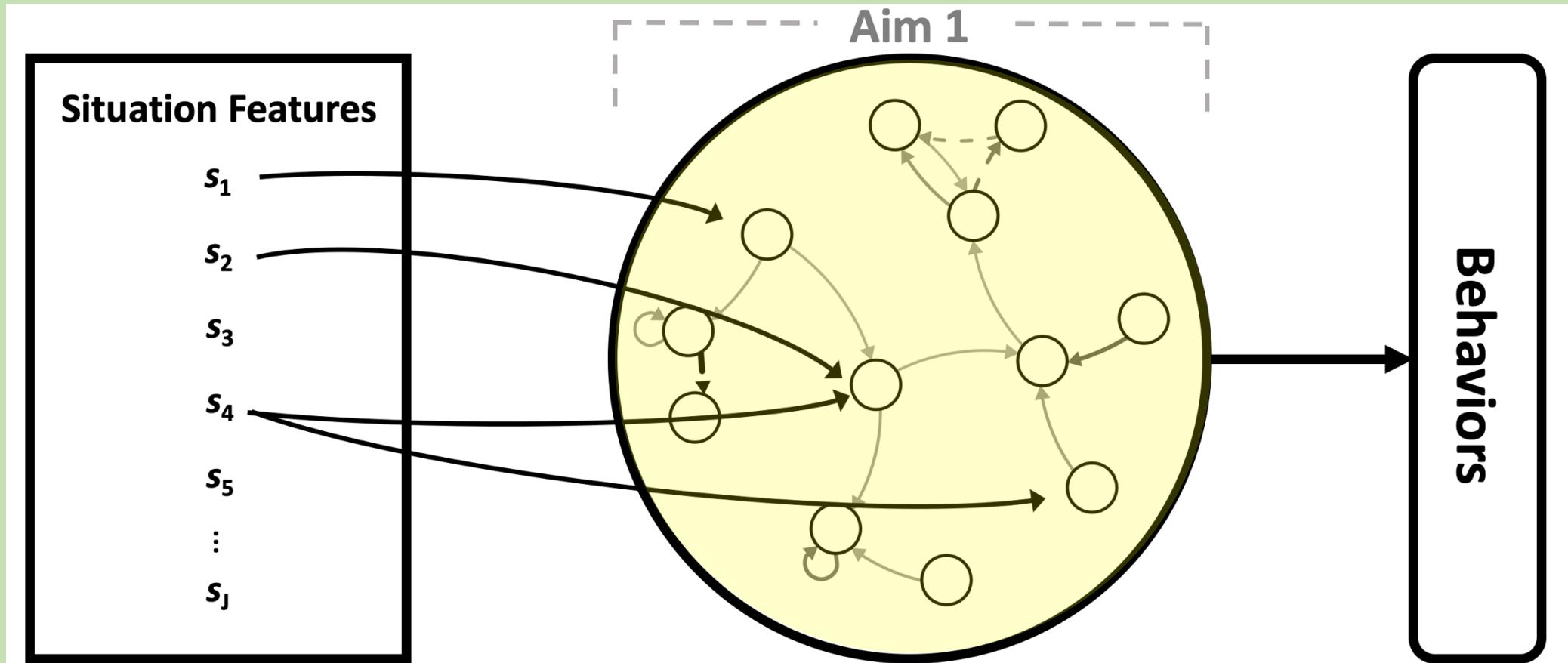
How consistent is
idiographic personality
across two
years?

Idiographic Personality is
consistent over two years AND
global events.



Aim 1: Bringing the individual back in the study of personality structure and change.

Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)



Aim 1: Bringing the individual back in the study of personality structure and change.

Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)

Idiographic personality structures are:

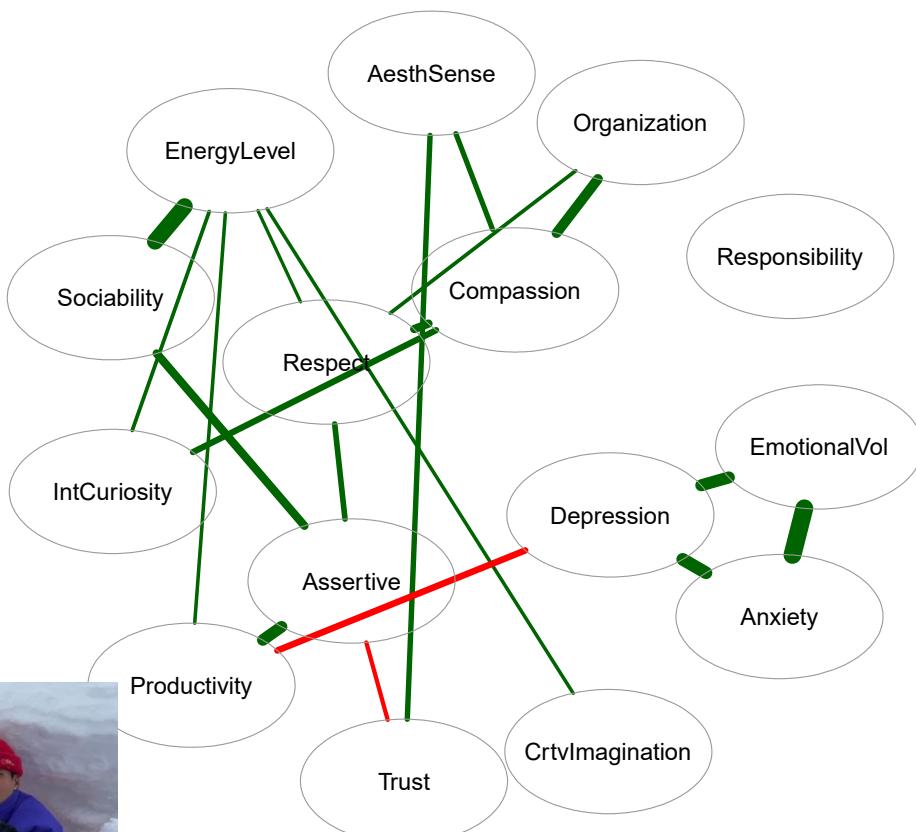
Unique (i.e. differ across people).

Relatively consistent over time.

Relatively consistent across global events.

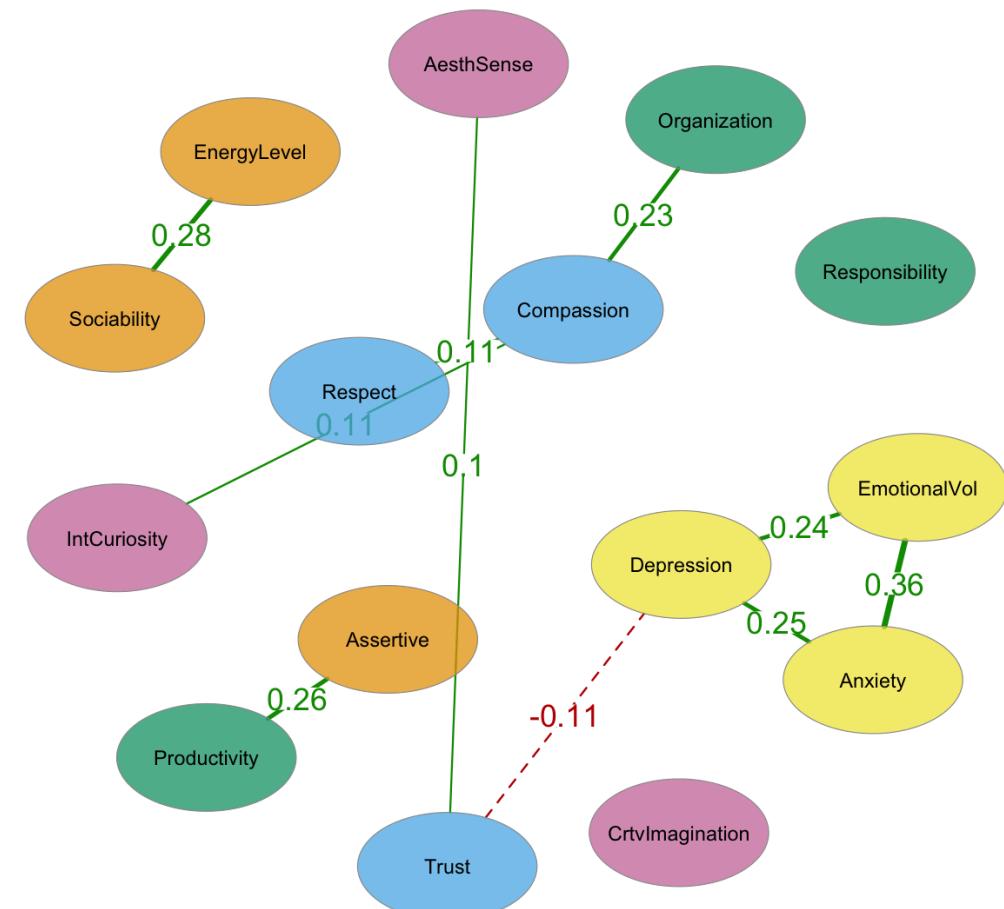
Extension: Time-Varying Networks

Stationary Network



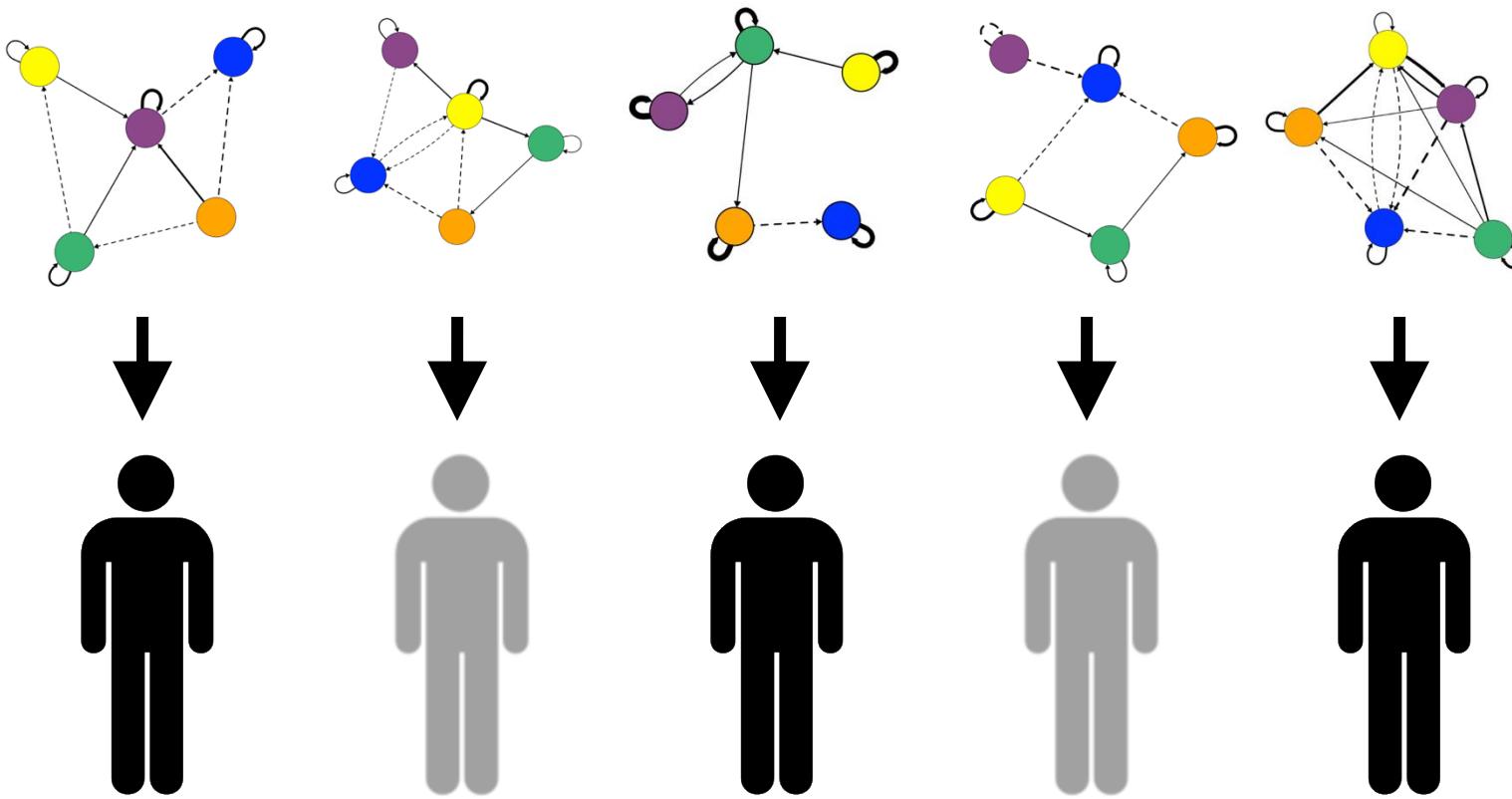
Colin J Lee

Estimation Point 1



Lee & Beck (under review)

Extension: Networks as Predictors



**Idiographic
Person-Specific**

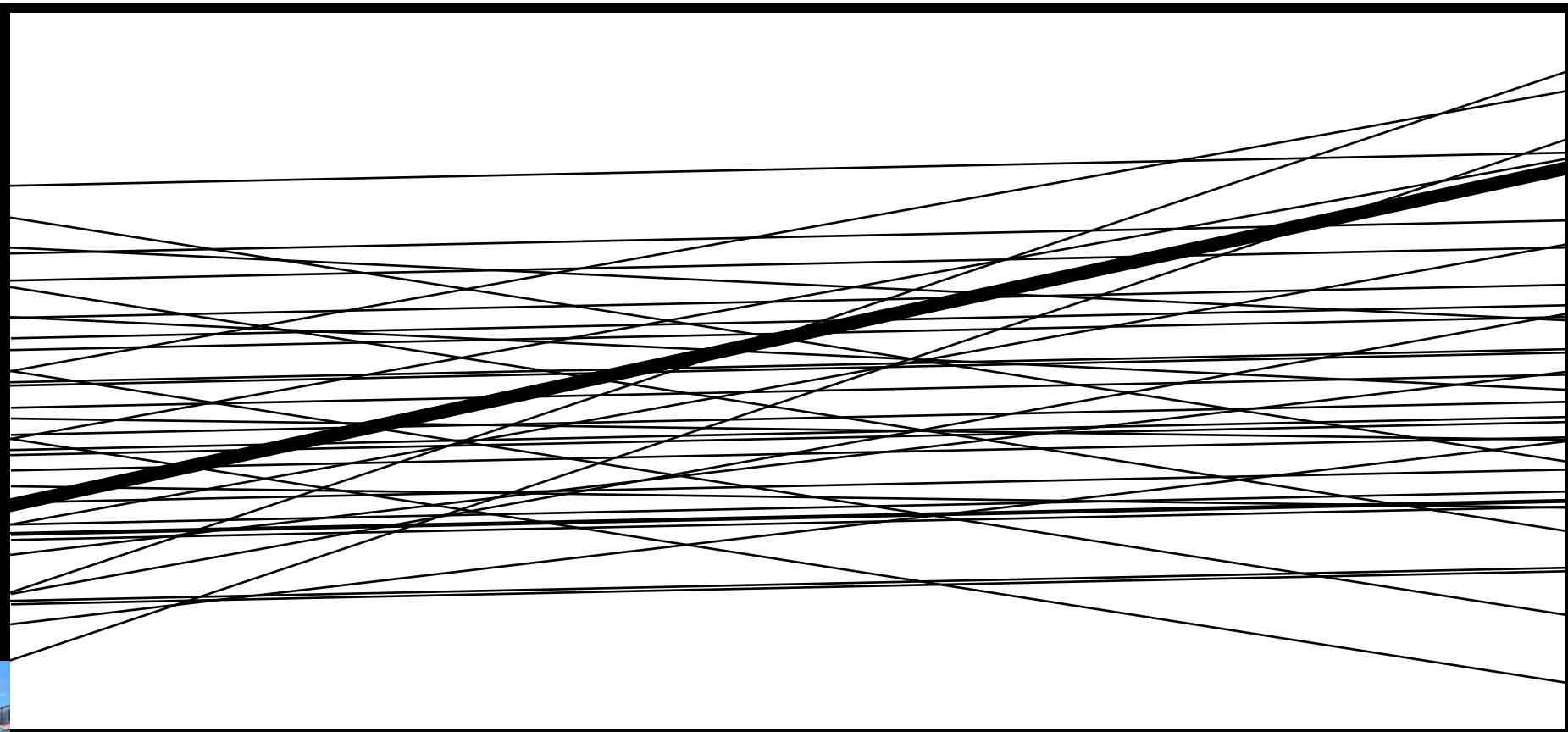
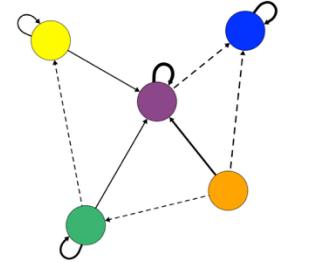
Extraversion

Agreeableness

Conscientiousness

Neuroticism

Openness

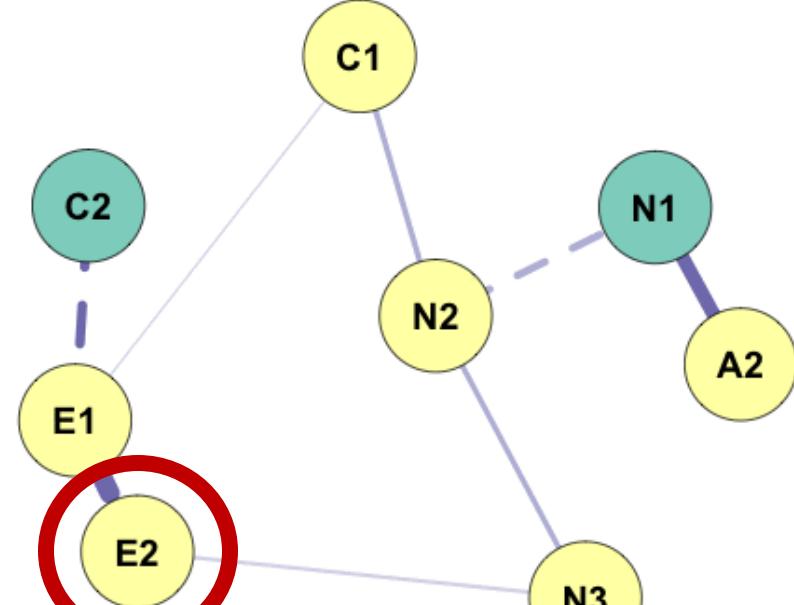


Adam Nissen

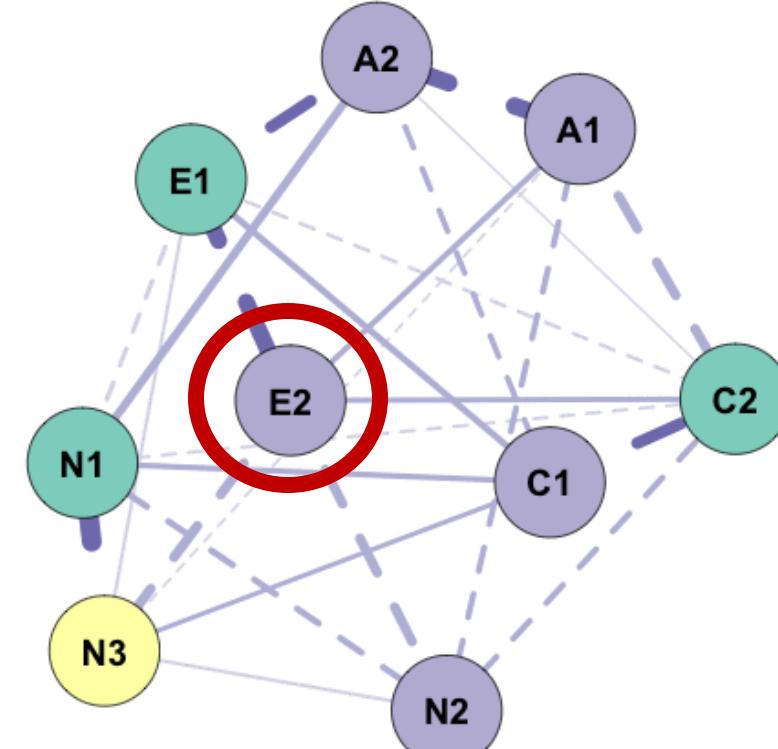
Nissen & Beck (2025a; *JPSP*)

Extension: Networks as Predictors

Low Density, Degree



High Density, Degree



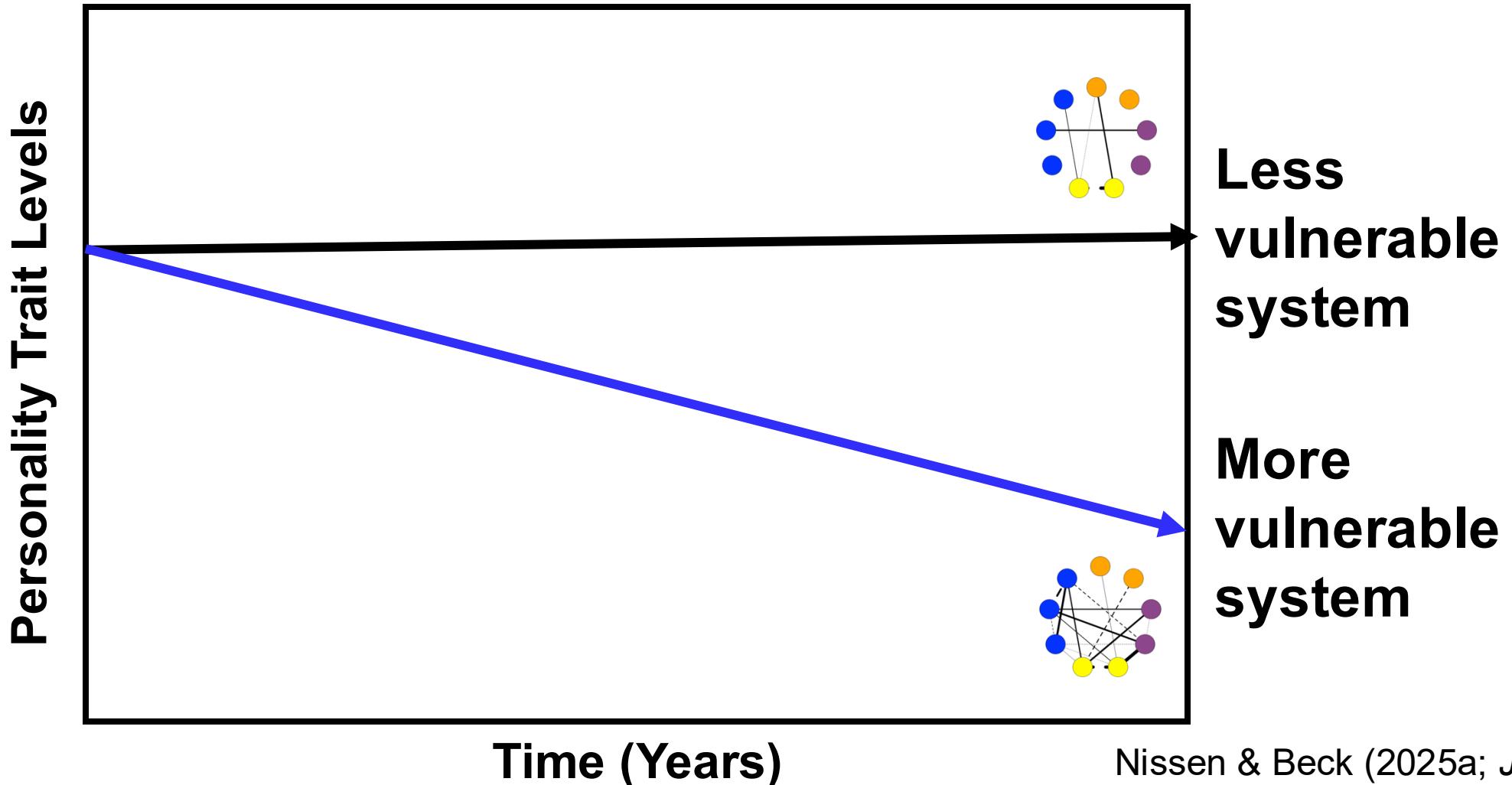
RIGIDITY



CHAOS

Integrating Across Time Scales:

Using personality dynamics to link idiographic systems to personality trait change



Adam Nissen

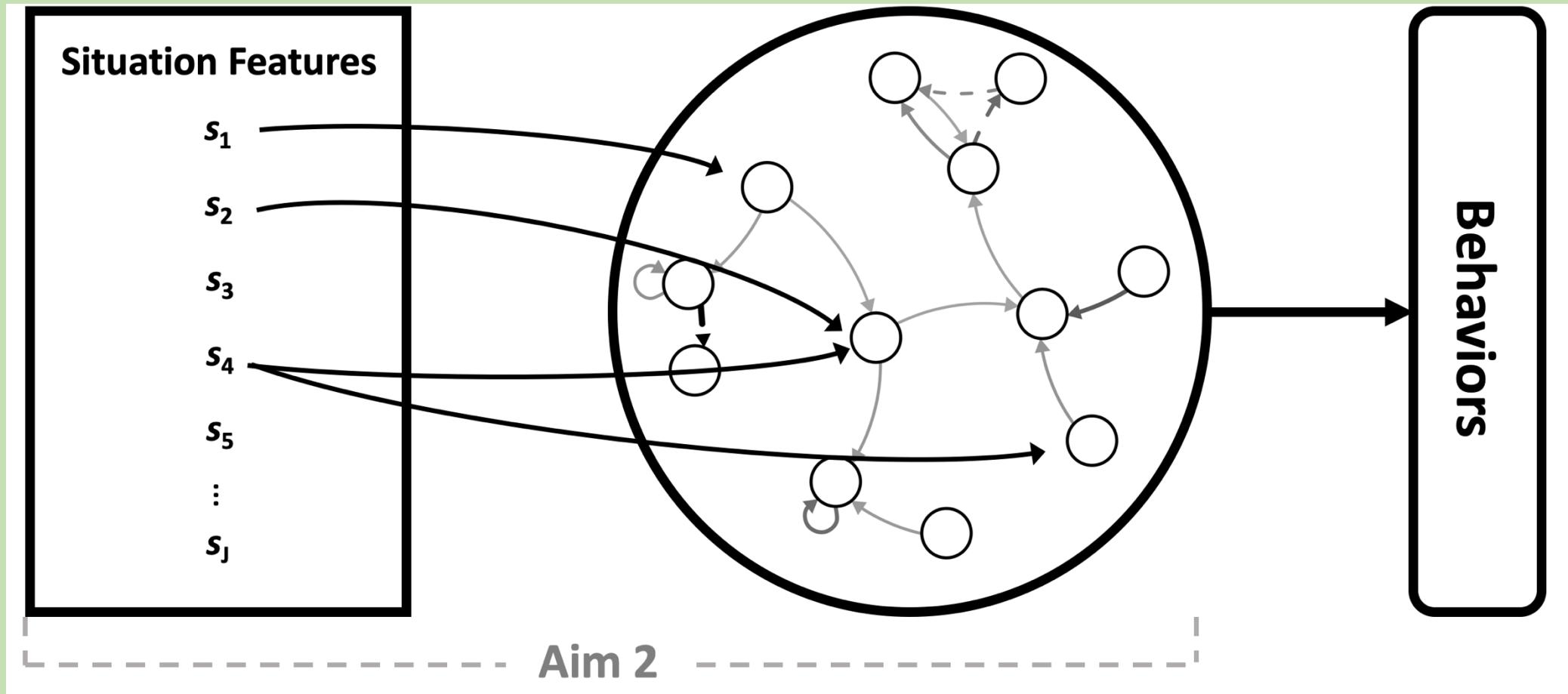
Nissen & Beck (2025a; *JPSP*)

Aim 1: Individuals show unique personality structures that are relatively consistent across time and events.

Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)

Aim 2: Using longitudinal data to understand how well-being unfolds across contexts.

Beck, et al.
(2025, *Nature Human Behaviour*)

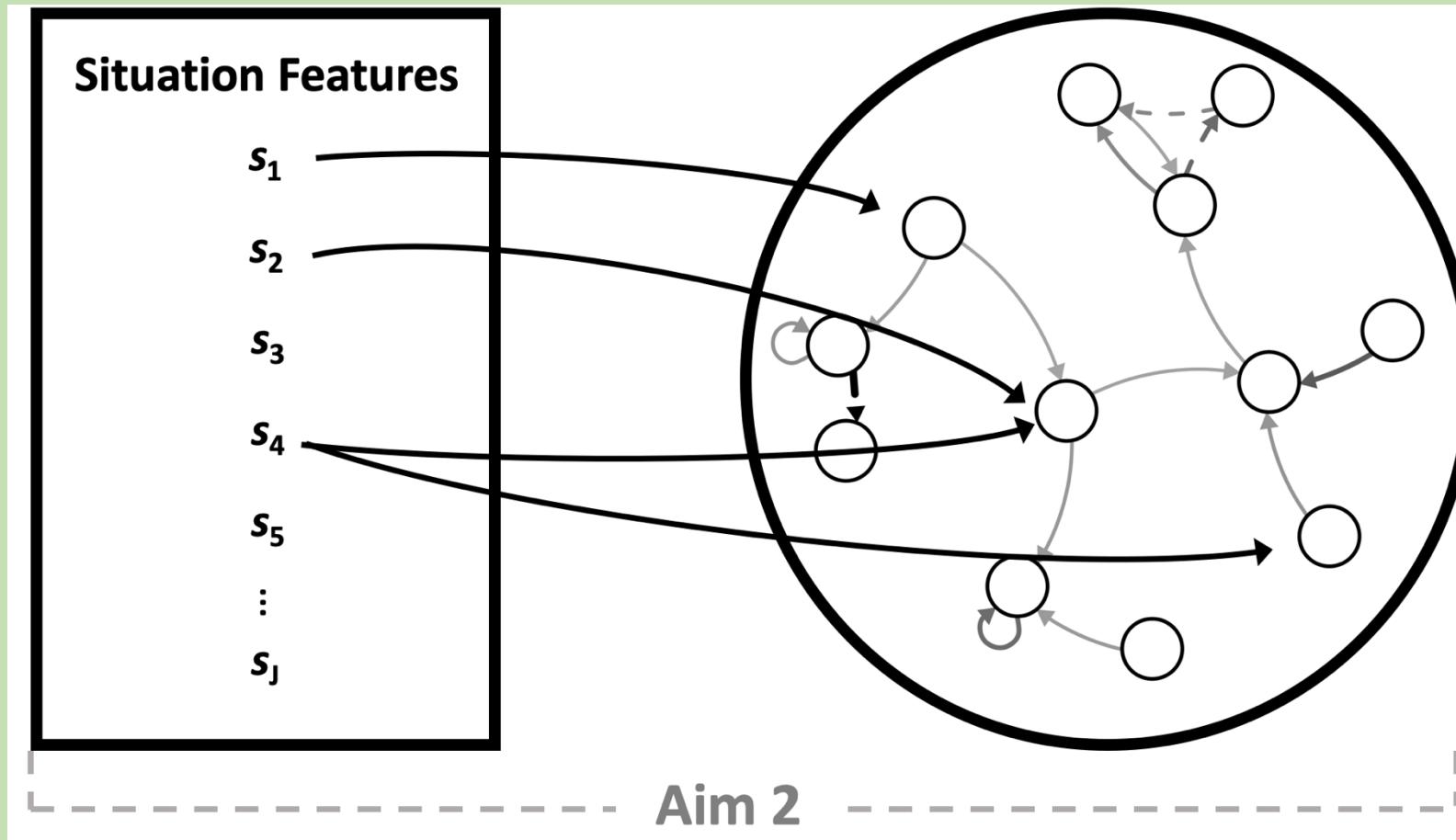


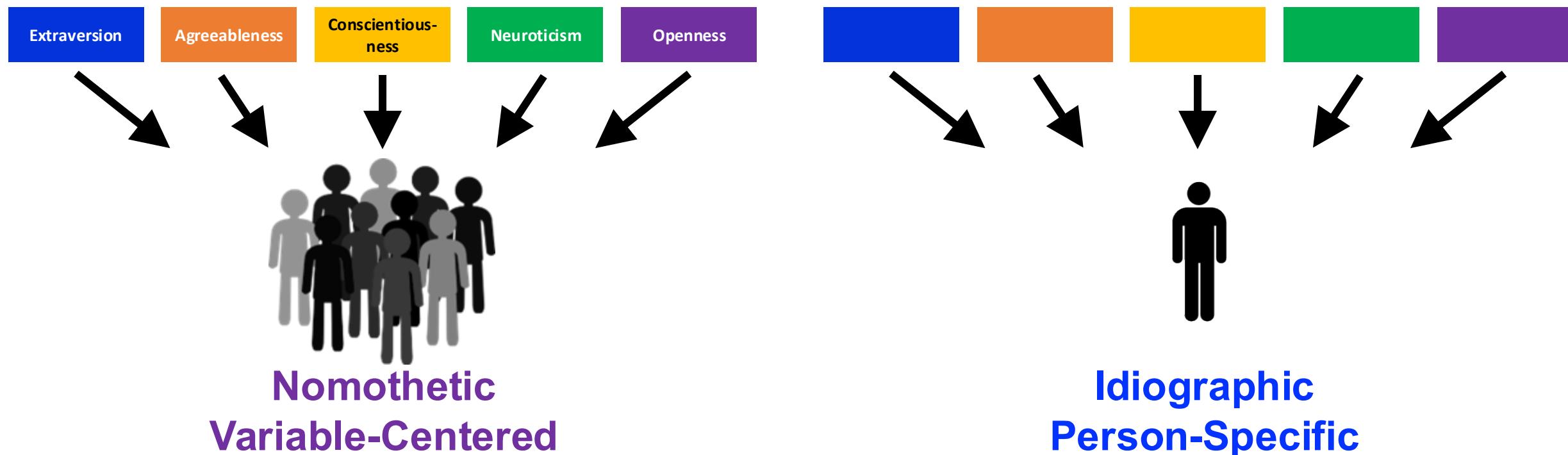
Aim 1: Individuals show unique personality structures that are relatively consistent across time and events.

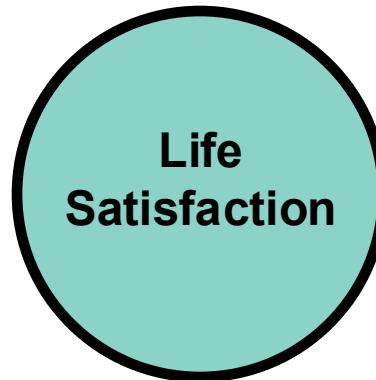
Beck & Jackson
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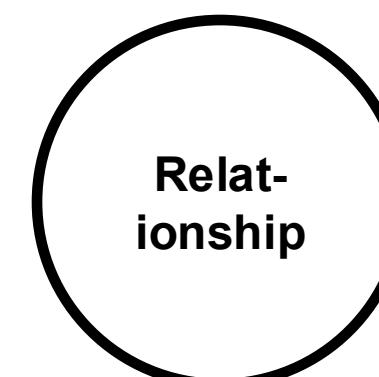
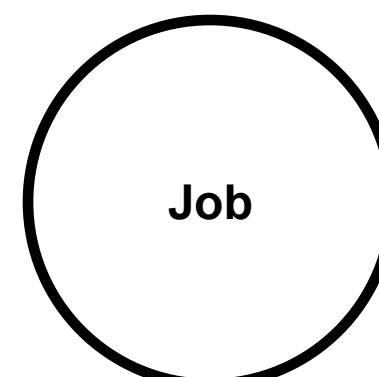
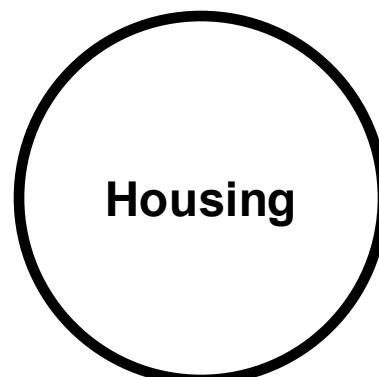
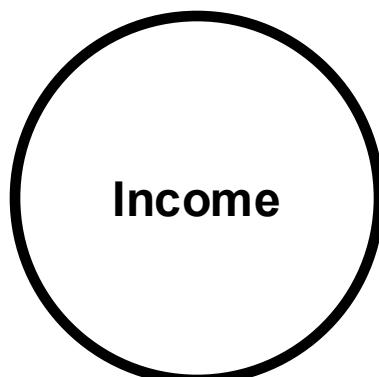
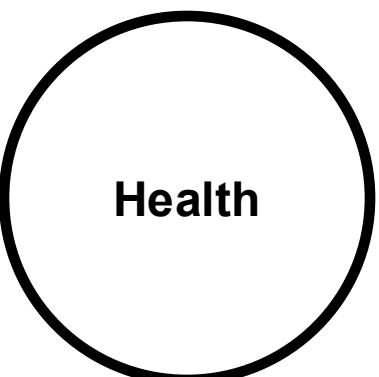


Strong Theoretical Models

Rich longitudinal data

Unique patterns ignored

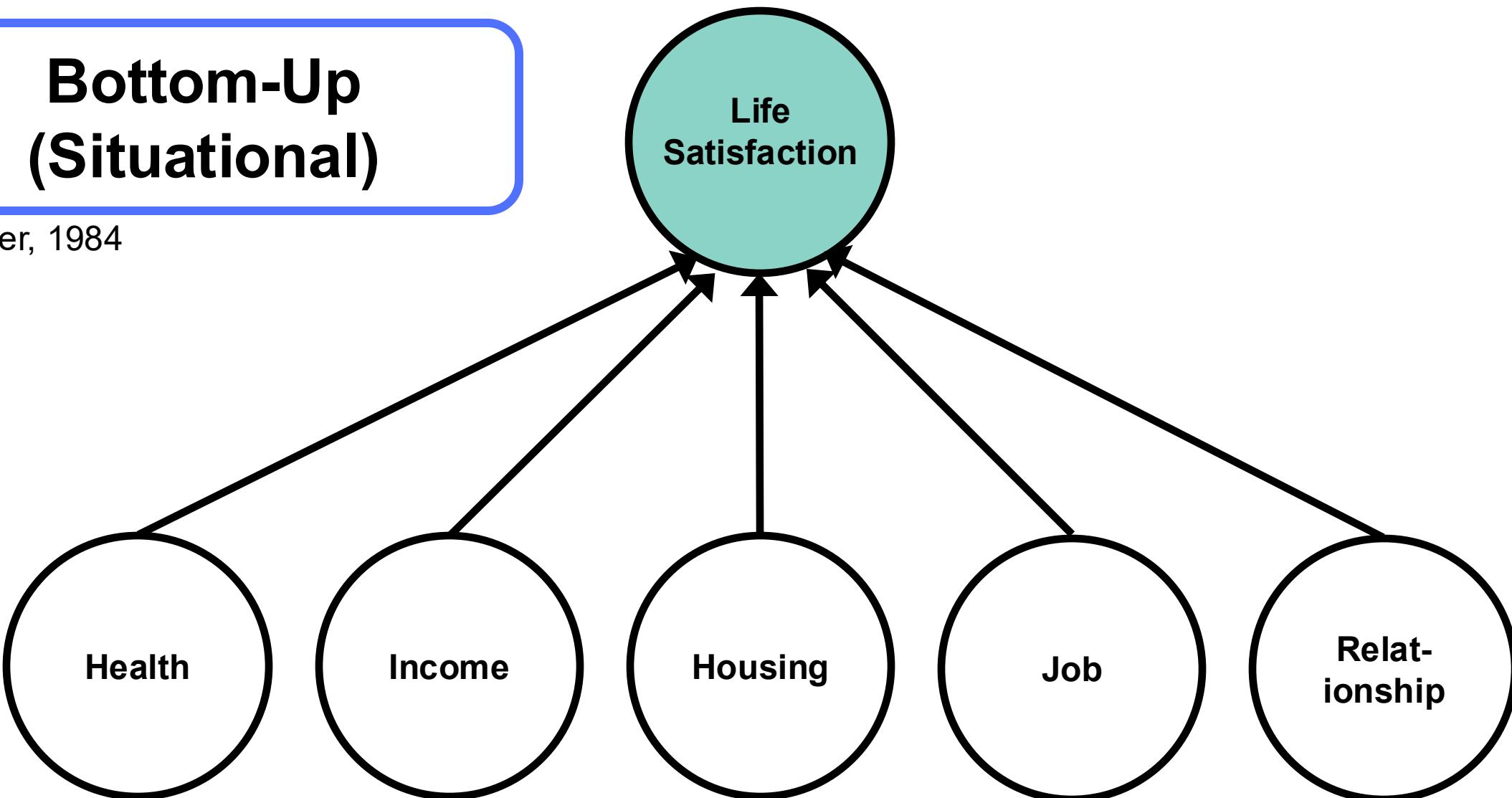
Domain Satisfaction



Bottom-Up (Situational)

Diener, 1984

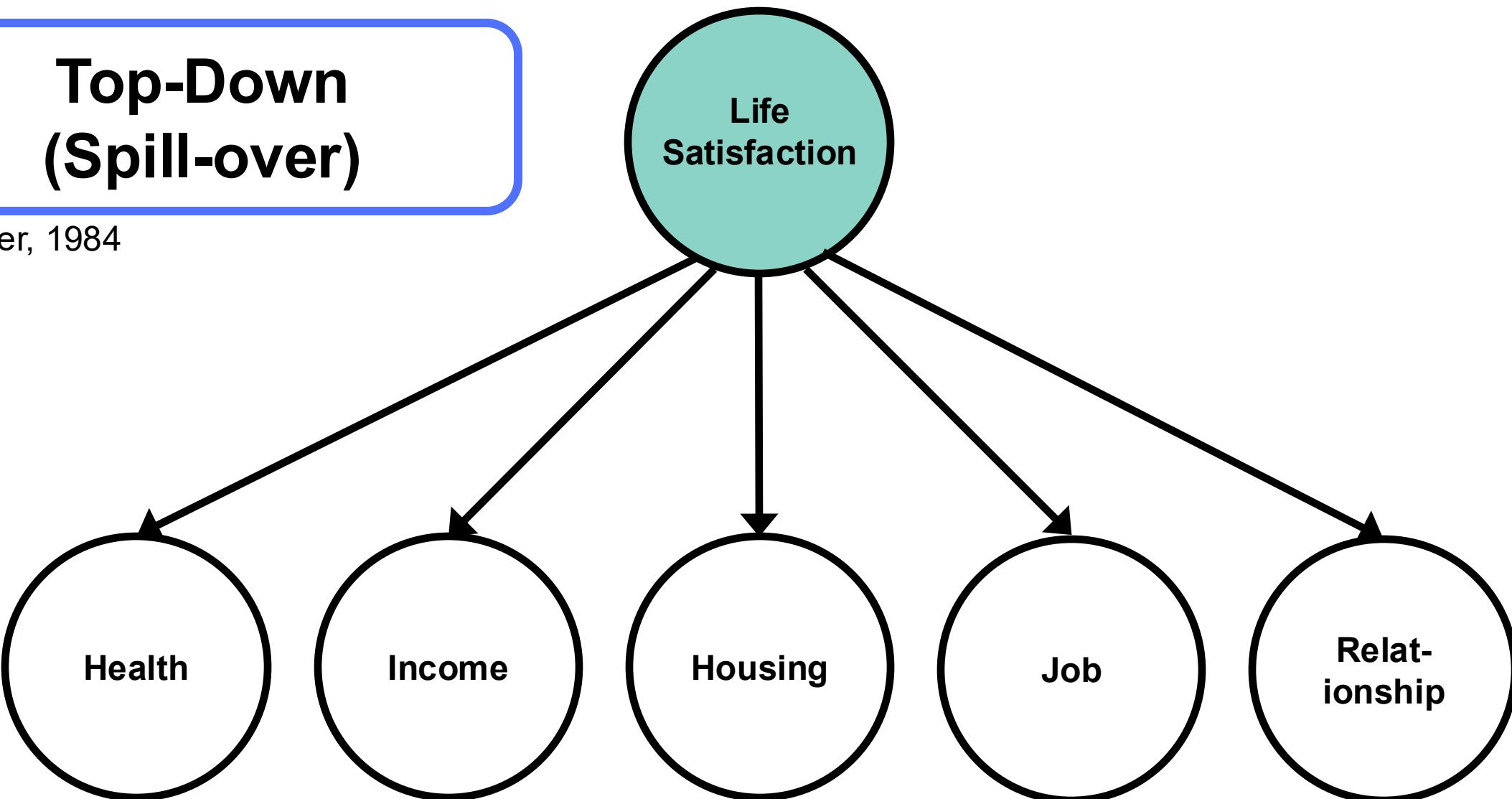
Domain Satisfaction



Top-Down (Spill-over)

Diener, 1984

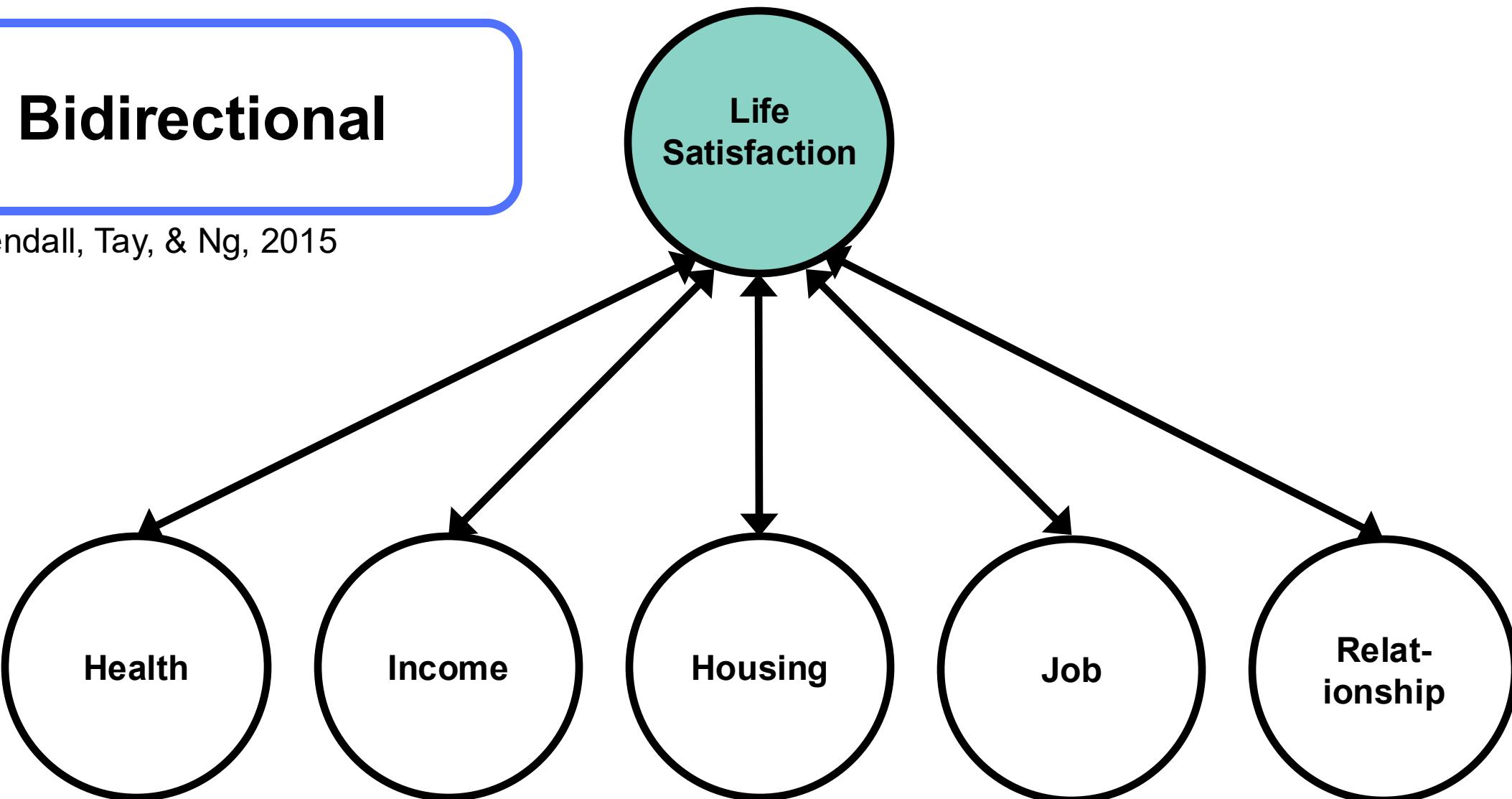
Domain Satisfaction



Bidirectional

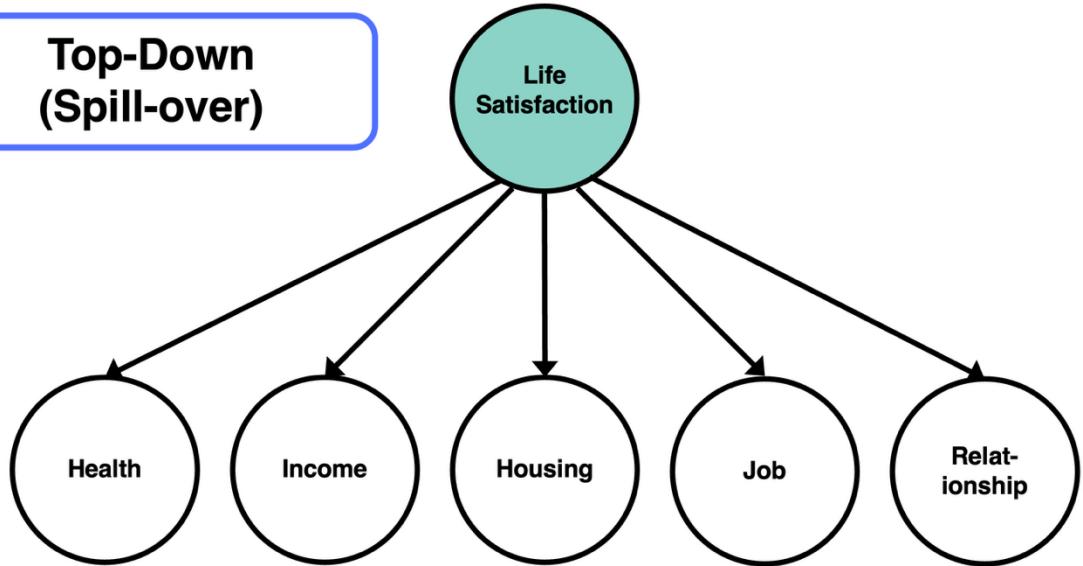
Kuykendall, Tay, & Ng, 2015

Domain Satisfaction



**Top-Down
(Spill-over)**

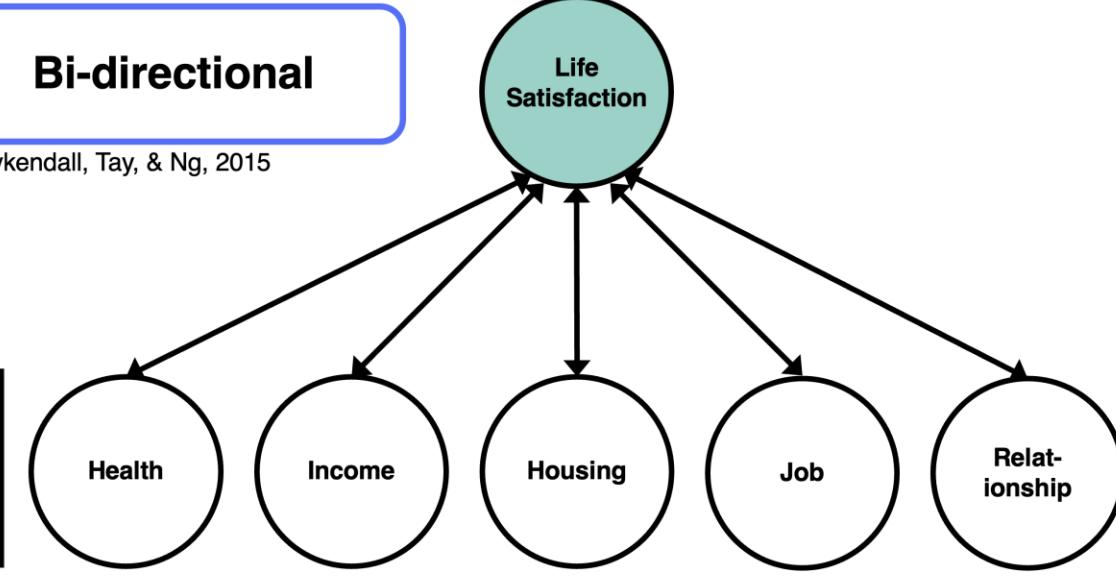
Domain Satisfaction



Bi-directional

Kuykendall, Tay, & Ng, 2015

Domain Satisfaction



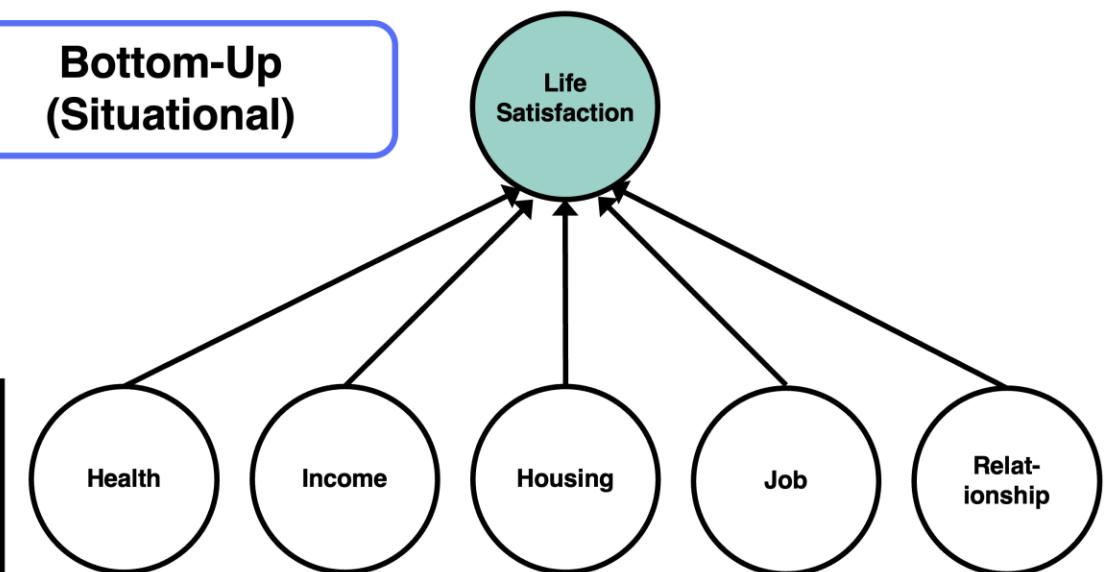
Non-directional

Domain Satisfaction

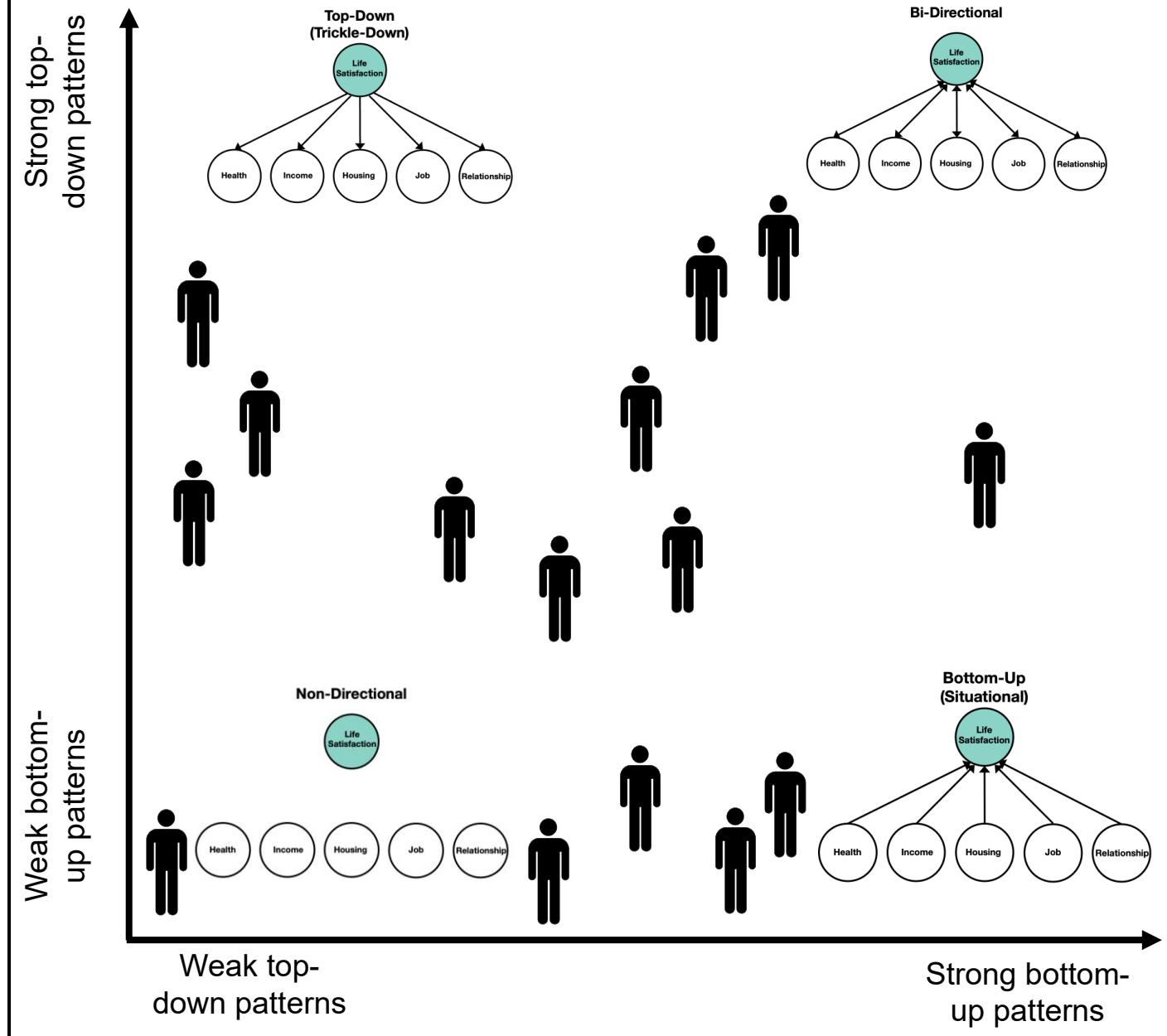


**Bottom-Up
(Situational)**

Domain Satisfaction



Personalised Perspectives on Happiness: For whom is each theory correct?



GSOEP**HILDA****SHP****BHPS****LISS****Multilevel VAR(1) Models**

Epskamp et al., 2018

Level 1:

$$Y_{ptj} = \beta_{0pj} + \beta_{1pj} * V_{1,p,t-1} + \dots + \beta_{kpj} * V_{k,p,t-1} + \varepsilon_{ptj}$$

Level 2:

$$\beta_{0pj} = \gamma_{00j} + \gamma_{01j} * \bar{V}_{1,p} + \dots + \gamma_{01j} * \bar{V}_{kp} + r_{0pj}$$

$$\vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots$$

$$\beta_{kpj} = \gamma_{k0j} + \gamma_{k1j} * \bar{V}_{p,1} + \dots + \gamma_{kkj} * \bar{V}_{pj} + r_{kpj}$$

**Between-Person Effects
(Level 2)**

$$\gamma_{01j} - \gamma_{0kj}$$

**Within-Person Effects
(Level 1)**

$$\gamma_{10j} - \gamma_{kkj}$$

**Person-Specific Effects
(Level 2 random effects)**

$$r_{0pj} - r_{kpj}$$

GSOEP**HILDA****SHP****BHPS****LISS****Multilevel VAR(1) Models**

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RESULTS

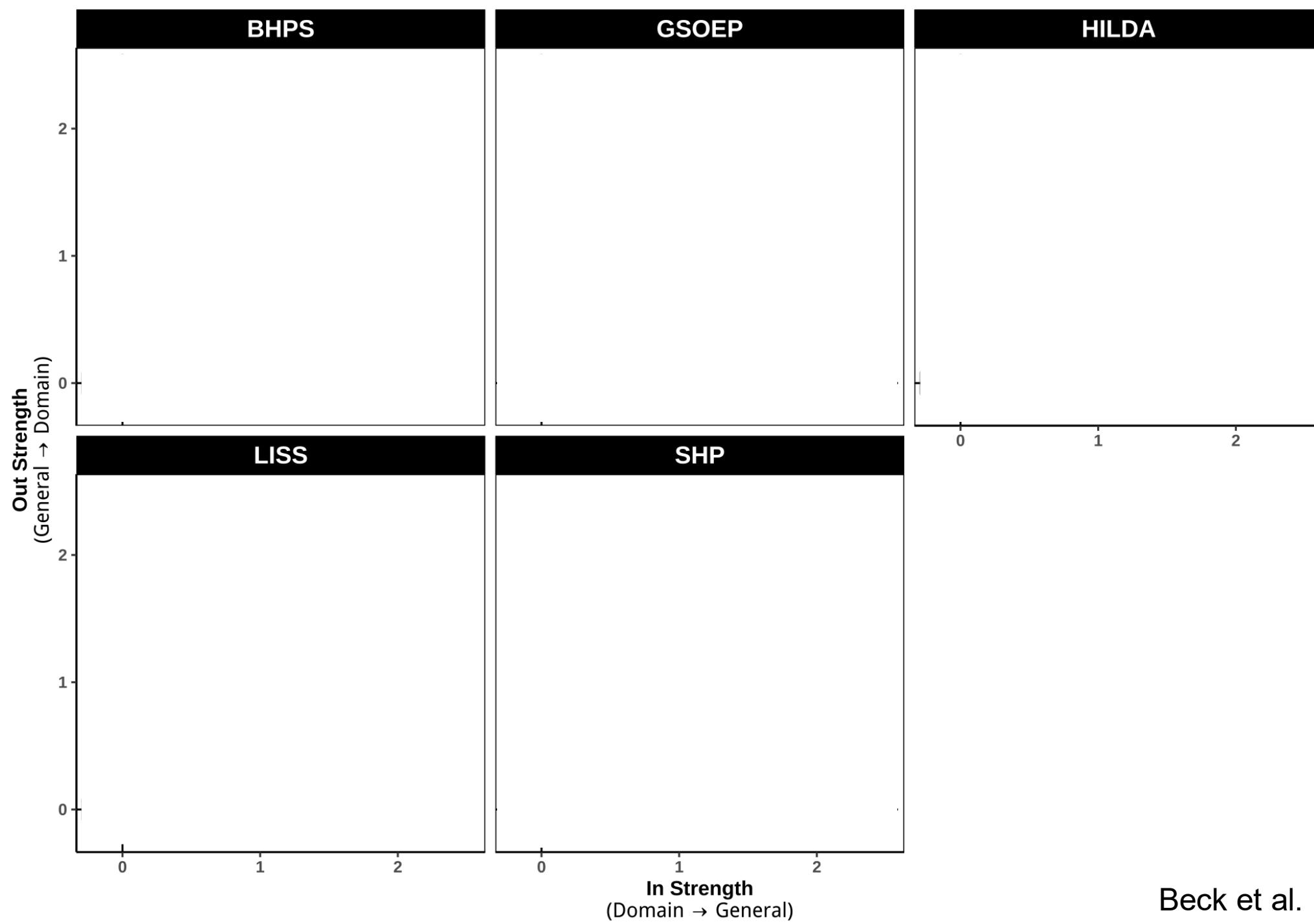
Aim 2

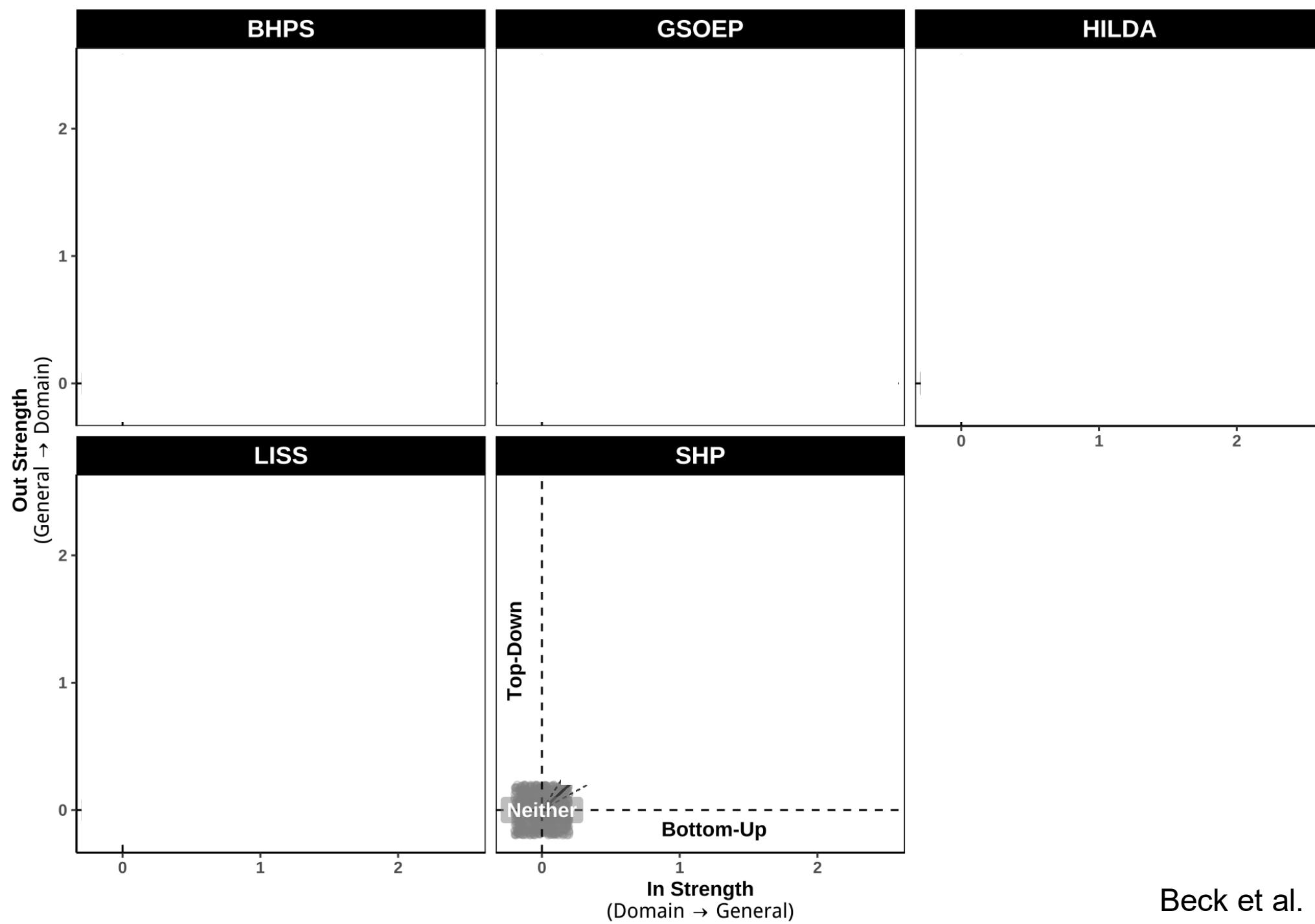
Top Down

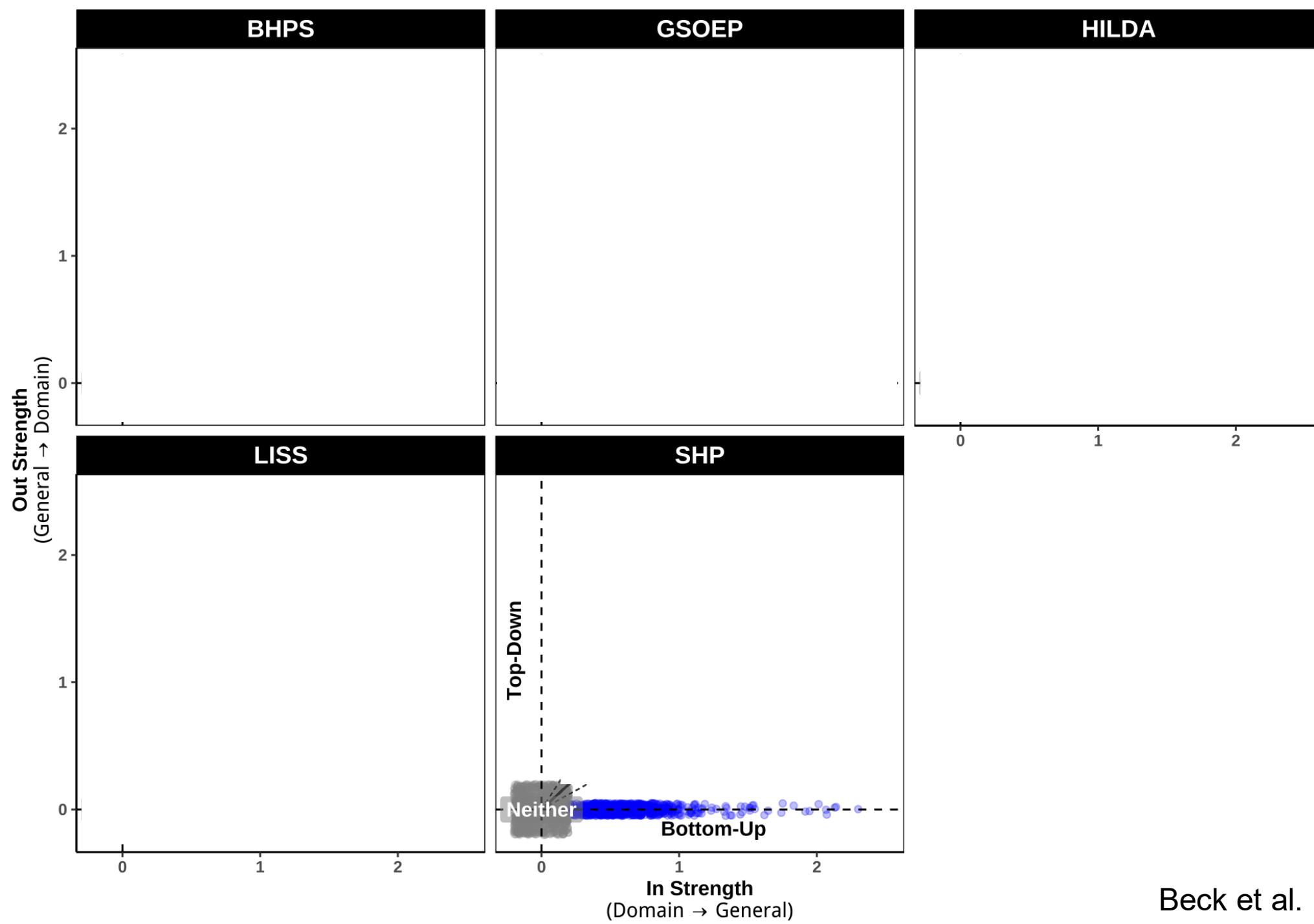
Bi-directional

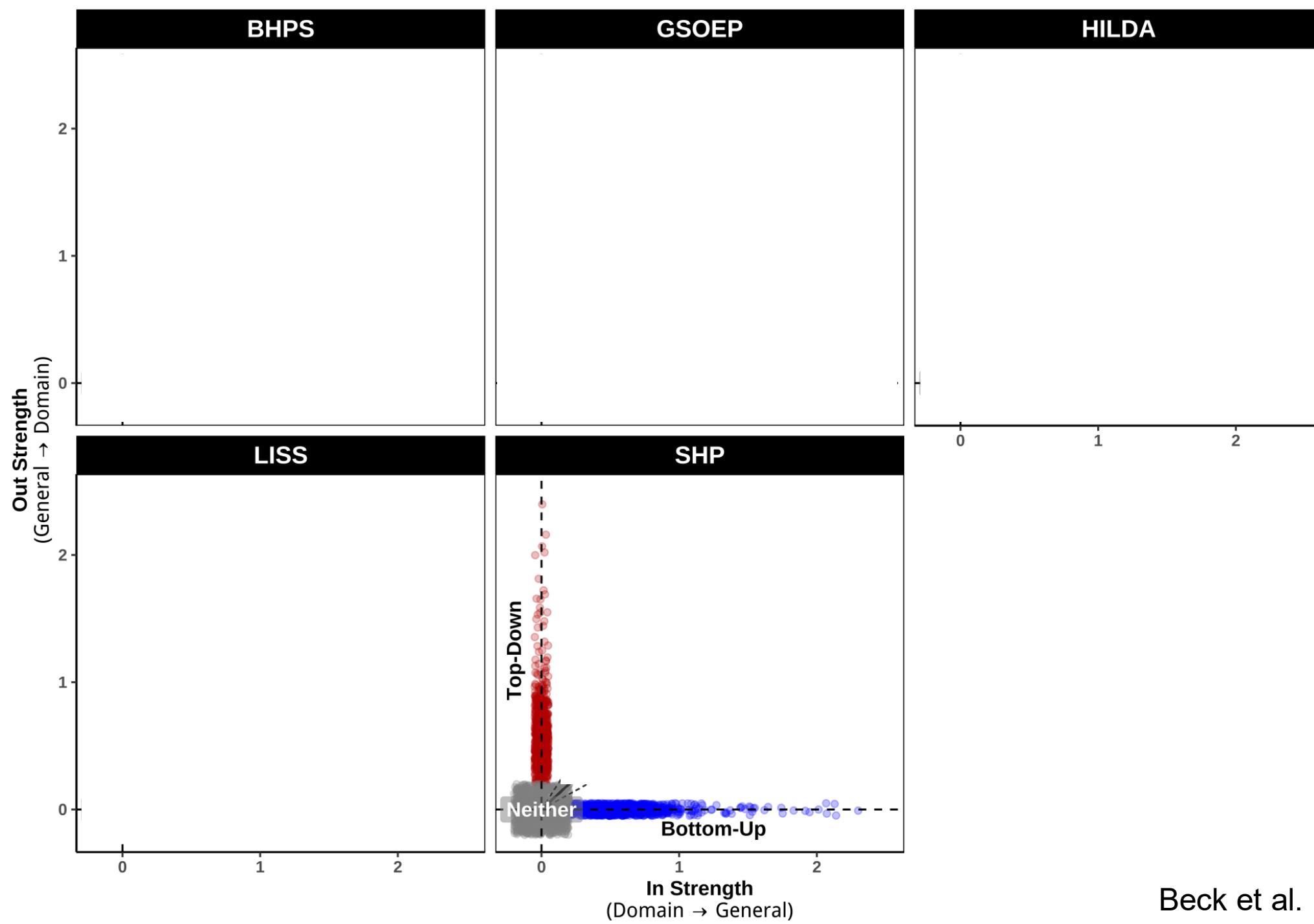
Non-Directional

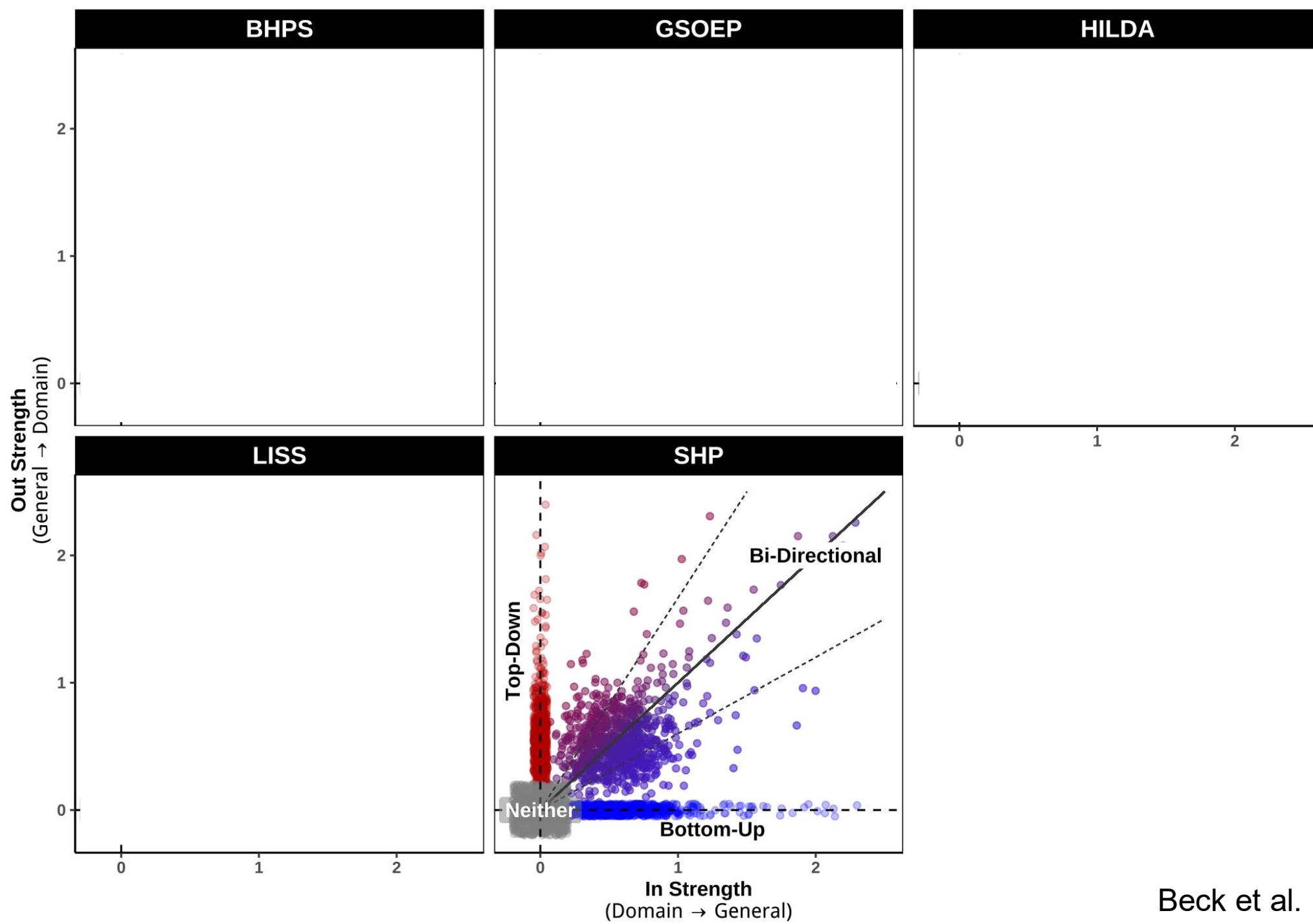
Bottom Up

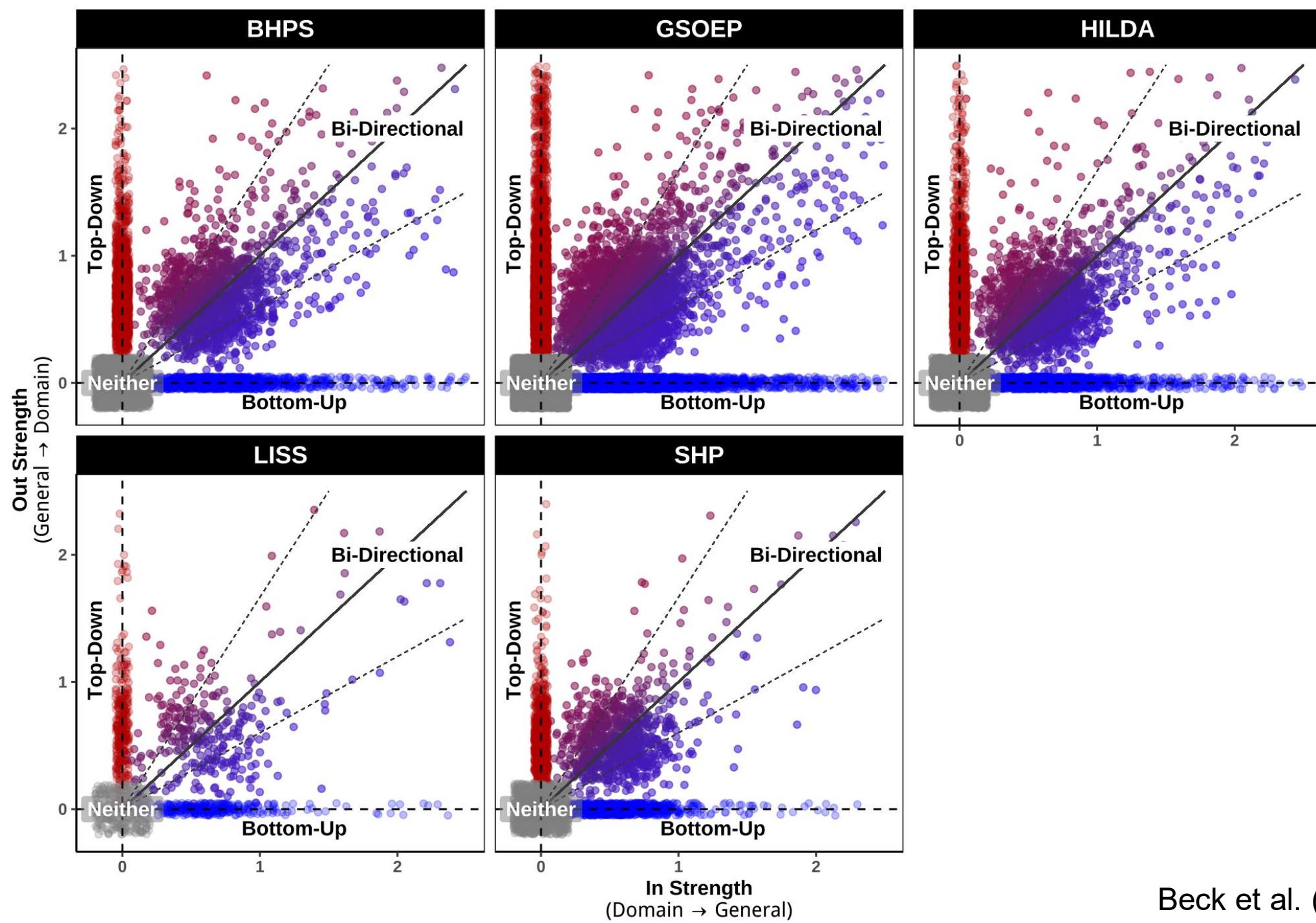


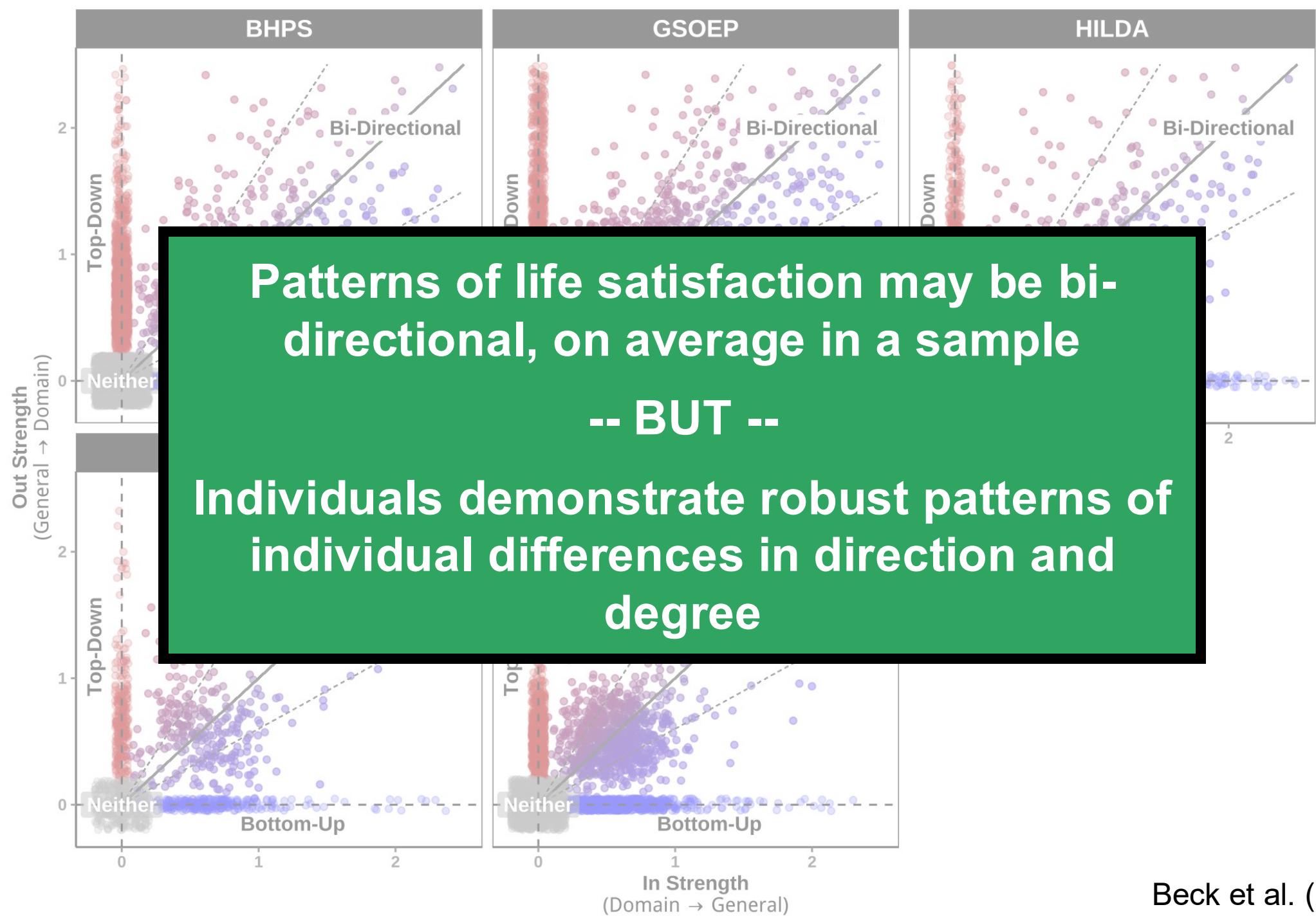










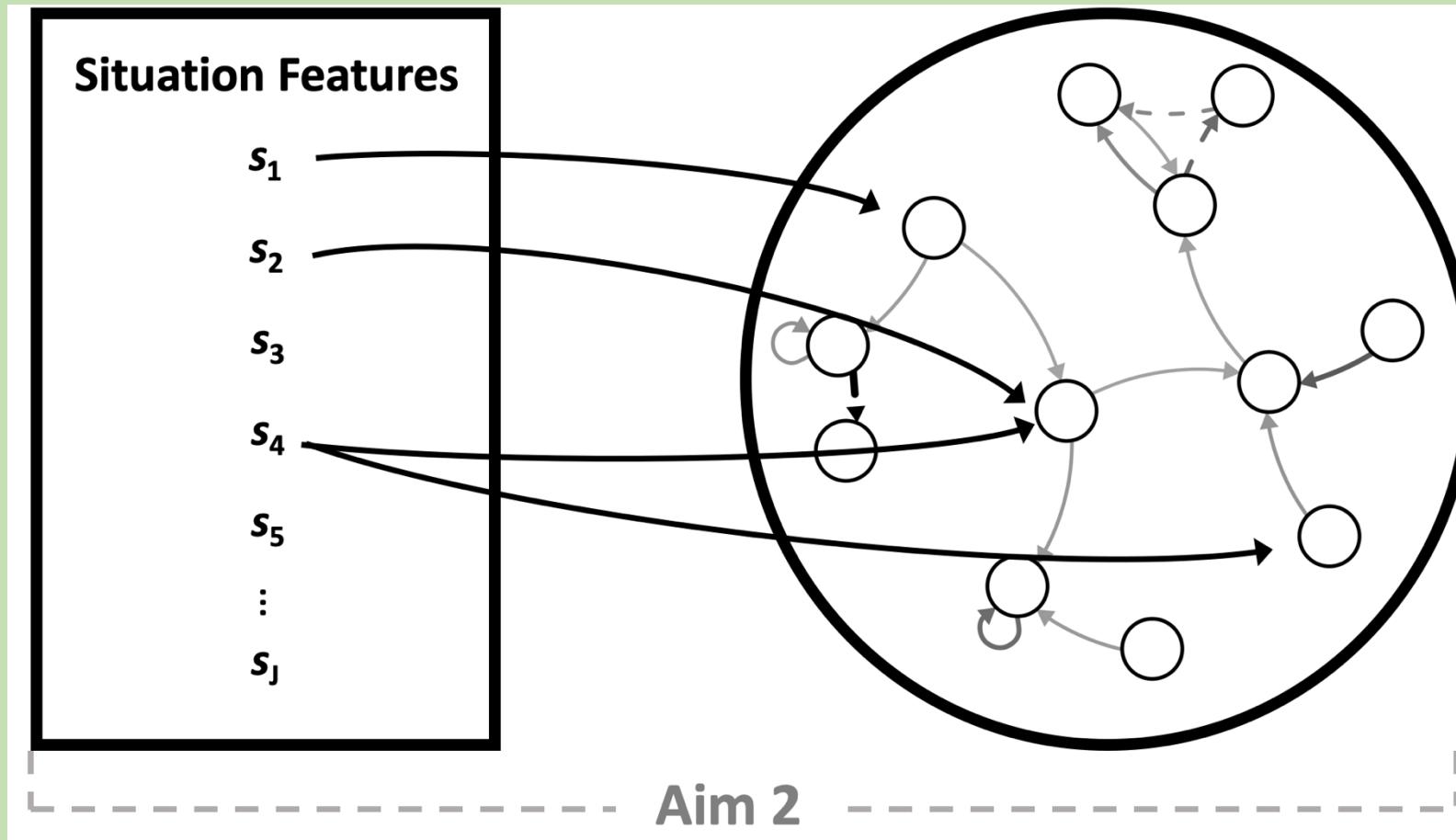


Aim 1: Individuals show unique personality structures that are relatively consistent across time and events.

Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)

Aim 2: Using longitudinal data to understand how well-being unfolds across contexts.

Beck et al.
(2025, *Nature Human Behaviour*)



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(2025, *Nature Human Behaviour*)

The dynamics of life and domain satisfaction:

Unfold differently across people

Do not appear well-captured by sample averages of idiographic dynamics

Have similar patterns of individual differences across samples

Aim 1: Individuals show unique personality structures that are relatively consistent across time and events.

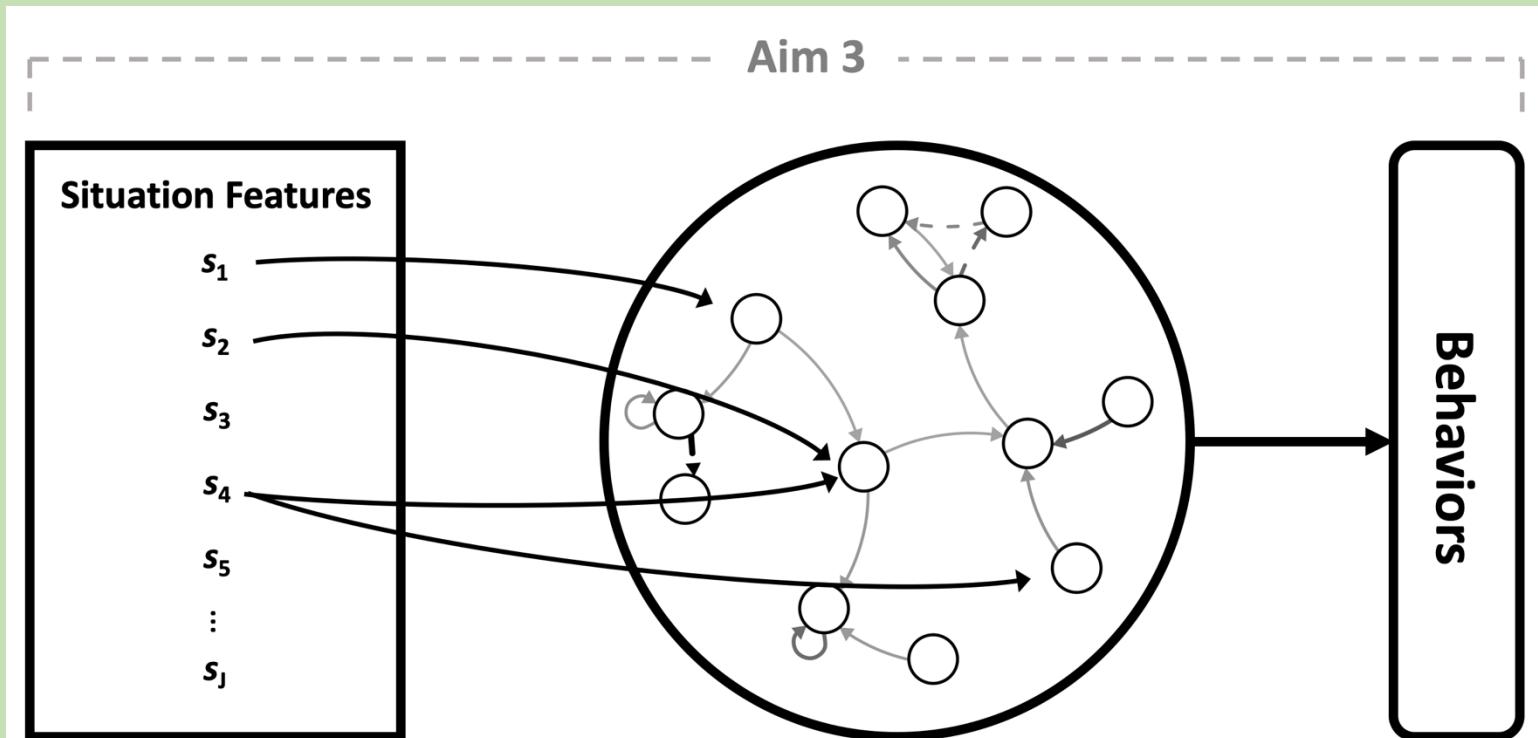
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Beck & Jackson
(2023, *Psych Science*)



Psychological

Situations

Behavior /
Experiences

Critical Assumption

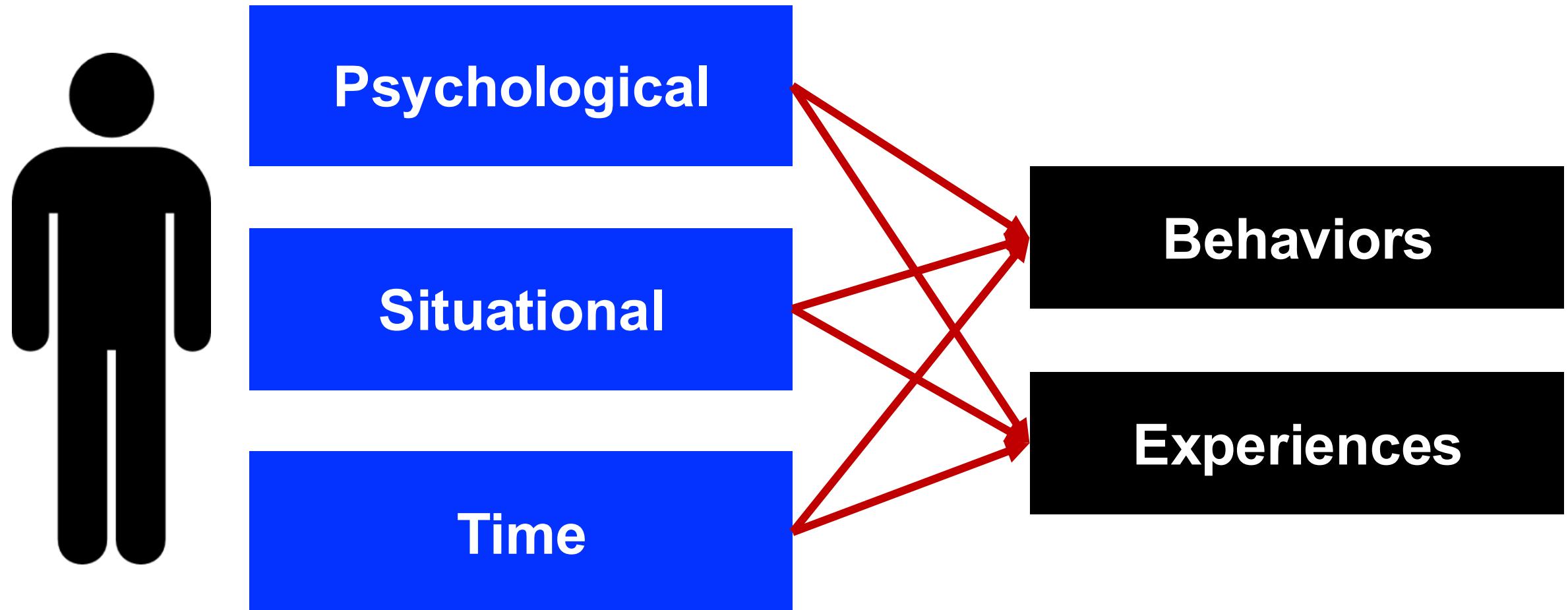
**Situations and experiences
should have similar
consequences across people.**

**People with similar levels of a
personality characteristic
should behave in similar ways.**

Alternative Assumption

**Situations and experiences
should have *different*
consequences across people.**

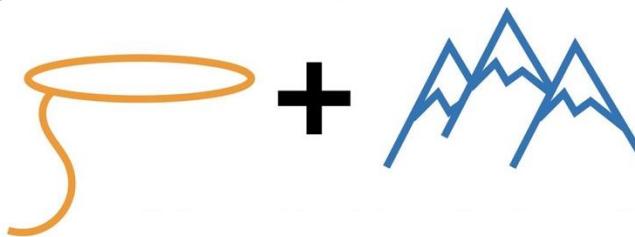
**People with similar levels of a
personality characteristic *may
not* behave in similar ways.**



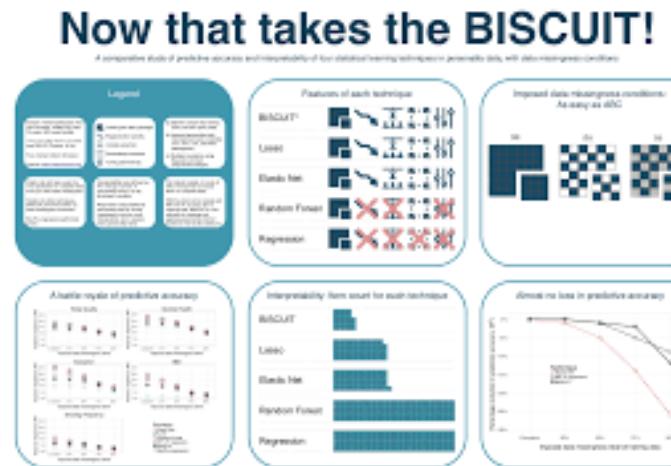
Analytic Plan

3 machine learning classification methods:

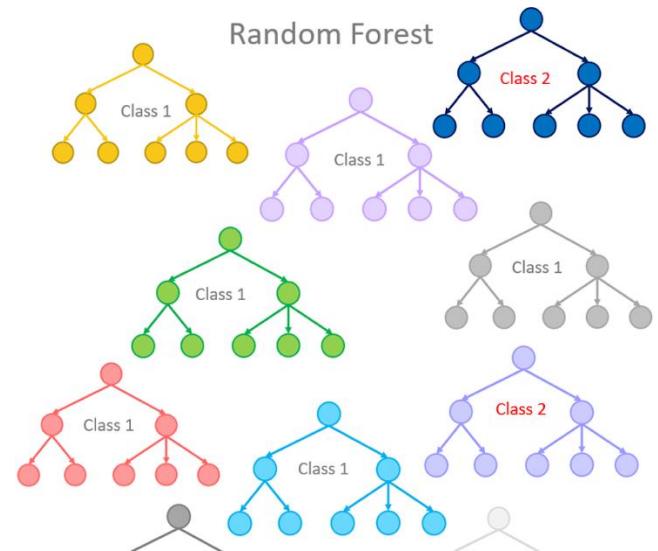
Elastic Net



BISCWIT



Random Forest

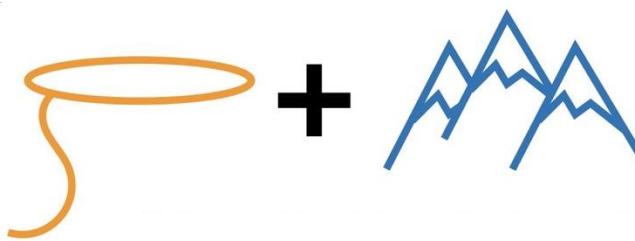


- Classification Accuracy
- Area under the receiver operating curve (AUC)

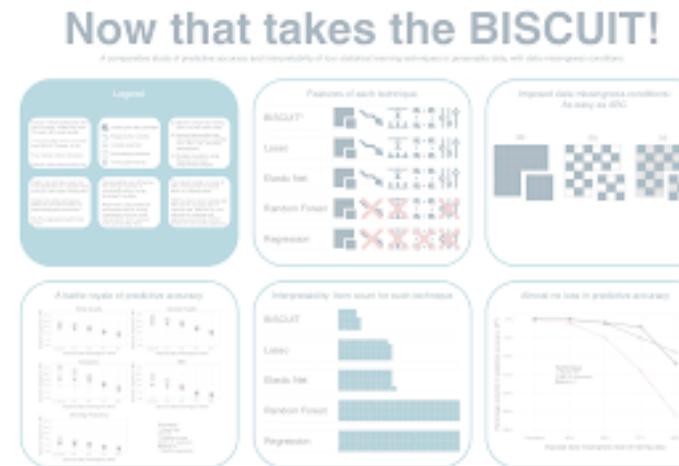
Analytic Plan

3 machine learning classification methods:

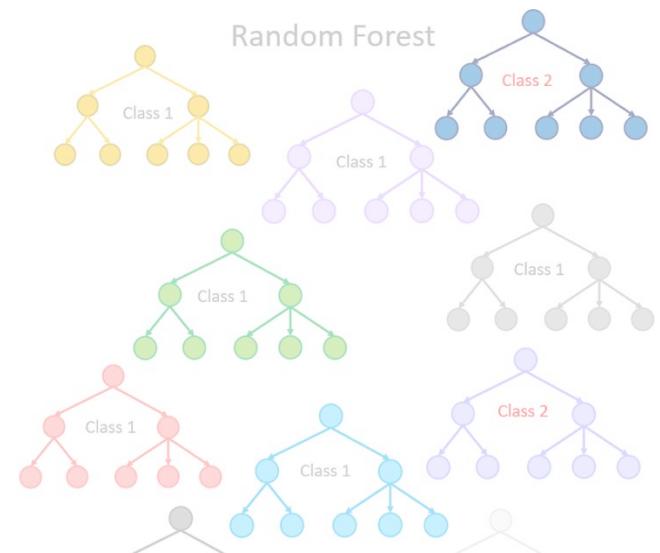
Elastic Net



BISCWIT



Random Forest



- Classification Accuracy
- Area under the receiver operating curve (AUC)

RESULTS

Aim 3

Classification Accuracy

Elastic Net

Median (SD)	N
-------------	---

Procrastination

Loneliness

Argument

Interacted

Studying

Sick

Tired

Classification Accuracy

Elastic Net

Classification accuracy was high, on average, with some variability across outcomes.

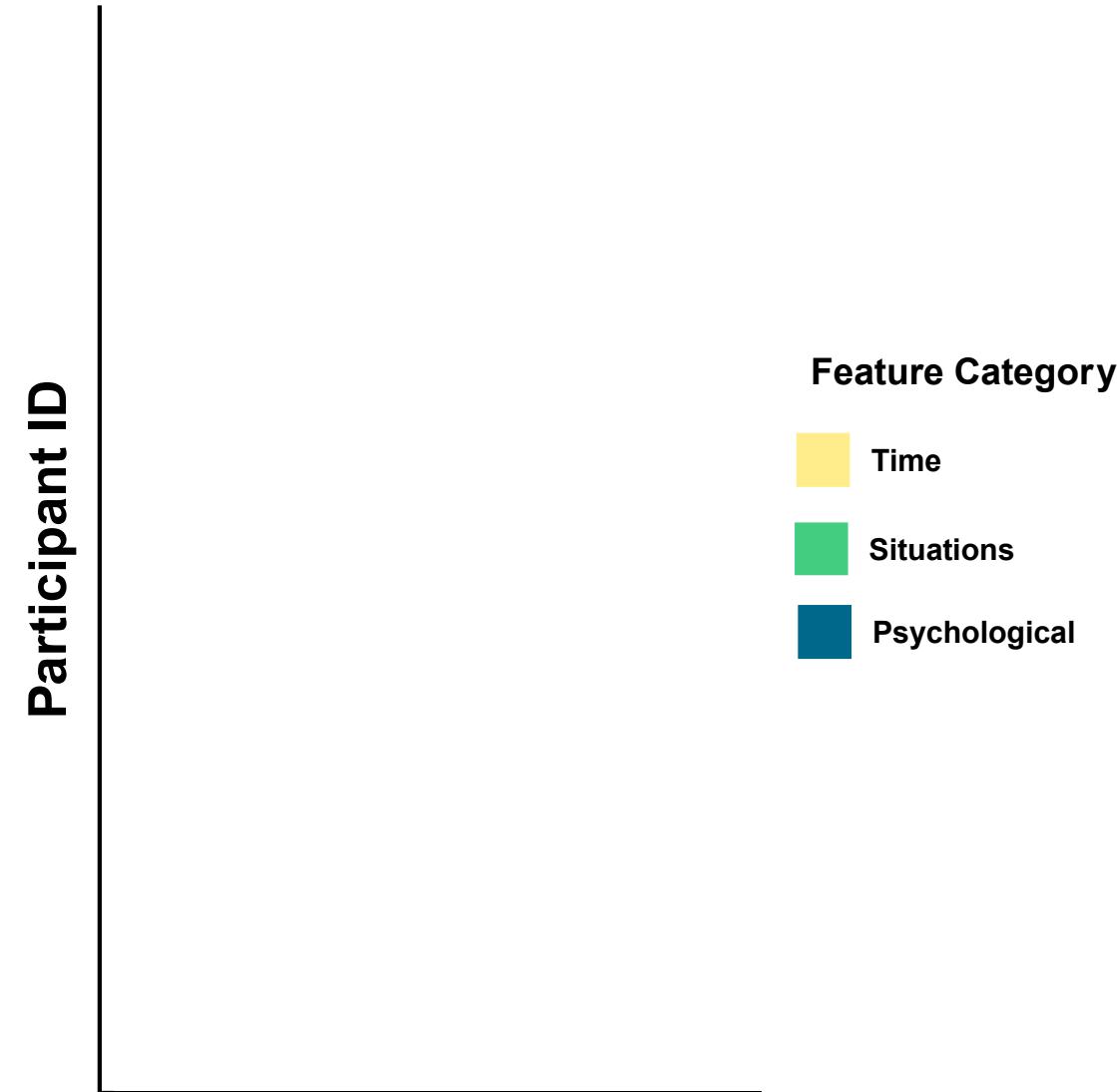
Sick

Tired

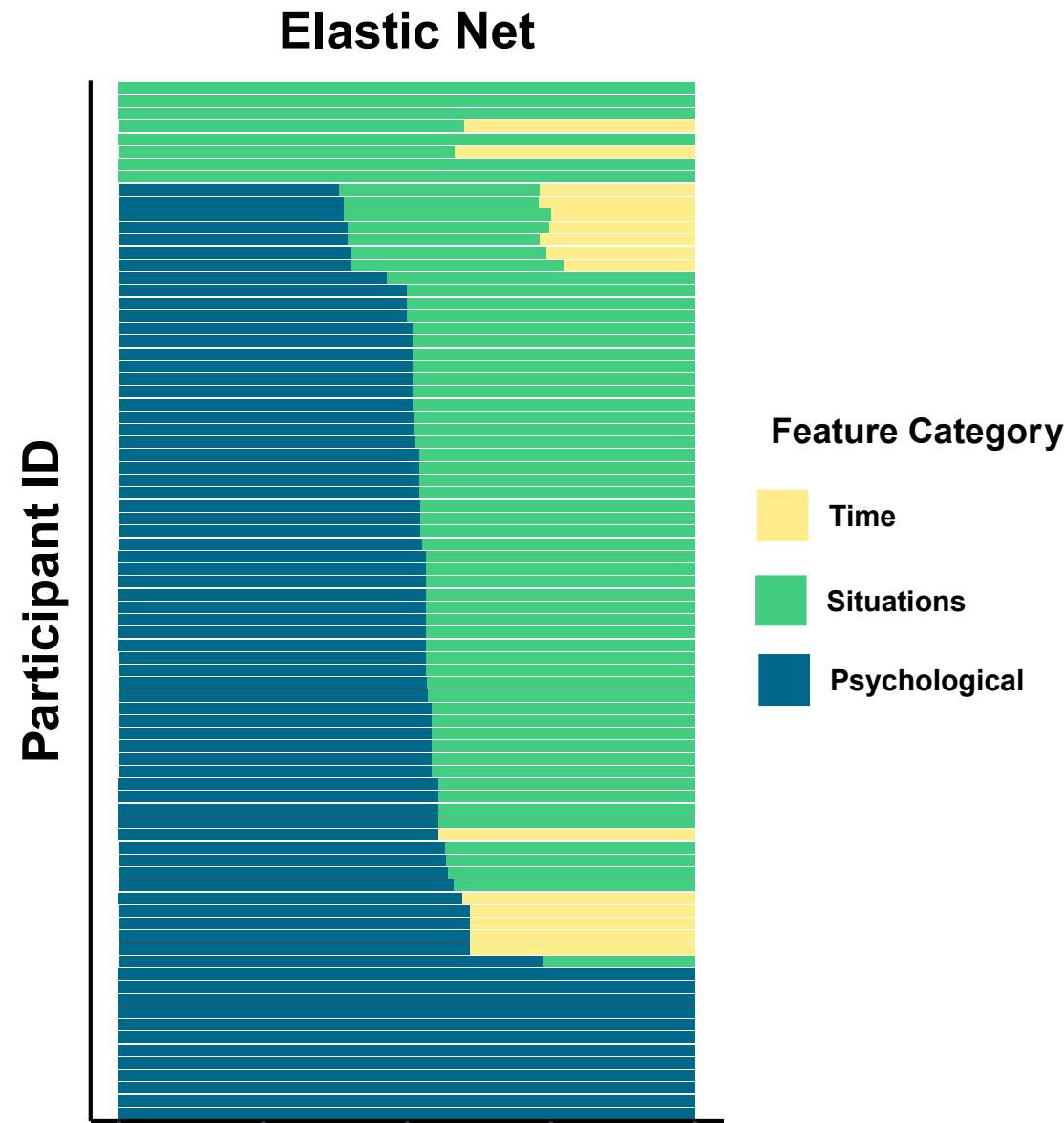
Do certain categories of features out-predict others?

Do certain categories of features out-predict others?

Elastic Net



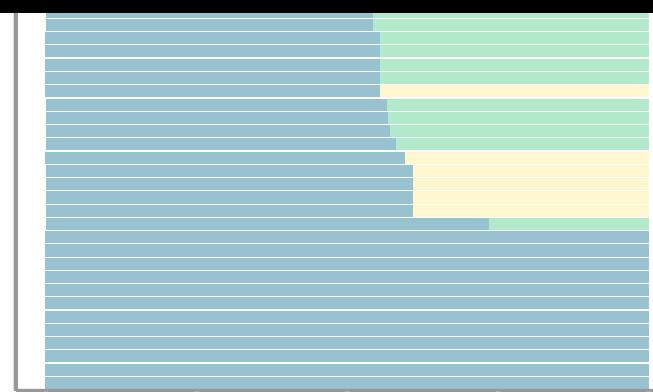
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Do certain categories of features out-predict others?

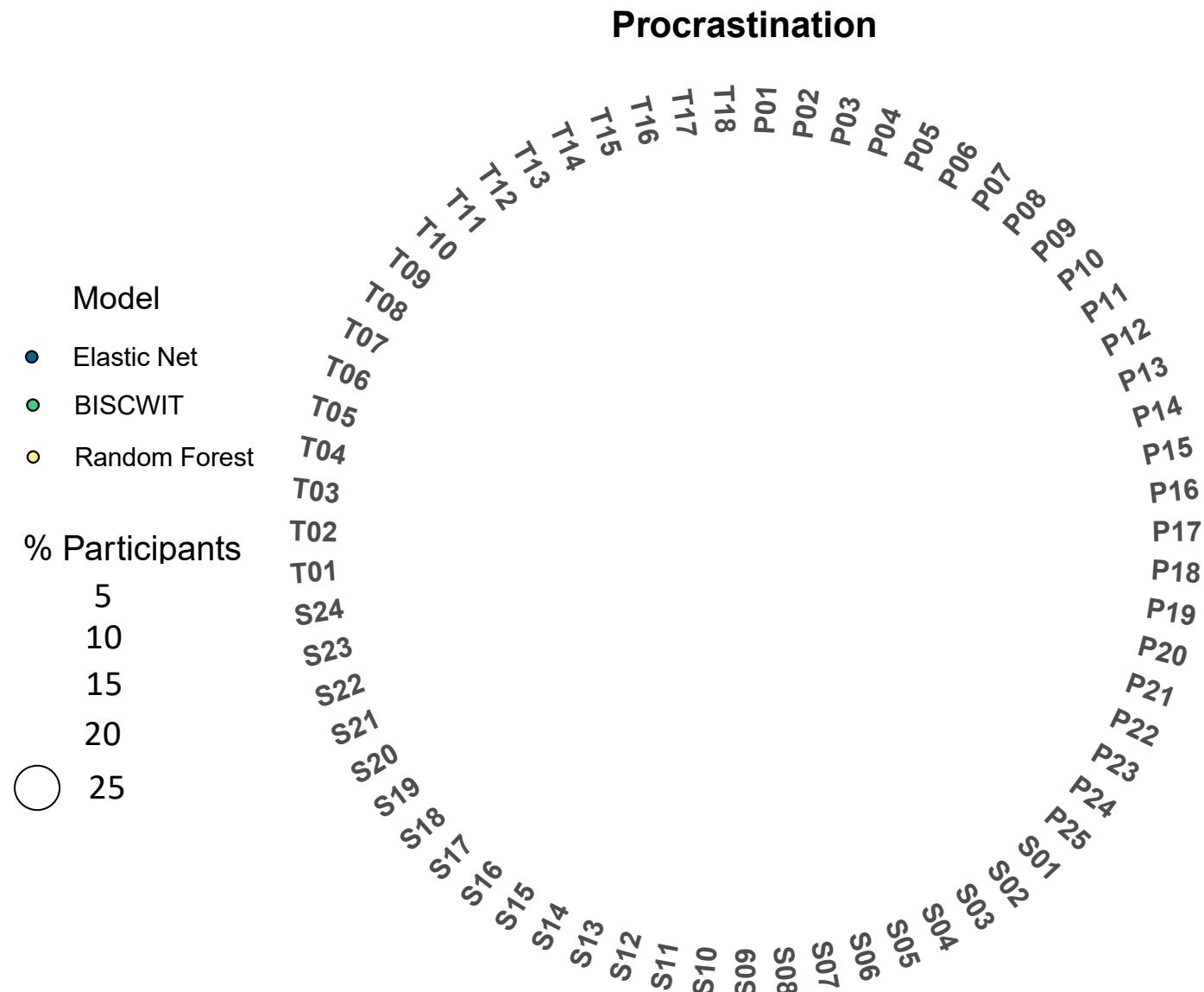
Elastic Net

The relative contribution of person, situation, and timing features varies across people.

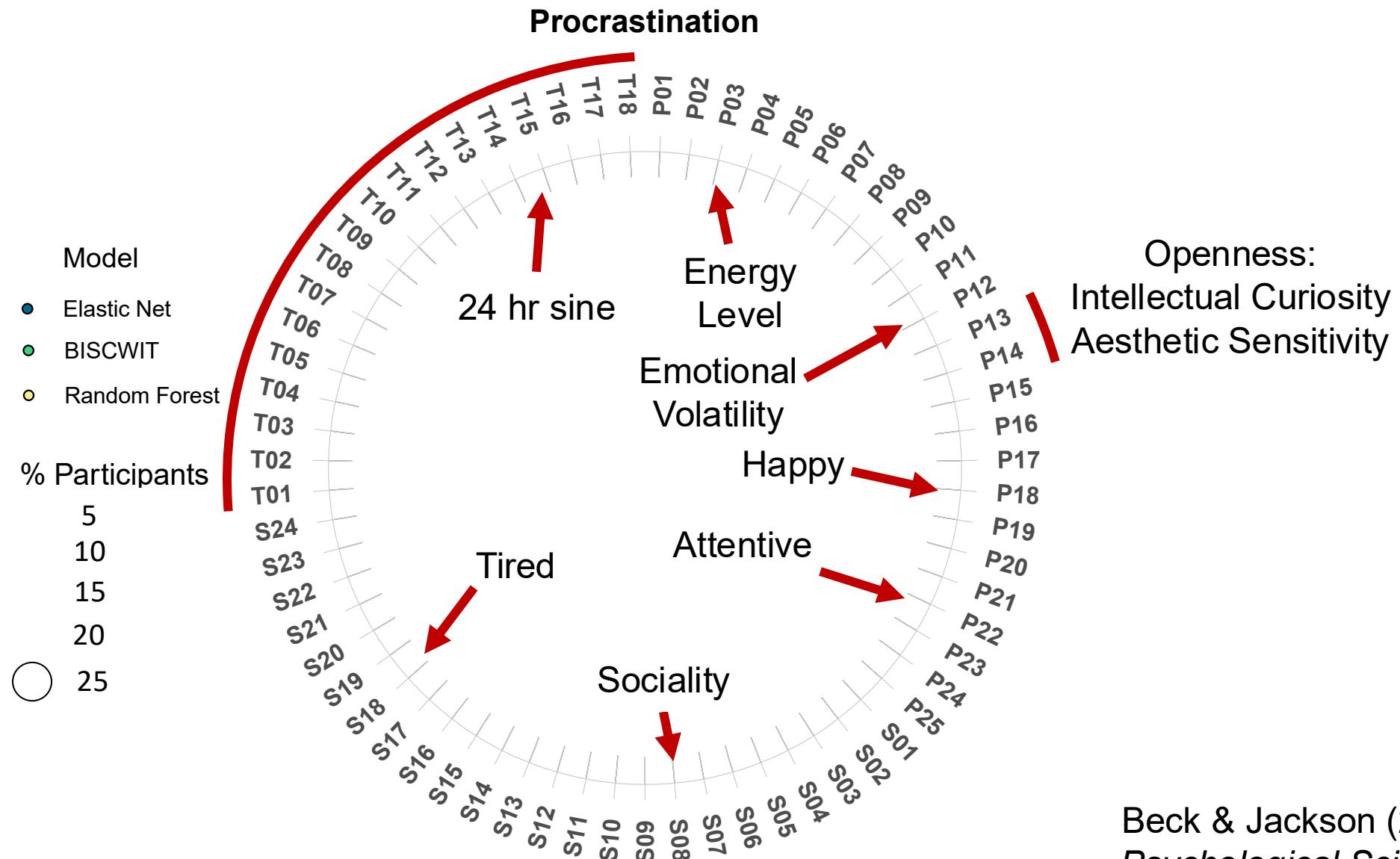


Which features play the strongest roles?

Which features play the strongest roles?



Which features play the strongest roles?



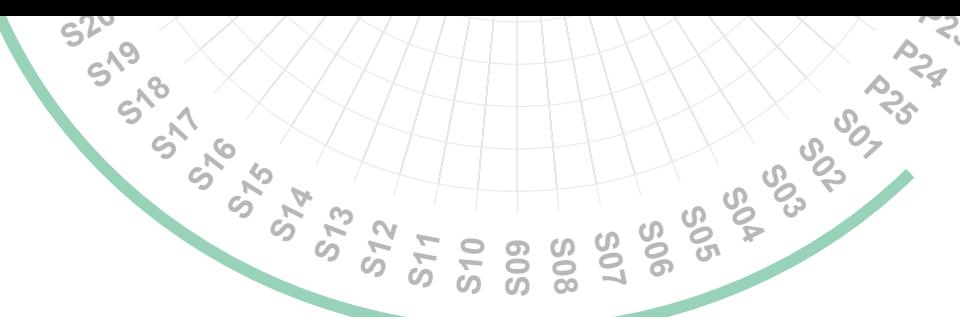
Which features play the strongest roles?

Procrastination

No one feature dominated the prediction of any outcome (max ~35%).

Behaviors & experiences have unique antecedents.

○ 25



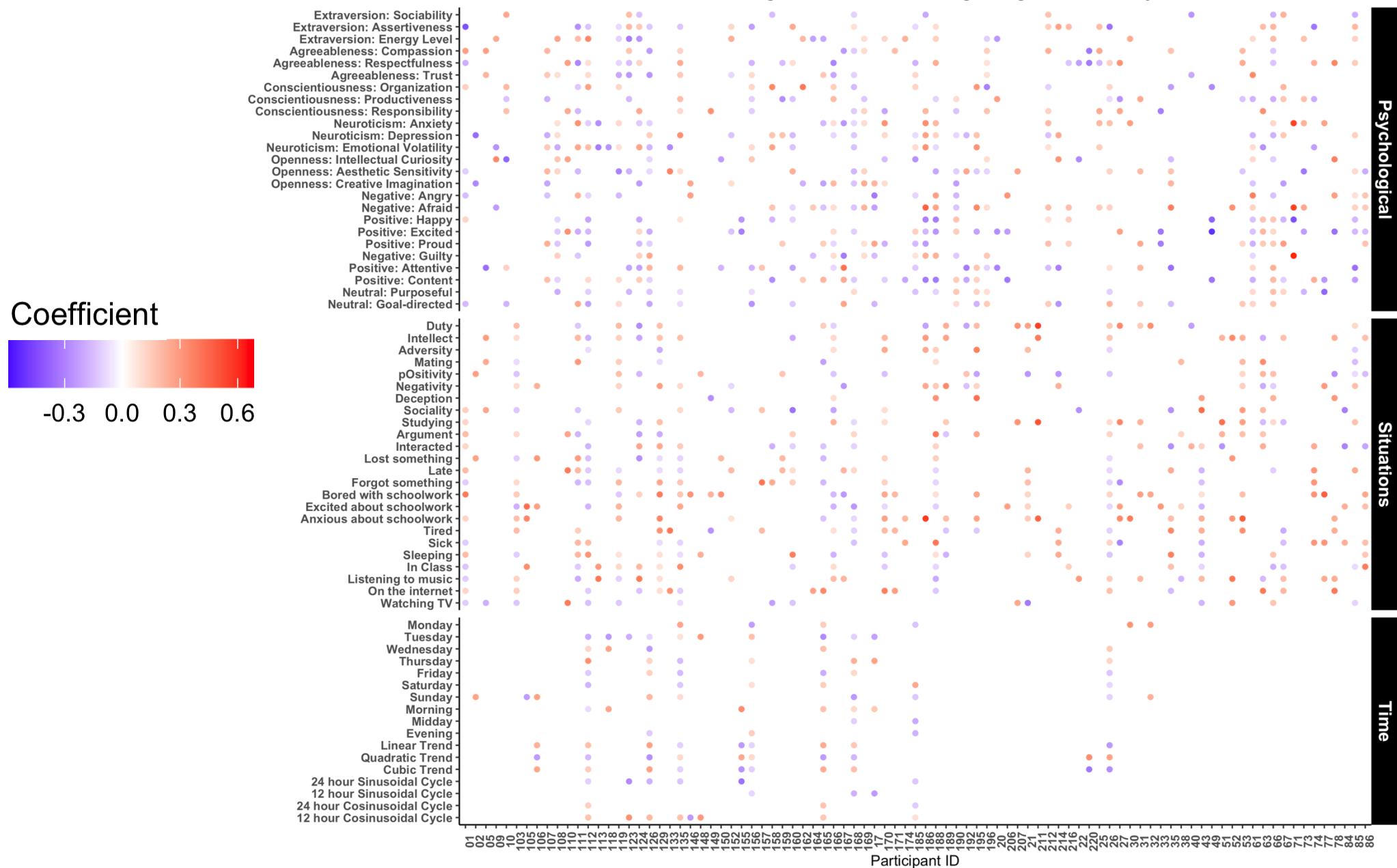
Aim 1: Individuals

Aim 2: Dynamics

Aim 3: Integration

Future Directions

BISCWIT Predicting Future Procrastinating Using Best Accuracy Models



Aim 1: Individuals

Aim 2: Dynamics

Aim 3: Integration

Future Directions

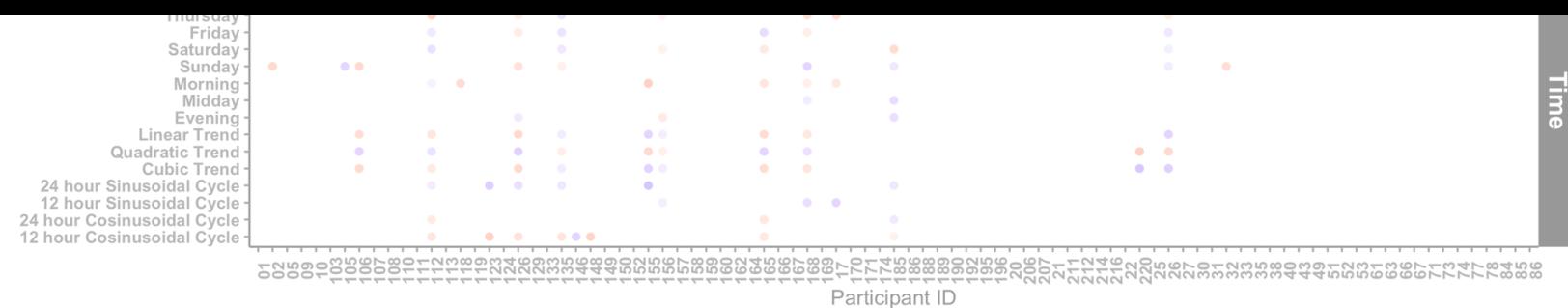
BISCWIT Predicting Future Procrastinating Using Best Accuracy Models



Coefficient



Individuals' profiles of antecedents differed in presence and direction.



Aim 1: Individuals show unique personality structures that are relatively consistent across time and events.

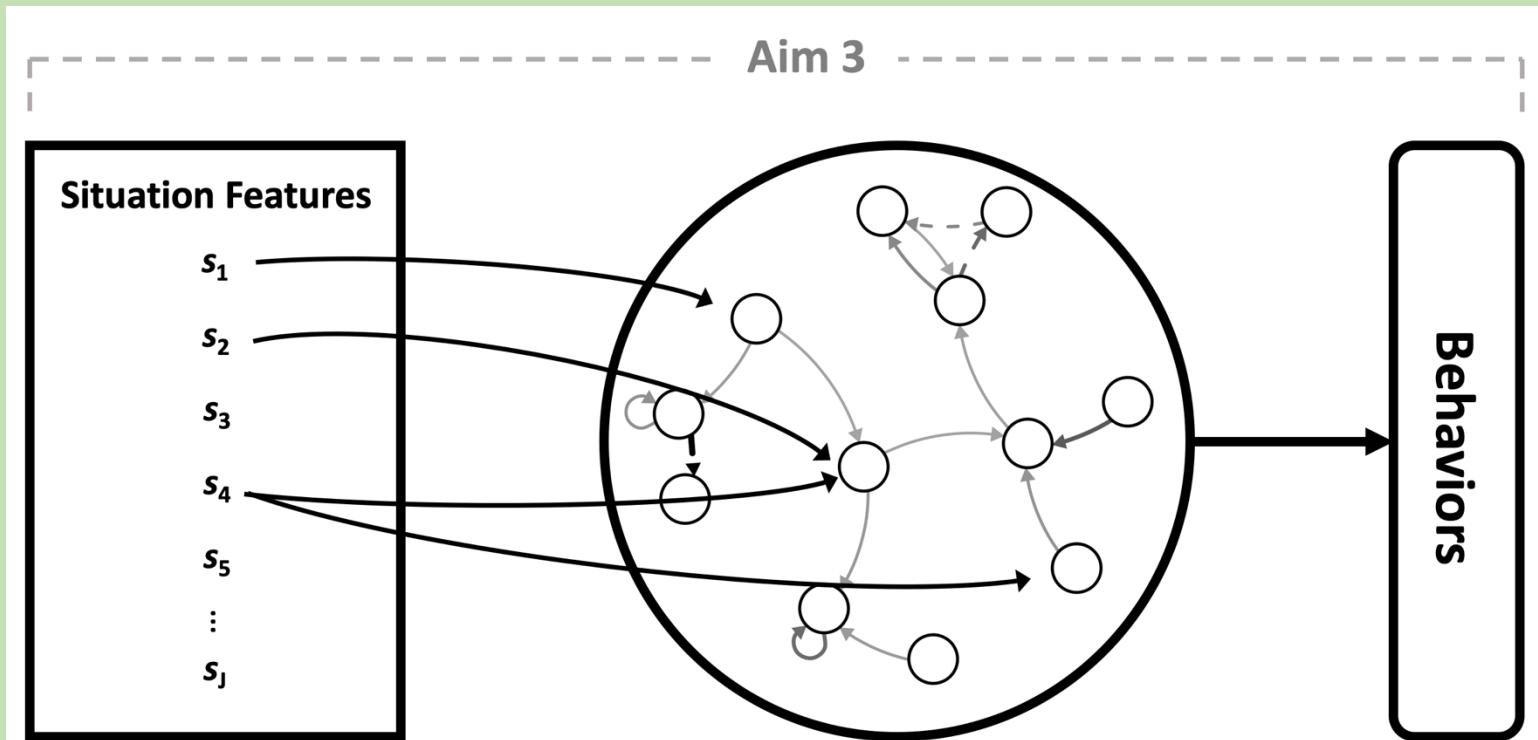
Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)

Aim 2: The dynamics of well-being unfold differently across people.

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(2023, *Psych Science*)

The antecedents of behaviors and experiences:

Can be used to accurately predict those behaviors and experiences

Differ across people

Vary in the degree of psychological, situational, and timing antecedents

Aim 1: Individuals show unique personality structures that are relatively consistent across time and events.

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(2020, *JPSP*; 2021b; *EJP*)

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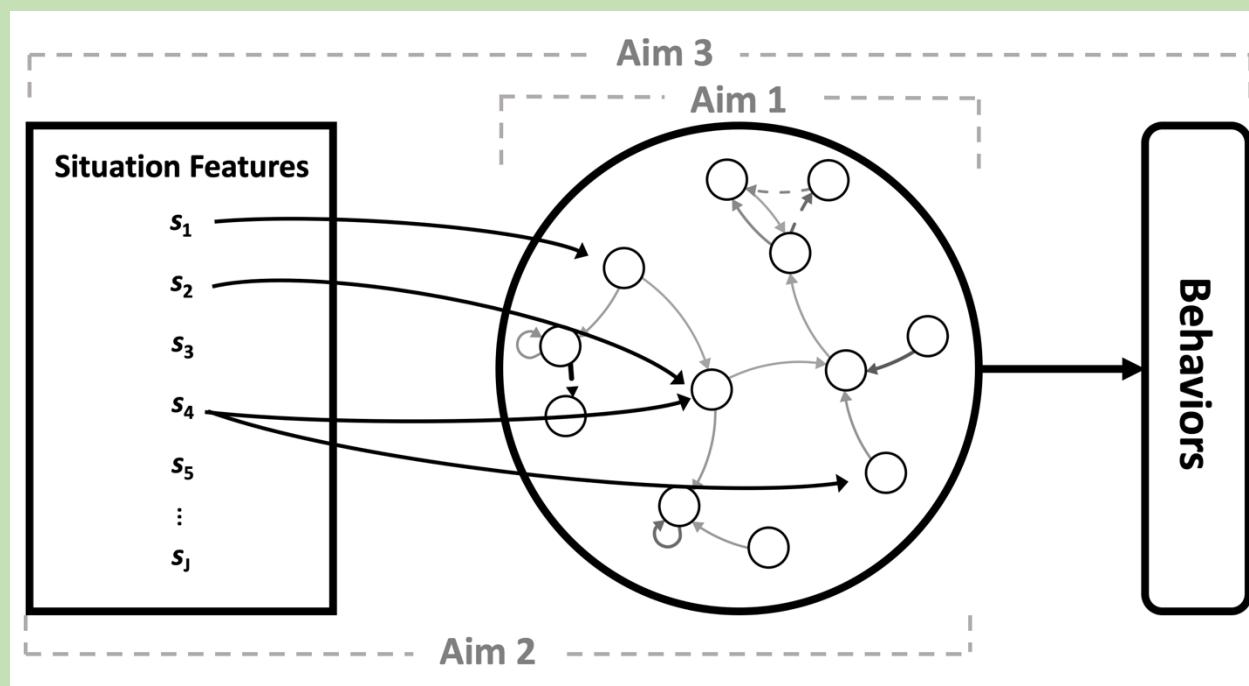
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Ongoing Directions



Other Ongoing Directions

Multilevel Structure

Personality as a Dynamic System

Personalized Assessment

Revisiting Cattell's Data Box

Integrating Across Time Scales

Revitalizing Grand Theories of Personality

Personalized Assessment

**What are we missing when we use
the same measures for everyone?**

We have no idea. That's an empirical question!

What are we missing when we use the same measures for everyone?

Content

Hypothesis: People will generate content that doesn't overlap with the Big Five or other typical shared indicators we measure.

Variability

Hypothesis: People will show more variability and use the full scale more for unique items than shared items, on average.

Predictive Utility

Hypothesis: Unique items will improve predictive utility and play important roles in personalized prediction models.

The Personalizing Personality Study

Study Design

UCDAVIS

Washington
University in St. Louis



● N = 200

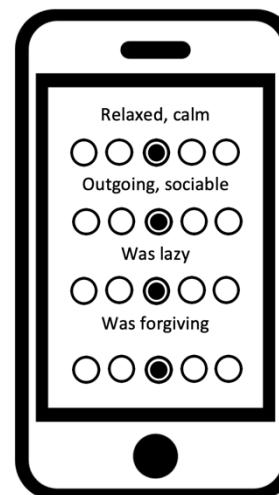
● N = 200

Baseline Surveys

- Big Five Personality
- Cardinal Traits
- Demographics
- Unique Item Generation
- ...
- etc.



BCS-2336406



Experience Sampling Method (ESM)

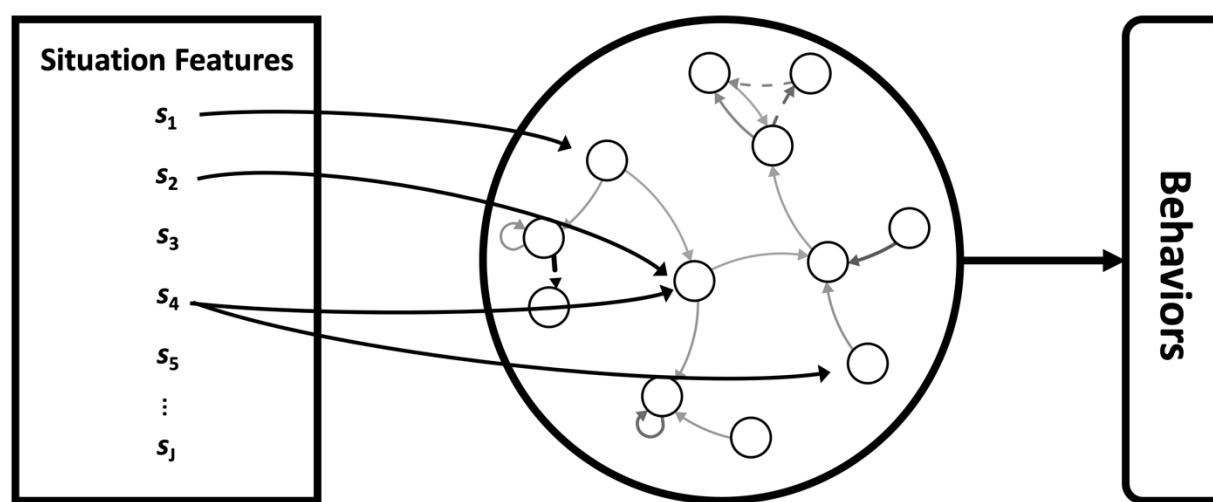
- 5 x / day for 3 weeks (max n = 105)
- Big Five Personality States
 - Unique, participant generated “Cardinal States”
 - DIAMONDS Situation Characteristics
 - Binary Behavior Indicators
 - Passive Sensing

Persons in Context: Systems Theories

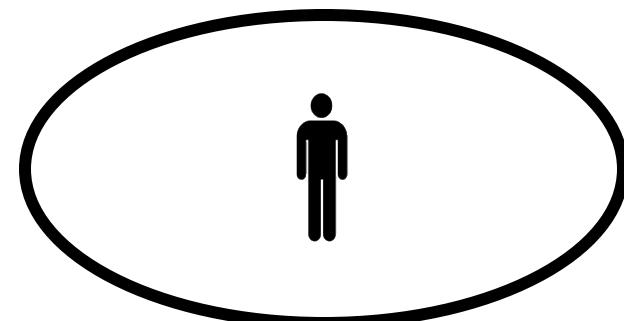
Ecological Systems Theory
(e.g., Bronfenbrenner, 1979)



Cognitive Affective Personality System
(e.g., Mischel & Shoda, 1995)



Field Theory
(e.g., Lewin, 1936)



e.g., Lewin, 1936

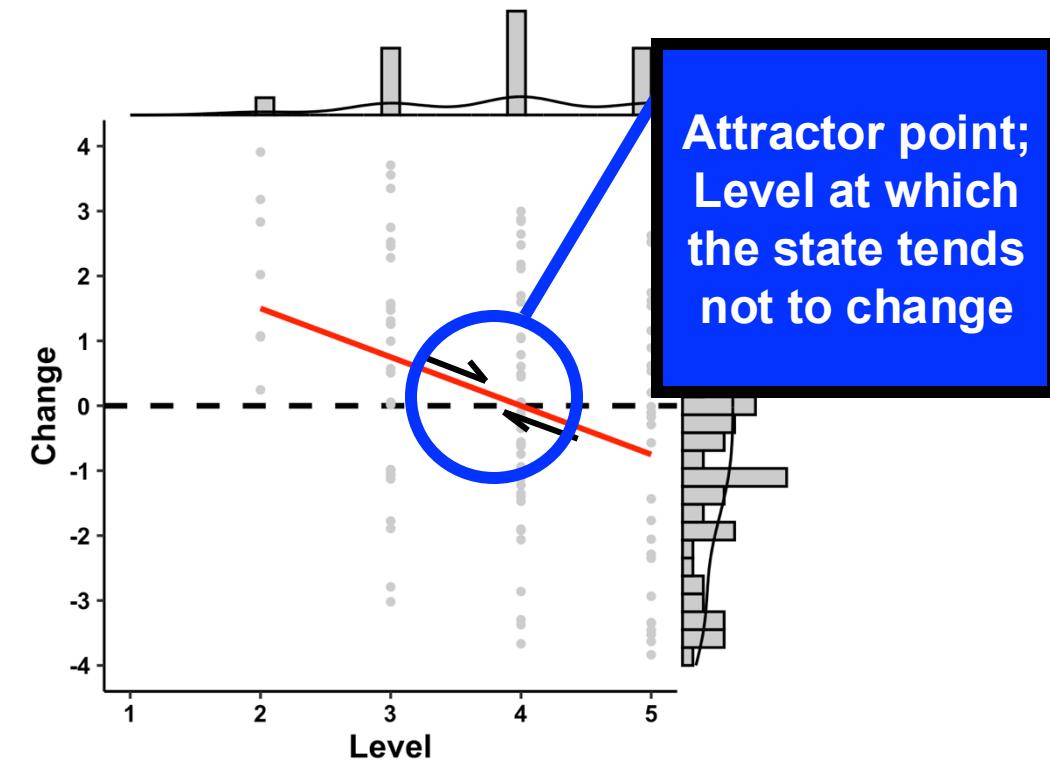
Personality As a System: Habits, Goals, and Tendencies

Looking across individuals,
individual differences appear in:

Attractor location
(x at which change is 0)

Attractor strength
(slope; b_1)

$$\frac{dp}{dt} = b_0 + b_1 p$$



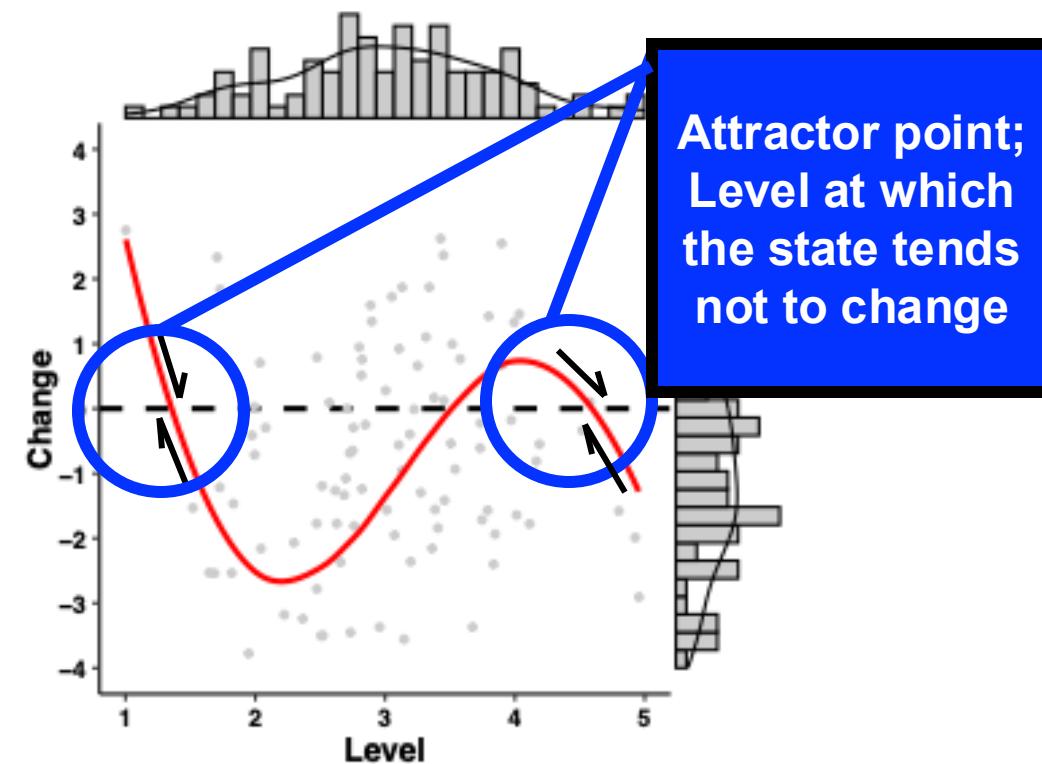
Personality As a System: Habits, Goals, and Tendencies

Looking across individuals,
individual differences appear in:

Attractor location
(x at which change is 0)

Attractor strength
(slope; b_1)

$$\frac{dp}{dt} = b_0 + b_1 p + b_2 p^2 + b_3 p^3$$



Personality As a System: Habits, Goals, and Tendencies

Look
individual

HOW THE PSYCHOLOGIST REACTS TO THE DISTINCTION "EXTROVERT-INTROVERT" WITH OBSERVATIONS CONCERNING LATERALIZATION OF FUNCTION.

b₃p³

BY JUNE E. DOWNEY
UNIVERSITY OF WYOMING

Thirty-three of the 224 men, or 14.7 per cent describe themselves as balanced or mixed in type. In Conklin's terms these respondents may be classified as "ambiverts".

Fifty-five of the 224 men, or 24.6 per cent, classify themselves as extroverts.

Seventy-six of the 224 men, or 33.9 per cent, describe themselves as introverts.

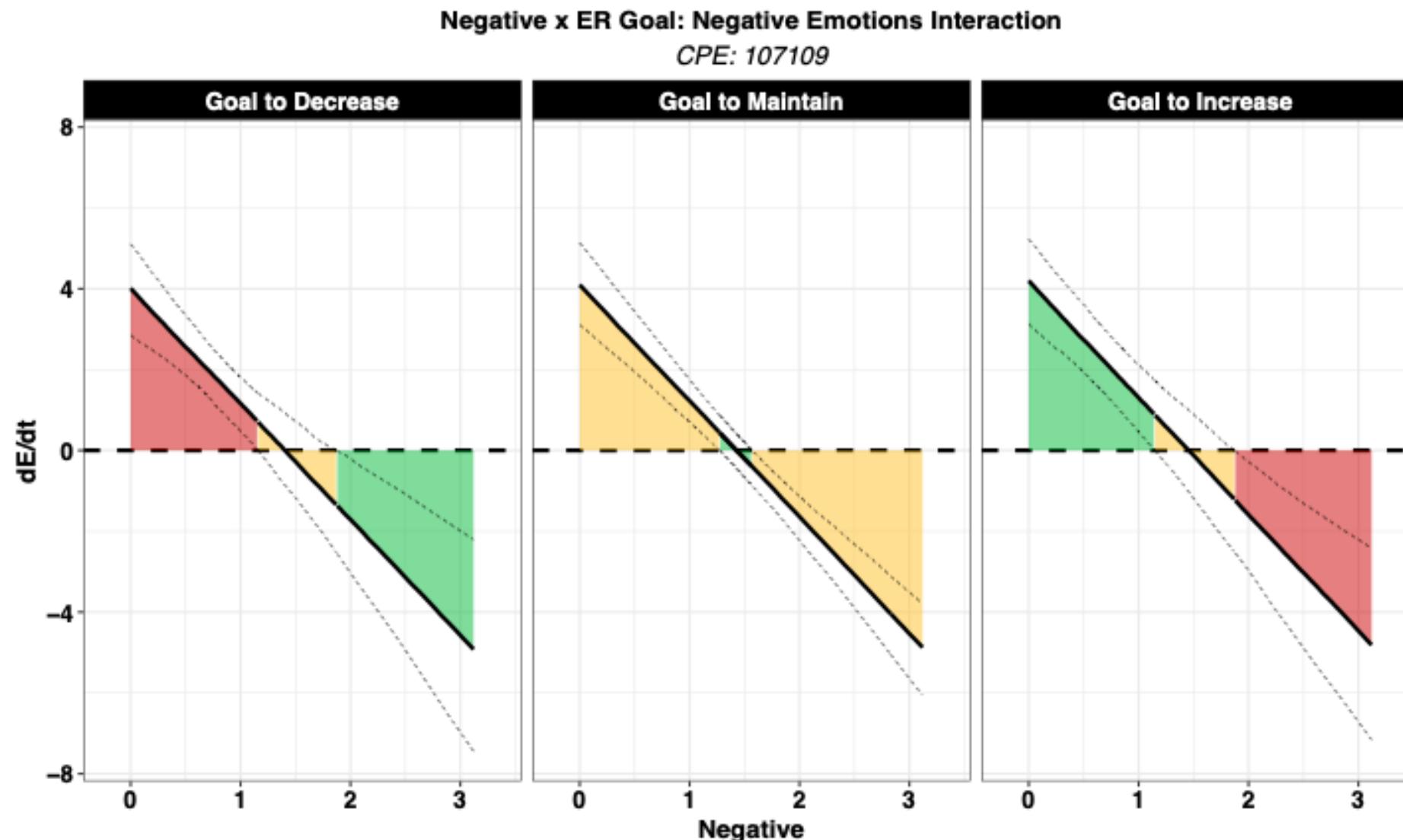
Twelve or 21.4 per cent of the 56 women classify themselves as ambiverts.

Twenty or 35.7 per cent classify themselves as extroverts.

Eighteen or 32.1 per cent classify themselves as introverts.

Attractor point;
Level at which
the state tends
not to change

Personality As a System: Habits, Goals, and Tendencies



What is personality?

“Personality is the **dynamic organization** within the individual of those **psychophysical systems** that determine his **unique adjustments to the environment**.”



(Allport, 1937, p. 32)

e.g., Allport, 1937, 1961, 1968

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Beck & Jackson
(2020, *JPSP*; 2021b; *EJP*)

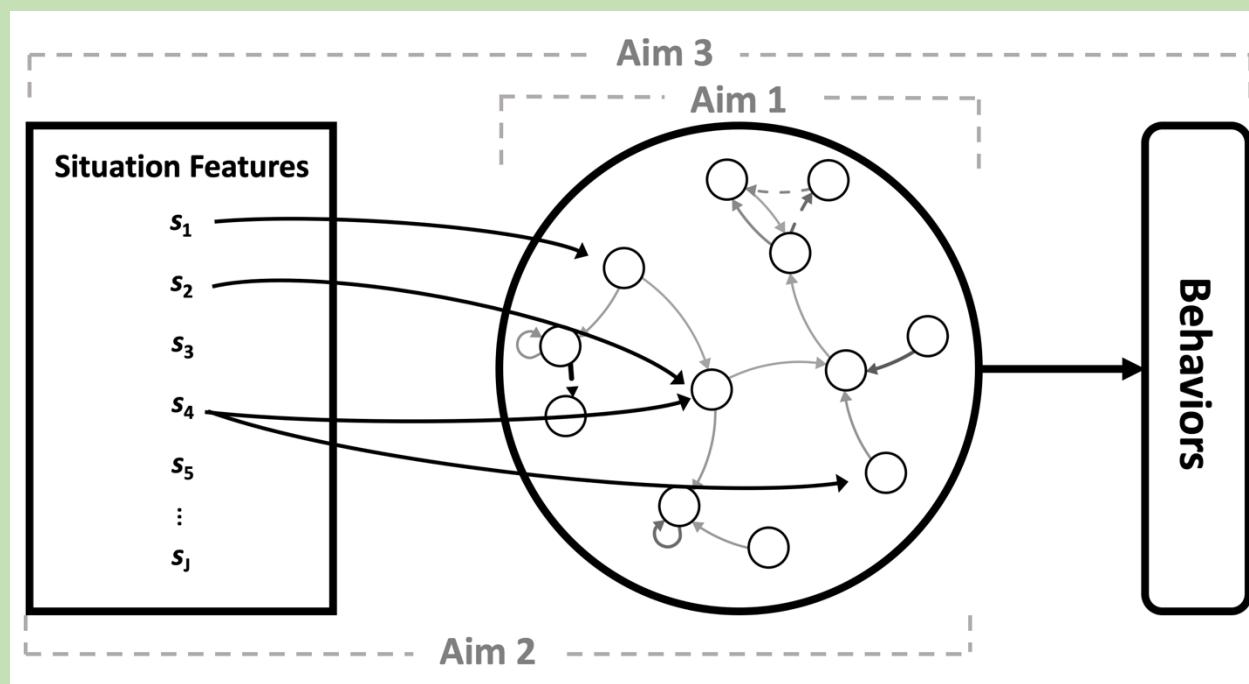
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(in press, *NHB*)

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Ongoing Directions



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Dr. Dan Mroczek
Dr. Eileen Graham

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SCAN ME



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National Science Foundation Grants BCS-2336406 and BCS-1125553; SPSP Inside the Grant Panel