Leadership in Organizations What We Know ... and Don't Know

Penn State

25 April 2014

Timothy A. Judge
Department of Management
Mendoza College of Business
University of Notre Dame



Leadership Defined

Leadership (n): The ability to influence a group toward the achievement of a vision or a set of goals

Theories of Leadership: Pre 1985

1920 -1950

Trait Theories

• "Great man" perspective (Mann's review [Ψ Bulletin, 1965] cast doubt on the validity of the perspective)

1950 -1970

Behavioral Theories

• Ohio State - Michigan studies

Contingency Theories

1970 -1985 • Effects of behaviors depended on situations (e.g., LPC Theory; Substitutes for Leadership; Path-goal Theory; Vroom-Yetton)

Theories of Leadership: Post 1975

1975 -1989

- Transformational/Charismatic Leadership Theories
 - House, 1977; Burns, 1978; Bass, 1985

1990 -1996

- Attributional Approaches / Relational Theories
 - Lord, Brown, & Freiberg, 1996; Meindl, 1990; Graen & Uhlbien, 1995

Ethical Theories

• Ethical Leadership (Brown, Treviño); Authentic Leadership (Luthans, Avolio, Walumbwa)

1997 -2014

The Problem (Well, Problems)



The cure to the purported problems with trait and behavioral theories was not any more valid than the theories they were meant to fix

The theories often confounded causes and effects

The reviews were not based on a systematic review of the evidence (by contemporary standards)

The Upshot



Trait and behavioral theories may have been subject to a premature burial

Leader Traits



Big Five

- Neuroticism
- Extraversion
- Agreeableness
- Conscientiousness
- Openness



Self-Concept

- Core selfevaluations
- Narcissism
- Hubris



her traits?

- Self-awareness
- Ambition
- Big Five aspects (Facets)

Leader Traits

Trait	Leader Emergence <i>k</i>	Leader Emergence ho	Leadership Effectiveness k	Leadership Effectiveness $ ho$
Neuroticism	30	24*	18	22*
Extraversion	37	.33*	23	.24*
Openness	20	.24*	17	.24*
Agreeableness	23	.05	19	.21*
Conscientiousness	17	.33*	18	.16*

^{* 95%} confidence interval excluding zero. k=number of correlations; ρ =estimated mean corrected correlation.

Source: Judge, Bono, Ilies, & Gerhardt (2002). Personality and leadership: A qualitative and quantitative review. Journal of Applied Psychology, 87, 675-780.

Leader Behaviors



Ohio State Dimensions

- Consideration
- Initiating Structure



Transformational Leadership

- Charisma
- Vision



Ethical Leadership

- Ethical Leadership
- Authentic Leadership

Leader Behaviors Ohio State Dimensions

Criterion	Consider- ation k	Consider- ation N	Consideration ρ	Consider- ation r
Follower job satisfaction	76	11,374	.46*	.40
Follower satisfaction with leader	49	7,871	.78*	.68
Follower motivation	11	1,067	.50*	.36
Leader job performance	25	2,330	.25*	.18
Group-organization performance	27	2,008	.28*	.23
Leader effectiveness	20	1,605	.52*	.39

^{* 90%} confidence interval excluded zero. k=number of correlations; N=combined sample size; ρ =estimated true correlation; r=mean observed correlation.

Source: Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones?: A re-examination of consideration, initiating structure, and leadership effectiveness. *Journal of Applied Psychology*, 89, 36-51.

Leader Behaviors Ohio State Dimensions

Criterion	Initiating Structure k	Initiating Structure N	Initiating Structure P	Initiating Structure r
Follower job satisfaction	72	10,317	.22*	.19
Follower satisfaction with leader	49	8,070	.33*	.27
Follower motivation	12	1,041	.40*	.26
Leader job performance	22	2,085	.24*	.19
Group-organization performance	27	2,079	.30*	.23
Leader effectiveness	20	1,960	.39*	.28

^{* 90%} confidence interval excluded zero. k=number of correlations; N=combined sample size; ρ =estimated true correlation; r=mean observed correlation.

Source: Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones?: A re-examination of consideration, initiating structure, and leadership effectiveness. *Journal of Applied Psychology*, 89, 36-51.

Slide 12 | 62

Leader Behaviors Transformational Leadership

Criterion	Transformational k	Transformational N	Transformational ρ
Follower job satisfaction	18	5,279	.58*
Follower satisfaction with leader	23	4,349	.71*
Follower motivation	16	4,773	.53*
Leader job performance	13	2,126	.27*
Group-organization performance	41	6,197	.26*
Leader effectiveness	27	5,415	.64*

^{* 95%} confidence interval. k=number of correlations; N=combined sample size; ρ =estimated true correlation.

Source: Judge, T. A., & Piccolo, R. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.

Leader Behaviors Ethical/Authentic Leadership

- The newest theories of leadership include ethical leadership and authentic leadership
- These theories have been subject to less research
 - Authentic leadership has proven controversial

So what works?

- Leader traits and leader behaviors (consideration, initiating structure, and transformational leadership) have proven themselves predictive of leadership
- Very little research has tried to reconcile these approaches
- Leader behaviors probably mediate, at least in part, leader traits
- Recently, we sought to reconcile leader behaviors

Reconciling Behavioral Approaches

	Follower Job Satisfaction	Leader Effectiveness
Consideration	.23**	.15
Initiating Structure	07	.21**
Transformational	.28**	.20**
R	.46**	.45**
R^2	.21**	.20**

Source: Piccolo, R. F., Duehr, E., Rowold, J., Heinitz, K., Bono, J. E., & Judge, T. A. (2012). The relative impact of complementary leader behaviors: Which matter most? *Leadership Quarterly*, 23, 567-581.

Attributional/Relational Approaches



Attributional Approaches

- Implicit Leadership Theory
- Romance of Leadership



Relational Approaches

• Leader - Member Exchange

I won't review these now, but they raise issues I will pick up later

Where We Are

- We can predict leadership emergence and effectiveness using both leader traits and leader behaviors
- In well controlled studies, these effects are moderate in magnitude
- What more is there is learn?
 - Plenty!
- I now turn to a discussion of some things we don't know
 - I highlight areas in which I am interested in collaborating

1

One important issue is whether, by focusing on broad traits, leader trait research has under-predicted leadership outcomes



Recently (Judge, Rodell, Klinger, Simon, & Crawford, JAP, 2013), we found that trait facets offer substantial promise in predicting job performance



We consider this study here because its results suggest relevance to leadership research

Slide 19 | 62

BROAD



NARROW

Ones & Viswesvaran (1996):

Broad measures have better predictive validities because "there is too much invalid variance in any...measure of specific, narrow personality dimensions"

"Narrow traits are better predictors of job performance than are the factors that subsume them" (Ashton, 1998)

"Using broad, complex measures, although convenient, runs the risk of masking meaningful and exploitable relations at more specific levels" (Tett et al., 2003)

Faceted approaches may produce higher criterionrelated validity than broad-trait-only approaches



Psychometrically, if facets of a multidimensional construct are positively correlated and differentially predict a criterion, then a composite of those facets will always produce higher criterion-related validity than the average of the facets



Broad-only measures are more likely to be construct-deficient in that they are likely to sample a narrower content domain than multidimensional measures This is important given the varying contexts over which organizational behavior occurs

- Each trait organized by 3 hierarchical levels
 - Single broad Big Five trait
 - Two facets according to DeYoung et al. (JPSP, 2007)
 - Six NEO sub-facets that correspond to each Big Five trait, but also are nested within the DeYoung et al. (2007) facets
- Meta-analyzed 1,176 correlations from 410 samples (N=406,029)
- Formed the 10 DeYoung facets from the NEO facets, and five broad traits from those facets



Peroung Facets

Neo S. -Facets

Slide 22 | 62

Which do you think best predicts leadership emergence, leadership effectiveness, and group performance?

Conscientiousness

Industriousness

Orderliness

Competence

Achievement

Self-Discipline

Deliberation

Dutifulness

Order

validity in predicting leadership think these outcomes?

differential

have

facets

Peroung Facets

Neo S. -Facets

Slide 23 | 62

Which do you think best predicts leadership emergence, leadership effectiveness, and group performance?

Agreeableness

Compassion

Trust

Altruism

Tender-

mindedness

Compliance

Politeness

Modesty

Straightforwardness

validity in predicting leadership think these outcomes?

differential

have

facets

Peroung Facets

Neo Si-Facets

Slide 24 | 62

Which do you think best predicts leadership emergence, leadership effectiveness, and group performance?

Neuroticism

Volatility

Withdrawal

Impulsiveness

Angry

Hostility

Anxiety

Depression

Vulnerability

Self Consciousness validity in predicting leadership outcomes?

differential

have

facets

think these

Neo Si '-Facets

Broad Trait

Which do you think best predicts leadership emergence, leadership effectiveness, and group performance?

Openness

Ideas differential Intellect **Actions** validity in predicting leadership have **Aesthetics** facets think these **Fantasy Experiential Feeling** outcomes? **Openness Values**

Peroung Facets

Slide 25 | 62

Peroung Facets

Neo Si-Facets

Slide 26 | 62

Which do you think best predicts leadership emergence, leadership effectiveness, and group performance?

Extraversion

Assertiveness

Enthusiasm

Assertiveness

Excitement Seeking

Activity

Gregariousness

Positive Emotions

Warmth

Do you think these facets have d validity in predicting leadership outcomes?

differential

What We Don't Know In Leadership: I Broad & Narrow Traits Predicting Job Performance

Slide 27 | 62

	6 NEO Facets		2 DeYoung et al. Facets		Single Broad Trait	
	R	Adj. R ²	R	Adj. R ²	R	Adj. R ²
Overall Job Performance						
Conscientiousness	.261**	.068**	.265**	.070**	.259**	.067**
Agreeableness	.194**	.037**	.166**	.028**	.165**	.027**
Neuroticism	.228**	.052**	.121**	.015**	.098**	.010**
Openness	.300**	.090**	.100**	.010**	.080**	.006**
Extraversion	.406**	.165**	.205**	.042**	.199**	.040**

Slide 28 | 62

What We Don't Know In Leadership: I Broad & Narrow Traits: Task Performance

	6 NEO Facets		2 DeYoung et al. Facets		Single Broad Trait	
	R	Adj. R ²	R	Adj. R ²	R	Adj. R ²
Task Performance						
Conscientiousness	.242**	.058**	.253**	.064**	.249**	.062**
Agreeableness	.244**	.059**	.110**	.012**	.099**	.010**
Neuroticism	.253**	.064**	.095**	.009**	.083**	.007**
Openness	.177**	.031**	.126**	.016**	.120**	.014**
Extraversion	.183**	.033**	.143**	.020**	.124**	.015**

Slide 29 | 62

What We Don't Know In Leadership: I Broad & Narrow Traits: Contextual Performance

	6 NEO Facets		2 DeYoung et al. Facets			Broad ait
	R	Adj. R ²	R	Adj. R ²	R	Adj. R ²
Contextual Performance						
Conscientiousness	.326**	.106**	.321**	.103**	.317**	.101**
Agreeableness	.330**	.109**	.178**	.032**	.175**	.031**
Neuroticism	.304**	.093**	.210**	.044**	.162**	.026**
Openness	.183**	.033**	.065**	.004**	.030*	.001*
Extraversion	.491**	.241**	.232**	.054**	.218**	.048**

What We Don't Know In Leadership: I Two Ways of Conceptualizing/Measuring Traits

Direct

Most common way to assess broad traits is with a direct approach, with single omnibus scale

 Broad traits assessed with omnibus measures obscure too many facet-level differences to provide optimal estimates of the criterion-related validity of personality, assessed with a single omnibus scale

Faceted

A hierarchical, faceted approach is superior if criterion-related validity is the standard

• To maximize construct correspondence (Fishbein & Ajzen, 1974), we would use facets of personality when predicting narrower behaviors—though our results showed facets were superior even in predicting broad criteria

- Has the leader trait perspective placed an overreliance on broad trait measures?
- Next step (and let me know if you're interested in collaborating!)

Metaanalytically link
lower-order
traits to
specific aspects
of leadership

Group
performance

What We Don't Know Bright versus Dark





Slide 32 | 62

TRAITS

BRIGHT

Socially desirable trait has positive implications for leaders and stakeholders

Socially desirable trait has negative implications for leaders and stakeholders

DARK

Example: Conscientious leader displays high ethical standards in pursuing agenda in the longterm interest of organization

Example: Self-confident (high CSE) leader pursues risky course of action built on overly optimistic assumptions

Example: Dominant leader takes control of ambiguous situation, and assumes responsibility for the outcome

Example: Narcissistic leader manipulates stock price to coincide with the exercise of personal stock options

DARK

Socially undesirable trait has positive implications for leaders and stakeholders

Socially undesirable trait has negative implications for leaders and stakeholders

What We Don't Know In Leadership: II Traits Paradoxes - Needed Next Steps

Slide 33 | 62





Examine how a bright-side trait can have negative effects on leadership

Example: Are there situations in which extraverted leaders, via social dominance, stress / overwhelm / agitate followers?

Examine how a dark-side trait can have positive effects on leadership

Example: Are narcissists more likely to emerge as leaders in groups, and are there situations in which this is important?

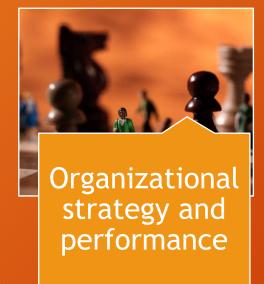


One way to do this is meta-analytically, guided by theory

Slide 34 | 62

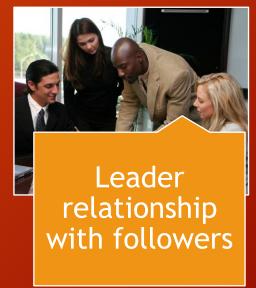
What We Don't Know In Leadership: Illa Situational Moderation

To what extent are trait effects moderated by situation?









What We Don't Know In Leadership: Illa Situational Moderation

Slide 35 | 62

Personality matters more when...

Person
Personality Traits

Behavior

Job Performance

the individual is situated in a context which allows and demands behaviors that are consistent with the trait

Source: Judge & Zapata, under review

Situation
Job
Context

Personality Situation Behavior

Situational Strength

Situation Strength

- Impact of decisions
- Consequences of error
- •Responsibility for others
- Unstructured work
- •Freedom to make decisions
- Variety

PROCESS

Big Five Traits

- Conscientiousness
- Emotional Stability
- Extraversion
- •Agreeableness
- Openness

General situation moderates all Big Five validities

Specific situation moderates some Big Five validities

Press/Activation

- •Independence in completing work
- •Attention to detail requirement
- Social skills requirement
- Level of competition requirement
- •Innovation/creativity requirement
- Dealing with angry/UP people

Slide 36 | 62

Job Performance

OUTCOME

Source: Judge & Zapata, under review

Slide 37 | 62

What We Don't Know In Leadership: Illa Situational Strength

	Conscientiousness	Emotional Stability
	r _{xy} (β)	r _{xy} (β)
Situation strength composite: Outcomes (high=strong)	.022	004
Situation strength composite: Process (high=weak)	.295*	.286*
Independence in completing work	.233**	.062
Attention to detail requirement	193*	.083
Social skills requirement	146	.234**
Level of competition requirement	071	018
Innovation/creativity requirement	.218*	139
Dealing with unpleasant or angry people	.249*	.220*
R	.449**	.501**
R ²	.201**	.251**

Slide 38 | 62

What We Don't Know In Leadership: Illa Situational Strength

	Extraversion	Agreeableness
	r _{xy} (β)	r _{xy} (β)
Situation strength composite: Outcomes (high=strong)	.021	324*
Situation strength composite: Process (high=weak)	.345**	.424**
Independence in completing work	177	.305*
Attention to detail requirement	342**	.411*
Social skills requirement	.243*	.259*
Level of competition requirement	.252**	400*
Innovation/creativity requirement	014	.099
Dealing with unpleasant or angry people	.314**	.251*
R	.709**	.547**
R^2	.502**	.299**

Slide 39 | 62

What We Don't Know In Leadership: Illa Situational Strength

	Openness
	r _{xy} (β)
Situation strength composite: Outcomes (high=strong)	233**
Situation strength composite: Process (high=weak)	.199*
Independence in completing work	.202*
Attention to detail requirement	.013
Social skills requirement	.101
Level of competition requirement	115
Innovation/creativity requirement	.332**
Dealing with unpleasant or angry people	.023
R	.453**
R ²	.205**

What We Don't Know In Leadership: IIIb Situational Moderation

- Do leader traits have different effects on perceived effectiveness vs. actual group performance?
 - "We conclude that personality and effective leadership are indeed linked, and the two key factors mediating the link are:
 (a) the leader's socio-political intelligence—his/her ability to understand within and between group political dynamics; and(b) the degree to which the leader is seen as having integrity.""We believe the data support the notion that leaders (CEOs) make a difference (for good or ill) in firm performance."
 - R. Hogan and T. Judge

Source: Hogan, R., & Judge, T. A. (2013). Personality and leadership. In M. G. Rumsey (Ed.), *The Oxford handbook of leadership*. New York: Oxford University Press.

What We Don't Know In Leadership: IV Leadership research has assumed a static process



Craig is more extraverted than Tim



Ken is more visionary than Craig



Ken is more considerate than Tim

- What if this process is as dynamic as it is static?
 - Put another way, what if there is as much within-leader variation in behavior as between-leader variation?

- Within-individual variation in experiences at work are partially responsible for withinindividual variation in personality states
- What is withinindividual variation in personality?

"A dimension with the same content and scale as a personality trait but that assesses how the person is at the moment rather than how he or she is in general."

(Fleeson, 2007, p. 826)

Social Psychology

- Variation in personality across situations or over time treated as measurement error (Mischel & Shoda, 1995)
- However, consistent with the density distributions approach to personality (Fleeson, 2001; Fleeson & Jolley, 2006):
 - Experiences at work can predict deviations from central tendencies in traits
 - There are trait-relevant individual differences in responsiveness to work experiences

Slide 44 | 62

What We Don't Know In Leadership: IV Within-Leader Variability

- We have begun to study the effect of work on personality variation over very short time periods (micro temporal effects)
- Funder: Interactionism (persons, situations, and behaviors) can take other forms beyond P x S

```
• Lewin: B=f(P,S) Schneider: S=f(P,B)
Our study: P=f(B,S)
```

• Within-individual variation in work context will cause within-individual variation in personality

What We Don't Know In Leadership: IV Hypotheses: Work Context → Next-Day Personality

Slide 45 | 62

Work Context	Personality
Prosocial behavior at work (PSB)	Conscientiousness Agreeableness Extraversion Openness
Interpersonal conflict (ICO)	Agreeableness Extraversion Neuroticism
Goal-setting motivation (GSM)	Conscientiousness
Intrinsic motivation (IMO)	Conscientiousness Openness

What We Don't Know In Leadership: IV Judge, Simon, Hurst, & Kelley (JAP, in press)

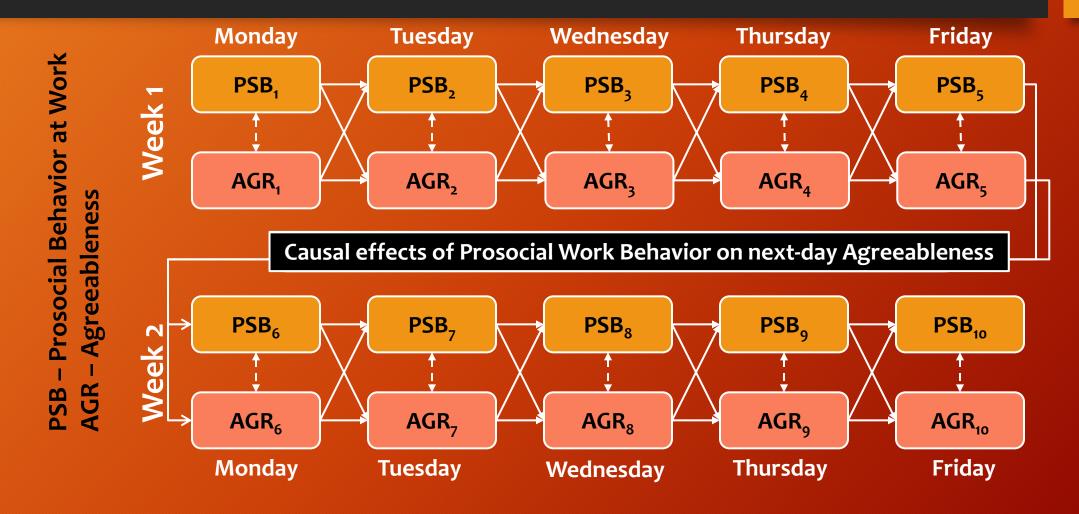
- Experience-Sampling Methodology (ESM) was used
 - Participants asked to complete a survey each day they attended work.
 Links to the surveys were emailed daily; surveys were available only from 3:00PM to 11:00PM
- Daily surveys contained measures of personality and work
- Of the 150 individuals invited to participate in the study, 129 (86%) started the study
- Usable data were available for 122 participants (81.3%). Out of possible 1,220 observations (122 × 10), 1,081 were provided (86.3%)

What We Don't Know In Leadership: IV Judge, Simon, Hurst, & Kelley (JAP, in press)

- Dataset constructed so that both personality and work variables were used to predict next day levels of both
- Specification also included (estimated links):
 - Autoregressive effects (day-to-day)
 - Day effects (constructs assessed on common day)
- General trait factor also was created to control for trait (between person) effects
- Within-week equality constraints were imposed
 - No reason to believe T→W different from W→TH

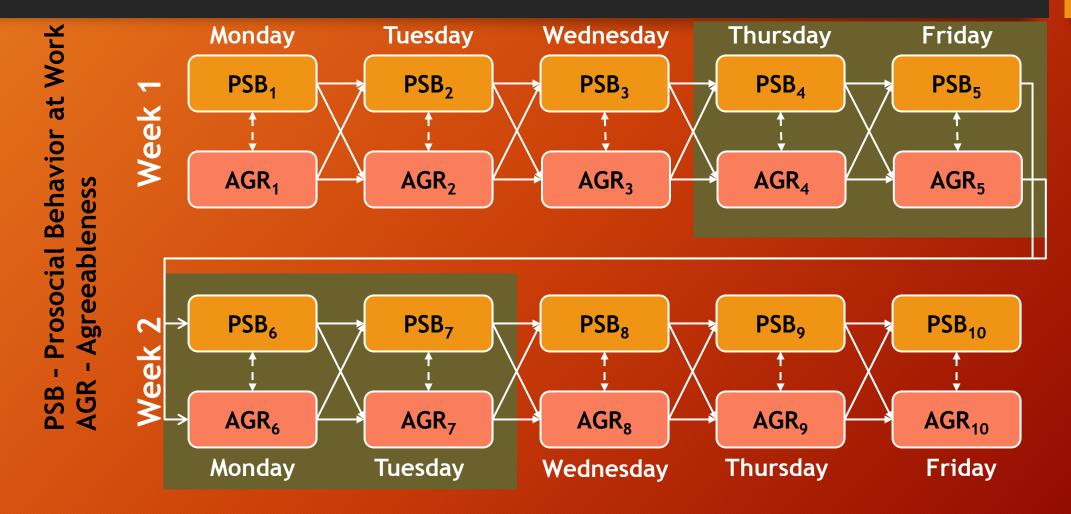
Slide 48 | 62

What We Don't Know In Leadership: IV Hypothesis: Prosocial Behavior - Agreeableness



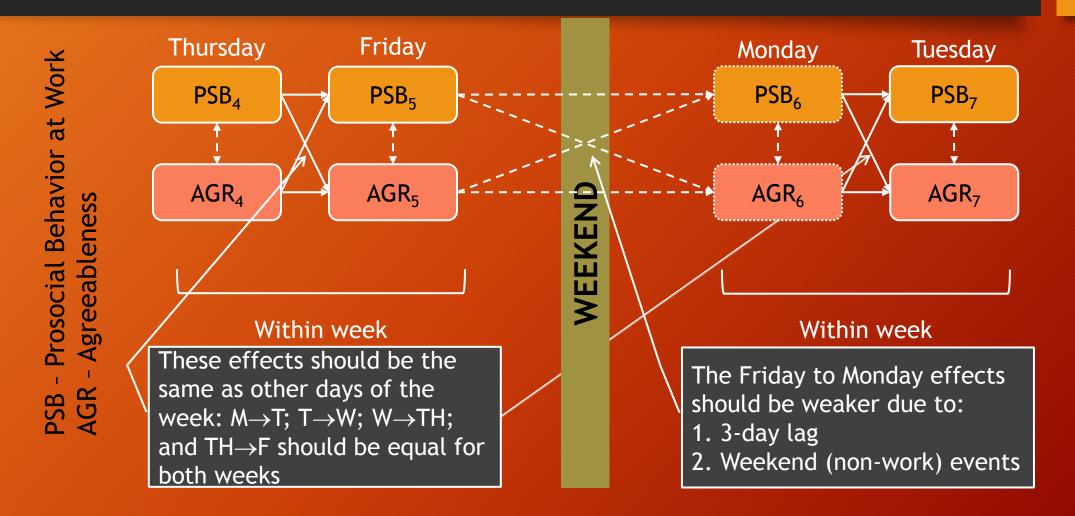
Slide 49 | 62

What We Don't Know In Leadership: IV Hypothesis: Prosocial Behavior - Agreeableness



Slide 50 | 62

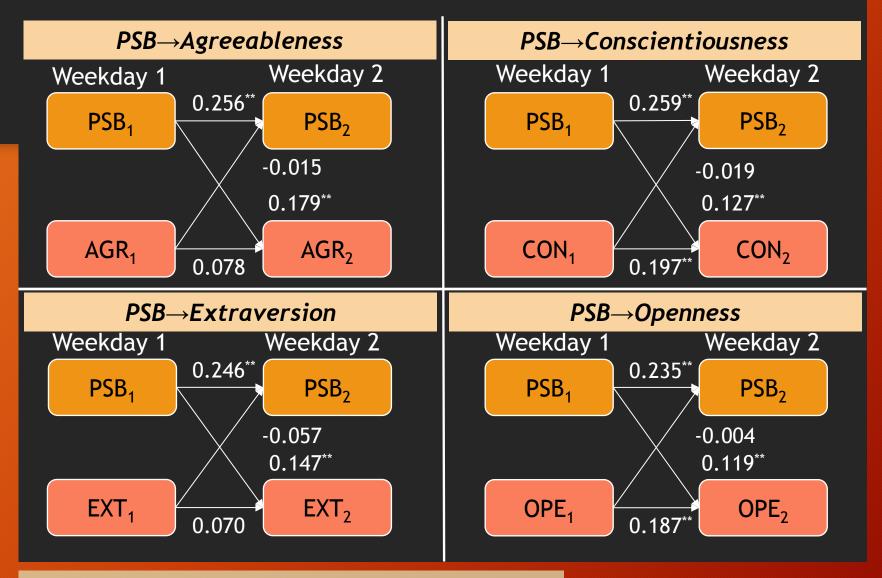
What We Don't Know In Leadership: IV Prosocial Behavior - Agreeableness Weekend Effects



Slide **51 | 62**

What We Don't Know In Leadership: IV Variability in Work & Personality: Between vs. Within

	Variance decomposition	
	Between	Within
Personality traits		
Extraversion	49.38%	50.62%
Agreeableness	53.47%	46.53%
Conscientiousness	44.06%	55.94%
Neuroticism	53.67%	46.33%
Openness	61.97%	38.03%
Average personality trait	52.51%	47.49%
Work variables		
Interpersonal conflict at work (ICO)	42.42%	57.58%
Prosocial behavior at work (PSB)	51.90%	48.10%
Goal-setting motivation (GSM)	45.91%	54.09%
Intrinsic work motivation (IMO)	49.39%	50.61%
Average work variable	47.41%	52.60%



Note. Unstandardized coefficients. * p < .05. ** p < .01.

Slide **52 | 62**

- Personality has much within-individual variation
- This is not transient error; it was predicted by work context
- More work → personality (9/11) than personality → work effects (4/11) were significant
 - In 1 case, only $p \rightarrow w$ significant
 - In 1 case, neither $w \rightarrow p$ nor $p \rightarrow w$ significant
 - Remember, these are within-individual relationships
- Within-week effects much stronger than cross-week effects

Rigorous Specification Controlled For:



Autocorrelated (day-to-day) errors



Within-day correlations



Simultaneous estimation of both directions of causality



Trait (between-individual personality) effects

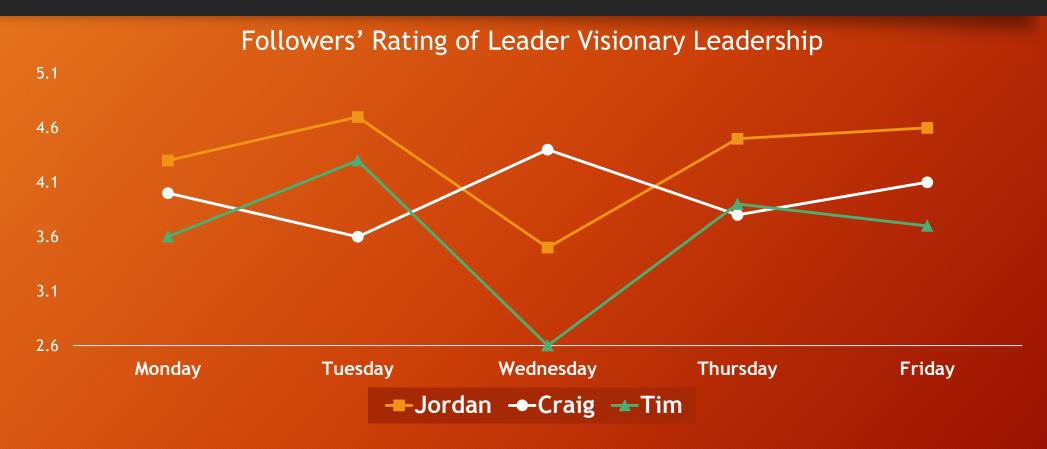
Slide 55 | 62

What We Don't Know In Leadership: IV Typical Research Design



Slide 56 | 62

What We Don't Know In Leadership: IV Within-Leader Variability



Slide 57 | 62

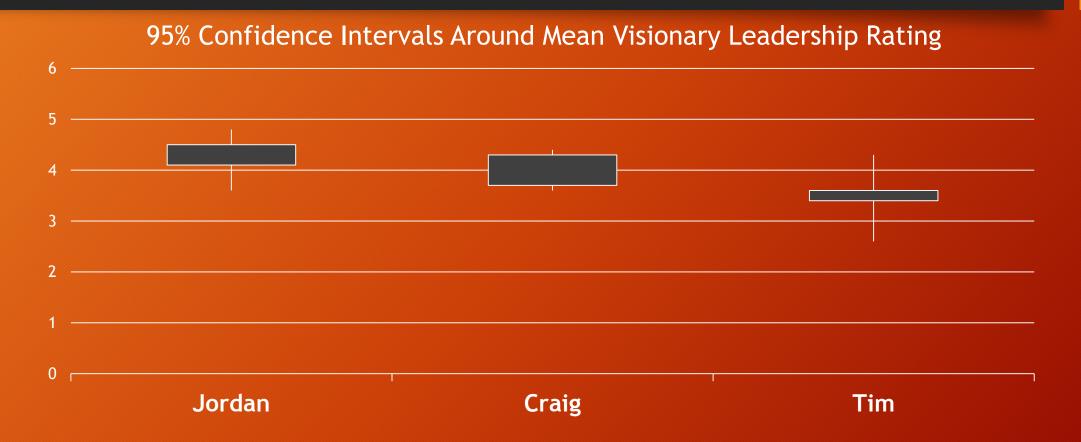
What We Don't Know In Leadership: IV Between- and Within-Leader Variation



This is absolute range—what if we constructed 95% CI's from two weeks of data?

Slide 58 | **62**

What We Don't Know In Leadership: IV Between- and Within-Leader Variation



What do these results mean for leadership research?

Leaders — and followers — are persons too!

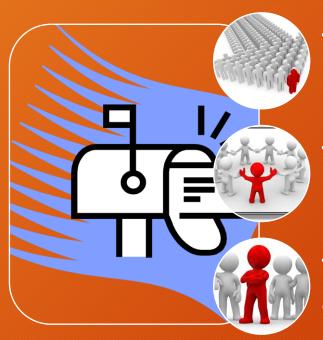
As much within- as between-individual variability

Need to revise core assumptions





Slide 60 | 62



To what extent is daily variation in leader traits related to daily variation in leader behaviors?

To what extent is daily variation in leader behaviors related to daily variation in LMX?

To what extent do leader traits or characteristics moderate the above effects?



Again, let me know if any of these topics interest you!

Conclusions



We can predict leadership outcomes, but we've probably reached a "methodological stalemate"



To predict further, need to better incorporate context & within-leader variability into designs



Hopefully this talk has provided some tangible ideas and methods about how this can be done



Thank you!

Penn State

25 April 2014

Timothy A. Judge
Department of Management
Mendoza College of Business
University of Notre Dame