

# Structured Interviews and the Assessment Center: Issues of Construct and Criterion-Related Validity



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# Historical Overview



- Unstructured: average predictive validity = .15
- Structured: average predictive validity = .34

# Structured Interviews



## **Future-Oriented** (Situational)

-questions about future behaviors

e.g. “What would you do if you had a problem with a customer?”

-average validity of .46

## **Past-Oriented** (Patterned-Behavior)

-questions about past behaviors

e.g. “Have you ever had a problem with a customer and how was it resolved?”

-average validity of .57

# Past Research



- Champion et al. (1994)
- Pulakos & Schmitt (1995)
- Huffcutt et al., (2001)

Past-oriented interviews yielded higher validity than future-oriented interviews

# Why?

## 1. Future-oriented have lower variance..

Campion et al. (1994): no difference between the two

Pulakos et al. (1995): future-oriented had higher variance

Huffcutt et al. (2001): future-oriented had higher variance

## 2. Future-oriented have lower reliability..

Campion et al. (1994): yes, but correcting did not diminish the difference

Pulakos et al. (1995): no difference between the two

Huffcutt et al. (2001): future-oriented had higher reliability

# Why?



## 3. Future-oriented and past-oriented interviews are measuring different things...

Campion et al. (1994): high relation (.73) between the two

Pulakos et al. (1995): did not report relation between the two

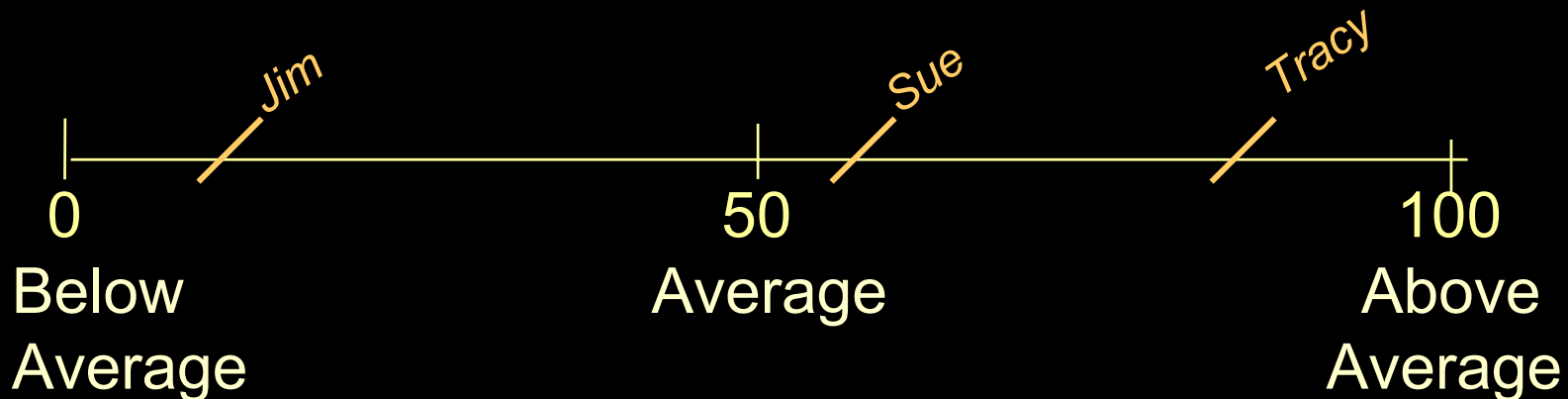
Huffcutt et al. (2001): low relation (.09) between the two

# The Current Study

- 1105 candidates
  - supervisory level positions
  - 78% male
  - mean age = 37 years
- Assessment Center:
  - Future-Oriented Interview
  - Past-Oriented Interview
  - Leaderless Group Discussion
  - In-Basket Exercise
  - Managerial Simulation
  - Cognitive Ability
  - Personality

# Method

- Job Performance
  - Relative percentile method ratings
    - Overall Job Performance
    - Promotability



## Strengths of the Current Design

1. Interviews were written to assess the same dimensions (i.e., planning & organizing, coaching, results orientation, team orientation, willingness to learn, communication)
2. Each participant received both a past-oriented and future-oriented interview
3. Performance ratings by superiors were obtained
4. Predictive validity design

# Results



- Past-Oriented

- Overall performance  $R=.37, p<.01$
- Promotability  $R=.32, p<.05$

- Future-Oriented

- Overall performance  $R=.17, n.s.$
- Promotability  $R=.19, n.s.$

# Incremental Validity

- Past-oriented interview does add to the prediction of overall job performance above future-oriented interview
  - $R^2$  change = .15,  $p < .01$
- Future-oriented interview does not add to the prediction of overall job performance above past-oriented
  - $R^2$  change = .05, n.s.

# Incremental Validity

- Past-oriented interview does add to the prediction of promotability above future-oriented interview
  - $R^2$  change = .12,  $p < .01$
- Future-oriented interview does not add to the prediction of promotability above past-oriented
  - $R^2$  change = .06, n.s.

# Why?



1. Do future-oriented have lower variance?

NO - future-oriented had *higher* variance

2. Do future-oriented have lower reliability?

NO - future-oriented had *high levels* of internal consistency reliability ( $\alpha=.89$ )

-past-oriented also had high levels of internal consistency reliability ( $\alpha=.89$ )



### 3. Are they measuring different things?

YES

- the relations between like dimensions of the past-oriented and future oriented interviews were small (ranged from .26 to .40)
- the relation between the overall score on the two was .39

# Results

	Past-Oriented	Future-Oriented	Significance of the Difference
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## Cognitive Ability

Verbal	.12**	.20**	p < .05
Numerical	.11**	.20**	p < .05
Symbolic	.11**	.13**	n.s.

# Results

	Past-Oriented	Future-Oriented	Significance of the Difference
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## Personality

Extraversion	<b>.11**</b>	<b>.11**</b>	n.s.
Adjustment	<b>.10*</b>	.07	n.s.
Independence	<b>.19**</b>	.08	p<.01
Leadership	<b>.11**</b>	.08	n.s.
Creativity	<b>.15**</b>	.06	p<.05

# Results

Past-Oriented

Future-Oriented

## Cognitive Ability

-verbal

-numerical

-symbolic

$R=.20^{**}$

$R=.30^{**}$

## Personality

-extraversion

-adjustment

-independence

-leadership

-creativity

$R=.23^{**}$

$R=.15^*$

# Results

	Past-Oriented	Future-Oriented	Significance of the Difference
In-Basket	<b>.20**</b>	<b>.17**</b>	n.s.
Managerial Simulation	<b>.34**</b>	<b>.25**</b>	p<.01
Faking	.02	<b>.10*</b>	p<.01

# Conclusions

- Past-oriented was stronger predictor of job performance and promotability
  - no difference in variances
  - no difference in reliabilities
  - measuring different things
    - Past-oriented: stronger link with personality, in-basket and managerial simulation
    - Future-oriented: stronger link with IQ and faking

# Implications

- Past-oriented may be more relevant with highly experienced candidates
- Maximum vs. Typical Performance
  - Past-oriented = typical performance
  - Future oriented=maximum performance
- Past-oriented may be less inhibited by faking

**Both future-oriented and past-oriented are likely to contribute to the assessment center**