

# Is Too Much of a Good Thing Really Wonderful?

(With apologies to Mae West)

## **Exploring Connections Between Assessment and 360-Degree Ratings and Instrument Results**

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# Purpose and Agenda

## Purpose

- Explore application of GP data to AC research and encourage further research

## Agenda

- Background
- Overview of GP, AC components and participants
- Review findings and discuss implications:
  - Variables related to AC performance
  - Variables related to 360-degree ratings
  - Relationships between AC and 360 ratings
- Q&A



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# Background Information



# Who is Georgia-Pacific?

- One of the world's leading manufacturers and distributors of tissue, paper, packaging, building products, pulp and related chemicals
- Started in 1927
- 2002 net sales of \$23B
- #74 on *Fortune 500*, #182 *Fortune's Global 500*
- Major consumer brands include Dixie, Brawny, Quilted Northern, Angel Soft, and Sparkle
- 60,000 employees at 400+ locations worldwide
- Culture – conservative, traditional; focus on execution and hierarchy



# Where Did The Data Come From?

- Correlational / exploratory research
- Conservative focus
  - Correlations at  $p < .01$  unless otherwise noted
- Identify attributes of highest performing leaders
- Consistency (or not) with past research
- Limitations of research



# Assessment Participants

- High-Potential
- Represent all GP business units and functional groups
- Demographics:
  - Total (N = 313) – 88% white, 80% male, approximate avg tenure = 11 years and avg age = 42
  - Sub-set (n = 187) – approximately same demographics
- AC ratings, personality and cognitive data on total sample
- 360-degree ratings only on sub-set



# GP Assessment Center

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- Began in 1996 for development of High-Potentials
- Initially instrument heavy and behavior “lite”
- RFP in Dec 2000, awarded contract in Feb 2001
- Leadership interviews as basis for new competencies and “day-in-the-life” simulation
- Assessment for potential via “forward looking standards”
- Piloted new mid-level AC in April, debuted May 1, 2001
- Implemented re-designed 360 instrument in Jan 2002

# GP Assessment Center

- “Day in the life” simulation; rated on 12 competencies
  - In-basket, two role-plays, LGD
- Standardized tests
  - Raven Advanced Progressive Matrices, 16PF (Personality Factors) Instrument
- Internally developed 360-degree instrument
- Avg rating profile ~ 1.5 Strengths, 7.8 Proficients, 2.8 Development Needs (N = 316)

	<b>D</b>	<b>N</b>	<b>A</b>
I performed well in the assessment exercises (N=316)	<b>5%</b>	<b>40%</b>	<b>55%</b>
I am confident that the assessment program can predict how well a participant will perform in a management position. (N = 190)	<b>8%</b>	<b>38%</b>	<b>54%</b>
The exercises reflected the general types of leadership activities that are required in my job. (N = 316)	<b>5%</b>	<b>13%</b>	<b>82%</b>



# 16PF (Personality Factors)

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- First published in 1949
- 16 underlying dimensions of personality that clustered into 5 global factors
- 50+ published studies; translated into 40+ languages
- Correlates with other “Big 5” models of personality
- Results delivered via customized report
  - Demonstrated link with on-the-job behaviors



# Raven Advanced Progressive Matrices

- Originally drafted in 1943; commercially available in 1947
- High construct validity; widely used in psychological research; industry standard
- Differentiates between people of *superior* intellectual ability
- Little contamination due to culture/language differences
- GP participants only told quartile range, not score



# 360-Degree Instrument

- Originally created in 1996; Complete revision of items and report format in 2001
- 1 – 5 rating scale (“Weakness” to “Role Model”)
- Confirmatory factor analysis (CFA) in Jan 2003:
  - “The construct validity of the 360-degree assessment instrument is quite high. Each identified factor is a valid performance indicator.”
- Used CFA to “tighten up” instrument
- 79 items covering 17 competencies



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# Variables Related to AC Performance



# Relationships with AC Performance

## Number of Strengths:

**1. Pay grade (+)**

**3. Warmth (+)**

**2. Raven score (+)**

**4. Imagination (+)**

- Contributions of each
  - Pay grade – proxy for experience, success in GP
  - Raven – cognitive skills
  - Warmth – outgoing, attentive to others (Extraversion)
  - Imagination – focused on ideas; related to creativity and “visionary leadership”

# Relationships with AC Performance

## Number of Development Needs:

1. Pay grade (-)

3. Self-Control (+)

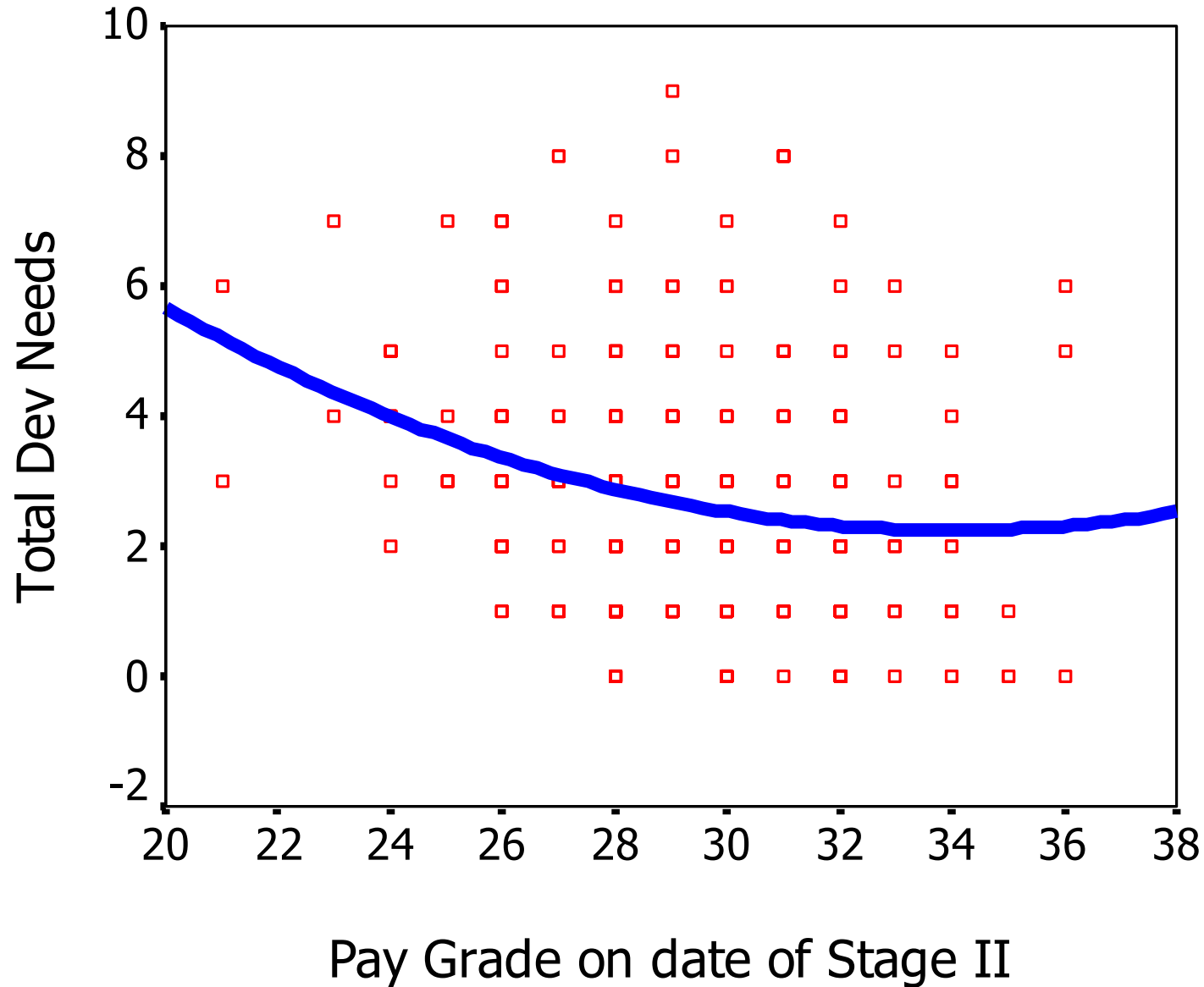
2. Raven score (-)

4. Tension\* (+)

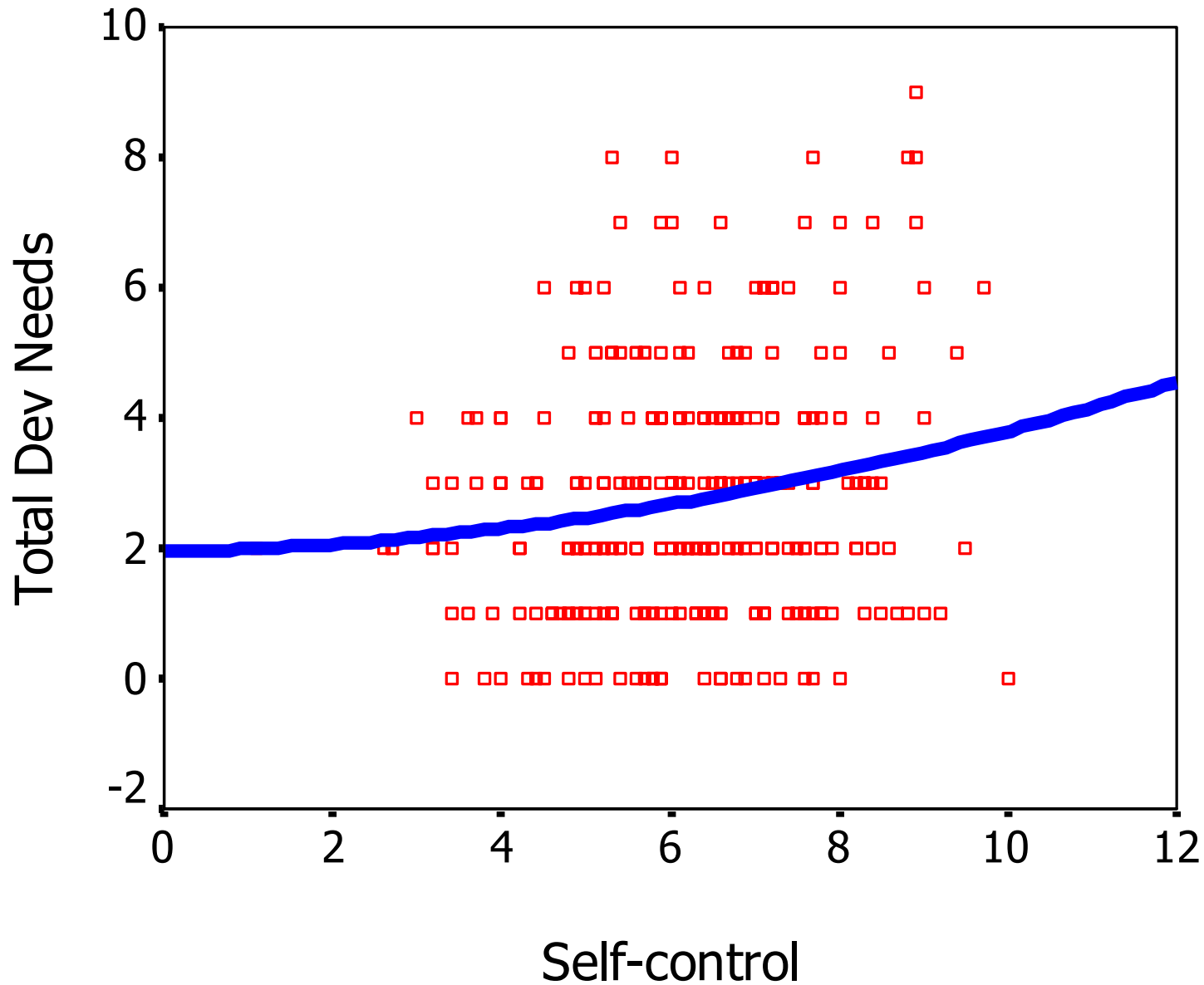
5. Dominance\* (+)

- Contributions of each
  - Pay grade and Raven – opposite effect from Strengths
  - Dominance – critical, pushy, controlling ( $*p < .05$ )
  - Tension – restless energy; impatient, irritable ( $*p < .05$ )
  - Self-Control – perfectionist, inflexible, too literal
- Curvilinear relationships

# Relationship Between DNs and Grade



# Relationship Between DNs and SC





# Backdrop: Derailment Research

- *Perfectionism and Excessive Caution* (Dotlich and Cairo, 2003)
- *Lack of Openness to New or Different Ideas and Lack of Initiative* (Zenger and Folkman, 2003)
- *Failure to learn or to adapt to change and Context Matters* (McCall and Hollenbeck, 2002)
- *Perfectionistic and Risk Averse* (@DDI, 2001)
- *A Strength Becomes a Weakness* (McCall, 1998)
- *Failure to delegate and Unable to think strategically (1983); Becoming mired in tactical issues/detail and Failure to make the transition from doing to seeing that things are done (1989)* (Leslie and Velsor, 1996)



# Examples of High SC in AC?

(Participants whose SC score was +1 SD > GP avg)

## Delegation

- “You were willing to share tasks with your staff, but seldom offered them real decision-making authority.”
- “You did not empower your subordinates with the latitude to develop their own ideas or carry them through. Instead, you tended to reserve the authority to make the final decision for yourself and generally did not include others’ input.”
- “You tended to maintain tight control over the decision-making process . . . (and) you appeared reluctant to empower your direct reports.”



# Examples of High SC in AC?

(Participants whose SC score was +1 SD > GP avg)

## Initiative / Problem Solving / Tactical vs. Strategic

- “While your ability to gather additional information from others is a strength, it (hindered) your decisiveness and impacted your ability to identify salient issues within your existing data.”
- “Despite your excellent grasp of complicated details, you were not quick to take definitive action and tended to defer making decisions in favor of gathering additional information or input from others.”
- “Your strategies . . . tended to be tactical in nature, focusing on immediate needs rather than having broad consequence and long-term benefit.”
- “Instead of using a strategic vantage point, you focused on addressing the immediate problems with tactical solutions.”



# Too Much of a Good Thing

- SC usually strong contributor to high performance: responsible, dependable, persistent, organized, etc.
  - Organizations reinforce/reward behaviors
- May “flip” to liability, thus contributing to derailment
  - Increased complexity/volume of challenges
  - Result: rigidity, “analysis paralysis,” micromanagement, too tactical, perfectionist, etc.
- If “flip” goes un-noticed, behaviors will continue – often with more intensity/effort
- AC provides real-time showcase of how flip occurs



# The “So What?”

- How to help participants:
  - Recognize the potential “dark side” of high SC?
  - Consistently choose different behaviors?
- Provide feedback that ties personality with specific behaviors (AC or 360-degree)
  - No training “fix” for personality
  - Treat it like weight control: constant potential for re-lapse
  - Increase self-awareness
- Potential role in talent planning discussions
  - High-potential vs. high-professional / manager vs. executive
- Credit where credit due: Dr. David Watterson and Dr. Murray Weaver



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# Variables Affecting 360-Degree Ratings

# What Seems to Matter?

- Significant *negative* relationship with Anxiety
  - Components: Emotional Stability, Apprehension, Vigilance, Tension
  - Research has found Emotional Stability (+) and Tension (-) to be significant predictors of leadership (Conn and Rieke, 1994)
  - Emotional Stability (+) and Apprehension (-) have strongest relationships in GP data
  - Peers can tell: significant negative correlations on 10 competencies

	<b>Self-Aware</b>	<b>MTJ</b>	<b>Influence</b>	<b>Strategic Leadership</b>	<b>Change Mgmt</b>
<b>Self</b>	<b>-.285</b>	<b>-.222</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Mgr</b>	<b>-.292</b>	<b>-.208</b>		<b>-.215</b>	<b>-.250</b>
<b>Peers</b>	<b>-.295</b>	<b>-.229</b>	<b>-.247</b>	<b>-.269</b>	<b>-.218</b>
<b>DRs</b>	<b>-.215</b>	<b>-</b>	<b>-.222</b>	<b>-</b>	<b>-</b>

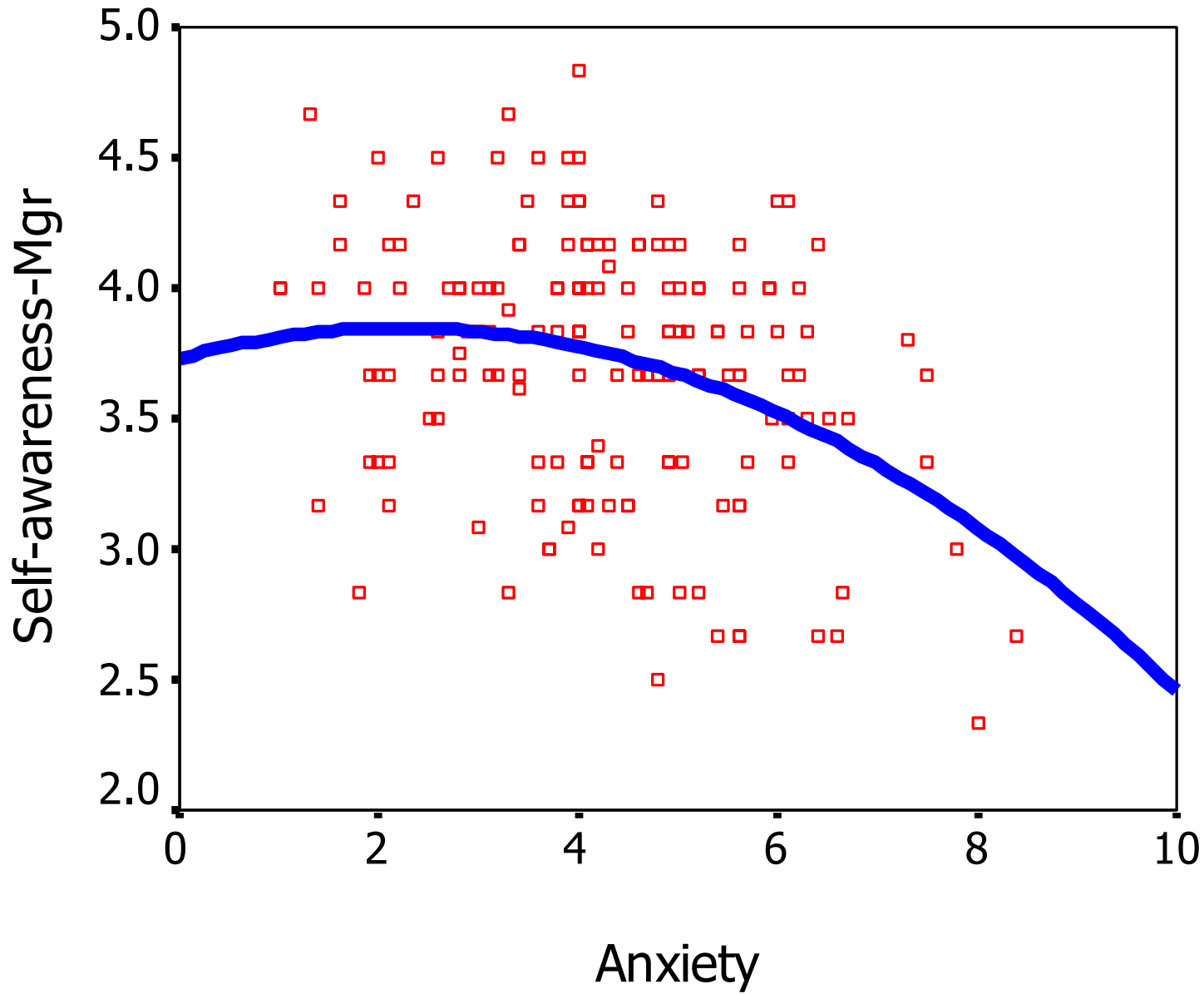
# How Anxiety Seems To Show Up

- Correlations with Self-Awareness items in 360
  - Item 11: Demonstrates self-confidence as a leader
  - Item 13: Accepts feedback from others in a positive manner (avoids defensiveness)
  - Item 14: Demonstrates flexibility
  - Item 16: Remains calm and deliberate when confronted by work-related stress or by opposition from others

	<b>Item 11</b>	<b>Item 13</b>	<b>Item 14</b>	<b>Item 16</b>
<b>Self</b>	-	<b>-.198</b>	-	<b>-.232</b>
<b>Mgr</b>	<b>-.240</b>	<b>-.224</b>	<b>-.227</b>	<b>-.257</b>
<b>Peers</b>	<b>-.245</b>	<b>-.295</b>	<b>-.214</b>	<b>-.303</b>
<b>DRs</b>	-	<b>-.218</b>	-	<b>-.306</b>

- Curvilinear relationships

# Anxiety and Mgrs' SA Ratings





# Relationships With Raven Results

- No significant correlations (51 possible) with competency-level ratings from Mgrs, Peers or DRs ( $p < .05$ )
- Significant negative correlations with Self ratings
  - Sense of Urgency and Managing Others
  - “Demonstrates self-confidence as a leader” (no significant correlations with others’ 360 ratings)
- 8 significant correlations (28 possible) with 7 items in Problem Solving ( $p < .05$ )
- Significant correlations between Raven and all rater groups’ 360 score on item “Possesses analytical and diagnostic skills” ( $p < .05$ )
- Caveat: Range restriction



# The “So What?”

- Anxiety is tricky
  - How to inform participants without making it worse?
  - Focus on reactivity and self-doubt/worry
  - Integrate into feedback sessions, re-fine wording in 16PF report
- Balanced view of cognitive abilities
  - What are others’ 360 ratings based on???
  - General Intelligence tests can account for 10% - 25% of variance in job performance
  - Leadership requires many competencies, which “operate in a cumulative and substitutable way to produce effective behavior.” (Raven, Raven and Court, 1998)
  - Help participants put cognitive abilities into context
  - Focus on strengths; leverage others’ talents



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# Relationships Between AC and 360 Ratings



# Contrasting AC and 360 Ratings

- Very different types of measurement
- Competency models “bleed”
  - Ex: competency clusters (achievement orientation, influence, and personal effectiveness) account for 80% - 98% of competency models (Spencer & Spencer, 1993)
  - GP competency model is no different
- What GP tells participants:
  - “Because of the use of ‘forward looking standards,’ it would not be unusual for your (AC) feedback to differ from feedback you have received about your performance in your current position, e.g., 360 results . . .”

# What I Found

- Looked at relationships on 12 competencies rated in both AC and on 360 instrument

<i>*p</i> <.05	<b>Correlations</b>
<b>Self</b>	<b>3*</b>
<b>Mgr</b>	<b>1*</b>

<i>*p</i> <.05	<b>Correlations</b>
<b>Peers</b>	<b>2</b>
<b>DRs</b>	<b>2*</b>

- Looked for relationships among two “logical” clusters
  - Interpersonal and Analytical

<i>*p</i> <.05	<b>Correlations</b>
<b>Self</b>	<b>5 / 4*</b>
<b>Mgr</b>	<b>1 / 5*</b>

<i>*p</i> <.05	<b>Correlations</b>
<b>Peers</b>	<b>3 / 4*</b>
<b>DRs</b>	<b>1 / 3*</b>



# Intriguing Relationships

- Self 360 ratings and AC ratings ( $*p < .05$ )
  - 360 Prob Solving and AC Prob Solving ratings (.178\*)
  - 360 Strat Thinking and AC Strat Thinking ratings (.227)
  - 360 Bus Acumen and AC Bus Acumen ratings (.226)
  
- Peer 360 ratings and AC ratings
  - 360 Active Learning rating and total DNs (-.192)
  - 360 Valuing Diversity rating and total Strengths (.210) and total DNs (-.195)
  - 360 Influencing rating and total DNs (-.205)



# The “So What?”

- Why these results?
  - Measuring different things – actual (?) vs. perception
  - Potential vs. current performance – “(People) can’t measure you against what you’re not doing now”
- Can both “measurements” be accurate?
  - I/O folks would say . . .
  - Managers would say . . .
- What to do?
  - Address head-on
  - Acknowledge limitations of both
  - Push complementary, not substitutable
- Range restriction



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# Questions?



# References

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- Atwater, J. (1998). *The Advantages and Pitfalls of Self-Assessment in Organization*. In Smither, J.W. (Ed.), *Performance Appraisal: State of the Art in Practice*. San Francisco, CA: Jossey-Bass.
- Clark, K. E. & Clark, M. B. (Eds.). *Measures of Leadership*. West Orange, NJ: Leadership Library of America, Inc.
- Conn, S. R., Rieke, M. L. (Eds.) (1994). *The 16PF Fifth Edition Technical Manual*. Champaign, IL: Institute for Personality and Ability Testing, Inc.
- Lombardo, M.M., & Eichinger, R.W. (1989). *Preventing Derailment: What To Do Before It's Too Late*. Greensboro, NC: Center for Creative Leadership
- Guastello, S. J. Rieke, M. L. (1993). *The 16PF & Leadership: Summary of Research Findings*. Champaign, IL: Institute for Personality and Ability Testing, Inc.
- Guion, R. M. (1998). *Assessment, Measurement, and Prediction for Personnel Decisions*. Mahwah, NJ: Lawrence Erlbaum Associates.
- McCall, M. W., Jr. & Hollenbeck, G. P. (2002). *Developing Global Executives*. Boston, MA: Harvard Business School Press.
- McCall, M. W., Jr. (1998). *High Flyers*. Boston, MA: Harvard Business School Press.



# References

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- Raven, J., Raven, J.C., & Court, J.H. (1998). *Manual for Raven's Progressive Matrices and Vocabulary Scales, Section 4*. Oxford, United Kingdom: Oxford Psychologists Press, Ltd.
- Robbins, S. P. (2003). *Organizational Behavior*. Upper Saddle River, NJ: Prentice Hall.
- Russell, M.T. & Karol, D.L. (1993). *The 16PF Fifth Edition Administrator's Manual*. Champaign, IL: Institute for Personality and Ability Testing, Inc.
- Zenger, J. H. & Folkman, J. (2002). *The Exceptional Leader*. New York, NY: McGraw Hill.

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# Appendix



# 16PF Global / Primary Factors

- *Extraversion*
  - Warmth, Liveliness, Social Boldness, Privateness, Self-Reliance
- *Anxiety*
  - Emotional Stability, Apprehension, Vigilance, Tension
- *Independence*
  - Dominance, Social Boldness, Vigilance, Openness to Change
- *Tough-mindedness (or Practicality)*
  - Warmth, Imagination, Sensitivity, Openness to Change
- *Self-control*
  - Rule-consciousness, Perfectionism, Imagination, Liveliness



# GP's Competency Model

- Demonstrating Integrity
- Active Learning
- Sense of Urgency
- Valuing Diversity\*
- Organizational Savvy\*
- Self-Awareness\*
- Business Acumen\*
- Problem Solving\*
- Strategic Thinking\*
- Managing the Job\*
- Customer Focus\*
- Influencing\*
- Communicating\*
- Managing Others\*  
*(sub-divided into  
Coaching on the 360  
instrument)*
- Leading with Courage\*
- Strategic Leadership

All competencies are included in GP's 360-degree instrument.  
\* designates those competences rated in the Assessment Center.