

***The Development, Investigation, and  
Extension of the  
Integrative Typology of Aggression:  
Implications for Predicting CWBs***

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# *Overview*

- Workplace Counterproductivity and Aggression
- Measurement of Aggressive Personalities
  - Self-Reports
  - Conditional Reasoning Technique
- Origins of the Integrative Typology
  - Consulting work with self-reports of personality
  - L. R. James' lab at UTK
- Integrative Typology of Aggression
- Predictions and Empirical Findings
- Revised Integrative Typology of Aggression
- Research Questions and Empirical Findings
- Conclusions, Implications, and Future Research Questions

# *Counterproductive Workplace Behavior (CWB) and Aggression*

- “...[The] occurrence of workplace violence... represents a relatively rare event in work settings. However, workplace aggression... [is] much more prevalent and may prove extremely damaging to individuals and organizations.”
  - Neuman & Baron, 1998, p. 391
- “...[To] the extent [that counterproductive] behaviors involve efforts by individuals to harm others at work, or the organizations in which this work occurs, they represent instances of ‘workplace aggression’ . . . , and we believe there are substantial theoretical and practical benefits to be derived in studying them as such.”
  - Neuman & Baron, 2005, p. 13

# *Counterproductive Workplace Behavior (CWB) and Aggression*

- CWBs are all too common and cost organizations billions each year (Bensimon, 1994; White, 1996).
- CWBs continue to be a popular and salient topic in OB (Bennett & Robinson, 2000; Neuman & Baron, 2005).
- Therefore, improved understanding of the antecedents of CWB is essential.

# *Antecedents of CWBs*

- There is some limited evidence that both job attitudes (Dalal, 2005) and some personality traits (Bing, Stewart, Davison et al., 2007) serve as antecedents of CWBs.
- In particular, individual differences in aggression have been shown to be one primary and important determinant of counterproductive behaviors (Bing, Stewart, Davison et al., 2007; Chen & Spector, 1992; Jockin, Arvey, & McGue, 2001; Neuman & Baron, 1998).
- However, these correlations, meaning those intended to illustrate the prediction of CWBs, are often small and sporadic.
- *This may be due to some theoretical shortcomings as well as some assessment shortcomings in the conceptualization and measurement of aggression, respectively.*

# *Conceptualization and Measurement of Aggressive Personalities*

- Concerning aggression as a personality trait, we believe that scholars need to rethink how we both conceptualize and measure it.
- Of course, the measurement technique should follow the re-conceptualization.
- Bottom Line: Advancements in this area of research on aggressive personalities may improve our understanding and prediction of CWBs.

# *Traditional Measures of Personality: Self-Reports*

- Self-Reports
  - Primary and most popular technique
  - Used for nearly countless measures of personality traits
  - Measure *explicit* components of personality
    - Conscious, *explicit* self-perceptions
- *Well-developed* self-reports are indispensable due to their...
  - Sound psychometric properties
  - Rapid assessment of numerous job-relevant traits
  - Ability to predict various dimensions of job performance

# *Shortcomings of Self-Reports of Aggression*

- Two basic assumptions of self-reports
  - Test takers are cognizant of their attributes (e.g., attitudes, behaviors, preferences, etc.).
  - Once test takers are cognizant of their attributes, they are willing to provide *accurate* reports for these attributes.
- These assumptions are not always met (e.g., Greenwald & Banaji, 1995; Nisbett & Wilson, 1977).
- These assumptions can be *particularly problematic for self-reports of negative traits like aggression*.
  - Aggressive personalities are often accompanied by inflated, positive, and inaccurate self-perceptions (Baumeister et al., 1996).
- Conclusion: Self-reports of aggression may be vulnerable to various problems.



# *Self-Reports of Aggression*

- I am a very evil person, but I'd like to work at your company.

– SA            A            N            D            SD

- I generally wish other people ill.

– SA            A            N            D            SD

- I hate other people.

– SA            A            N            D            SD

- I would like to ruin someone's life.

– SA            A            N            D            SD

- Life is a matter of “push or be shoved.”

– SA            A            N            D            SD

- *Remember, people don't always know themselves well, and when they do they won't necessarily tell you the truth about themselves.*
- *Also, aggressive personalities are often accompanied by inflated, positive, and inaccurate self-perceptions.*

# *Self-Reports Capture an Explicit Component of Personality*

- Recall that self-reports capture *explicit* components of personality.
  - Self-perceptions
  - Self-attributed emotions, values, beliefs, behaviors
- But what about *implicit* components?
  - Implicit cognitions
  - Latent motives
  - Subconscious drives and desires
- People cannot accurately self-report attributes of which they are not aware.
- To measure implicit components of personality *indirect* measurements are theoretically essential because they neither inform the test taker of what is being assessed nor request self-report concerning it (Greenwald & Banaji, 1995).

# *Conditional Reasoning Captures an Implicit Component of Personality*

- C-Span Epiphany...  
Generated idea to reveal  
peoples' latent motives via  
biases in reasoning...
- One can construct inductive reasoning problems that reveal the test taker's implicit and unrecognized biases, and that expose this conditional reasoning process.

# *Conditional Reasoning Captures an Implicit Component of Personality*

- Reasoning is said to be *conditional* when the likelihood that a person will consider a behavior to be reasonable depends upon the strength of that person's inclination to engage in the behavior.
  - James, 1998
- If people with different dispositional tendencies tend to use different implicit and unrecognized biases in their reasoning when attempting to justify their actions, then...
  - One can construct inductive reasoning problems that reveal the test taker's implicit and unrecognized biases, and that expose this conditional reasoning process.

# *Conditional Reasoning Tests*

- **Conditional Reasoning Tests (CRTs; James, 1998)**
  - Offer an indirect assessment of personality.
  - Measure the *implicit* (unconscious) justification mechanisms and biases that govern how individuals perceive, analyze, and reason about their environments and their interactions with others.
  - CRTs appear as tests of critical thinking or inductive reasoning capacity.
  - Test takers are instructed to pick the response option that can be most logically concluded from the information given in the stem.
    - One response defends the latent motive to aggress.
    - One response defends the latent motive to be prosocial.

# *Conditional Reasoning: Example Item*

- The old saying, “an eye for an eye,” means that if someone hurts you, then you should hurt them back. If you are hit, then you should hit back. If someone burns your house, then you should burn their house. A problem with the “eye for an eye” plan is:

*Illogical*

→ A. It tells people to “turn the other cheek.”

*Prosocial*

→ B. It offers no means to settle a conflict in a friendly way.

*Illogical*

→ C. It can only be used at certain times of the year.

*Harmful  
Intent*

→ D. People have to wait until they are attacked before they can strike.

# *The Idea to Integrate Self-Reports with Conditional Reasoning Tests*

- Thesis, antithesis, and synthesis (Hegel, 1816)
- I was working for a personnel selection consulting company when at UTK.
  - I saw firsthand the validity and utility of self-reports of personality when doing criterion-related validity studies (Thesis).
- I was in L. R. James' laboratory as a graduate student.
  - He had become totally dissatisfied with self-reports and hence his pursuit of Conditional Reasoning as an alternative to measuring personality (Antithesis).
- I proposed to L. R. James the idea that self-reports should be integrated with conditional reasoning tests to capture a more complete picture of personality (Synthesis).

# ***Integrative Typology of Personality Assessment for Aggression (Bing, Stewart, Davison et al., 2007)***

|  | <b>SELF-REPORT</b>  |   |
|--|---|---|
| <b>CONDITIONAL REASONING TEST (CRT)</b>  | <b>Low Aggression</b>   | <b>High Aggression</b>  |
|  | – It takes a lot to get me mad.   | – Life is a matter of “push or be shoved.”  |
| <b>JMs for Aggression</b><br>– Hostile Attribution Bias<br>– Retribution Bias<br>– Derogation of Target Bias | <b>Latent Aggressives</b><br>– do not perceive self as aggressive<br>– Hypothesis: Engage in subtle CWBs                  | <b>Manifest Aggressives</b><br>– perceive self as aggressive, but justifiably so<br>– Hypothesis: Engage in overt CWBs          |
| <b>Prosocial Values</b><br>– Impartial Attributions<br>– Constructive Framing<br>– Implicit Helpful Intent   | <b>Prosocials</b><br>– perceive self as reliable, friendly, non-aggressive<br>– Hypothesis: Refrain from engaging in CWBs | <b>Overcompensating Prosocials</b><br>– overly self-critical in self-perceptions<br>– Hypothesis: Refrain from engaging in CWBs |





### **Prosocials**

- perceive self as prosocial, reliable, friendly, and non-aggressive
- hold prosocial values implicitly
- generally refrain from engaging in CWBs



### ***Congruent***

## *Congruent*

### **Manifest Aggressives**

- perceive self as aggressive, but justifiably so
- well-developed cognitive structure to justify CWBs
- engage in overt CWBs



## Latent Aggressives

- do not perceive self as aggressive
- well-developed cognitive structure to justify CWBs
- engage in subtle, indirect CWBs

## *Incongruent*







***Incongruent***

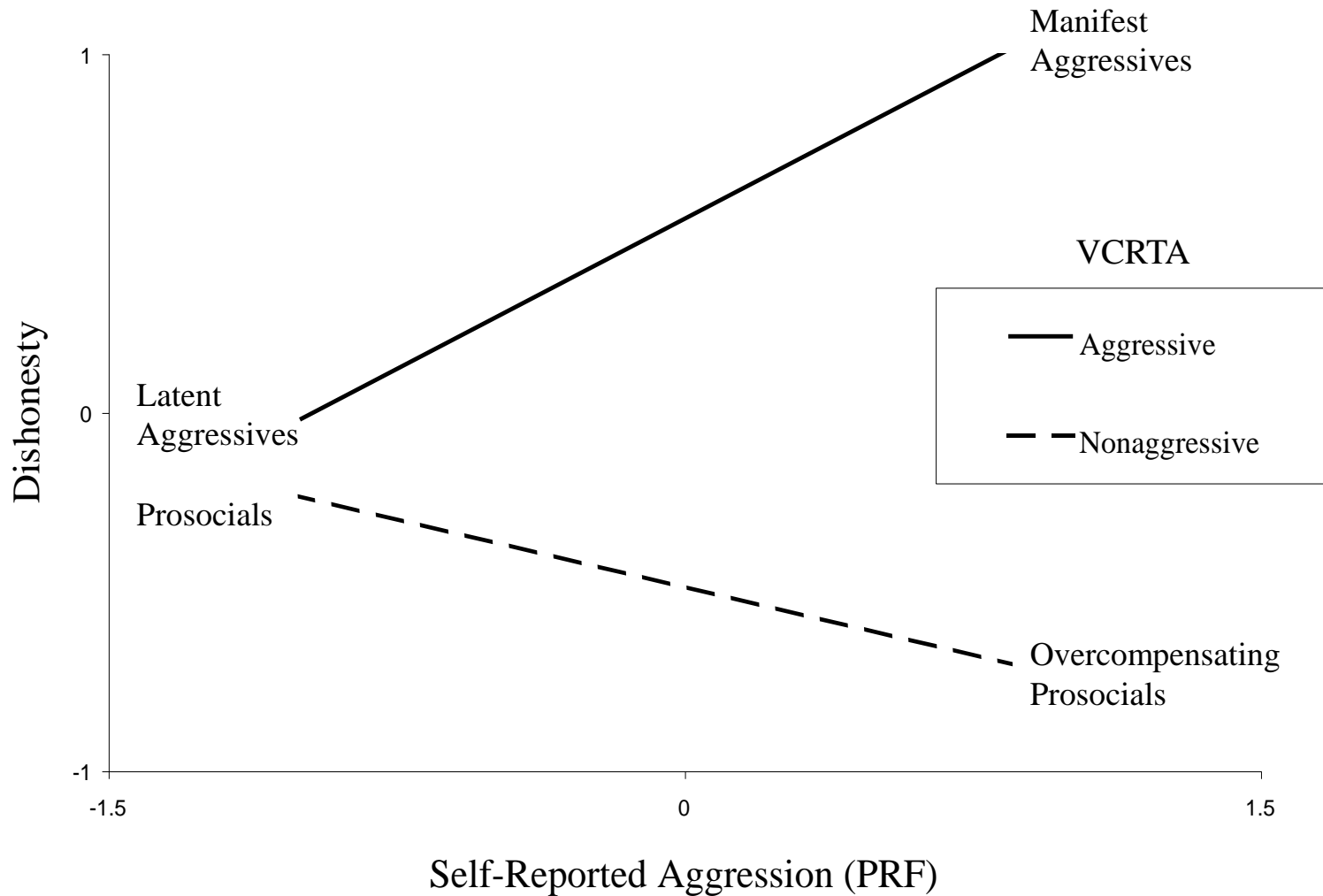
### **Overcompensating Prosocials**

- perceive self as potentially aggressive, which stimulates desire to inhibit aggression
- overly self-critical
- hold prosocial values implicitly
- refrain from CWBs

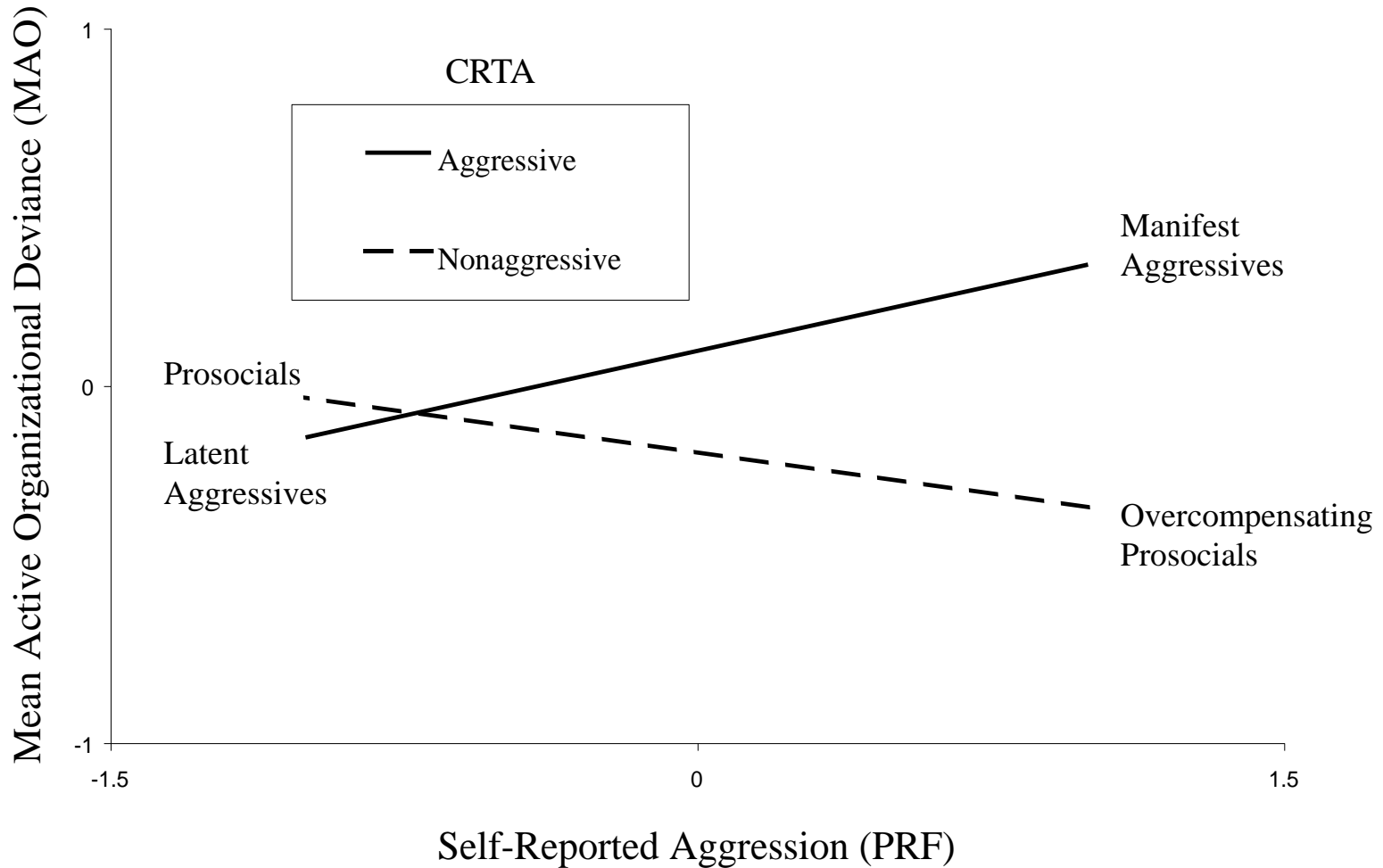
## ***Prior Results***

- Bing et al. (2007) & Frost et al. (2007) found support for the **Integrative Typology**
- For example:
  - Prosocials and Overcompensating Prosocials refrained from CWBs
  - Latent Aggressives were the least likely to engage in OCBs
  - Manifest Aggressives were the most dishonest, and engaged in overt CWBs

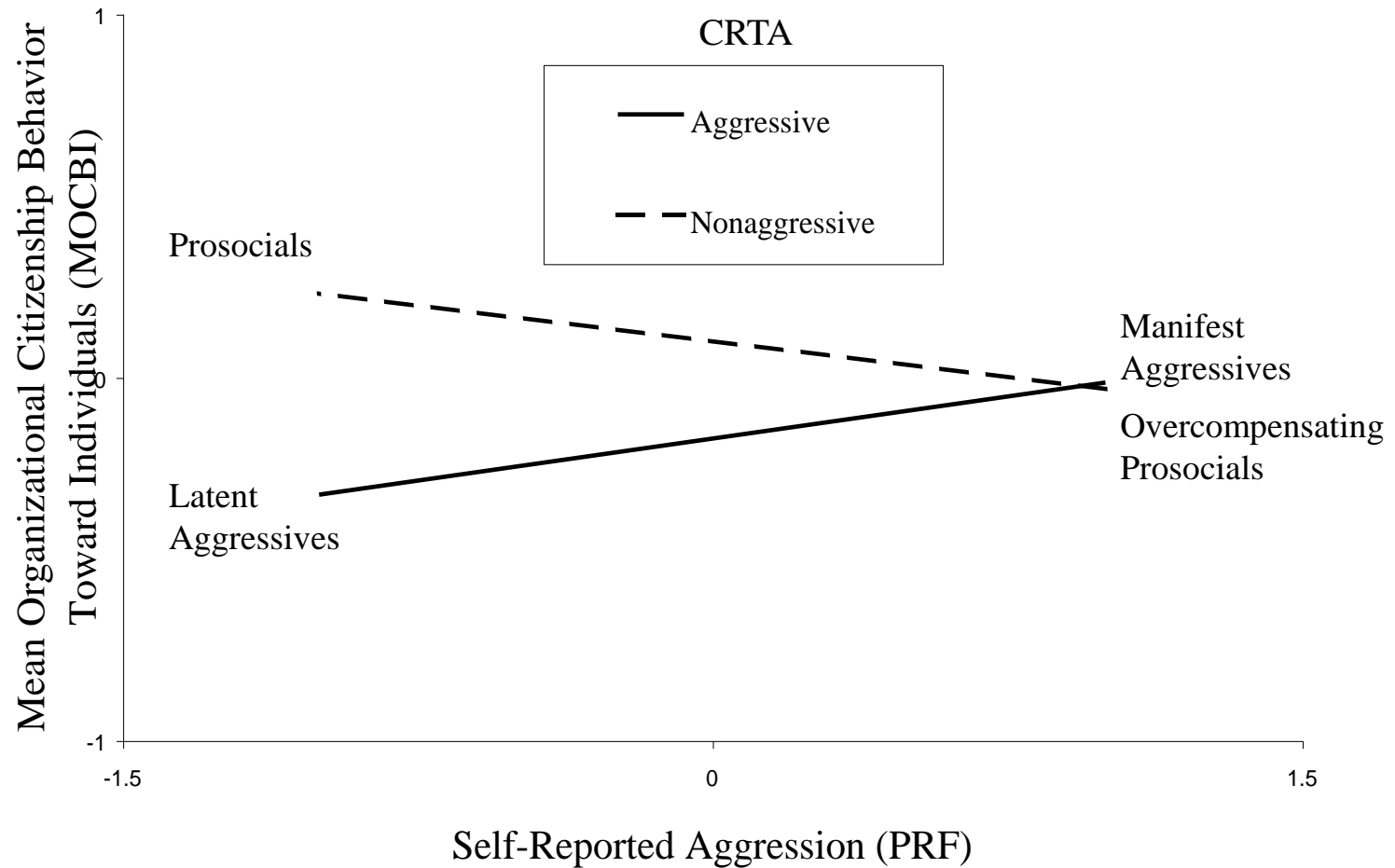
# *Prior Results: Lab Study*



# *Prior Results: Field Study*



# *Prior Results: Field Study*





## *Expanding the Integrative Typology to Include a Center Cell Prototype*

- Bing, LeBreton, Davison et al. (2007) expanded the basic 2 X 2 integrative typology of personality to include a 5<sup>th</sup> prototype, the “center cell”.
- The center cell is referred to as “Congruent Average Joe/Jane” or *Congruent AJs*.

# *Revised Typology of Personality Assessment for Aggression*

|  | <b>SELF-REPORT</b>  |  |
|--|---|--|
| <b>CONDITIONAL REASONING TEST (CRT)</b>  | <b>Low Aggression</b>   | <b>High Aggression</b>   |
|  | – It takes a lot to get me mad.   | – Life is a matter of “push or be shoved.”   |
| <b>JMs for Aggression</b><br>– Hostile Attribution Bias<br>– Retribution Bias<br>– Derogation of Target Bias | <b>Latent Aggressives</b><br>– do not perceive self as aggressive<br>– Hypothesis: Engage in subtle CWBs        | <b>Manifest Aggressives</b><br>– perceive self as aggressive, but justifiably so<br>– Hypothesis: Engage in overt CWBs                                   |
| <b>Prosocial Values</b><br>– Impartial Attributions<br>– Constructive Framing<br>– Implicit Helpful Intent   | <b>Prosocials</b><br>– perceive self as friendly, not aggressive<br>– Hypothesis: Refrain from engaging in CWBs | <b>Engaging Prosocials</b><br>– perceive self as friendly, not aggressive, but critical in self-assertion<br>– Hypothesis: Refrain from engaging in CWBs |

**Congruent AJs**

# *A Question about Moderated Multiple Regression (MMR)*

- What is the major weakness of MMR from a standpoint of complexity versus parsimony in modeling the previously presented 5-cell typology?
- It will always model the **Congruent AJs** as though they are in the middle of all other prototypes, no matter what.
- It does not allow **Congruent AJs** to fall in proximity on the criterion of interest to the other prototypes if those are indeed separated on the criterion of interest (i.e., on the Y-axis).



## Congruent AJs



*The congruent,  
average, yet what are  
these people like?*

# *The Current Studies*

- **Purpose**

- Examine the nomological network of the revised integrative typology of aggression in relation to both other personality variables and the manifestation of CWBs.

- **Primary Research Questions:**

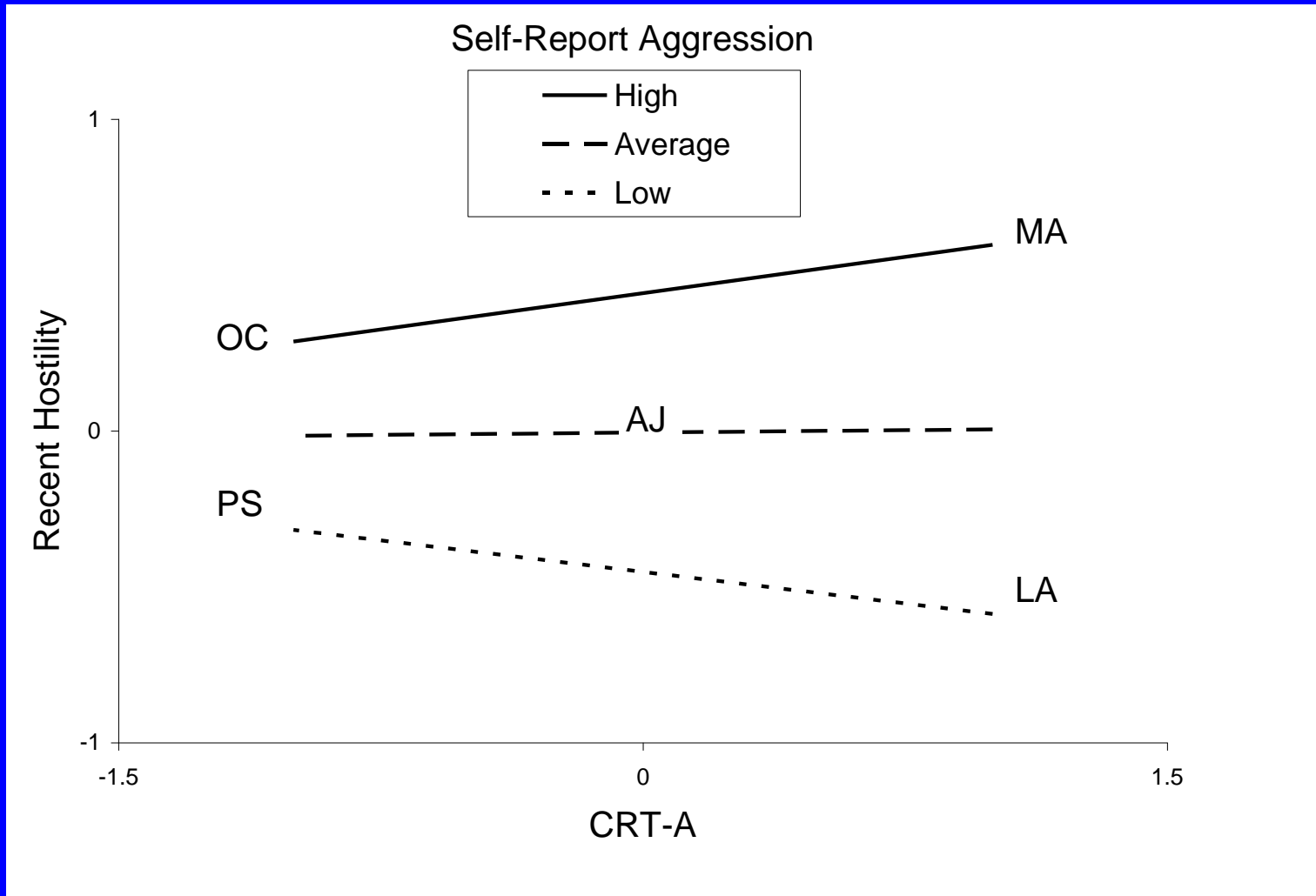
- What are Congruent AJs like?
- Will Congruent AJs conform to dispositional levels and levels of CWBs similar to those found for Prosocials?
  - Need polynomial regression for congruency testing and modeling curvilinearity
- Will Congruent AJs manifest on the criteria at intermediate levels which are equidistant from the other prototypes?
  - MMR will represent this pattern, and one can verify it is the \*correct\* parsimonious model if squared terms are nonsignificant when entered on the 3<sup>rd</sup> step of the polynomial regression equation.

# *Study 1: Student Sample*

- Method and Sample
  - Questionnaire data collected from 207 undergraduate students
- Predictors
  - Explicit Personality - 20-items from Jackson PRF
  - Implicit Personality - 25-item CRT-A (James, 1998)
- Criteria
  - Recent Emotions/Moods (self-reported):
    - Recent Feelings of Hostility
    - Recent Feelings of Phobic Anxiety

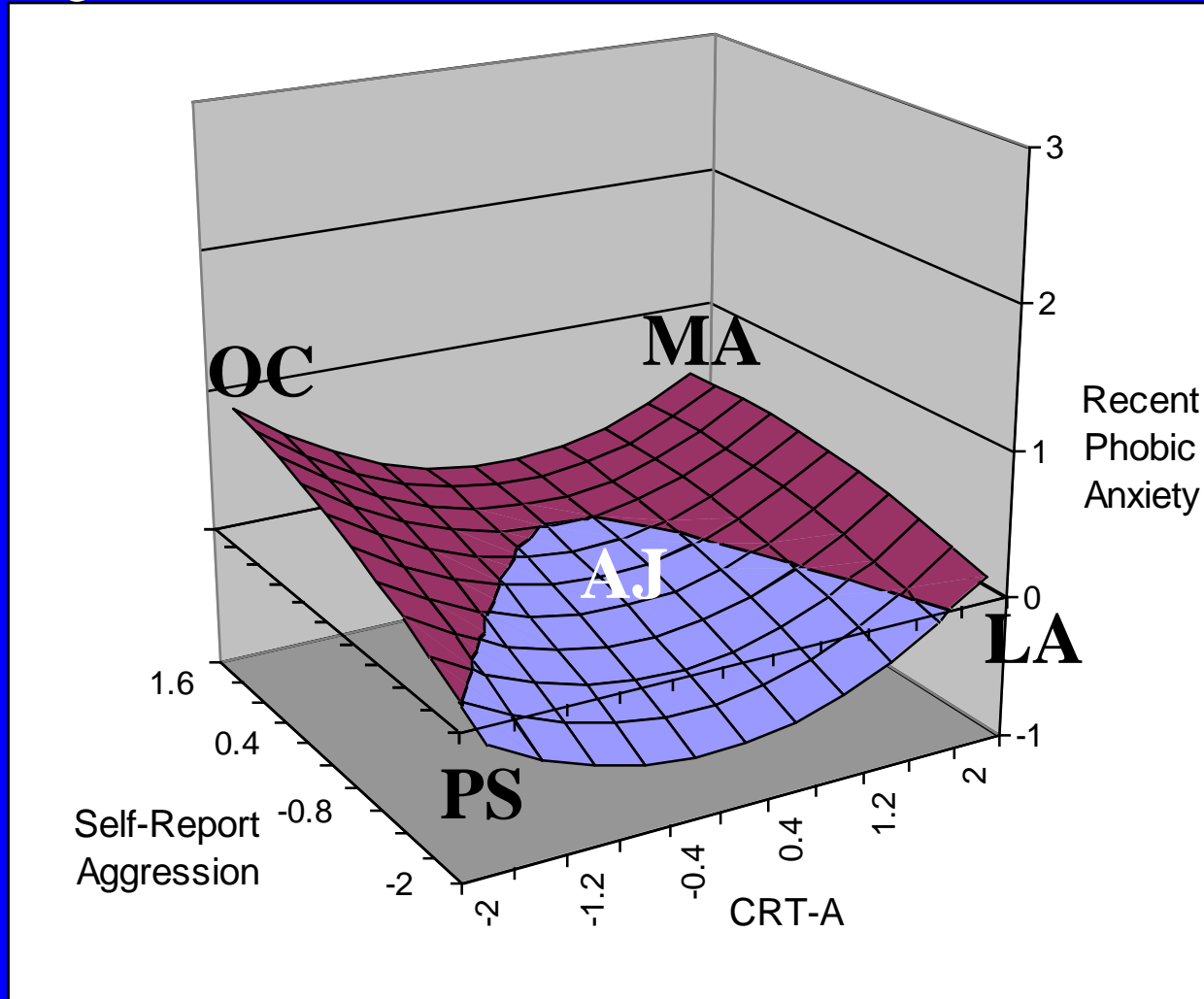
# *Study 1: Student Sample Results*

- Interactive effect found for Recent Feelings of Hostility, with Manifest Aggressives the highest and Latent Aggressives the lowest
  - Congruent AJs at average level



# *Study 1: Student Sample Results*

- Curvilinear effect found in the prediction of Recent Feelings of Phobic Anxiety, with Overcompensating Prosocials elevated.
  - Congruent AJs similar to Prosocials



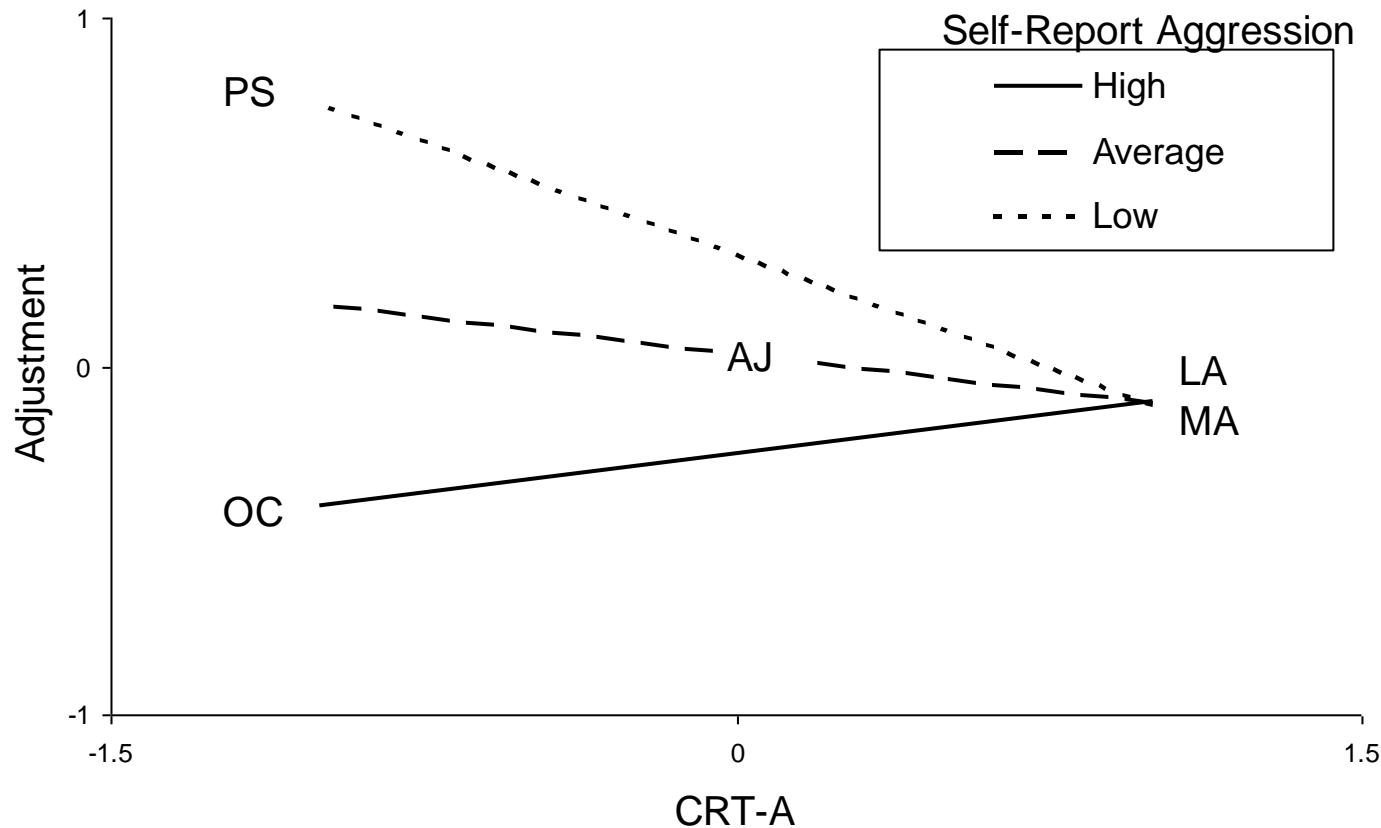


## *Study 2: Working Adult Sample (Nurses)*

- Method and Sample
  - Questionnaire data collected from 144 nurses.
- Predictors
  - Explicit Personality - 20-items from the Jackson PRF
  - Implicit Personality - 25-item CRT-A (James, 1998)
- Criteria
  - Explicit Personality Traits - Adjustment, Agreeableness
  - Peer-reported CWB
  - Grievances filed (from organizational records)

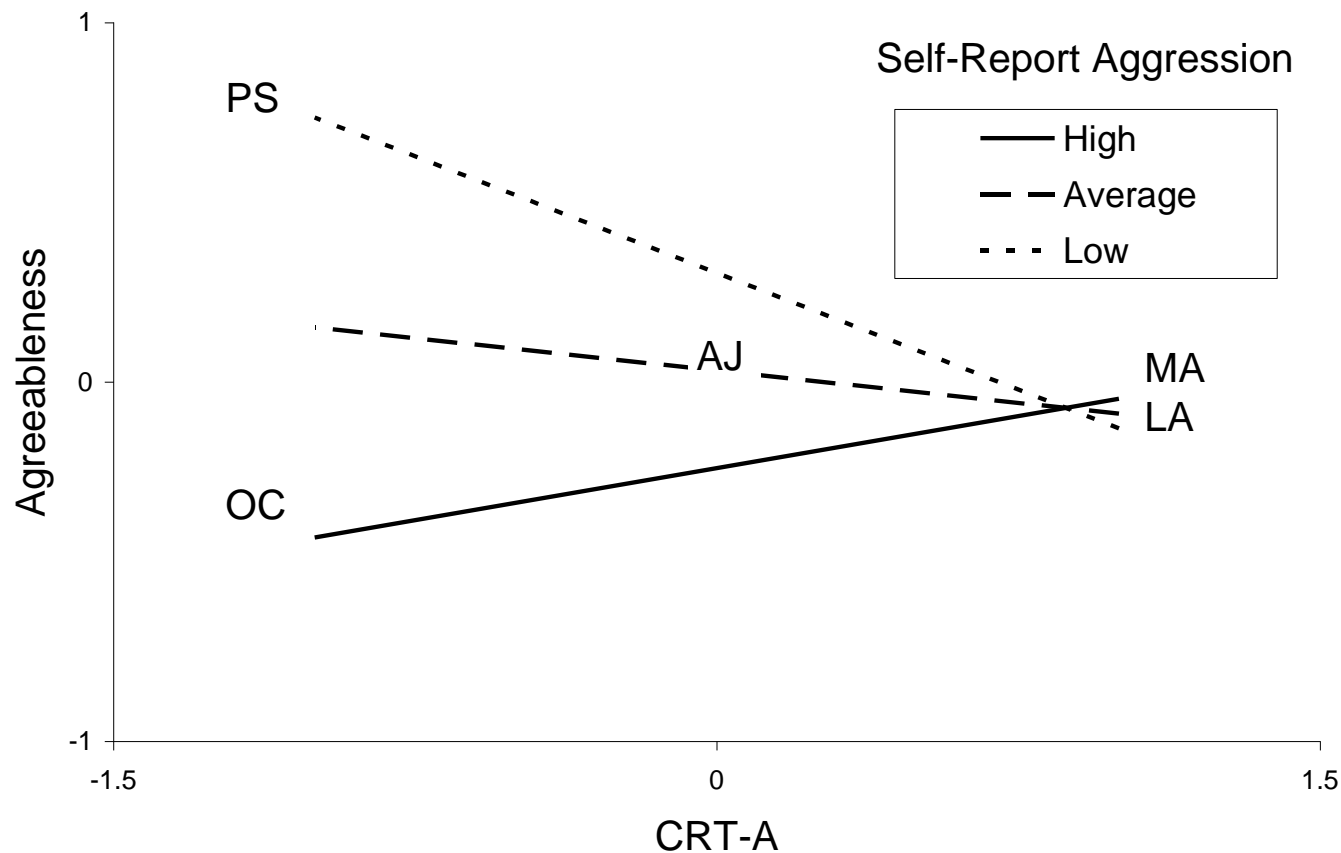
# *Study 2: Nurses Sample Results*

- Interactive effect found for Adjustment, with Prosocials highest and Overcompensating Prosocials lowest.
  - Congruent AJs at average level.



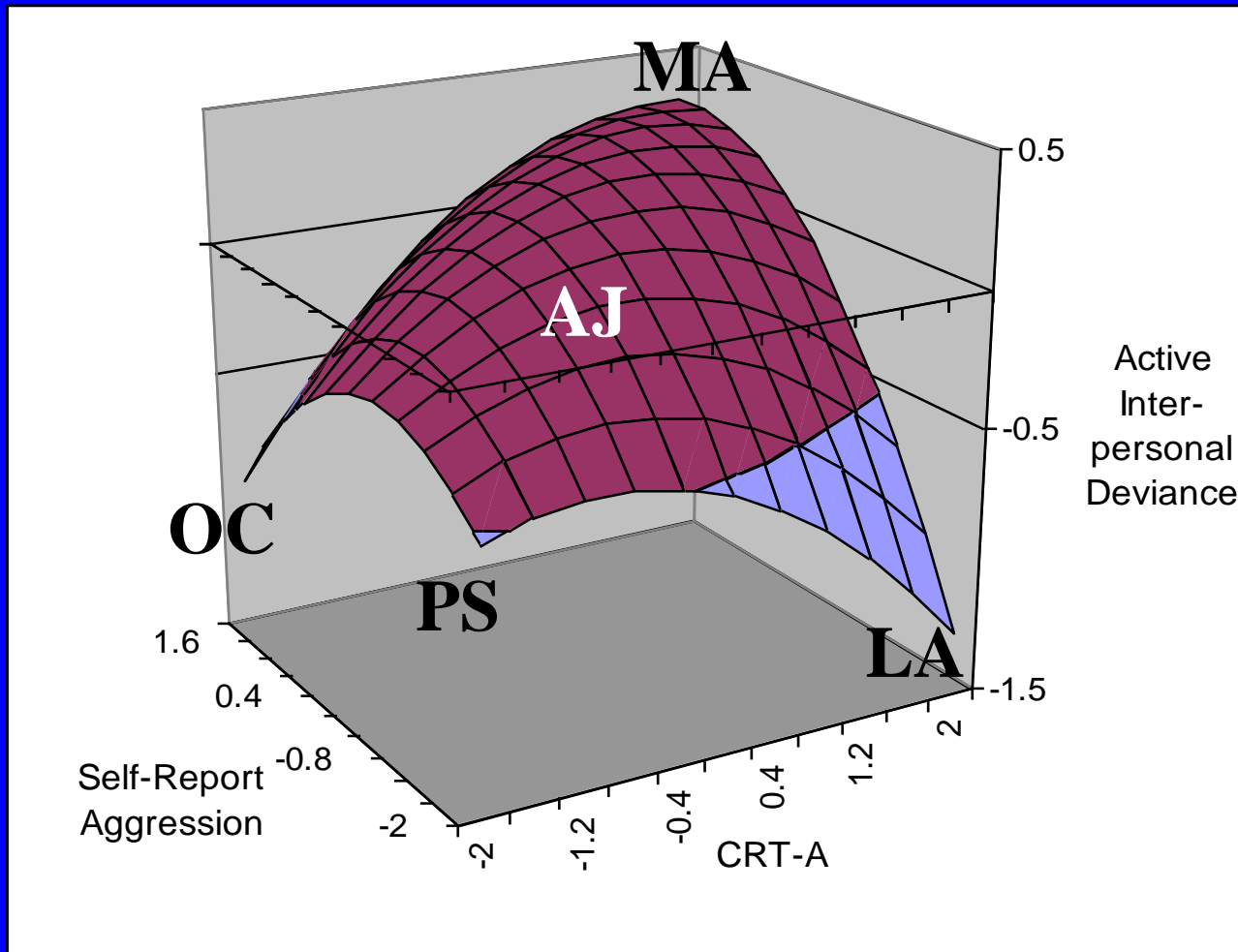
# *Study 2: Nurses Sample Results*

- Interactive effect found for Agreeableness, with Prosocials highest and Overcompensating Prosocials lowest
  - Congruent AJs at average level



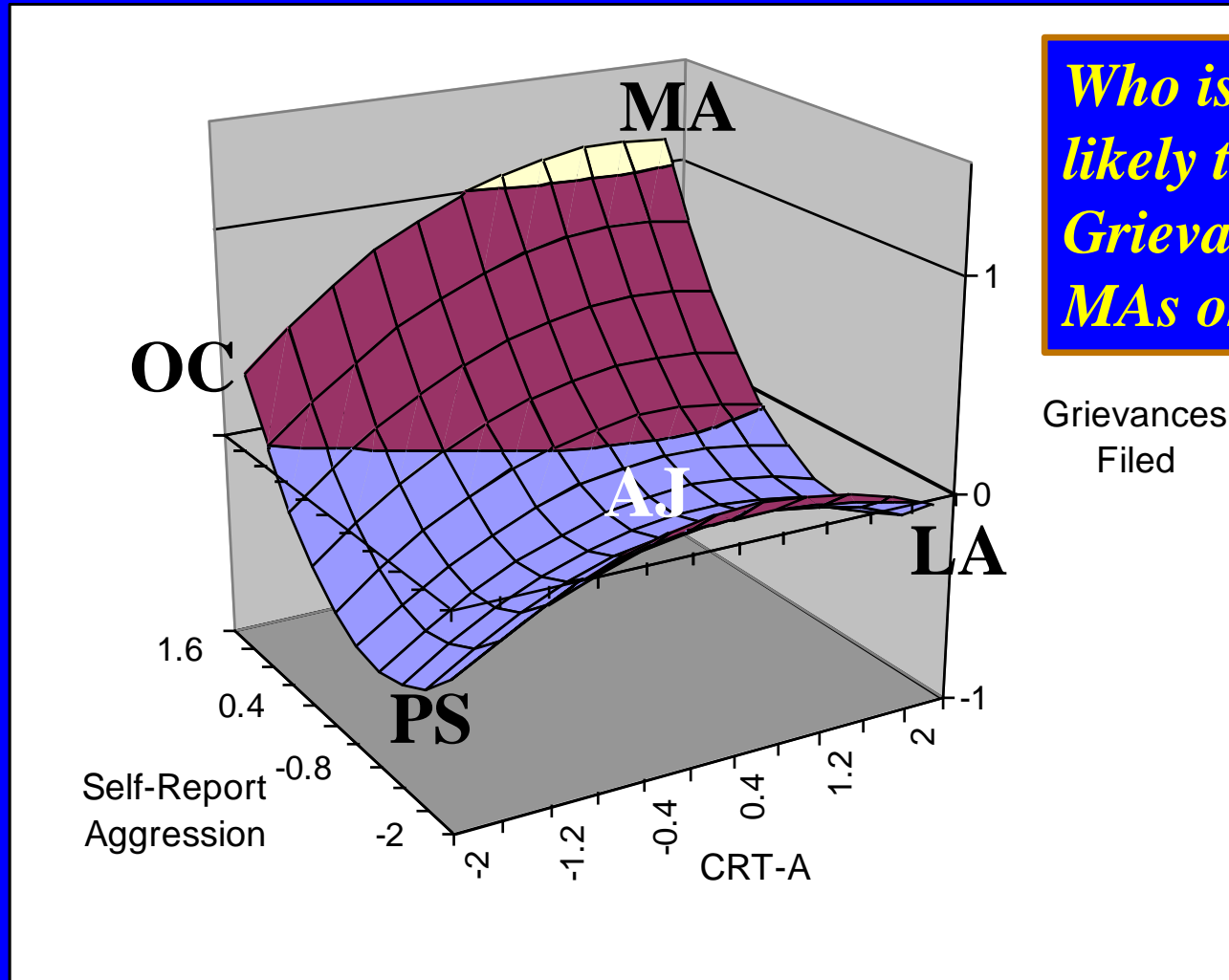
# *Study 2: Nurses Sample Results*

- Curvilinear effect found in the prediction of Active Interpersonal Deviance, with Manifest Aggressives elevated
  - Congruent AJs are the second most elevated



# *Study 2: Nurses Sample Results*

- Curvilinear effect found for Grievances Filed, with Manifest Aggressives elevated.
  - Congruent AJs similar to Prosocials and Latent Aggressives.



*Who is more likely to win the Grievance?  
MAs or OCs?*

# *Conclusions*

- With this research we finally have empirical evidence supporting the theory that on-the-average, “people are just no darn good.”
- Nature of the criterion can drive predictions. . .
  - Additive, Interactive, or Curvilinear
- Nomological Net Expansion
  - Interactive relationships were obtained when linking the integrative typology with other measures of explicit personality (e.g., agreeableness, adjustment).
  - Curvilinear relationships were obtained when linking the integrative typology of aggression with CWBs (e.g., active interpersonal deviance).

# *Implications*

- Theoretical Implications
  - Can psychic conflict now be objectively quantified?
  - Can Freudian theory now be empirically tested and potentially falsified and/or supported?
- Practical Implications
  - Improved personnel selection models
  - Improved team member selection
  - Improved executive coaching

# *Future Research*

- Examine the Person X Situation interaction effects – How does the situation affect the behavior of the prototypes, especially the Congruent AJs?
  - Challenging because it will require the modeling of three-way interactions and require quantifying/categorizing situations.
  - Extreme prototypes may be less responsive to changes in situations.
    - Prosocials may be prosocial even when unfairly treated.
    - Manifest Aggressives may be aggressive even when fairly treated.
    - Congruent Average Joe/Jane's behavior may be more **malleable**
      - Congruent AJs may respond more like Prosocials when treated fairly, and more like Manifest Aggressives when treated unfairly.
- Extend the work on integrative typologies to other **traits** and to other **criteria**.



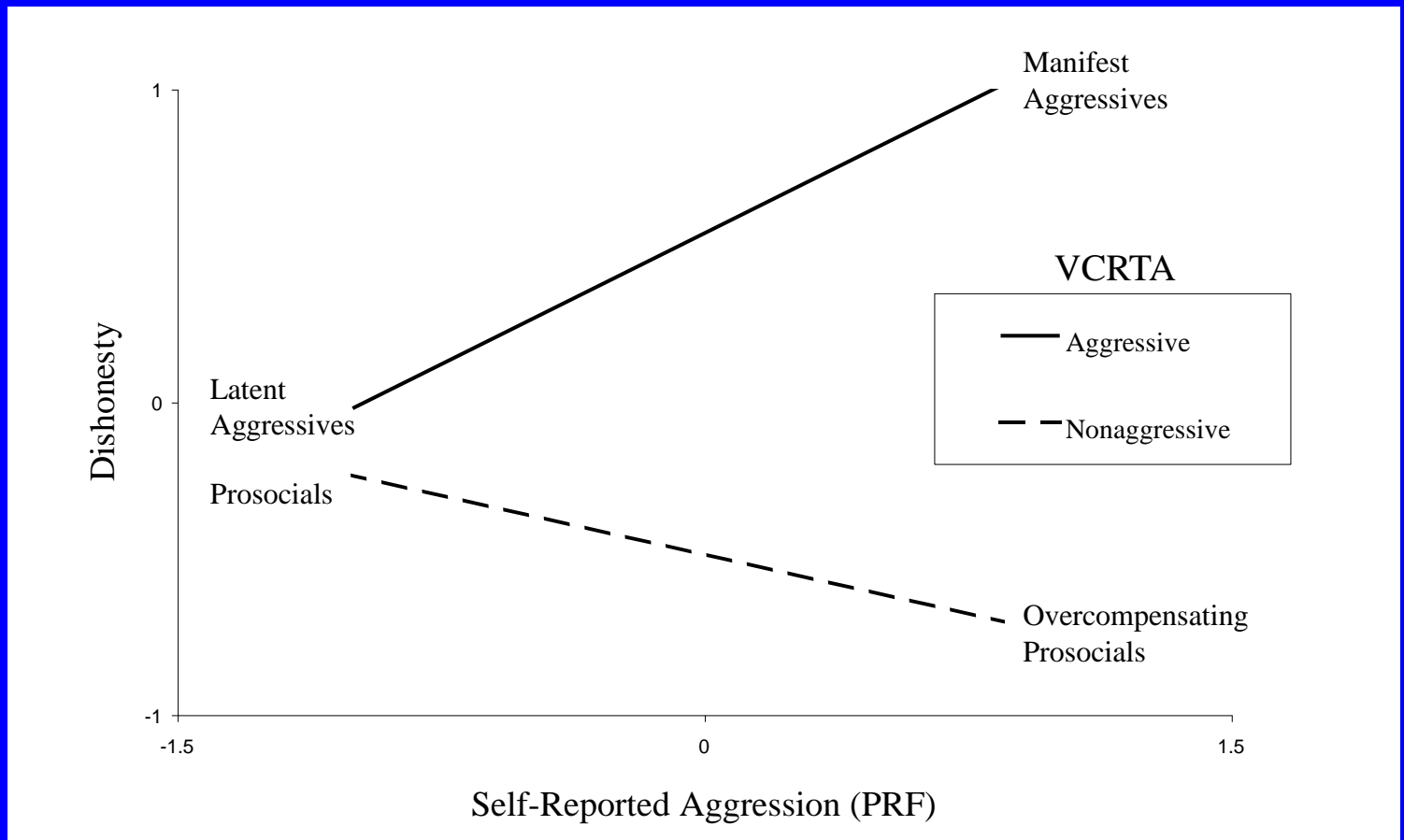
*Thank You*

*Questions?*

# *References Related to Conditional Reasoning*

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# *Integrative Typology of Aggression: Study 1*



$\Delta R^2$  for interaction = .12,  $p < .01$ ; Total  $R^2 = .36$ ,  $p < .01$

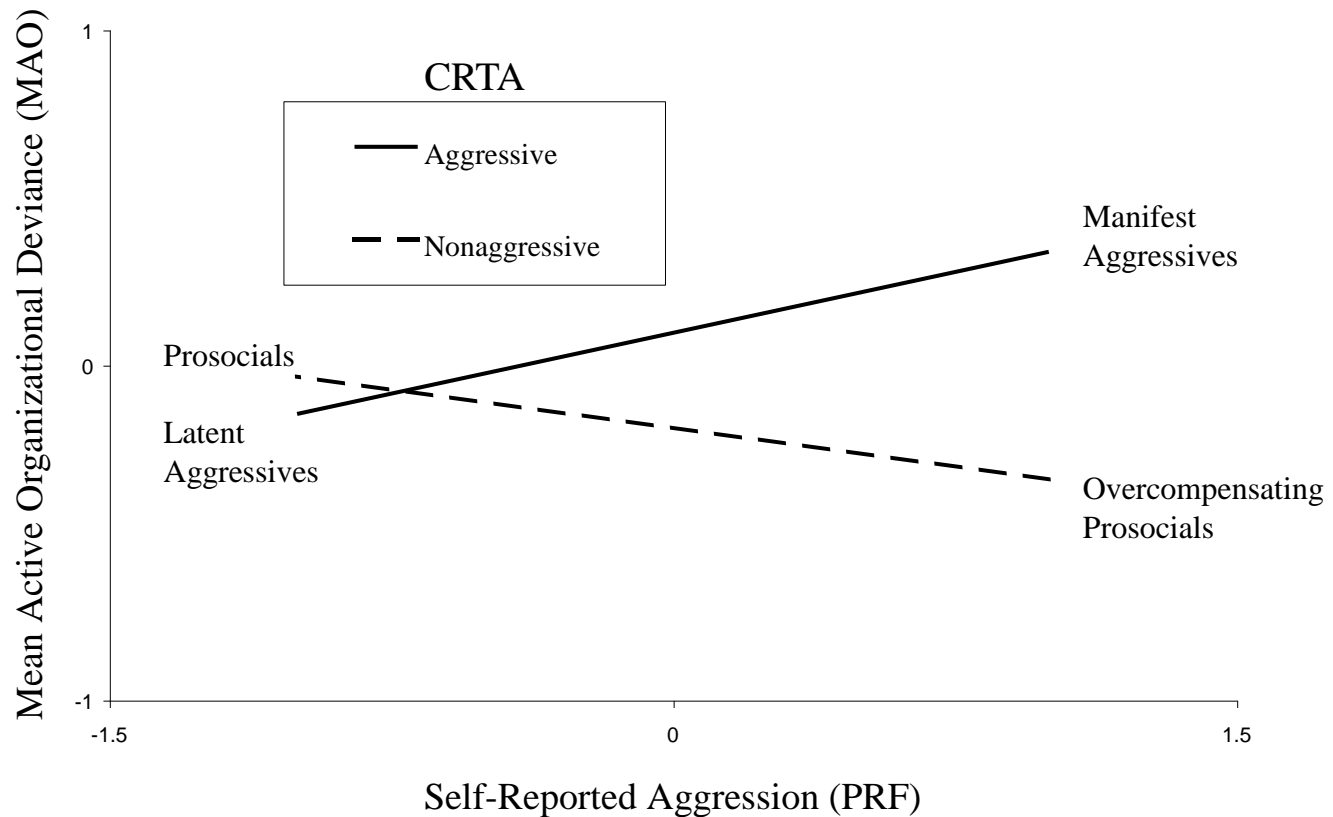
# MHMR Results for the Prediction of Dishonesty in Study 1

Note.  $\wedge p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ .

<sup>a</sup> This statistic represents the incremental variance accounted for in the criterion when an additional predictor is added to the model.

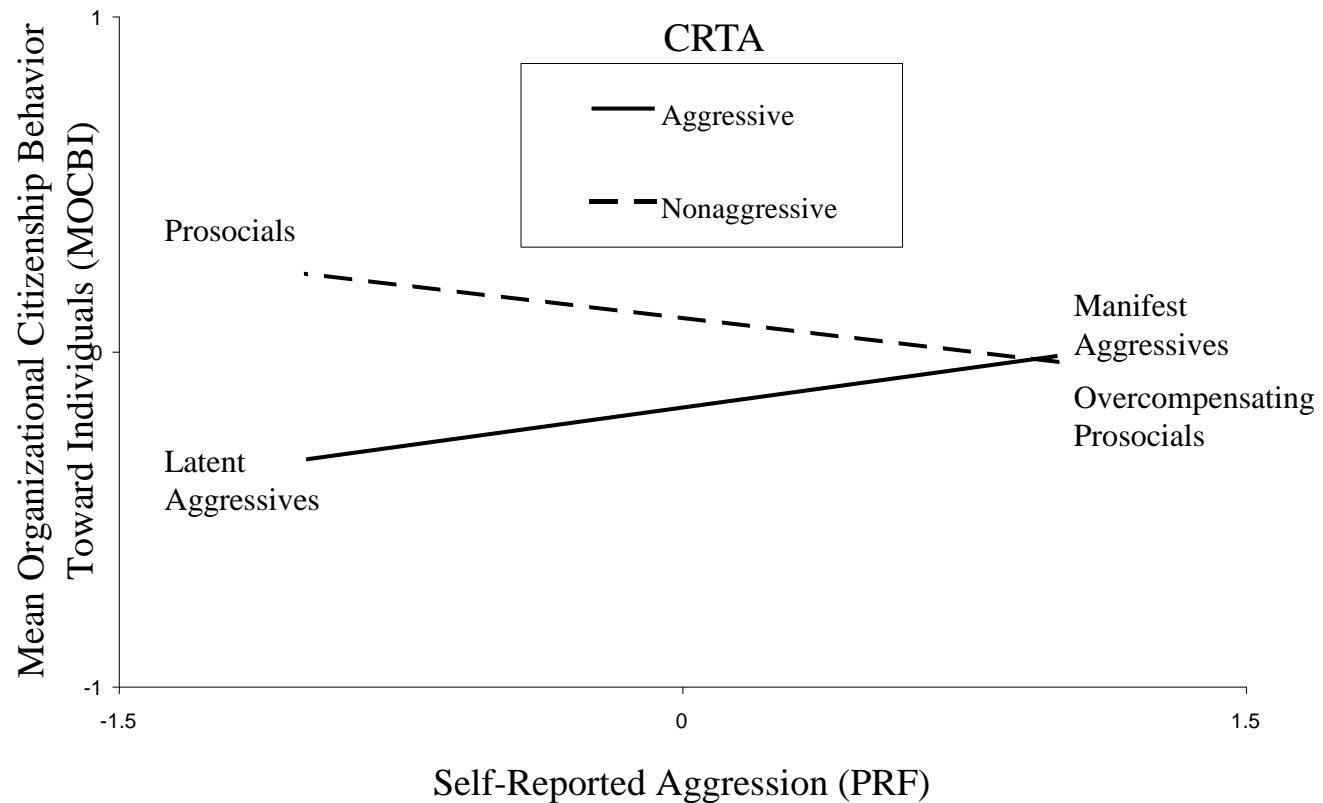
| Dishonesty                   |         |         |                           |            |         |  |
|------------------------------|---------|---------|---------------------------|------------|---------|--|
| Step                         | $\beta$ | $R^2$   | $\Delta R^2$ <sup>a</sup> | $\Delta F$ | $df$    |  |
| Step 1                       |         | .24**   | .24**                     | 9.31**     | (2, 59) |  |
| VCRTA                        | .48**   |         |                           |            |         |  |
| PRF Aggression Scale         | .14     |         |                           |            |         |  |
| Step 2                       |         | .36**   | .12**                     | 11.18**    | (1, 58) |  |
| VCRTA X PRF Aggression Scale | .35**   |         |                           |            |         |  |
| Overall $R$                  |         | .60**   |                           |            |         |  |
| Overall $F$                  |         | 11.00** |                           |            | (3, 58) |  |

# *Integrative Typology of Aggression: Study 3*



$\Delta R^2$  for interaction = .04,  $p < .01$ ; Total  $R^2 = .08$ ,  $p < .01$

# *Integrative Typology of Aggression: Study 3*



$\Delta R^2$  for interaction = .02,  $p = .054$ ; Total  $R^2 = .04$ ,  $p < .10$