Evaluator struggles: Risk aversion, impotence, and decision making

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Influence of case details and evaluator differences in SVP cases

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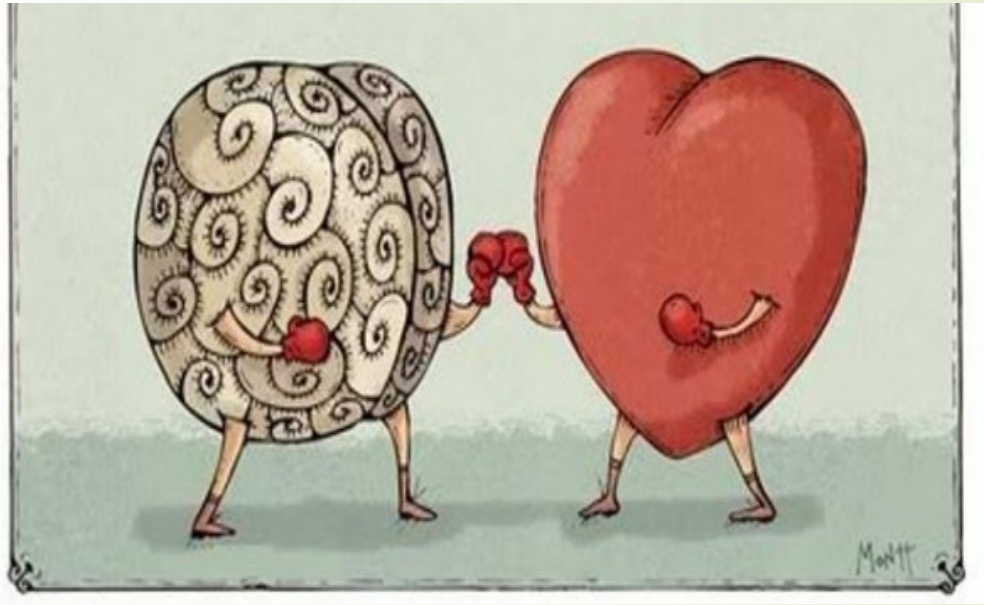
How do evaluators make decisions?

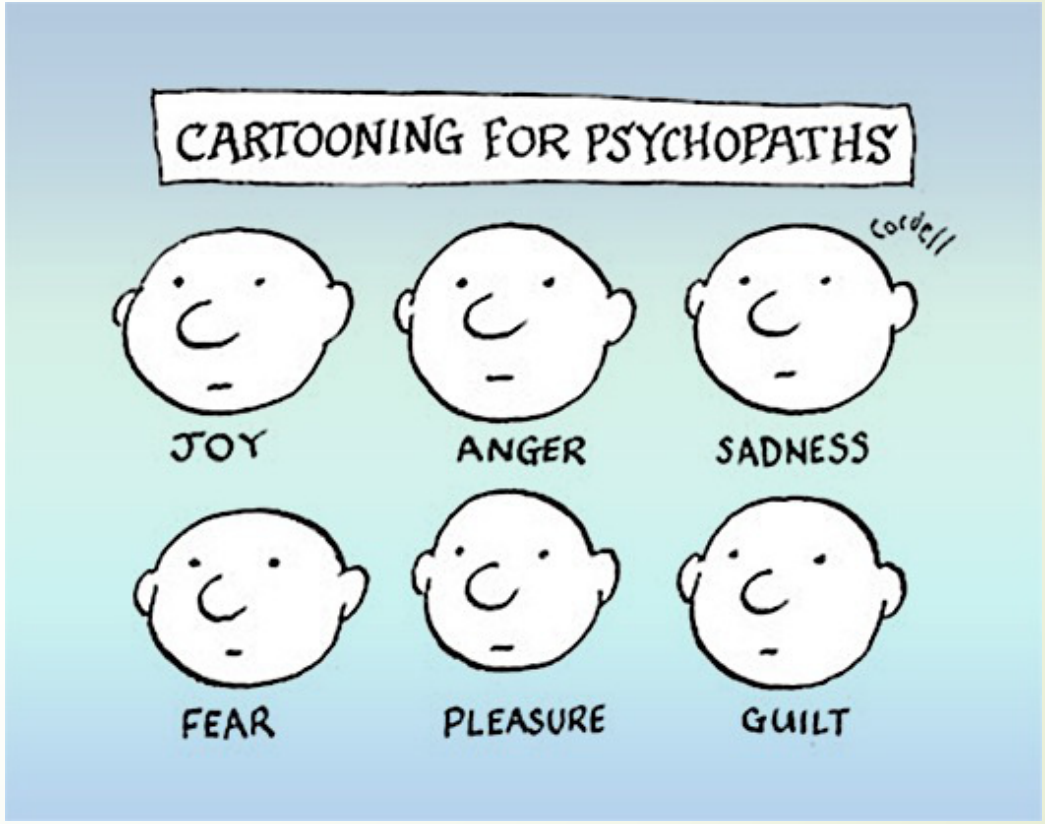
Risk assessments and unstructured decision making

- Standardized assessments are strongest predictors *(Guy, 2008; Hanson & Morton-Bourgon, 2009)*
- But these are not used in isolation *(Vrieze & Grove, 2009)*
- Static99R may have some (49%) or a lot (42%) of influence *(Chevalier, Boccaccini, Murrie, & Varela, 2015)*.
- Clinical override
  - Often used to increase risk for sexual offenders
  - Leads to decrease in predictive validity *(Storey, Watt, Jackson, & Hart, 2012; Wormith, Hogg, & Guzzo, 2012)*



Addition of Psychopathy

- Predictive of recidivism *(Hanson & Morton-Bourgon, 2005)*
- Characteristics of psychopathy are related to sexual aggression *(Malamuth, 2003)*
- No association *(Barbaree, Seto, Langon, & Peacock, 2001; Langstrom & Grann, 2000; Murrie, Boccaccini, Caperton, & Rufino, 2011)*



Dynamic Duo

- PCL-R (Factor 2 – Facet 4) *(Hawes et al., 2013)*
  - Research (d = .44) versus Clinical (d = .28)
  - Sexual deviance & Psychopathy - *OR:* 2.80 – 3.21
- No additional prediction to sexual recidivism after Static99R *(Looman, Morphett, & Abracen, 2012)*
- Not clear this is being applied appropriately in clinical practice *(Boccaccini et al., 2015)*

What about Sadism?

- Sadism is associated with sexual violence and severity of violence *(e.g., Robertson & Knight, 2014)*
- Phallometric index and level of violence during index, but not DSM diagnosis predict sexual recidivism *(Kingston, Seto, Firestone, & Bradford, 2010)*
  - But do not incrementally add to prediction after accounting for actuarial risk results (SORAG)
- Sadism diagnosis – 4.2x more likely to sexually reoffend (after controlling for Static99; *Kingston et al., 2015*)
- Meta-analysis – 2.3x more likely to sexually reoffend *(Eher et al., 2015)*

Is there an "evaluator effect"?

- Field studies *(Murrie et al., 2008; Murrie et al., 2009)*
- Experimental study *(Murrie et al., 2013)*
- Evaluator differences in scoring *(Boccaccini et al., 2014; Chevalier et al., 2015; Miller et al., 2011; Murrie & Warren, 2005)*
- Once identified - may seek and interpret data that is biased towards the side they work for *(Murrie & Boccaccini, 2015; Neal & Grisso, 2014)*

Florid Case Details

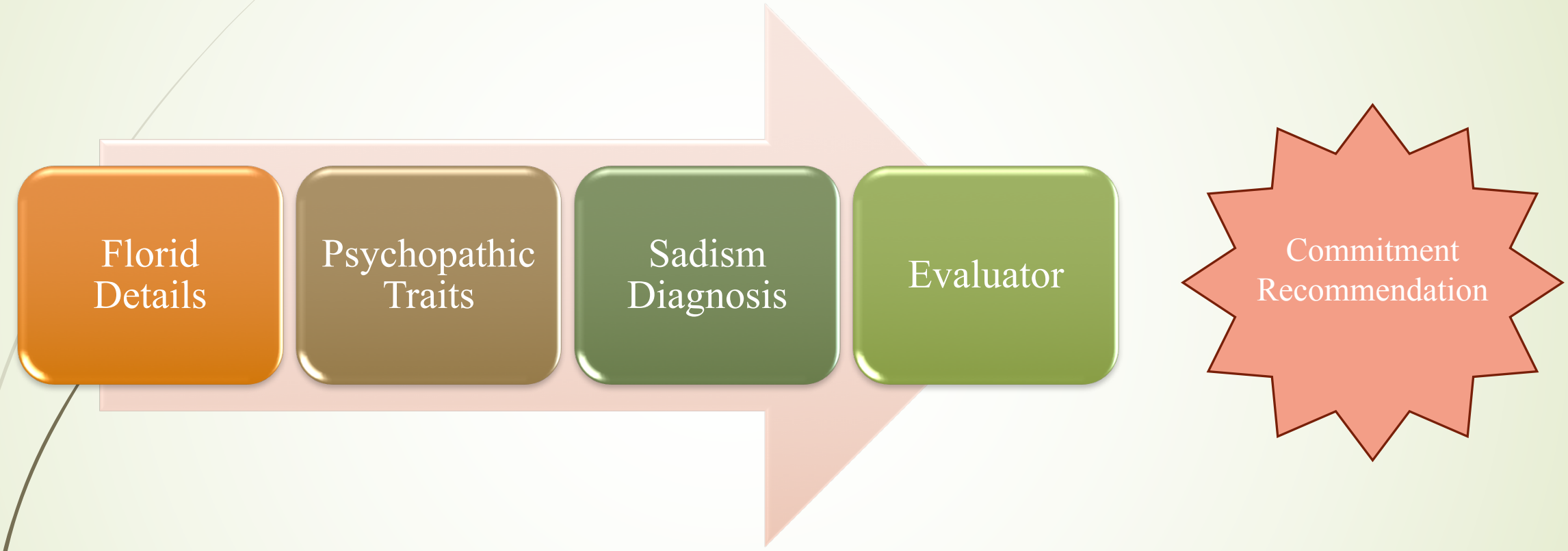
- Exploratory:
  - Presence of vivid or florid details
  - Preliminary work on extraneous case details (*Zapf and colleagues*)

What information do evaluators use to evaluate risk and make decisions about commitment: Two parts

- 1. Vignettes (with varying levels of florid details, presence of Sadism, or psychopathic traits) rated anonymously by professionals in the field

- 2. Followed up by SVP data from DHS state evaluators in Wisconsin

Part 1: Vignettes

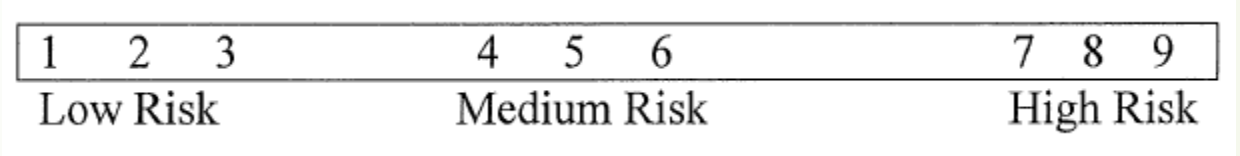


Participants

- N = 158 respondents to an online survey
  - **Final n = 94 completed all case vignettes**
    - 88 (94%) worked with an adult population
    - 78 (83%) completed sexual risk assessments as part of job duties
    - 67 (71%) United States; 18 (19% United Kingdom; 9 (10%) Canada
    - Within United States – participants reported working across 34 different states (Northeast, Midwest, South, West)

Measures

- 8 case vignettes
  - **<u>2 Outcome Ratings</u>**
    - Categorize patient's current risk level for sexual recidivism



    - Rate how likely they would be to recommend civil commitment under provisions of SVP law.
      - 1 (*Highly Unlikely*; 2 (*Somewhat Unlikely*); 3 (*Somewhat Likely*); 4 (*Highly Likely*)

Measures

- Case details varied in 2X2X2 factorial design
  - Level of victim distress (Florid details)
  - Psychopathic traits (32 versus 22)
  - Diagnosis of Sadism (Present versus not)

2 x 2 x 2 Factorial Design

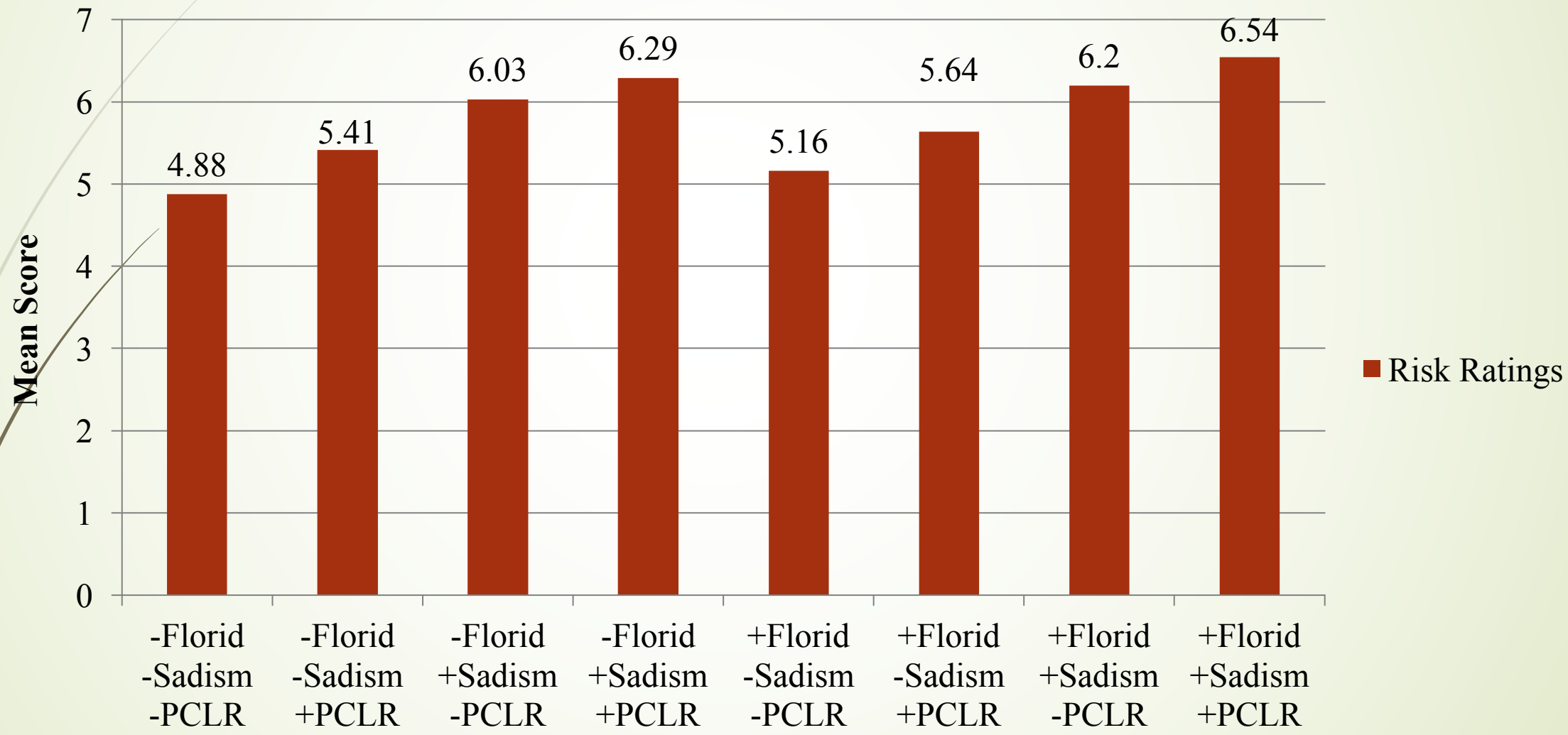
	Non-Florid Offense		Florid Offense	
PCLR Low (22)	-Florid -SADISM -PCL-R	-Florid +SADISM - PCL-R	+Florid -SADISM -PCL-R	+Florid +SADISM -PCL-R
PCLR High (32)	-Florid -SADISM +PCL-R	-Florid +SADISM +PCL-R	+Florid -SADISM +PCL-R	+Florid +SADISM + PCL-R

Mr. Jones

- 48 years old
- Divorced, Caucasian Male
- Being evaluated for civil commitment
- Static99R score of 3 (low/moderate)
- Current prison sentence completed for Aggravated Rape & Assault and battery with a Dangerous Weapon (knife).
- Current offense involved an adult female stranger
- One previous sex offense with an adult female stranger – convicted of Aggravated Rape
- Dynamic risk factors include sexual preoccupation, feeling aggrieved, and not thinking of consequences of actions
- Some capacity for healthy intimate relationships
- No evidence of sexual interest in children

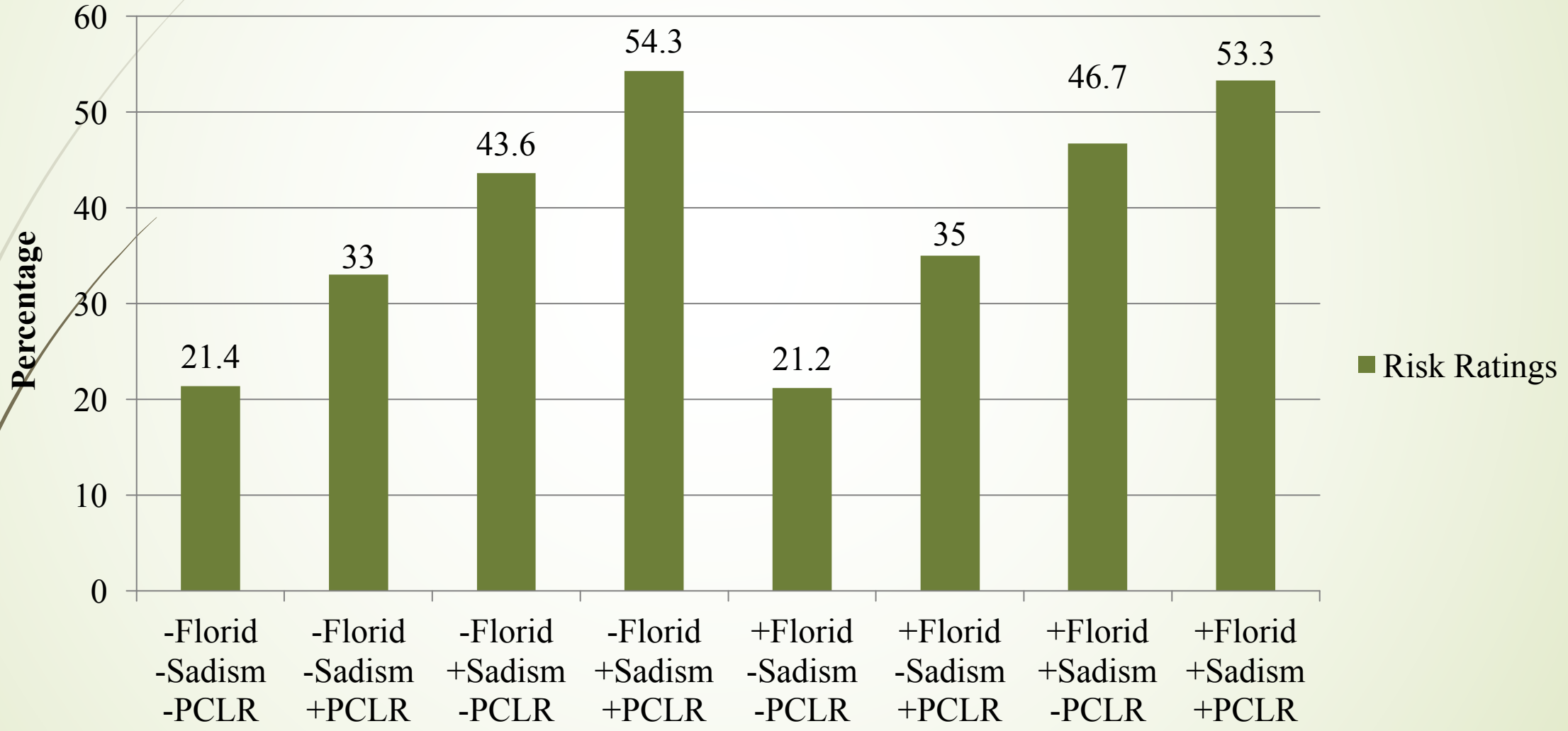
Descriptives: Risk Ratings

1	2	3	4	5	6	7	8	9
Low Risk			Medium Risk			High Risk		



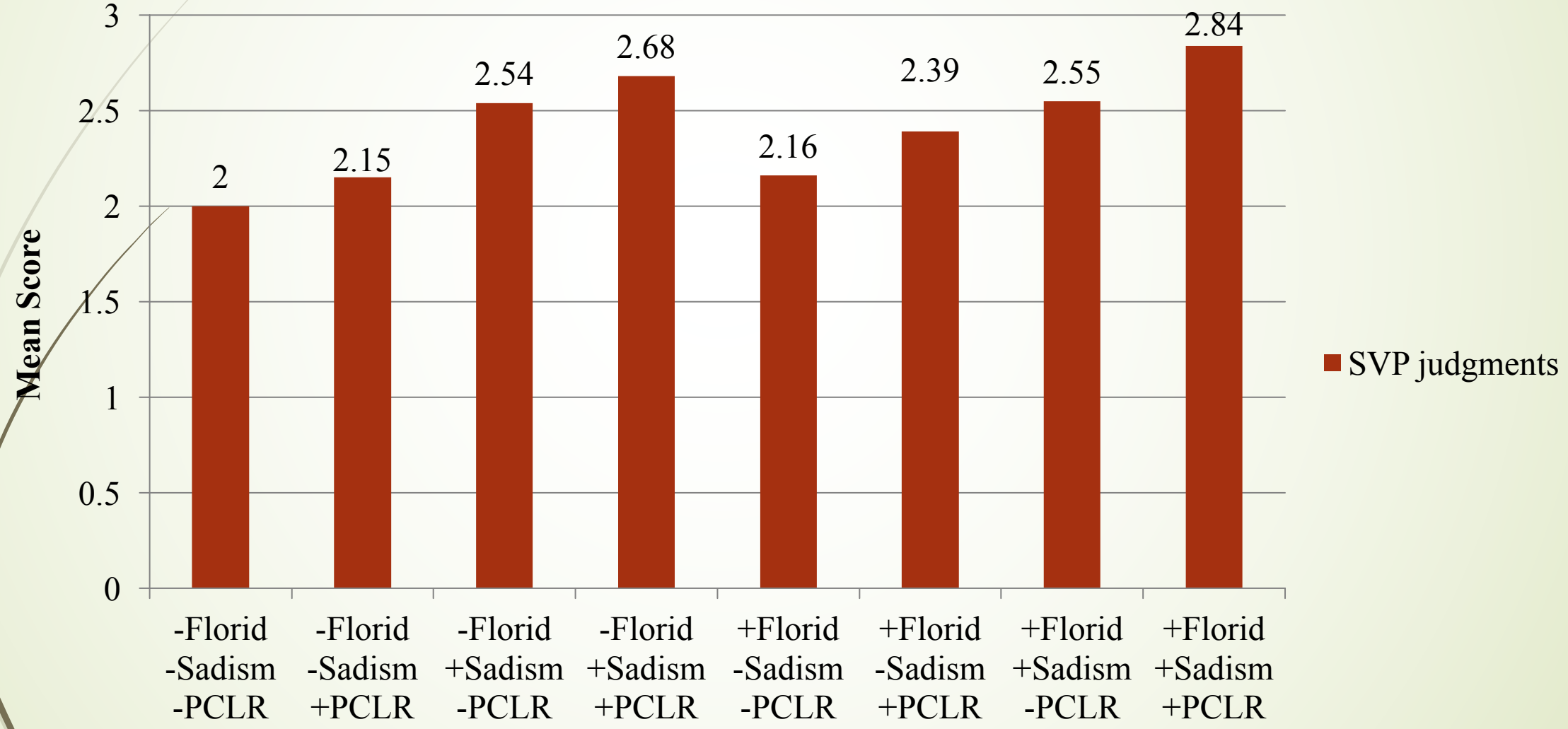
High Risk (7-9)

1 2 3	4 5 6	7 8 9
Low Risk	Medium Risk	High Risk



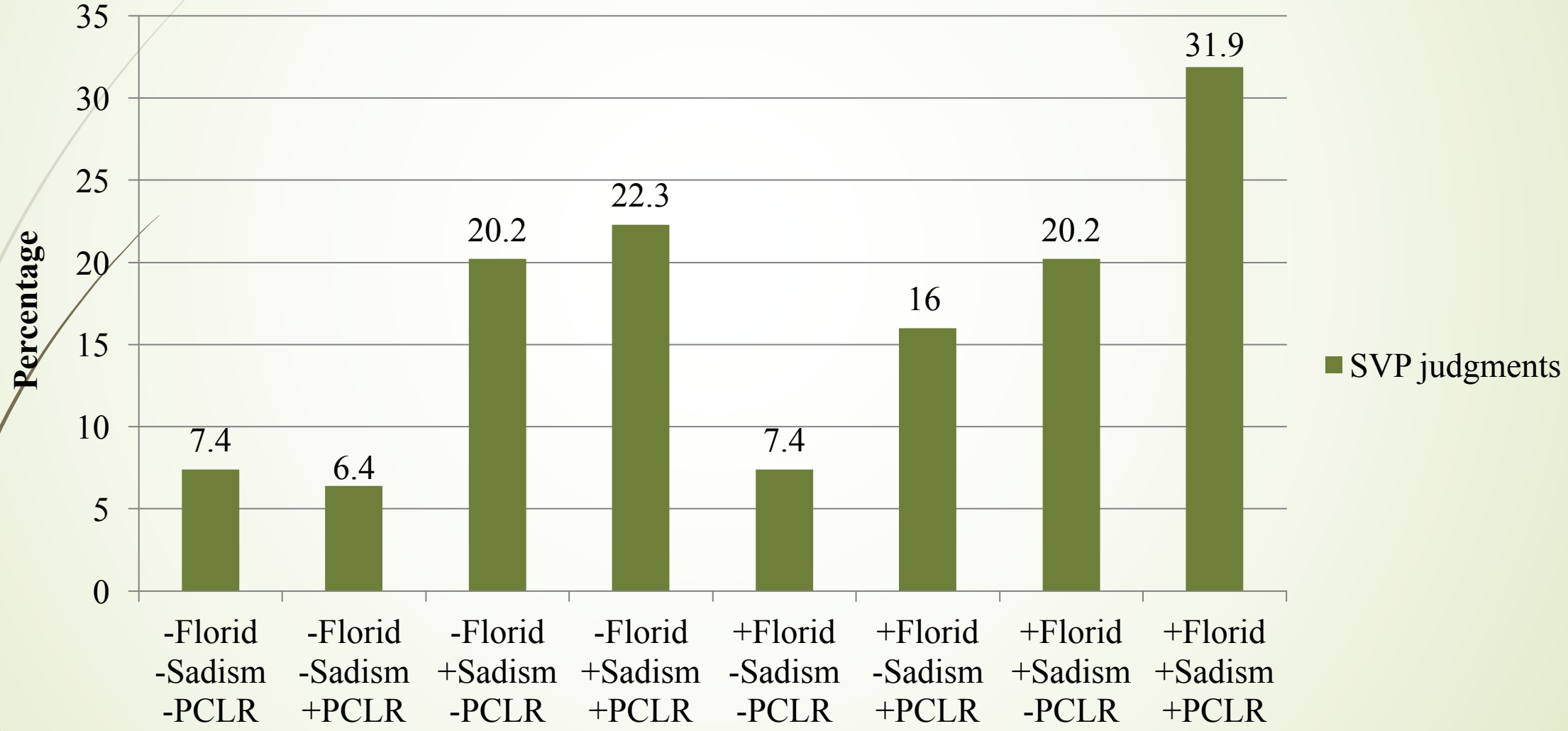
Descriptives: Commitment Judgments

1 (*Highly Unlikely*; 2 (*Somewhat Unlikely*); 3 (*Somewhat Likely*); 4 (*Highly Likely*)



Highly Likely to Commit (4)

1 (*Highly Unlikely*; 2 (*Somewhat Unlikely*); 3 (*Somewhat Likely*); 4 (*Highly Likely*)



Correlations between risk ratings and commitment judgments within vignettes

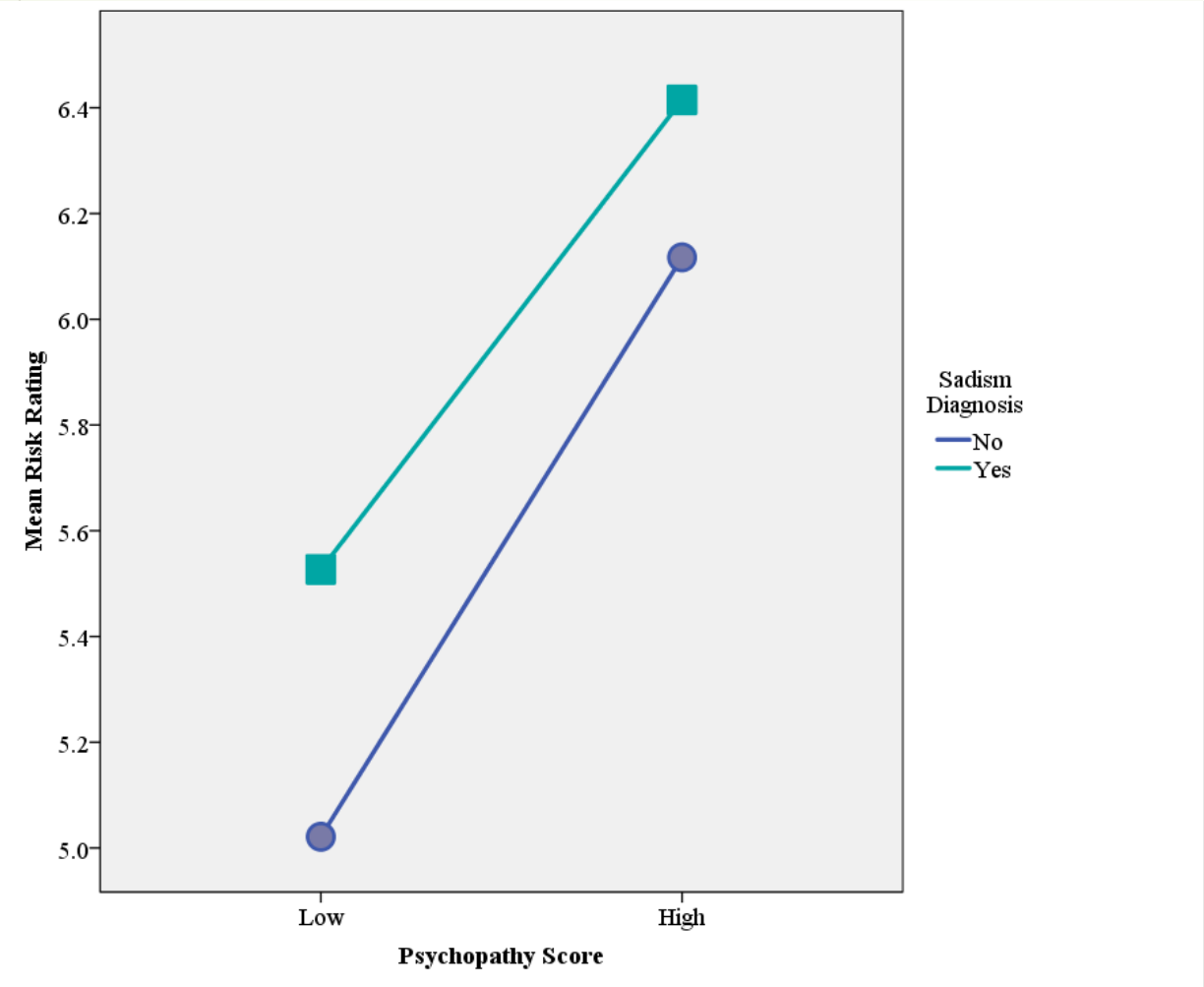
Vignette	*Pearson r*
-Florid -Sadism -PCL-R	.77
-Florid -Sadism +PCL-R	.69
-Florid +Sadism -PCL-R	.68
-Florid +Sadism +PCL-R	.63

Vignette	*Pearson r*
+Florid -Sadism -PCL-R	.71
+Florid -Sadism +PCL-R	.65
+Florid +Sadism -PCL-R	.71
+Florid +Sadism +PCL-R	.65

ANOVA Results: Effects of florid details, psychopathy, and Sadism on risk ratings

	Multivariate *F* Test	Sig
Florid Details	$F\,(1, 93) = 12.31$	$p = .001$
Psychopathy	$F\,(1, 93) = 138.63$	$p < .001$
Sadism	$F\,(1, 93) = 32.49$	$p < .001$
Florid Details * PCLR	$F\,(1, 93) = .15$	$p = .70$
Florid Details * Sadism	$F\,(1, 93) = .04$	$p = .85$
PCLR * Sadism	$F\,(1, 93) = 4.27$	$p = .04$
Florid Details * PCLR* Sadism	$F\,(1, 93) = .66$	$p = .42$

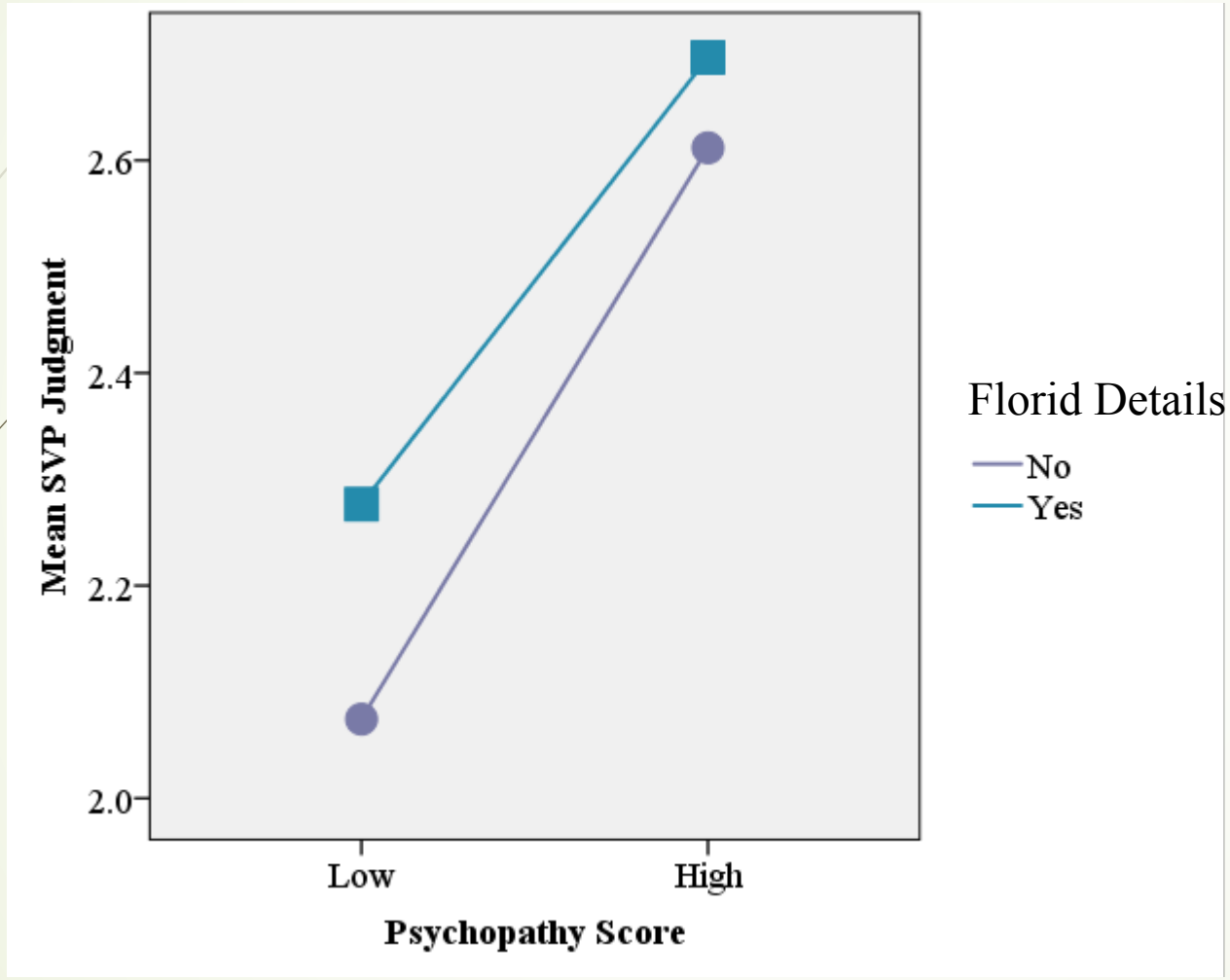
Interaction: Psychopathy * Sadism Diagnosis



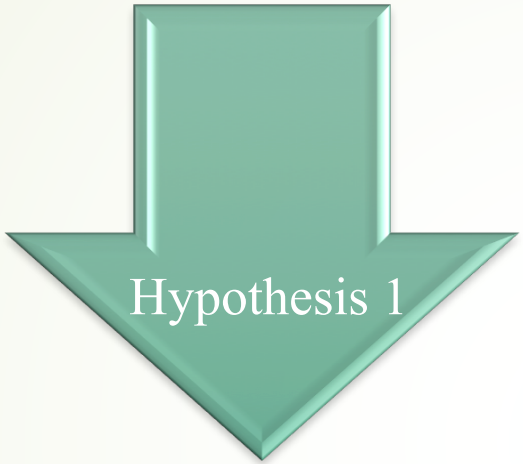
ANOVA Results: Effects of florid details, psychopathy, and Sadism on commitment judgments

	Multivariate *F* Test	Sig
Florid Details	$F\,(1, 93) = 9.92$	$p = .002$
Psychopathy	$F\,(1, 93) = 102.31$	$p = .002$
Sadism	$F\,(1, 93) = 22.99$	$p < .001$
Florid Details* PCLR	$F\,(1, 93) = 4.75$	$p = .03$
Florid Details* Sadism	$F\,(1, 93) = 2.98$	$p = .09$
PCLR * Sadism	$F\,(1, 93) = .13$	$p = .72$
Florid Details* PCLR* Sadism	$F\,(1, 93) = .30$	$p = .58$

Interaction: Florid Details * Psychopathy

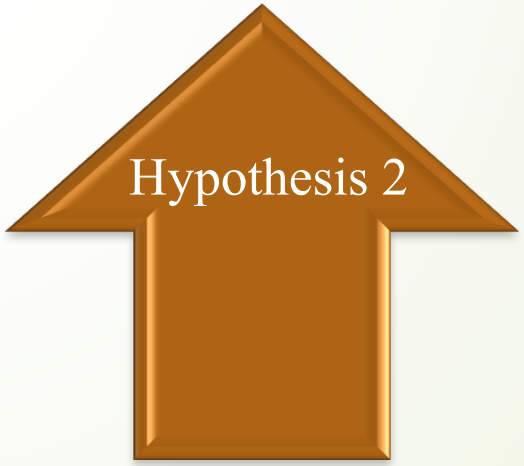


Examining the Evaluator Effect



Weighted on different factors

Inclination to assign high risk



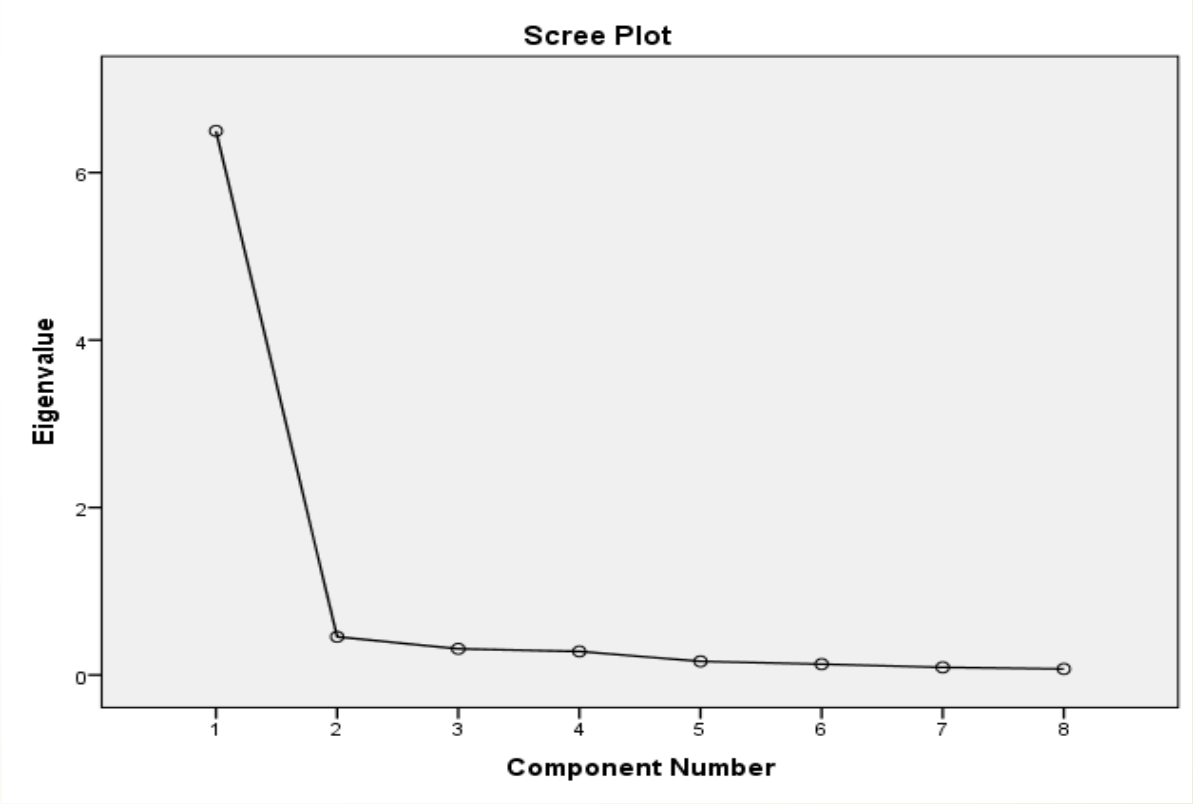
Results: Examining the evaluator effect

- Correlations between risk ratings across vignettes
  - $r = .66 - .87$, $p < .001$
- Correlations between commitment ratings across vignettes
  - $r = .55 - .82$, $p < .001$

Results: Examining the evaluator effect

- Principal Components Analysis of risk ratings
  - Resulted in 1 Factor

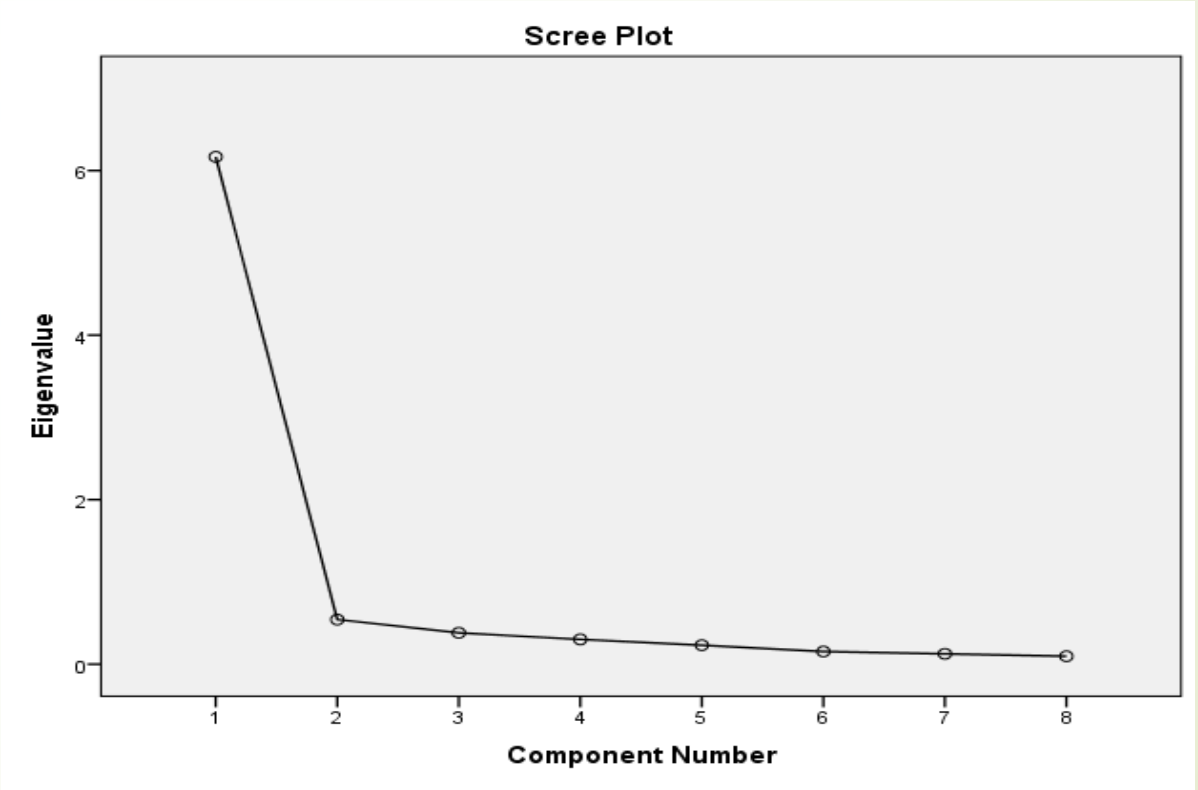
Vignette 1	.85
Vignette 2	.91
Vignette 3	.92
Vignette 4	.92
Vignette 5	.88
Vignette 6	.92
Vignette 7	.90
Vignette 8	.91



Results: Examining the evaluator effect

- Principal Components Analysis of commitment judgments
  - Resulted in 1 Factor

Vignette 1	.81
Vignette 2	.91
Vignette 3	.91
Vignette 4	.87
Vignette 5	.89
Vignette 6	.91
Vignette 7	.84
Vignette 8	.88



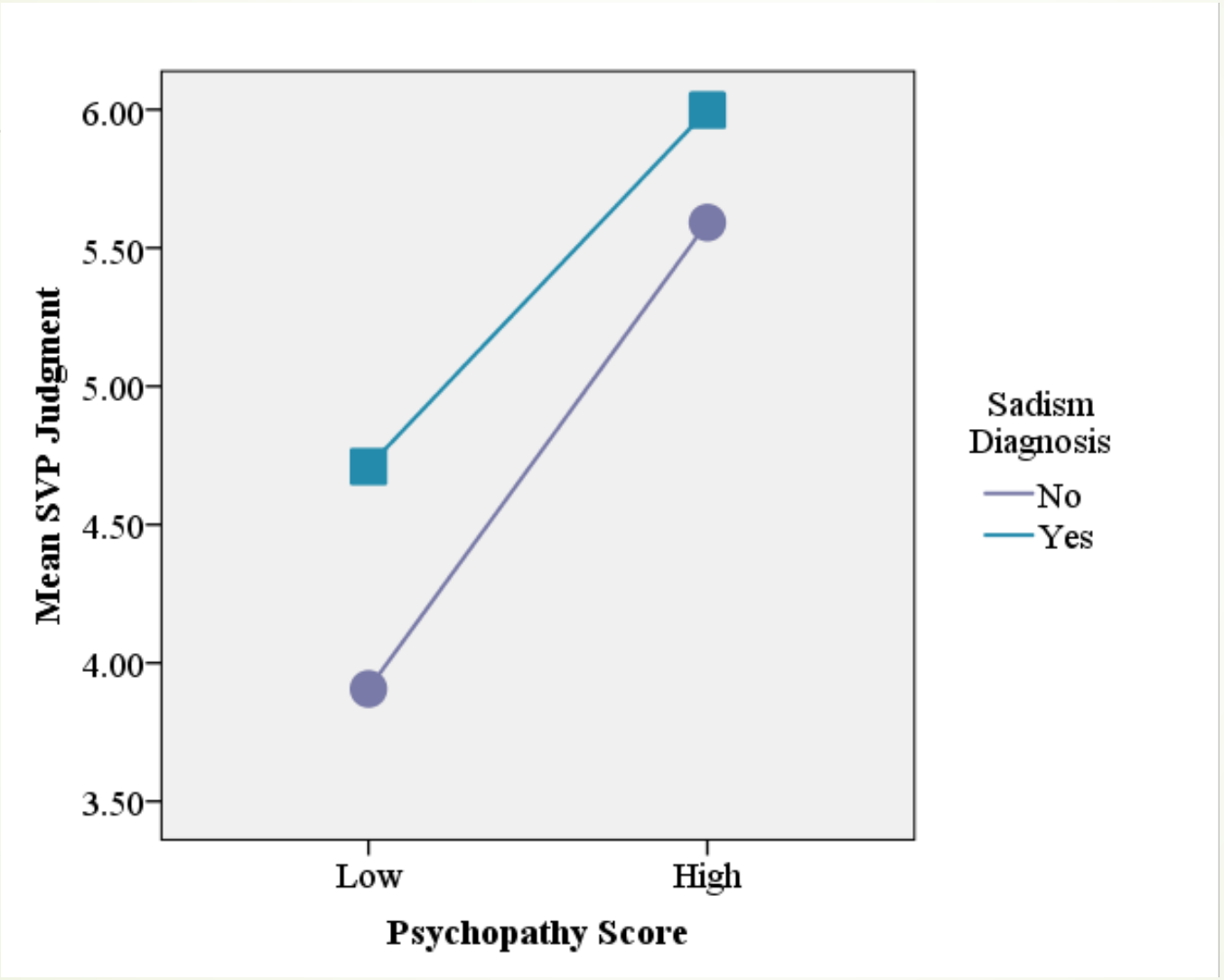
Parsing out the evaluator effect: Risk ratings

	Multivariate *F* Test	Sig
Florid Details	$F\,(1, 93) = 13.62$	$p < .001$
Psychopathy	$F\,(1, 93) = 216.19$	$p < .001$
Sadism	$F\,(1, 93) = 36.04$	$p < .001$
Florid Details* PCLR	$F\,(1, 93) = .48$	$p = .49$
Florid Details* Sadism	$F\,(1, 93) = .00$	$p = .99$
PCLR * Sadism	$F\,(1, 93) = 3.59$	$p = .06$
Florid Details* PCLR* Sadism	$F\,(1, 93) = .25$	$p = .62$

Parsing out the evaluator effect: Commitment judgments

	Multivariate *F* Test	Sig
Florid Details	$F\,(1, 93) = 9.14$	$p = .003$
Psychopathy	$F\,(1, 93) = 116.28$	$p = .003$
Sadism	$F\,(1, 93) = 23.26$	$p < .001$
Florid Details* PCLR	$F\,(1, 93) = .01$	$p = .94$
Florid Details* Sadism	$F\,(1, 93) = .58$	$p = .45$
PCLR * Sadism	$F\,(1, 93) = 5.24$	$p = .02$
Florid Details* PCLR* Sadism	$F\,(1, 93) = 1.14$	$p = .29$

Interaction: Psychopathy * Sadism Diagnosis



VS.

Part 2: Evaluator Differences: SVP data from DHS state evaluators in Wisconsin

980.07 Evaluations in Wisconsin

- *N* = 354 980.07 evaluations were conducted by (*n* = 13) clinicians during the calendar year of 2016

- **Patient Sample from SRSTC**
  - Age: *M* = 52.64 (*SD* = 11.10)
  - Static99R: *M* = 5.28 (*SD* = 1.73)
  - PCLR: *M* = 23.50 (*SD* = 5.75)

What predicts commitment recommendation?

- Treatment
- Assessment Instruments
- Diagnoses
- Evaluator

What predicts commitment recommendation?

Pre-Treatment (n = 37)
In Treatment (n = 272)
On SR (n = 45)

Static99R Score

PCL-R Score

Pedophilia

Sadism

Major Mental Illness

Below Average(.40)
Average(.64)
Above Average (.85)

Treatment

(Wald = 16.94, $p < .001$)

<u>As compared to Pre-Treatment</u>

- ***In treatment – OR: 2.79, p =.01***
- On SR – OR: 0.90, $p = .82$

Treatment

(Wald = 6.81, p = .03)

As compared to Pre-Treatment

- In treatment – OR: 1.63, p =.25
- On SR – OR: 0.63, p = .39

Assessment Instruments

- ***Static99R - OR: 1.83, p < .001***
- PCL-R - OR: 1.03, p = .16

Treatment

(Wald = 6.34, p = .04)

As compared to Pre-Treatment

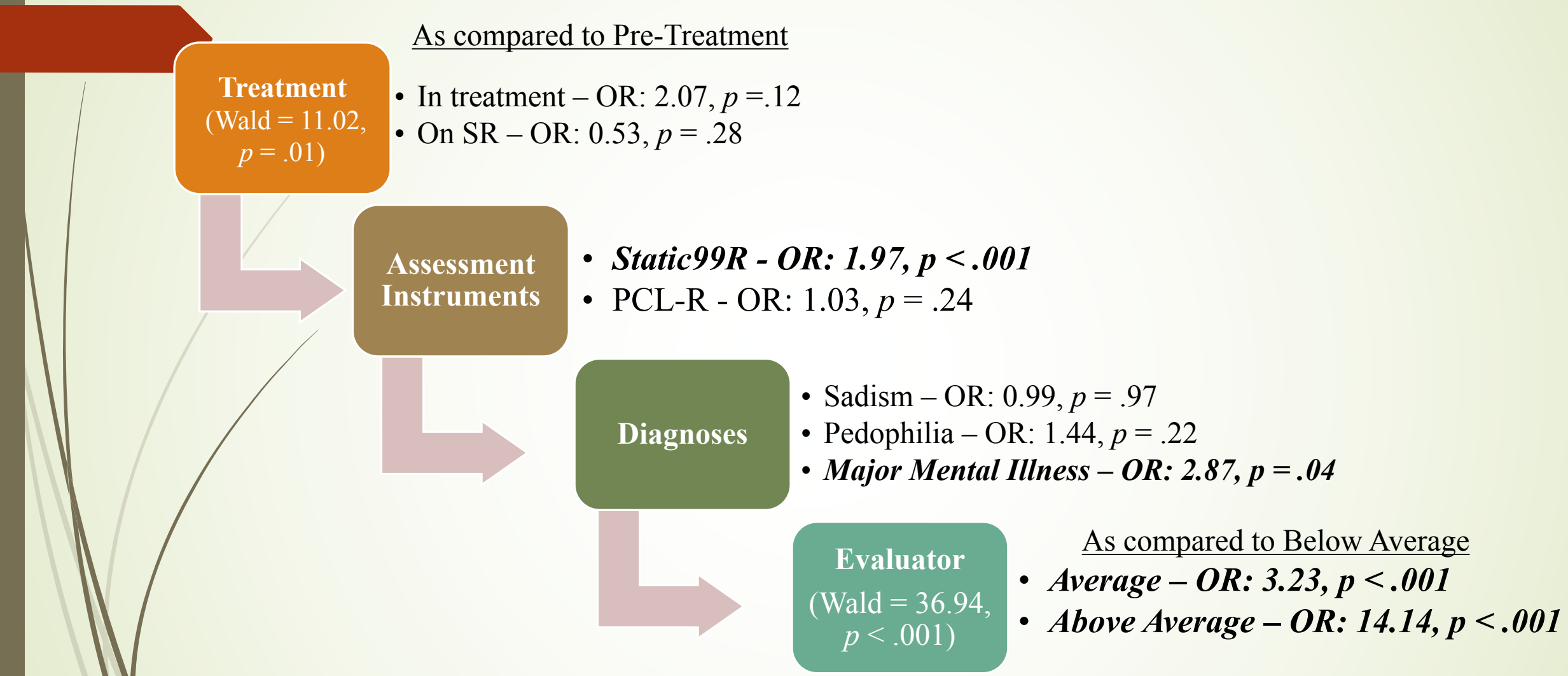
- In treatment – OR: 1.65, p =.24
- On SR – OR: 0.64, p = .64

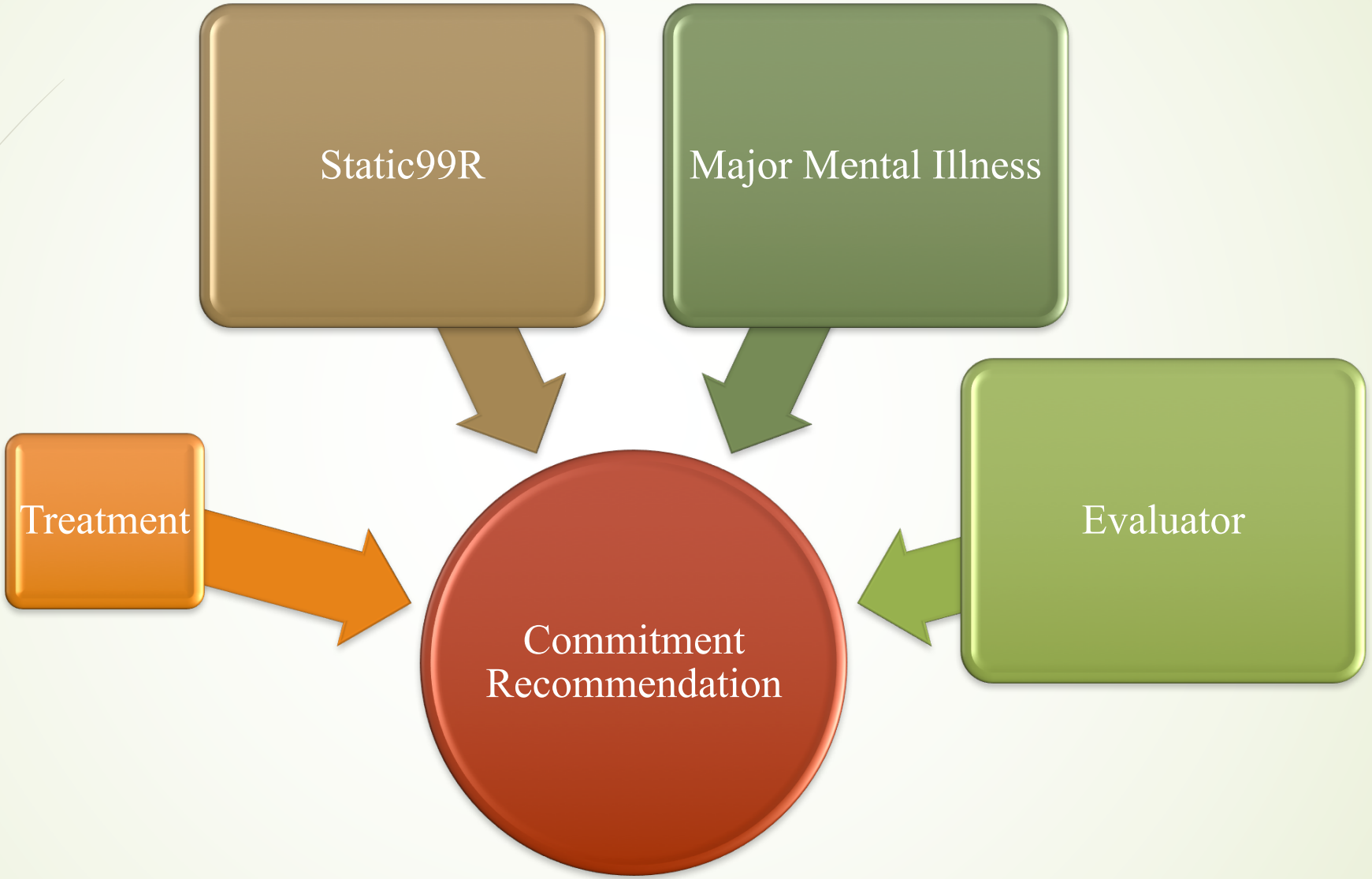
Assessment Instruments

- ***Static99R - OR: 1.84, p < .001***
- PCL-R - OR: 1.04, p = .07

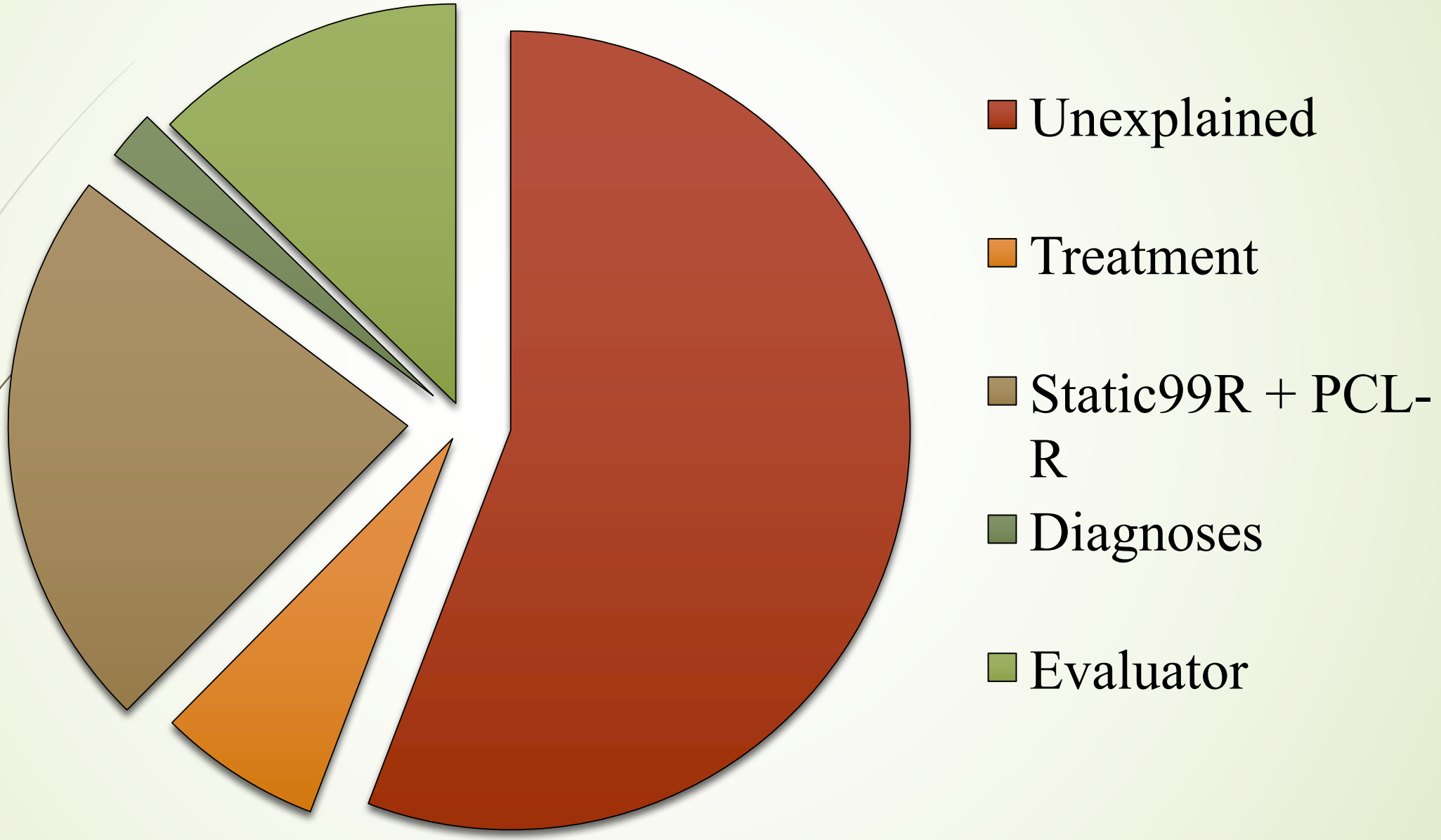
Diagnoses

- Sadism – OR: 0.93, p = .87
- Pedophilia – OR: 1.35, p = .27
- ***Major Mental Illness – OR: 2.80, p = .03***


Treatment
(Wald = 11.02, p = .01)
As compared to Pre-Treatment
• In treatment – OR: 2.07, p =.12
• On SR – OR: 0.53, p = .28
Assessment Instruments
• Static99R - OR: 1.97, p < .001
• PCL-R - OR: 1.03, p = .24
Diagnoses
• Sadism – OR: 0.99, p = .97
• Pedophilia – OR: 1.44, p = .22
• Major Mental Illness – OR: 2.87, p = .04
Evaluator
(Wald = 36.94, p < .001)
As compared to Below Average
• Average – OR: 3.23, p < .001
• Above Average – OR: 14.14, p < .001


Static99R
Major Mental Illness
Treatment
Evaluator
Commitment Recommendation

COMMITMENT RECOMENDATION



Conclusion

Take Home Points

Vignettes

- Florid Details
- Psychopathy
- Sadism
- **Evaluator**

980.07 Cases

- Treatment
- Static99R
- Major mental illness
- **Evaluator**

Evaluator Matters…A lot

- Consistent with past research *(Boccaccini et al., 2014; Chevalier et al., 2015; Miller et al., 2011; Murrie & Warren, 2005)*
- Bias – deviation from the norm
  - *Implicit and Explicit*
    - Representativeness (Base rate neglect)
    - Availability (Confirmation bias)
    - Anchoring (framing/context)

Evaluator Bias – "Bias Blind Spot"

Acknowledgments

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