

Toward Reducing Risk for Violence, Victimization and Suicide-Related Behaviour:

Initial Findings from the Royal Columbian Risk Reduction Study

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Risk Reduction in Mental Health

- Mental disorder is a risk factor for ...
 - Violence to others
 - Violence to self
 - Being victimized
- These adverse outcomes ...
 - Are related to one another
 - Share some common risk factors beyond mental disorder

Multiple Adverse Outcomes

- Harm to Self
 - 7 to 8-fold increase among most diagnostic categories (Hillbrand, 2001)
- Being victimized
 - 11-fold increase compared to general population (Teplin et al., 2005)
- Violence to others
 - 5-10-fold increase in risk in epidemiological research (Hodgins et al., 1996)
 - 50-70% increase in risk for violence, given presence of psychosis across 203 studies (Douglas et al., in press)
- Understanding common risk factors for these multiple adverse outcomes will increase the benefit to patients in terms of risk reduction

Rationale for Concurrent Approach

- Optimally informing risk reduction treatment efforts
 - Risk factors that predict multiple outcomes
 - Risk factors that are dynamic
- Reducing harmful outcomes among persons with mental illness
- Improving mental health
- Reducing costs

Possible Associations

- Violence, victimization, and suicide-related behaviour could...
 - Share common risk factors
 - Substance abuse
 - Have unique risk factors
 - Depression
 - Act as true risk factors for one another
 - Have no real association with one another beyond common risks

Douglas et al. (2007)

- MacArthur Database on Mental Disorder and Violence (Monahan, Steadman, et al)
- 1136 civil psychiatric patients
 - 951 used in current analyses
 - 59% male, 70% White, 82% major MD
- In-hospital baseline assessment
- 5 follow-ups over 50 weeks

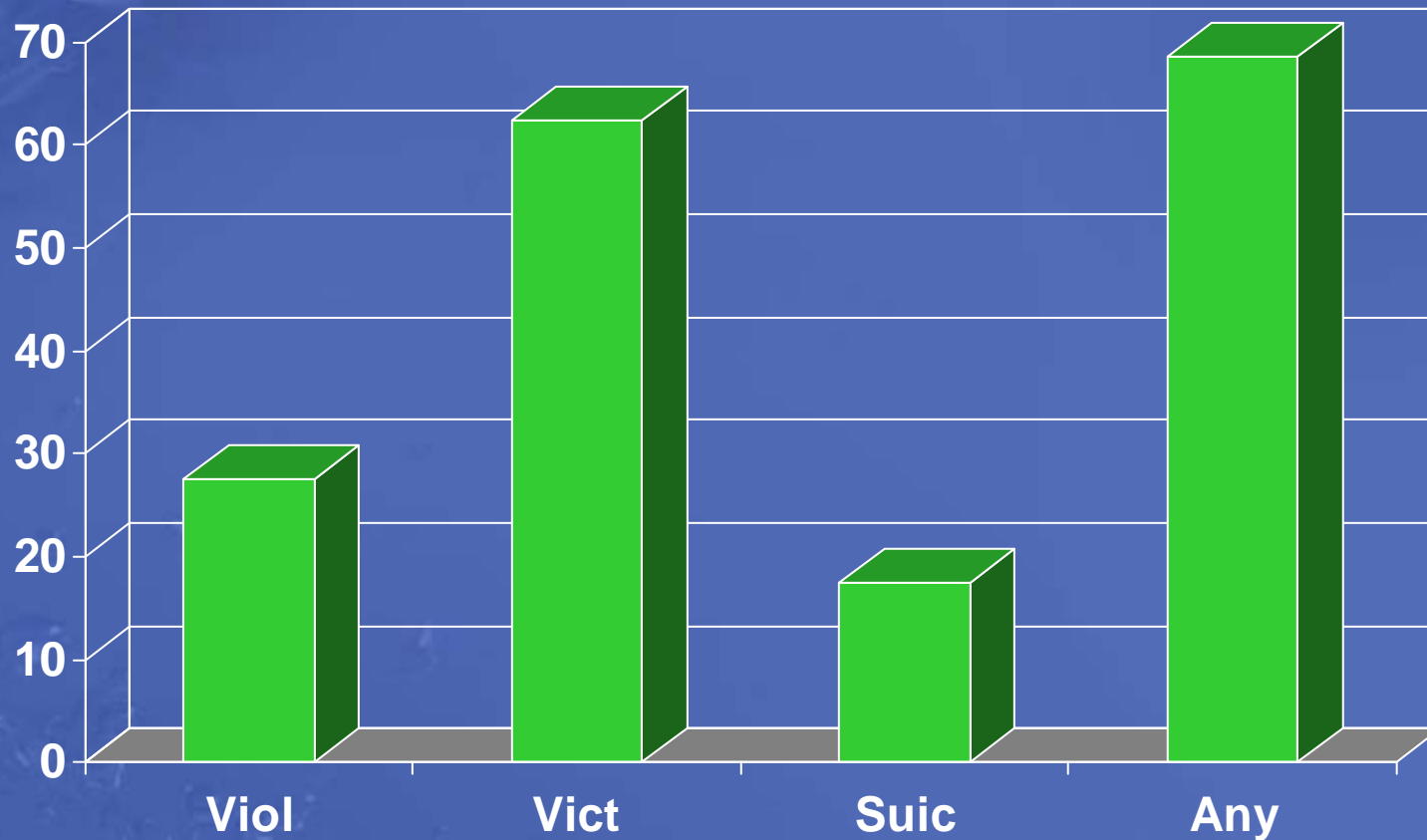
Dependent Variables

- Physical violence, any time in follow-up
- Victimization
- Suicide Attempts

Predictor Variables

- Demographics
 - Age, gender, race
- Past adverse events
- Diagnosis
 - Mental illness
 - Substance abuse
 - Psychopathy
- Substance use problems
 - Lifetime and recent use and abuse
- Symptoms
 - BPRS
 - Positive symptoms
- Psychological Functioning
 - Anger, impulsivity, stress
- Personality
 - NEO-PI
- Context
 - Support, employment, treatment

Outcomes During Follow-Up



% Experiencing Outcome

Pairwise Associations

Victimized

No

Yes

Violent

Yes

31
(12%)

231
(88%)

No

330
(48%)

359
(52%)

Odds = 6.85

Phi = .33

Pairwise Associations

Suicide
Attempt

No

Yes

Violent

Yes

197
(75%)

65
(25%)

No

588
(85%)

101
(15%)

Odds = 1.92

Phi = .12

Pairwise Associations

Suicide Attempt

No Yes

Victimized

Yes

459
(78%)

131
(22%)

No

326
(90%)

35
(10%)

Odds = 2.66

Phi = .16

Multivariate: Violence

- $R^2 = .32, p < .000$
 - Psychopathy (antisocial/impulsive)
 - NEO-PI Extraversion
 - NEO-PI (Dis)Agreeableness
 - Novaco Anger Scale (Behavioral)
 - Fewer mental health pros in network

Multivariate: Victimization

- $R^2 = .24, p < .000$
 - Psychopathy (antisocial/impulsive)
 - NEO-PI Neuroticism
 - Used alcohol, last 2 months
 - Baseline victimization
 - In treatment in follow-up (-)
 - Missed treatment sessions in follow-up

Multivariate: Suicide Attempts

- $R^2 = .16, p < .000$
 - Psychopathy (antisocial/impulsive)
 - NEO-PI Neuroticism
 - Drug abuse, lifetime (-)
 - Baseline suicide attempts
 - Number of people in network (-)

Discussion

- Adverse outcomes were common, and related to one another
- Shared risks?
 - Drug abuse, anxiety-depression, violent fantasies, antisocial personality features (PCL:SV), anger, stress, neuroticism
 - Above and beyond past behavior
- Overlapping domains: personality features, negative emotionality, surrounding supports / treatment

FHA Risk Reduction Study

- Prospective, repeated-measures study
- Baseline + 5 monthly post-release assessments of...
 - Outcomes
 - Promising dynamic factors
- Difference from other studies?
 - More frequent repeated measurements
 - More detailed measurement of outcomes
 - More detailed measurement of timing
 - More detailed measurement of proximate risk factors

- Baseline assessment
 - Interview (~2 - 2.5 hours)
 - Standardized questionnaires (1.5 – 2 hours)
- Community re-assessments
 - Focus on dynamic risk factors (change)
 - Focus on time since last seen
 - Interview (1 – 1.5 hours)
 - Standardized questionnaires (1 – 1.5 hours)

Areas of Assessment (Risk Factors)

- Psychiatric symptomatology
- Social history
- Emotional functioning
 - Anger, stress, impulsivity
- Attitudes
- Personality / personality disorder
- Substance use
- Context (employment, living situation)
- Treatment (and noncompliance)
- Support (peers, relationships)

Areas of Assessment (Outcomes)

- Violence
 - Actual, attempted or threatened harm to another person
 - Many categories (minor to severe)
- Victimization
 - Same as violence, but receipt thereof
- Suicide-related Behavior
 - Ideation
 - Attempts

Sample to Date...

- 54 patients discharged from RCH
 - 52% male
 - 36 years old (19-61)
 - 85% Caucasian
 - 52% psychosis, 46% mood
 - 78% involuntary
 - 57% unemployed
 - 76% prior hospitalization
 - 48% drugs or alcohol in past 2 weeks

Antisocial and Violent Behavior

- Arrests, ever 30%
- Spousal violence 19%
- Stalking 26%
- Violence within 2 weeks 19%
- Assault
 - Under age 12 15%
 - 13-17 19%
 - 18+ 39%

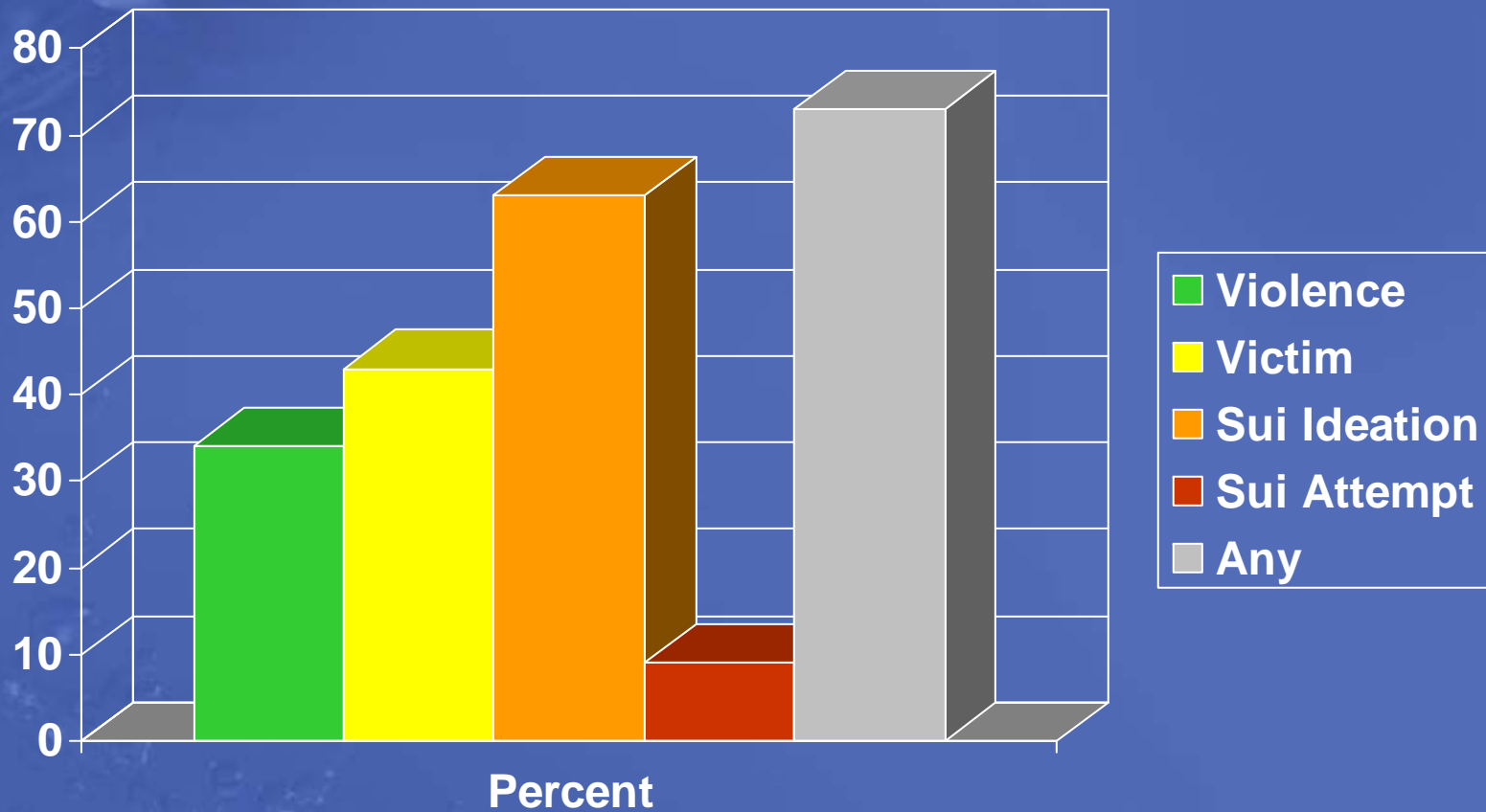
Major Outcome Categories

- Any violence 44%
- Physical violence 39%
- Suicide ideation 76%
- Suicide attempt 56%
- Victimization 63%
 - Child sexual abuse 30%
 - Child physical abuse 50%

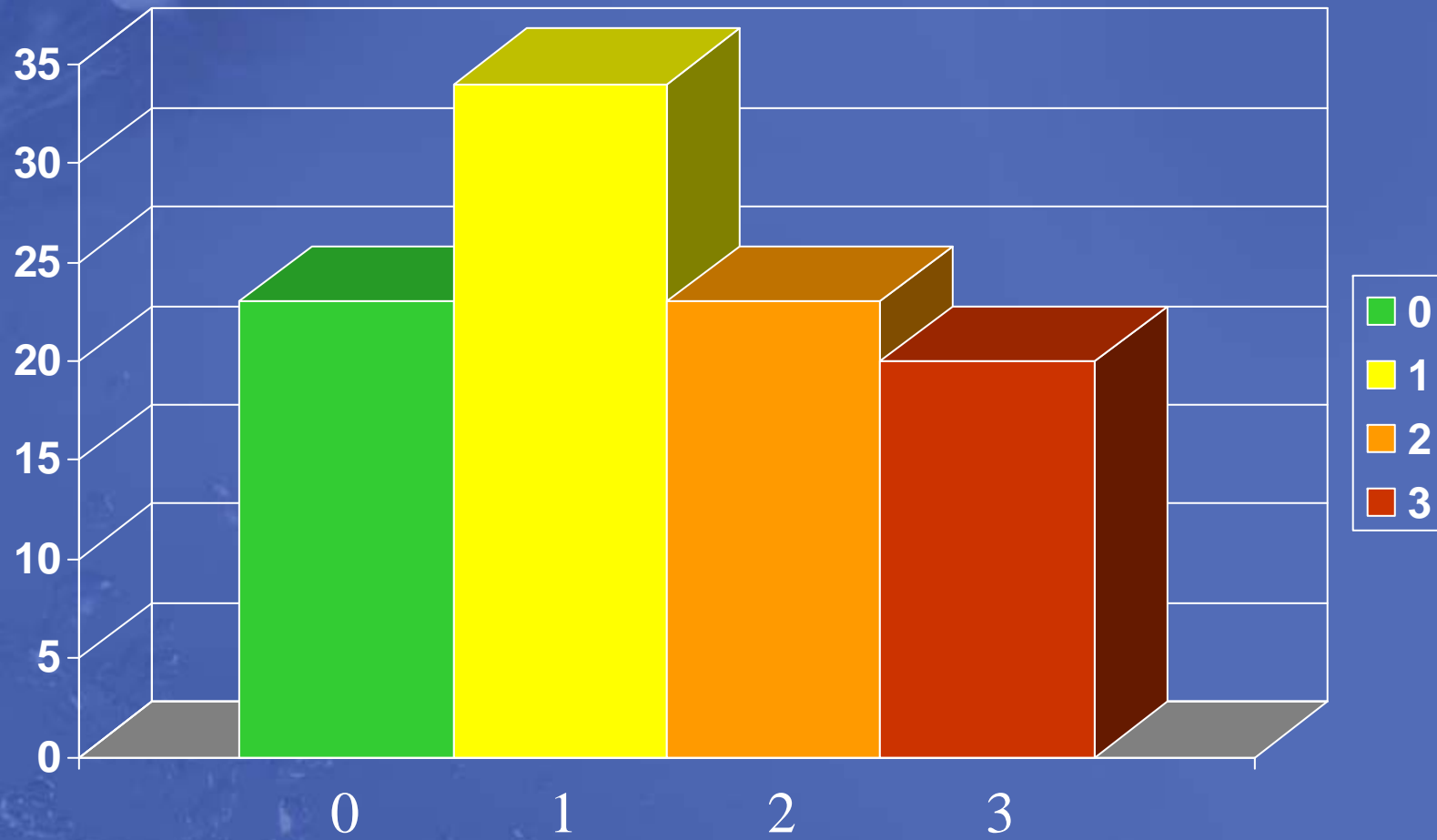
Outcomes during Hospitalization

- Violence 19%
- Suicide ideation 54%
- Suicide attempt 7%
- Victimization 14%
- Restraint/PRN/rule violation 24%

Outcomes during Follow-Up



Number of Outcomes, Follow-Up



Pairwise Associations

Victimized

No

Yes

Violent

No

16
(70%)

7
(30%)

Yes

4
(33%)

8
(67%)

Odds = 4.57

Phi = .35

Pairwise Associations

Suicide
Attempt or
Ideation

No

Yes

Violent

No

9
(39%)

14
(61%)

Yes

4
(33%)

8
(67%)

Odds = 1.29

Phi = .06

Pairwise Associations

Suicide
Ideation or
Attempt

No Yes

Victimized

No

11
(55%)

9
(45%)

Yes

2
(13%)

13
(87%)

Odds = 7.94

Phi = .43

Planned Analyse

- Promising correlates of (a) individual outcomes and (b) joint outcomes
- Event transaction focus
- Change over time

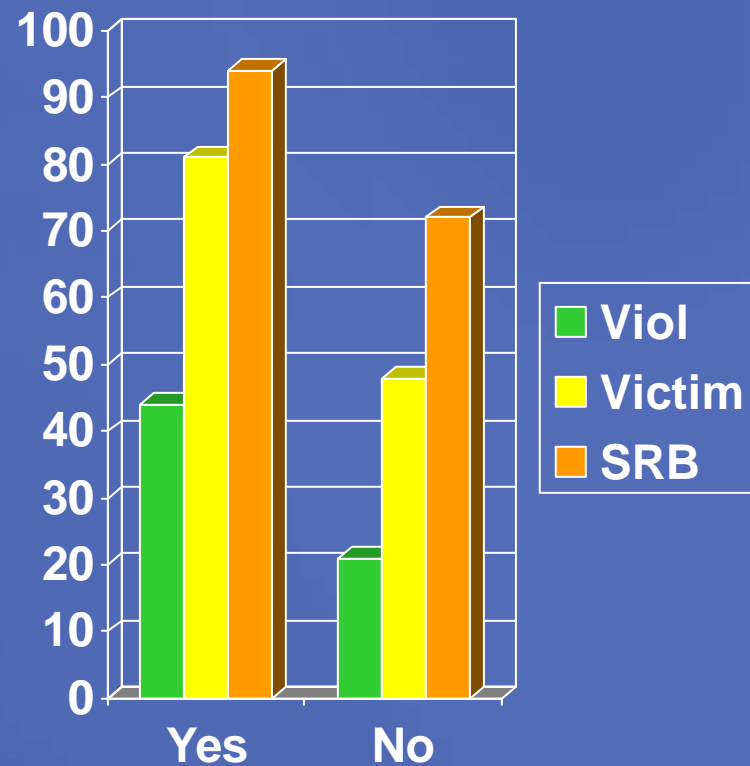
Promising Correlates of Outcomes

For example....

TCO Delusion Question:

“Have you ever felt like your mind was dominated by forces beyond your control?”

Predicts each outcome



Promising Correlate

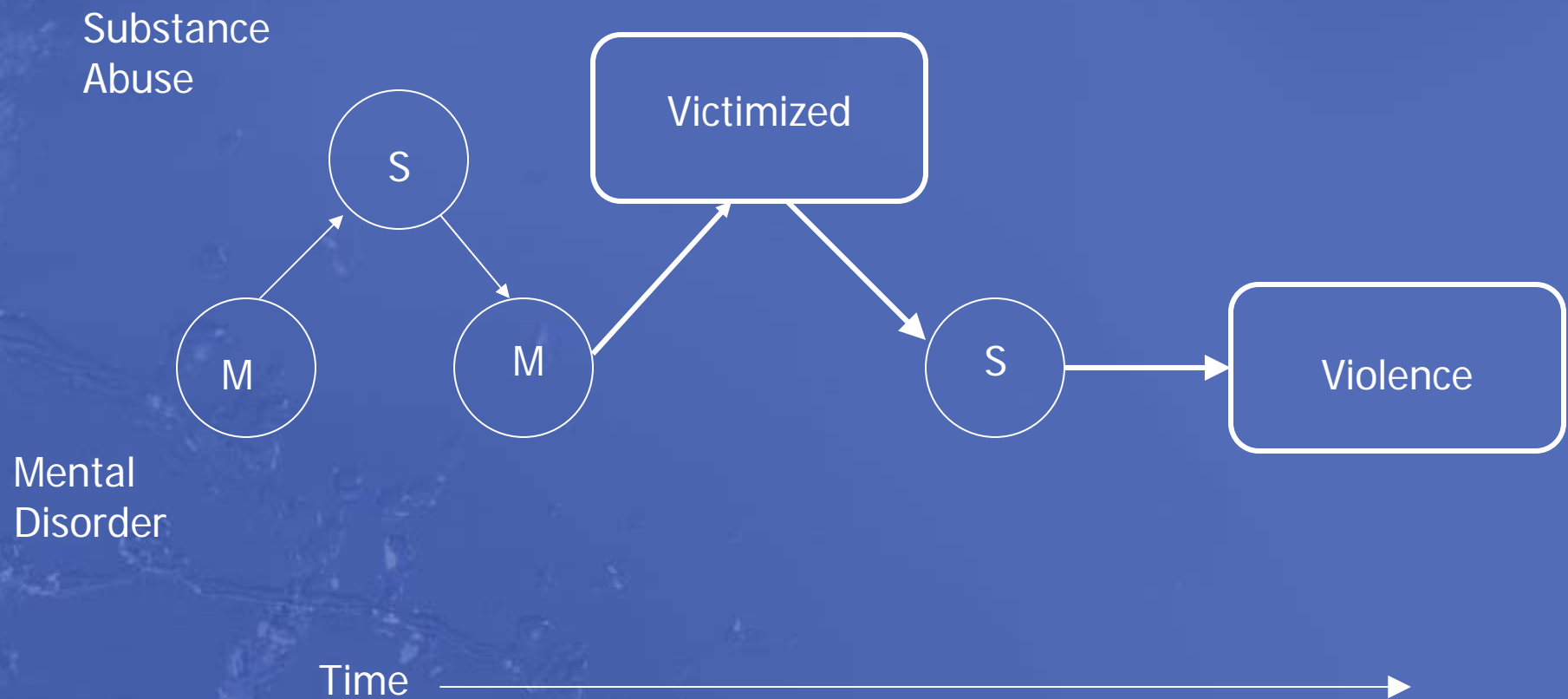
(Significant associations with one or more outcomes)

- TCO Delusions
- Substance use problems
- Unemployment
- Noncompliance with treatment
- Perceived coercion
- Anger
- Perceived hostility
- Homelessness

Event Transaction Focus

- When violence occurs
 - victimization occurs at the same time 38% of the time
- During those transactions...
 - Using drugs or alcohol 30%
 - Medication noncompliance 24%
 - Active psychiatric symptoms 75%
- Implications for management?
 - Skills training; problem solving; de-escalation
 - Compliance; medication management
 - Substance use treatment

Change over time: transaction



Conclusion

- High incidence of adverse outcomes
 - 77% had at least one in 6 month follow-up
- Strong associations between
 - Violence and victimization
 - SRB and victimization
- Promising common risk factors exist
- Next steps will inform...
 - Isolating most important dynamic risks
 - Looking for event transactions and their correlates
 - Determining intervention targets with greatest chance of reducing risk

Thank You

Contact

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