Cycles of Violence: Examining Mental Health Mechanisms in Violence

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Background

- Residing in a community with high levels of violence relates to negative outcomes including increased interpersonal violence (as in Latzman et al. 2005; Romano et al. 2005; Wright et al. 2011).
- The social disorganization tradition explains this relationship as a function of neighborhood characteristics (as in Bursik and Grasmick 1993; Sampson et al. 1997).
- The purpose of this study is to examine how psychological states can affect violence.
- By integrating the stress and coping perspective, I conceptualize that continued exposure to violence in the neighborhood leads to resource depletion placing the individual at increased risk for PTSD (Baumeister et al. 1998; Pearlin 1999).
- The hyper-arousal and reactivity characteristic of PTSD thus increases the individual's violent acting out.

Conceptual Model

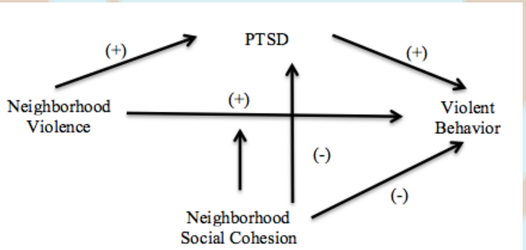

Figure 1: Conceptual Framework

Data and Measures

- Data from the Collaborative Psychiatric Epidemiology Surveys (CPES) are used to examine this proposed relationship (Alegria et al. 2001-2003).

Measures

- Violent behavior (sum scale).
- Neighborhood violence (standardized scale).
- The PTSD (dummy).
- Trauma Exposure (log of unique traumatic experiences).
- Control variables: age, sex, race (ref = white), education (ref = less than high school), and prior violence.

Results

Table 1: Odds ratios for logistic models predicting PTSD

	Model 1	Model 2	Model 3	Model 4
Neighborhood violence	1.124 ***	1.126 ***	1.121 ***	1.124 ***
	(.029)	(.030)	(.031)	(.031)
Trauma Exposure		1.220 ***		1.219 ***
		(.027)		(.027)
Social Cohesion			.951 **	.953 **
			(.017)	(.017)
Constant	.263 ***	.189 ***	.263 ***	.190 ***
	(.047)	(.034)	(.047)	(.034)
R^2	.059	.077	.060	.078
χ^2	257.71 ***	320.36 ***	263.19 ***	326.26 ***

n = 15,339
note: standard error in parenthesis
†p ≤ .10; *p ≤ .05; **p ≤ .01; ***p ≤ .001

Multivariate Results

Table 2: Coefficients and standard errors of OLS models predicting violent behavior

	Zero order	Model 1	Model 2	Model 3	Model 4	Model 5
Neighborhood violence	.018 **	-.003	-.005 ***	-.019 ***	.033 **	.031 **
	(.005)	(.005)	(.005)	(.005)	(.009)	(.009)
Age	-.014 ***	-.013 ***	-.013 ***	-.013 ***	-.013 ***	-.013 ***
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Black	-.004	-.270 ***	-.265 ***	-.268 ***	-.272 ***	-.267 ***
	(.025)	(.029)	(.029)	(.029)	(.029)	(.029)
Hispanic	-.449 ***	-.728 ***	-.712 ***	-.242 **	-.227 **	-.218 ***
	(.026)	(.036)	(.036)	(.058)	(.058)	(.058)
Asian	-.601 ***	-.688 ***	-.667	-.070	-.066	-.052
	(.019)	(.024)	(.024)	(.052)	(.052)	(.052)
Other	.691 ***	.397 ***	.383 **	.399 ***	.399 ***	.385 **
	(.144)	(.116)	(.116)	(.116)	(.117)	(.116)
Sex	.106 ***	.093 ***	.114 ***	.098 ***	.098 ***	.118 ***
(ref = female)	(.021)	(.025)	(.025)	(.025)	(.025)	(.025)
Income	-.001	.0003	-.0004	.0004	.0004	-.0003
	(.0002)	(.0003)	(.0003)	(.0003)	(.0003)	(.0003)
High School	.088 **	-.209 ***	-.207 ***	-.233 ***	-.231 ***	-.222 ***
	(.032)	(.046)	(.047)	(.047)	(.047)	(.047)
Some College	-.042	-.304 ***	-.306 ***	-.319 ***	-.317 ***	-.312 ***
	(.029)	(.047)	(.048)	(.048)	(.048)	(.048)
College	-.177 ***	-.325 ***	-.331 ***	-.349 ***	-.347 ***	-.342 ***
	(.028)	(.047)	(.048)	(.048)	(.048)	(.048)
Prior violence	.499 ***	.405 ***	.399 ***	.401 ***	.398 ***	1.389 ***
	(.030)	(.029)	(.029)	(.029)	(.029)	(.029)
PTSD	.433 ***		.278 ***			.268 ***
	(.056)		(.051)			(.050)
Social Cohesion	-.058 ***			-.054 ***	-.057 ***	-.056 ***
	(.001)			(.004)	(.004)	(.004)
Neighborhood violence * Social Cohesion					-.007 ***	-.007 ***
					(.001)	(.001)
Constant		1.622 ***	1.422 ***	1.472 ***	1.474 ***	1.428 ***
		(.124)	(.076)	(.075)	(.075)	(.076)
R^2		.208	.213	.223	.224	.589
F		119.70 ***	122.49 ***	190.06 ***	178.46 ***	357.41 ***

n = 15,339
note: standard error in parenthesis.
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Summary

- Neighborhood violence predicts both individuals' violent behavior and PTSD diagnosis.
- PTSD diagnosis relates to increased violence.
- Stronger social support networks are negatively related to average neighborhood violence.

Conclusion

- Living in a violent neighborhood increases the probability of violent behavior.
- Psychological well-being is tied to:
  - Healthier neighborhood social conditions.
  - Decreased probability of engaging in violence.
- Strong social networks moderate the effect of neighborhood conditions.

Limitations/Future Research

- The data are cross sectional
- Future exploration:
  - Examine relationships longitudinally.
  - Incorporate individual level controls.
  - Explore the nature of the causal relationship between individual violence and neighborhood violence.

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