

## Abstract

It is well-established that increased exposure to violence often leads to increased levels of clinical symptoms involving depression and anxiety among youth. Many times, these circumstances result in problem behaviors such as aggression, withdrawal, and defying of authority or the law. These types of behaviors, in effect, are frequently what lead such youth to their involvement within the justice system as well as continued recidivism, a harmful cycle which can persist for years afterward. The current study aims to examine the impact of social support (domain, diversity, and depth of social support) on depression and anxiety and, in particular, whether they modify the link between exposure to direct or indirect violence and mental health symptomatology (depression and anxiety). This secondary analysis of data was performed using original data from the Pathways to Desistance study, where 1,354 juvenile offenders were recruited from Arizona and Pennsylvania to complete individual interviews on a longitudinal basis. A Spearman's rho correlation showed that both direct exposure and witnessing of violence were significantly correlated to depression and anxiety. Hierarchical linear regression analyses indicated that social support did not moderate the relationship between exposure to violence and depression or anxiety. Results of the current study imply that universal screenings and services must be implemented on both a prevention and intervention basis, and it also advocates the need for trauma-informed care within this community.

## Introduction

### Significance of the Study

- Reports of data consistently show that over 90% of incarcerated adolescents have experienced at least one traumatic victimization
- Studies often indicate that children with a history of violence exposure are up to 5 times more likely to develop negative effects compared to other children. Adolescents within the general population were more likely to present with high levels of depression and anxiety when they reported exposure to violence

### Purpose of Research

- The purpose of the current study is to explore the relationship between exposure to violence and negative mental health outcomes among incarcerated youth

### Research Questions

1. Does increased exposure to violence, whether directly or indirectly, have an impact on symptoms of anxiety in juvenile youth?
2. Does exposure to violence, whether directly or indirectly, have an impact on symptoms of clinical depression in juvenile youth?
3. Do systems of social support moderate the relationship between exposure to violence and mental health symptoms?

### Hypotheses

1. Among juvenile youth, there is a positive relationship between all types of exposure to violence and symptoms of anxiety.
2. Among juvenile youth, there is a positive relationship between all types of exposure to violence and symptoms of clinical depression.
3. Domains, diversity, and depth of social support will moderate the relationship between exposure to violence and mental health symptoms, such that greater social support systems will result in fewer symptoms of anxiety and depression in incarcerated youth, even if there is any history of exposure to violence

## Literature Review

### Exposure to Violence

- Rates of violence exposure among this population range from 75-90%
- For adolescent males, witnessing violence has been found to be a reliable predictor of delinquency and aggressive behavior, and their rates of witnessing violence are typically between 50-80%
- Rosenberg et al. (2014) asserted that higher levels of mental health symptomatology and delinquency were more likely to be found among adolescents who were more severely maltreated, regardless of the type of abuse they experienced

### Mental Health Symptomatology

- In one study of 1,000 incarcerated adolescents, 25% were moderately depressed and 22% were severely depressed
- Among incarcerated youth, the rate of anxiety is consistently higher than the general population's, at around 26%

### Social Support

- Social support was found to mediate the effect of clinical depression and traumatic stress among adolescents, but this mediating relationship was not found in all studies

### Gaps and Limitations

- Prior studies of childhood trauma primarily rely on samples of adolescents in the general population
- Currently, there is not a wealth of empirical research on multiple forms of violence, nor is there a lot of studies that look at differential effects of witnessing versus directly experiencing violence
- There is incongruent literature that supports and does not support social systems as a moderating factor in decreasing mental health symptomatology

## Methodology

### Research Design and Data Collection Procedures

- The current study is a secondary analysis of the data from Research on Pathways to Desistance, which is a multisite longitudinal study of serious juvenile offenders, 2000
- Interviews included assessment of youths' social background, school engagement, mental health, substance use, among other variables
- Baseline interviews were performed in 2000, and follow-up interviews were performed once a year for the next 6 years

### Sample and Sampling Method

- Participants included 1,354 serious juvenile offenders from adolescence to young adulthood
- Enrolled youth were at least 14 years old and under 18 and were found guilty of a serious offense
- The number of males convicted with drug offenses were capped at a 15% inclusion rate in the study in order to avoid overrepresentation of drug offenders
- Additionally, all females who met enrollment criteria were included in the original study

### Measures

- Exposure to violence is the predictor variable of interest which measures participants' self-reported rates of witnessing violence and directly experiencing violence. 13 items examined exposure to violence.
- Mental health outcomes is the outcome variable of interest and specifically focuses on the constructs of clinical depression and anxiety. 53 items evaluated the participants' experiences of depression and/or anxiety
- Social support is the moderator variable of the current study. This variable is measured in three ways: Domains of social support assesses the number of domains (e.g., Adults you admire, adults you could talk to, etc.) in which at least one supportive person is mentioned. Diversity of social support measures the number of different types of people mentioned. Depth of social support counts how many adults are mentioned in more than two domains

## Results

### Spearman's Rho

- Spearman's rho coefficients were computed among violent victimization; witnessing violence; depression; anxiety; and domains, diversity, and depth of social support
- Direct victimization and witnessing of violence were both positively correlated with anxiety and depression, as shown by Table 2
- Depth of social support was negatively correlated with depression as shown in Table 2

### Hierarchical Linear Regression

- Four linear regressions were performed among the study variables: IVs- direct victimization and witnessing, and DVs- depression and anxiety, in order to test mediation properties of depth of social support
- In all four regression models, associations between individual IVs and DVs did not differ when depth of social support was introduced into the model

Table 2  
Means, Standard Deviations, and Intercorrelations for Exposure to Violence, Social Support, and Mental Health Symptoms

Variables	M	SD	1	2	3	4	5	6	7
1. Victim Score	1.58	1.457	—						
2. Witnessed Score	3.77	1.956	.536**	—					
3. Domains of Social Support	6.64	1.753	-.017	-.003	—				
4. Diversity of Social Support	4.02	1.954	.044	.025	.315**	—			
5. Depth of Social Support	2.00	1.058	-.022	-.015	.458**	.411**	—		
6. Depression	.596	.745	.299**	.219**	-.042	-.008	-.060*	—	
7. Anxiety	.464	.639	.238**	.143**	-.027	.046	-.032	.600**	—

Note. \*p < .05. \*\*p < .01.

Table 1  
Sample Characteristics (N = 1,354)

Characteristic	f	%
Gender		
Male	1170	86.4
Female	184	13.6
Age	M = 16.04	SD = 1.143
Ethnicity		
White	274	20.2
Black	561	41.4
Hispanic	454	33.5
Other	65	4.8
Family Structure		
Two bio parents	199	14.7
Single bio mom, never married	288	21.3
Single bio mom, divorced or separated	218	16.1
Single bio mom, widowed	22	1.6
Bio mom and stepdad	238	17.6
Single bio dad	74	5.5
Other adult relative	164	12.1
Bio dad and stepmom	42	3.1
Two adoptive parents	10	0.7
No adult in home	64	4.7
Other	4	0.3
Single bio mom, married, bio dad not present	23	1.7
Single bio mom, marital status unknown	8	0.6
Enrolled in school		
No	382	28.2
Yes	972	71.8
Anyone in family ever arrested		
No	292	21.6
Yes	1058	78.1
Parents' education level	M = 4.3032	SD = .94614

Table 3  
Results of Hierarchical Regression Analyses Predicting Mental Health Outcomes among Adolescent Exposure to Violence and Depth of Social Support

Variable	B	Beta	t	p	R <sup>2</sup>	ΔR <sup>2</sup>
<b>Depression</b>						
1. Gender	.215	.100	3.656	.000	.015	.015
Age	.040	.061	2.227	.026		
2. Victim Score	.163	.319	5.378	.000	.079	.063
3. Depth of social support	-.019	-.027	-6.57	.511	.083	.004
4. Victim Score x Depth of social support	-.016	-.080	-1.216	.224	.084	.001
<b>Anxiety</b>						
1. Gender	.187	.087	3.138	.002	.015	.015
Age	.049	.076	2.729	.006		
2. Witness Score	.094	.244	4.145	.000	.048	.033
3. Depth of social support	-.002	-.003	-.052	.959	.053	.005
4. Witness Score x Depth of social support	-.012	-.093	-1.164	.245	.054	.001
1. Gender	.242	.131	4.695	.000	.016	.016
Age	.018	.033	1.171	.242		
2. Witness Score	.056	.169	2.850	.004	.034	.018
3. Depth of social support	-.005	-.008	-1.125	.900	.036	.002
4. Witness Score x Depth of social support	-.006	-.054	-.671	.502	.036	.000

## Discussion

### Summary of Findings

Spearman's rho coefficients were performed on all the study variables and were able to demonstrate that there were some significant relationships between certain variables. For example, a relationship was established between direct exposure to violence and symptoms of anxiety and depression. A similar relationship was found between witnessing violence and symptoms of anxiety and depression. Regarding social support, only depth of social support was shown to display a negative relationship with any mental health symptomatology. In particular, more self-reported levels of depth of social support were shown to be related to decreased levels of clinical depression in incarcerated youth.

### Implications for Research and Practice

- By substantiating and providing further evidence of the link between exposure to violence and mental health symptomatology, community mental health advocates will have more leverage in engaging policymakers for the needs of youth that are both at-risk of and currently involved in the justice system
- As for youth already involved in the justice system, research findings from this study support the need for universal mental health screenings and interventions
- Because social support by itself has a significant relationship with depression, the need for trauma-informed clinicians to provide services to this population is also arguably necessary

### Strengths and Limitations

#### Strengths

- The distinction between witnessing and being directly exposed to violence, which has not been done at length in the existing literature
- The study further sought to utilize hierarchical linear regression testing in an attempt to clarify inconsistent literature with regard to social support as a moderator to levels of anxiety and depression

#### Limitations

- The sample population in question solely consisted of serious juvenile offenders that are more deeply involved in the system and incriminated by more severe crimes, so the results may not be perfectly generalizable to the overall population of incarcerated youth
- The study relied on self-reported data of anxiety and depression, and because the study disproportionately consisted of male participants, it is also possible that the accuracy of the data is skewed as males are less likely to openly report symptoms of anxiety or depression
- These findings may be more relevant to incarcerated youth males rather than their female counterparts

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