

Substance Use Criminality, and Social Support: An Exploratory Analysis with Incarcerated Women

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Abstract: This exploratory study examined the extent to which substance use and criminality influence perceptions of social support. A stratified random sample of 100 incarcerated women in one Kentucky prison participated in face-to-face interviews. Overall, findings indicate that perceptions of social support significantly and negatively correlated with women's severity of substance use and criminal involvement. In addition, the breadth of a respondent's social network was negatively related to the age of first incarceration and to the severity of alcohol and drug use. Findings from this study suggest there is a relationship between severity of substance use, criminality, and perceptions of social support. Implications for substance use research and practice are discussed.

Keywords: Criminality, female offenders, social support, substance use

INTRODUCTION

This exploratory study examined the extent to which substance use and criminality influence perceptions of social support among incarcerated

This project was sponsored by a grant from the National Institute on Drug Abuse (ROI-11309, Leukefeld, PI).

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women. This study is grounded in literature on the relationship between social support and problem behaviors that suggests: 1) there is an inverse relationship between social support and coping with stressful events (1), 2) social support is closely aligned with relationships (2); 3) relationships and social support have unique importance for women (3); 4) unstable social support systems contribute to the initiation and continued involvement in problem behaviors like substance use and criminal activity (4).

The literature review for this study did not identify any studies which examined the potential relationship between problem behaviors, such as substance use and criminality, as predictors of social support among incarcerated women. However, it is possible that as a consequence of these types of problem behaviors, existing social support systems with family and/or friends may be compromised. Therefore, this exploratory study examines the associations between problem behaviors and social support. This study addresses a gap in the literature by examining the hypothesis that an earlier age of onset of problem behaviors and increased severity of substance use and criminal involvement is associated with decreased perceptions of social support.

METHOD

Participants

This study included a stratified random sample of 100 urban and rural women from one Kentucky prison. The sample was mostly white (72%), and ages ranged from 19 to 66 with an average age of 37.4. Over half of the participants (61%) reported 12 years of education or more (years of education ranged from 6–18). The largest percentage of participants reported being single (37%) and 30% were divorced. The majority of participants reported having children (89%) with the average number of children at 2.4 (range 0–7).

Procedures

This project was conducted as a component of a study funded by NIDA (R01–11309, Leukefeld, PI). A list of inmates was obtained from the administrative office. Potential participants ($N = 160$) were sent recruitment letters to attend study information sessions at the prison. Among the potential participants, 60 inmates did not respond to the study recruitment letter (examples of reasons included being transferred from the institution, in segregation at the time of the interview, and not being interested in participating). Face-to-face interviews were completed in the

prison's visitation room. Correctional officers monitored participant entry and exit into the visitation room, but were not present for the confidential interviews. Interviews lasted approximately one hour, and participants were paid \$25 for their time.

Measures

The *independent variables* came from the drug and alcohol use, and the criminality sections of the Addiction Severity Index (ASI) (5) and included: 1) *Age of onset of problem behaviors* (age of first use of any substance, age of first incarceration); 2) *Severity of substance use* (composite additive measure of years of regular drug and alcohol use and days of use during the year prior to incarceration); and 3) *Severity of criminal involvement* (total number of lifetime criminal convictions, number of lifetime months incarcerated, and severity of current charge).

The *dependent variables* included: 1) *Perceived social support* measured by the Multidimensional Scale of Perceived Social Support (MSPSS) (6); 2) perceived size of the *social network* (one item to ask respondents how many people they felt close to and trusted).

Individual factors were examined as control variables due to their potential relationships with the dependent variables of social support and included age (7), marital status (8), history of abuse (9), and length of time in prison.

RESULTS

Bivariate Analyses

Bivariate correlations are presented in Table 1. Age of first incarceration was significantly and positively correlated with the size of the social network ($r = .313, p < .01$), but not with perceived social support (MSPSS). There was an overall negative relationship between severity of substance use and social support since 5 of the 6 correlations were significant. However, only one of the six correlations examining the association between severity of criminal involvement and social support was significant.

Multivariate Analyses

Multivariate regression models examined the extent to which problem behaviors predicted measures of social support (See Table 2). Predictors

Table 1. Bivariate correlations between substance use and social support

IV	DV	Pearson r
<i>Age of onset of problem behaviors</i>		
Age of first incarceration	MSPSS scores	.127
	Social network	.313**
Age of first substance use	MSPSS scores	.078
	Social network	.119
<i>Severity of substance use</i>		
Severity of alcohol use	MSPSS scores	-.296**
	Social network	-.259**
Severity of drug use	MSPSS scores	-.109
	Social network	-.250*
Overall severity of substance use	MSPSS scores	-.232*
	Social network	-.305**
<i>Severity of criminal involvement</i>		
Days incarcerated	MSPSS scores	-.295**
	Social network	-.098
Lifetime convictions	MSPSS scores	-.119
	Social network	-.172
Having a violent charge	MSPSS scores	.074
	Social network	.168

Note: ** $p < .01$, * $p < .05$.

and control variables were selected for the multivariate model based on significant bivariate correlations.

Predicting MSPSS

The severity of substance use measure was composed of the severity of alcohol use; therefore, two regression models were examined separately to include severity of alcohol use (MSPSS Model 1) and severity of overall substance use (MSPSS Model 2) to determine the unique contributions of these measures to predict variance in social support. Marital status was the only individual factor significantly correlated with MSPSS, and it was controlled for in both Model 1 and Model 2 by loading it as the first step. Model 1 (severity of alcohol use) was significant ($F = 8.9$, $p = .000$) with the independent variables accounting for 18.5% of the overall variance in MSPSS. Each of the predictors was significant at the $p < .05$ level. Model 2 (severity of overall substance use) was also significant ($F = 7.52$, $p = .000$) with the independent variables accounting

Table 2. Predictors of MSPSS and social networks

	β	<i>SE</i>	<i>p</i>
Predictors of MSPSS			
Model 1 (Adj. $R^2 = .185$)			
Step 1			
Married	.288	3.02	.004
Step 2			
Lifetime days incarcerated	-.259	.064	.006
Severity of alcohol use	-.241	.142	.011
Model 2 (Adj. $R^2 = .165$)			
Step 1			
Married	.288	3.02	.004
Step 2			
Lifetime days incarcerated	-.273	.065	.004
Severity of substance use	-.195	.077	.039
Predictors of social network			
Model 1 (Adj. $R^2 = .104$)			
Step 1			
Age	.040	.023	.051
Step 2			
Age of first incarceration	.227	.023	.063
Severity of alcohol use	-.174	.027	.096
Severity of drug use	-.074	.024	.504
Model 2 (Adj. $R^2 = .108$)			
Step 1			
Age	.032	.023	.051
Step 2			
Age of first incarceration	.219	.023	.071
Severity of substance use	-.207	.015	.046

for 16.5% of the overall variance in MSPSS. Each of the predictors was also significant at the $p < .05$ level.

Predicting Size of Social Network

Similar to the MSPSS model, Model 1 included severity of alcohol use and severity of drug use, while Model 2 included the composite measure of severity of substance use to determine the unique contributions of these measures to predict variance in size of the social network. Age was the only individual factor which was significantly correlated with social network at the bivariate level, and controlled in both models by loading as the first step. Model 1 was significant ($F = 3.84$, $p = .006$)

with the independent variables accounting for 10.4% of the overall variance in social network. Despite the overall model's significance, none of the predictors were significant at the $p < .05$ level. Model 2 was also significant ($F = 4.97, p = .003$) with the independent variables accounting for 10.8% of the overall variance in social network. Severity of substance use emerged as the only significant predictor ($\beta = -.207, p = .046$).

DISCUSSION

The purpose of this exploratory study was to examine the extent to which age of onset and severity of substance use and criminal involvement influenced perceived social support in a sample of incarcerated women. It was hypothesized that an earlier age of onset of problem behaviors and increased severity of substance use and criminal involvement would be associated with decreased perceptions of social support.

Overall, the hypothesis was supported for the relationship between substance use and social support, but less convincing for the relationship between criminal involvement and substance use. Findings indicated that more severe use of alcohol and drugs was related to decreased perceptions of social support and decreased social network. There were only slight variations in the regression models when alcohol was examined alone and when examined as a part of the substance use composite score, suggesting that while alcohol use may differentially relate to the measures of social support, this relationship may be influenced by the potential for concurrent use of other illegal drugs. In addition, study findings suggested a modest relationship between criminal involvement and social support. Specifically, being incarcerated at an earlier age was related to a decreased social network among incarcerated women. However, the only significant correlate of perceived social support was the number of lifetime days incarcerated, which was also the only significant predictor in the multivariate model. These findings suggest that the degree to which women perceive social support may not be strongly influenced by their criminal involvement but rather by the amount of time they are incarcerated and away from family and friends.

This study has limitations which may influence findings. While stratified random selection contributed to increasing external validity, the small sample size could limit generalizability to other incarcerated women and criminally involved female substance users. Participants were asked to recall events during the time period before incarceration—a time when the majority of these women reported using alcohol and other drugs, and a time when they were more likely involved in the criminal behavior that led to their incarceration. This analysis is conducted with cross-sectional

data which limits the opportunity to study the interaction between substance use, criminality, and social support over time.

Despite these limitations, study findings are important because the literature indicates that individuals, particularly substance abusers, with stronger support networks and an enhanced sense of social support have more positive treatment outcomes (10, 11). Since the literature suggests that a large percentage of incarcerated women may not have strong supportive resources, this study contributes an initial step to better understanding differences in perceptions of social support which may be associated with problem behaviors.

REFERENCES

1. Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. *Psychological Bulletin* 1985; 98:310–357.
2. Reis HT, Collins N. Measuring relationship properties and interactions relevant to social support. In *Social Support Measurement and Intervention*. Cohen S, Underwood LG, Gottlieb BH, eds. New York: Oxford University Press, 2000; 136–192.
3. Miller JB. *Toward a New Psychology of Women*. Boston: Beacon Press, 1976.
4. Strauss SM, Falkin GP. Social support systems of women offenders who use drugs: A focus on the mother-daughter relationship. *Drug and Alcohol Abuse* 2001; 27(1):65–89.
5. McLellan A, Luborsky L, O'Brien C, Woody G. An improved diagnostic instrument for substance abuse patients: The addiction severity index. *Nervous and Mental Diseases* 1980; 168:26–33.
6. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Personality Assessment* 1988; 52(1):30–41.
7. Norris FH, Kaniasty K. Received and perceived social support in times of stress: A test of the social support deterioration deterrence model. *Personality and Social Psychology* 1996; 71(3):498–512.
8. Katz RS. Explaining girls' and women's crime and desistance in the context of their victimization experiences: A developmental test of revised strain theory and the life course perspective. *Violence Against Women* 2000; 6(6):633–660.
9. Hyman SM, Gold SN, Cott MA. Forms of social support that moderate PTSD in childhood sexual abuse survivors. *Family Violence* 2003; 18(5): 295–300.
10. Cosden M, Cortez-Ison E. Sexual abuse, parental bonding, social support, and program retention for women in substance abuse treatment. *Substance Abuse Treatment* 1999; 16(2):149–155.
11. Huselid RF, Self EA, Guiterres SE. Predictors of successful completion of a halfway-house program for chemically-dependent women. *Drug and Alcohol Abuse* 1991; 17(1):89–102.

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