Factors Associated with Risk Principle Adherence and Recidivism in a Mental Health Jail Diversion Program

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Introduction

Much has been written about the importance of using structured approaches to assess recidivism risk. Meta-analytic research demonstrates that a variety of structured approaches have good validity in predicting recidivism and violence risk (Campbell et al., 2009; Guy, 2008; Singh et al., 2011). In practice, implementation of structured risk assessments can be used to determine individual risk level, inform treatment planning, and guide risk management strategies (Andrews et al., 2006).

The Risk-Need-Responsivity (RNR) model (Andrews et al., 1990) provides a framework for examining the link between risk assessment and risk management (Singh et al., 2013). Briefly, the RNR model is a best practice approach to assessing and treating offenders (Crime and Justice Institute at Community Resources for Justice, 2009). The risk principle asserts that treatment should align with individual risk level, such that higher risk offenders receive more intensive treatment and lower risk offenders receive less intensive treatment (Andrews & Bonta, 2010). Thus, findings of risk assessments can be used to inform the level of intervention (e.g., number and intensity of services) in the individual case (Andrews & Bonta, 2010; Ogloff & Davis, 2004).

Prior research has found that adherence to the risk principle is associated with reduced recidivism, particularly among female and young offenders (Andrews & Dowden, 2006). Though much of the research has been conducted in prison or other institutional settings, adherence to the risk principle also has been shown to reduce recidivism in jail diversion populations (e.g. Lowenkamp et al., 2006). However, there remain gaps in the literature pertaining to the links between structured risk assessments, services, and outcomes, such as factors that affect adherence to the risk principle.

The Present Study

The purpose of this poster is to examine the link between risk assessments, services, and recidivism in mental health jail diversion clients, with a focus on the risk principle. We hypothesize that as adherence to the risk principle increases, recidivism will decrease. We additionally explore factors associated with risk principle adherence.

Methods

Participants

The sample is comprised of clients in a mental health jail diversion program in a metropolitan area of a southeastern state. Inclusion criteria are: serious mental illness (schizophrenia spectrum or bipolar disorder); at least seven lifetime arrests or three arrests in the past three years; and moderate or high risk of violence, self-harm, suicide, self-neglect, or general offending. To date, 94 participants have completed baseline assessments and 59 (62.8%) have completed the 3-month follow-up.

Measures

Risk was assessed using the Short-Term Assessment of Risk and Treatability (START; Webster et al., 2009). Briefly, the START guides the assessment of strengths and vulnerabilities to estimate risk (Low, Moderate, High) across seven domains. An eighth estimate, General Offending, is being piloted in this study. Strength and vulnerability total scores are computed by summing item ratings for research purposes.

Service use items were drawn from the Addiction Severity Index (ASI; McLellan et al., 1980) and the Epidemiological Catchment Area Interview (ECA; USDHHS, 1985). Specific service use variables included: *hospitalization* (number of admissions to a hospital for mental health, alcohol, or drug problems), *behavioral health professional* (number of contacts with a professional for mental health, alcohol, or drug problems), *substance use contact* (number of contacts with a professional, support group, or other treatment for alcohol or drug problems), and *total contact* (total number of service contacts for mental health, alcohol, or drug problems).

Recidivism was assessed through self-report of any criminal activity, arrests, or incarcerations.

Procedures

Potential participants were recruited at the time of referral to the mental health jail diversion program and consented for study participation. In-person assessments were completed following consent (baseline) and 3-months later (follow-up). Strength and vulnerability total scores were dichotomized (Low, High) and service use items were dichotomized (Low, High) using the median value for each variable for analyses (see Table 1).

Results

Descriptive Statistics

Most (79.8%) participants are male. Approximately 52.1% are white, 45.7% African American, and 1.1% "other" race; about half (47.9%) are Hispanic. Participant age ranges between 18–68 years (M = 36.51; SD = 13.06). A majority are single (90.4%) and have a high-school degree (53.2%). Schizophrenia spectrum disorder is the most common primary diagnosis (50.0%). Table 1 presents descriptive statistics for the risk, service use, and recidivism variables.

Table 1. Descriptive Statistics for Risk, Service Use, and Recidivism

	Low	High	*Mdn* (range)
Risk Variables	*n (%)*	*n (%)*	
Strength Total Score*	46 (51)	46 (50)	14 (0-29)
Vulnerability Total Score	49 (53)	44 (47)	19 (2-30)
Service Use Variables			
Hospitalization	33 (58)	24 (42)	0 (0-3)
Behavioral Health Professional	29 (51)	28 (49)	2 (0-30)
Substance Use Contact	28 (66)	20 (35)	0 (0-60)
Total Contact	28 (52)	26 (48)	4 (0-92)
Outcome Variables	No	Yes	
Recidivism	44 (75)	15 (25)	n/a

Notes. N = 94. % = valid percent. *indicates reverse coding

Risk Principle Adherence

A majority of offenders demonstrated risk principle adherence in seven of eight service-risk matches (see Table 2). Subgroup analyses identified variation in risk principle adherence as a function of sociodemographic characteristics. Specifically: 1) hospitalization-strength match was better in male than female offenders; 2) behavioral health professional-vulnerability match was better in single than married offenders; 3) substance use contact-vulnerability match was better in offenders with less than a high school degree than those with high school diplomas; 4) hospitalization-vulnerability match was better in White offenders than offenders of other races (see Table 2).

Results

Table 2. Prevalence of Risk Principle Adherence by Subgroup

		Overall	Sex		Education		Relationship		Race	
			M	F	<HS	≥HS	Ma.	S	W	O
		%	%	%	%	%	%	%	%	%
Hospitalization	S	55	63_a	20_b	50	59	80	53	55	58
	V	66	63	80	58	72	100	63	79_a	50_b
BH Professional	S	54	57	33	58	50	80	51	60	48
	V	56	53	66	50	60	100_a	51_b	63	44
Substance Use Contact	S	46	47	40	44	50	40	46	41	58
	V	53	47	66	61_a	41_b	80	52	54	59
Total Contact	S	53	57	33	44	60	60	52	50	52
	V	55	52	80	58	50	60	53	45	54

Notes. n=59; S=START Strength Total Score; V=START Vulnerability Total Score; BH=Behavioral Health; M=Male; F=Female; <HS=less than high school diploma; ≥HS=at least high school diploma; Ma=Married; S=Single; W=White; O=race other than White; a and b= significant difference between groups; all df=1; all ps <.05.

Recidivism

Bivariate analyses showed associations in the expected direction between risk principle adherence and recidivism (see Table 3). Specifically, low risk offenders who had less hospital admissions for behavioral health problems were also less likely to recidivate compared to low risk offenders who had more hospital admissions.

Table 3. Chi-Square Analyses of Risk Principle Adherence and Recidivism

		Overall Risk Adherence		Low Risk Offenders		High Risk Offenders	
		χ^2	Contingency Coefficient	χ^2	Contingency Coefficient	χ^2	Contingency Coefficient
Hospitalization	S	0.03	0.03	4.09*	0.37*	2.04	0.26
	V	3.44‡	0.24‡	9.20**	0.47**	0.23	0.10
BH Professional	S	0.34	0.08	1.86	0.26	0.02	0.01
	V	1.06	0.14	0.72	0.15	0.37	0.12
Substance Use Contact	S	0.26	0.07	1.27	0.21	0.01	0.02
	V	3.40‡	0.24‡	2.75‡	0.28‡	1.00	0.20
Total Contact	S	1.61	0.17	1.71	0.25	1.25	0.21
	V	2.93‡	0.23‡	0.52	0.13	3.16‡	0.35‡

Notes. n = 59; S=START Strength Total Score; V=START Vulnerability Total Score; BH=Behavioral Health; *p < .05; **p < .01; ‡p < .10; all df = 1.

Additionally, associations between overall risk principle adherence in terms of hospitalization, substance use contacts, and total number of service contacts approached significance. No evidence of associations between risk principle adherence for behavioral health contacts were found for low or high risk offenders.

Discussion

Overall, findings provide some evidence for associations between risk principle adherence and recidivism in a sample of adults participating in a mental health jail diversion program. Subgroup analyses revealed differences in risk principle adherence as a function of demographic characteristics. Additionally, offenders with hospital admissions proportionate to their risk level were less likely to recidivate. Our findings are congruent with previous research (e.g., Singh et al., 2013; Vieira et al., 2009), but are limited by a small sample size at follow-up, reliance on self-report data, and the short follow-up timeframe.

Acknowledgments

This project is funded by the Bristol-Meyers Squibb Foundation. We thank the 11th Judicial District Criminal Mental Health Project (CMHP) for its cooperation and support.