

The Effect of Formal and Informal Coercion on Managing Risk for Violence in the Community

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Abstract: Risk management is an important and unstudied aspect of risk assessment. The present study investigates the relationship between coercion and violence risk in the community among mental health consumers. Community-based mental health treatment programs are often used by both hospitals and criminal-justice facilities releasing individuals receiving treatment back into the community. Community programs may employ a combination of *formal* (threats or “leverage,” physical force) and *informal* (persuasion, inducement) coercion for purposes such as enhancing treatment compliance and reducing violence risk. Although there has been research on the impact of formal coercion in the community, there has been far less empirical attention on the impact of informal coercion on risk for violence. Participants were mental health consumers (N = 212) seeking services at ten community drop-in centers in the metropolitan Philadelphia area. Participants completed two measures developed by the MacArthur Research Network on Mental Health and Law: the clinically useful Iterative Classification Tree (to measure the participant’s risk for violence in the community) and the modified Admission Experience Survey (to measure actual and perceived coercion both in treatment and in their everyday life as well as the impact of that coercion). Results indicate that one form of coercion (“positive pressure”) was significantly related to treatment satisfaction. Such positive pressure may be useful in managing risk for violence among high-risk participants by increasing treatment adherence and facilitating the development of social support.

Keywords: coercion, violence, leverage, consumers

For nearly 50 years, the role of coercion in the provision of mental health treatment has been the subject of substantial debate (Greer, O’Reagan, & Traverso, 1996). Some (e.g., Monahan et al., 1995) have underscored the patient’s moral right to make autonomous decisions, and to be treated with dignity and respect. Although not

disputing the importance of autonomy and dignity, Appelbaum (1985) observed, “in the absence of judicious coercion, patients will not receive needed care” (p. 306).

It has only been within the last 25 years, however, that there has been a substantial empirical focus on the relationship between coercion and important outcomes such as treatment response and violence in the United States. In 1993, an NIMH roundtable that included patients, their families, and mental health providers described coercion as a “wide range of actions taken without consent of the individual involved” (Blanch & Parish, 1993). Diamond (1996) suggested that coercion exists on a continuum that includes friendly persuasion, interpersonal pressure, control of resources, and use of force. On such a continuum, informal coercion would fall on the end of the spectrum that included friendly persuasion and interpersonal pressure, whereas formal coercion would typically include the use of resources as leverage and the use of force. Intense verbal persuasion by mental health professionals might be considered in the intermediate area between formal and informal coercion.

Three factors have been shown to relate to the perception of coercion in the context of hospitalization (Lidz, et al., 1995). The first factor was “pressures” or actions by others intended to influence the patient to enter the hospital. The second involved cultural differences in the experience of hospitalization. The third, “procedural justice,” involved the perception that patients had a voice and were treated with respect in this process. There were several components to “pressures”: inducement, persuasion, threat, and force. Inducement was defined as someone offering or promising something in return for the patient admitting himself or herself to the hospital. Persuasion involved talking to the patient without threats about hospitalization; these subcategories (inducement and persuasion) were termed “positive pressure” (Lidz et al., 1995). Threats, by contrast, involved possible commitment as well as the use of something of value to the patient (e.g., money, housing, and contact with family) as leverage to force treatment. Threats and the use of actual force were considered as formal coercion in this study (Lidz et al., 1995).

It is likely that individuals with a serious mental disorder who are at higher risk for violence are commensurately more likely to experience some kind of coercion or “leverage” in association with treatment. In a survey of 1,011 persons with psychiatric disorders in five cities who received treatment in public mental health systems, investigators found that about three quarters of participants who reported serious violence (e.g., threats with a weapon, sexual assault, or an act causing injury to a third party) also reported having experienced leveraged treatment, contrasted with about one half of individuals experiencing such leveraged treatment but who did not report serious violent acts (Swanson, Van Dorn, Monahan, & Swartz, 2006).

For risk-management purposes, the more frequent use of leverage among higher risk individuals is neither surprising nor inappropriate. There is substantial evidence that treatment adherence reduces violence risk (Swanson, Swartz, & Elbogen, 2004; Swartz et al., 1998a; Swartz et al., 1998b), as well as evidence that treatment engagement is also associated with lower risk of violent behavior (Elbogen, Van Dorn, Swanson,

Swartz, & Monahan, 2006; Skeem, Monahan, & Mulvey, 2002; Torrey, Stanley, Monahan, & Steadman, 2008). If adherence to and engagement in treatment are associated with a reduced risk of violent behavior, however, than an important empirical question is whether such adherence and engagement can be promoted through informal, positive means (persuasion and inducement) as well as more formal means (threats, leverage, and physical force)—and whether such informal coercion is itself associated with reduced violence risk. This question is addressed in the present study.

Materials and Methods

Participants

Participants were recruited from and interviewed at ten community drop-in centers located in urban and suburban communities in and around Philadelphia, Pennsylvania. In total, 212 participants were interviewed for the study. Although participants were recruited from all ten of the drop-in centers, the majority of participants came from three sites: Chester City Consumer Center, in Chester (N = 42); A New Life Consumer Center, located in Philadelphia (N = 37); and North Philadelphia (Do Drop-In) Consumer Center, located in Philadelphia (N = 27). The smallest number of participants was recruited from Bryn Mawr Consumer Center in Bryn Mawr (N = 9).

Participants ranged in age from 18 to 50, with a mean age of almost 40 years old. A total of 132 men and 80 women participated in the study. Of the participants who completed both surveys, approximately 36% of the participants self-identified as African American (N = 77) and 22% as Caucasian (N = 47), with Hispanic and “Other” each about 2% (N = 5 for each group). One individual who self-identified as Asian-American participated in the study. Racial/ethnic background information was not available on the 74 participants who only completed one measure. The majority of participants (N = 137, or 65%) reported that they had never been married. Another 34 (16%) reported being divorced, 24 (11%) stated they were separated from their spouse, 15 (7%) reported being married currently, and 2 (1%) stated that they were widowed. Of the participants who completed both measures, 83 (39%) reported having either a high school diploma or a GED, while 34 participants (16%) reported that they had never earned a degree. Another 15 (7%) reported that they had received either their associates degree or a technical degree, and 4 participants (2%) reported that they had received their bachelors degree. This information was only available for the participants who completed both measures. Reported monthly income ranged from \$0 to \$4,000 a month, with a mean of \$728. Most of the participants who completed both measures (N = 88) reported that they had been unemployed for at least the last month. The two primary reasons for unemployment were medical or mental health disability (N=28, or 13%) and “psychiatric problems” (N=20, or 9%). Information regarding income and employment was available only for participants who completed both measures. All participants reported having been hospitalized at least once for either mental health or substance-abuse problems. The number of hospitalizations ranged from 1 to 75, with a mean of almost 7. The majority of participants (N = 156, or 74%) reported that their most recent hospitalization had been voluntary. Of the remainder, 46 participants (22%)

reported that their last hospitalization had been involuntary; 65 participants (31%) indicated that they had been hospitalized involuntarily at least once; and 1 participant declined to provide the legal status of the most recent hospitalization.

All participants completed a survey intended to measure their risk for violence in the community. This risk measure was the clinically useful ICT developed by investigators in the MacArthur study of violence risk (Monahan et al., 2000). Participants who scored as either “low risk” or “high risk” were asked to complete a second survey intended to measure perceived coercion. The coercion measure was the modified AES created for use in a study on mandated community treatment (John Monahan, personal communication, 9/2/03). Of those completing the ICT, 102 (48%) were identified as low risk, 42 (20%) were identified as high risk, and 68 (32%) were unclassified. However, six low-risk and one high-risk participant were either unwilling or unable to complete both measures. Thus, 97 low-risk and 41 high-risk participants completed both the ICT and the AES.

Following approval of this protocol by IRBs for the university and the City of Philadelphia, recruitment of participants was conducted through the use of agency staff, flyers and individual requests. Potential participants were informed about the study. Those willing to participate reviewed the consent form with a research assistant, after which the participant responded to seven questions regarding information in the consent form. Those who were able to correctly answer five of the seven questions were considered sufficiently knowledgeable about the research procedures to provide informed consent to participate.

The drop-in centers, which are community centers that do not offer mental health treatment,¹ were used as data-collection sites. Consumers at the drop-in centers were selected because they might have experienced coercive interactions, either as an inpatient or in the course of mental health treatment in the community. Further opportunities for experiencing coercion involved case management or conditional release.

Selection criteria for research participants included (1) a history of either voluntary or involuntary psychiatric hospitalization for mental health or substance-abuse problems; (2) between the ages of 18 and 50; (3) speaks English; and (4) does not have a legally appointed guardian. Participants younger than 18 were excluded, as violence risk and coercion should be studied separately for adolescents. Participants over the age of 50 were excluded due to the inverse relationship between violence and age, and the decreased probability of violent behavior in older individuals (Monahan et al., 2001). Participants who were too disorganized or whom agency staff did not recommend contacting also were not asked to participate in the study. One participant was excluded from the study halfway through completing the coercion measure because he was too disorganized to complete the process.

¹ However, many of the consumers at these centers have a history of hospitalization for either mental health or substance-abuse treatment. Additionally, most participants were involved in mental health treatment in the community.

Procedure

Participants in the study were contacted once while at one of the drop-in centers. At the initial contact, examiners screened participants to determine their level of risk for violence in the community. To assess level of risk for violence in the community, researchers completed the Iterative Classification Tree (ICT) (Monahan et al., 2000). The definition of “violent” for purposes of the present study is that described by researchers in the MacArthur Risk study as “serious acts of violence”—“battery that resulted in physical injury, sexual assaults, assaultive acts that involved the use of a weapon, or threats made with a weapon in hand” (Monahan et al., 2001, p. 40). Classification of participants as “high risk” or “low risk” was done according to the Clinically Useful ICT (Monahan et al., 2000). Under this model, every participant was asked the same initial question; depending on the response, any of a number of subsequent questions would be asked next. Each participant was assigned a score associated with the incidence of MacArthur participants who were violent within twenty weeks post-discharge. This process was repeated three times, once for each iteration of the Clinically Useful ICT.

The present study used the same two-threshold approach to classification as was used by Monahan and colleagues (2001). For each iteration, any participant assigned a predicted probability of violence greater than twice the base prevalence rate in the MacArthur Risk study (>37%) was considered “high risk,” and any participant whose predicted probability of violence was less than half the baseline prevalence rate (< 9%) of that study was categorized as “low risk.” Participants who fell between these two thresholds were considered “average risk” and were not studied further in this project. Using the Ohlin/Burgess method (Burgess, 1982; Ohlin, 1951), the results of each iteration were scored as follows: -1 for low risk, 0 for average risk, and +1 for high risk. A composite risk score was then calculated for each participant by summing the risk scores from each iteration. Scores on the risk measure could thus range from -3 (if the participant was in the low-risk category on each iteration) to +3 (if the participant was in the high-risk category each time). Monahan and colleagues (2001) reported that 75% of participants who had a score of 1 or more were involved in at least one serious act of violence in the first 20 weeks following discharge from the hospital. They also found that 75% of participants who were not violent had a score of -1 or less. Thus, in the present study, participants who score 1 or more across the three iterations were considered high risk, and participants who score -1 or less were considered low risk.

The twelve independent variables used in this study were as follows: (1) seriousness of prior arrest, (2) motor impulsiveness, (3) father used drugs, (4) recent violent fantasies, (5) major disorder without substance abuse, (6) legal status, (7) schizophrenia, (8) anger reaction, (9) employed, (10) recent violence, (11) loss of consciousness, and (12) parents fought. Data on these variables were gathered from participants’ self-report, as clinical records were not available at the drop-in centers. Seriousness of prior arrests was measured by the patient’s description of arrests since age 15, including whether the charge was a felony or misdemeanor and whether it was a crime against persons or

against property. Motor impulsiveness was measured from the motor sub-scale of the Barratt Impulsiveness Scale (Barratt, 1994). Father used drugs was also measured by self-report. Recent violent fantasies were assessed using the Schedule of Imagined Violence (Grisso, Davis, Vesselinov, Appelbaum, & Monahan, 2000). Major disorder without substance abuse refers to a diagnosis of any major mental disorder without any co-occurring diagnosis of substance abuse. Legal status describes the voluntary versus involuntary nature of the most recent hospitalization, as reported by the individual. Schizophrenia was diagnosed using the DSM-IV Checklist. Anger reaction was measured by a short version of the Behavioral Subscale of the Novaco Anger Scale (Novaco, 1994). Employment status was measured by self-report. Recent violence was obtained through self-report of violence in the two months prior to hospital admission. Loss of consciousness was gauged by any self-reported loss of consciousness due to head injury. Finally, "parents fought" was measured by self-report.

An initial questionnaire was administered as part of the screening interview with the participant. This questionnaire took approximately five minutes to complete. Participants received five dollars for their participation in this part of the study.

Participants who scored either in the high-risk or low-risk range were then administered a modified version of the MacArthur Admission Experience Survey (AES), a measure of perceived coercion created for use in a study on the prevalence of mandated community treatment (Monahan, personal communication, 9/2/03). The AES is a questionnaire containing true-false items similar to the content of the MacArthur Admission Experience Interview (AEI) (Gardner et al., 1993). The AEI is composed of 16 questions that load onto 5 underlying factors (Influence, Control, Choice, Freedom, and Idea), with high internal consistency and yielding a total score that is highly correlated with AEI total score (Gardner et al., 1993).

The AES is intended to measure perceived coercion, considered only from the perspective of the participant. Although using only one source of information to measure coercion can introduce significant error, patients' accounts appear to be better than other sources (Lidz et al., 1997). The modified AES contains six additional scales not contained in the standard version: (1) General Pressure to Adhere to Treatment; (2) Perceived Coercion to Adhere to Treatment (AES), (3) Use of Specific Leverage: Outpatient Commitment, Criminal Justice System, Money, and Housing; (4) Satisfaction with Treatment; and (5) Support for Treatment; and (6) Coercion in Everyday Life. Participants were asked three additional questions for each area of coercion assessed using this modified AES: (1) if they had ever acted violently while subject to a particular form of leverage; (2) about times when the participant could have acted violently but did not, and whether a particular form of leverage was present at those times; and (3) whether coercion in the form of social rejection or isolation, or the threat of either, was associated with seeking treatment.

Research assistants were thoroughly trained in administering both the ICT and the AES. Training was supervised by the first author.

Results

The modified AES involved a series of questions about four different forms of leverage (outpatient commitment, the criminal justice system, money and housing). For each of these four, participants were asked (1) whether they had ever been subject to that form of leverage, (2) if that form of leverage had been used to compel treatment adherence, (3) whether that form of leverage was present the last time they wanted to act violently but did not, (4) if their decision not to act violently was based on the concern that this particular form of leverage would be used, and (5) whether they had ever acted violently in the presence of that form of leverage. The two groups did not differ significantly in the number of different forms of leverage to which they reported being subjected.

Outpatient commitment was the first form of leverage considered (see Table 1). Low-risk and high-risk participants did not differ in their reports of the impact of outpatient commitment on restraint from violence. The majority of both low-risk (76%) and high-risk (69%) participants reported that the last time they wanted to act violently but did not, they had not been subject to an outpatient commitment order ($\chi^2(1) = .20, p = .46$). More low-risk participants (63%) than high-risk subjects (40%) reported that their decision to not act violently was based on the fact they were subject to an outpatient commitment (OPC) order, although this difference was not statistically significant ($\chi^2(1) = .63, df = 1, p = .41$). The majority of both low-risk (70%) and high-risk (70%) participants reported that they had never acted violently while on OPC. When considered separately by gender, high-risk and low-risk female participants did not differ significantly in their response to the opinion statement "OPC keeps people from being violent" ($F = .34, p = .57$). By contrast, high-risk male participants disagreed significantly more with this statement than did low-risk male participants ($F = 4.81, p < .05$).

Next, the criminal justice system as violence-relevant leverage was considered (see Table 2). Participants were asked three questions related to their violence and criminal justice histories: (1) "In the past when you have wanted to act violently but chose not to, did you worry that you would be arrested if you acted violently?"; (2) "Was fear of being arrested the reason you chose not to be violent?"; and (3) "In the past have you acted violently, been arrested, but given the choice to seek treatment instead of going to trial?" The majority of both low-risk (80%) and high-risk (85%) participants reported that in the past when they have wanted to act violently but chose not to, they were concerned that the police would arrest them if they acted violently; this difference was not statistically significant ($\chi^2(1) = .45, p = .34$). A significantly greater proportion of high-risk participants reported that they had acted violently, and were given a chance to seek treatment rather than go to trial ($\chi^2(1) = 4.28, p < .05$). Considered separately by gender, high-risk and low-risk participants differed significantly in their responses for both men ($F = 6.70, p < .05$) and women ($F = 6.70, p < .05$) on the question of whether the criminal justice system is useful in managing violence risk, with the high-risk groups of both genders responding "no" significantly more often.

Table 1
Outpatient Commitment as Leverage in High-Risk (N=41) and Low-Risk (N=97) Participants

ICT-Defined Risk Group	Violence Risk Relevant Outpatient Commitment (OPC) Item (N and % of those responding to item)		Π^2
	Have you ever been on OPC?		
	No	Yes	
Low risk	74 (78.7%)	20 (21.3%)	0.16
High risk	31 (75.6%)	10 (24.4%)	
	Are you currently on OPC?		
	No	Yes	
Low risk	51 (96.2%)	2 (3.8%)	7.55*
High risk	19 (76%)	6 (24%)	
	Have you ever been told that you must keep your mental health appointments because you were subject to an OPC order?		
	No	Yes	
Low risk	5 (22.7%)	17 (77.3%)	0.73
High risk	1 (10%)	9 (90%)	
	In the past when you have wanted to act violently but did not, were you under OPC?		
	No	Yes	
Low risk	22 (75.9%)	7 (24.1%)	0.20
High risk	9 (69.2%)	4 (30.8%)	
	Was your decision to not act violently based on the fact that you were on OPC?		
	No	Yes	
Low risk	3 (37.5%)	5 (62.5%)	0.63
High risk	3 (60%)	1 (40%)	
	OPC helps people stay out of the hospital		
	No	Yes	
Low risk	21 (23.1%)	70 (76.9%)	6.25*
High risk	16 (45.7%)	19 (54.3%)	
	OPC keeps people from being violent		
	No	Yes	
Low risk	25 (28.7%)	62 (71.3%)	8.74**
High risk	21 (56.8%)	16 (43.2%)	

* $p < .05$

** $p < .005$

Table 2
Criminal Justice System as Leverage in High-Risk (N=41) and Low-Risk (N=97) Participants

ICT-Defined Risk Group	Violence Risk Relevant Criminal Justice System Item (N and % of those responding to item)		Π^2
Have you ever been picked up by the police and taken to see the doctor?			
	No	Yes	
Low risk	71 (74.7%)	24 (25.3%)	0.24
High risk	29 (70.7%)	12 (29.3%)	
Did you understand that they were only providing transportation?			
	No	Yes	
Low risk	6 (25%)	18 (75%)	0.00
High risk	3 (20%)	9 (75%)	
Did you think that you would be forced to go into treatment?			
	No	Yes	
Low risk	10 (41.7%)	14 (58.3%)	0.96
High risk	3 (25%)	9 (75%)	
Ever told you could avoid jail by going to treatment in the community?			
	No	Yes	
Low risk	45 (73.8%)	16 (26.2%)	0.40
High risk	23 (67.6%)	11 (32.4%)	
Ever told that charges would be dropped if you got treatment in the community?			
	No	Yes	
Low risk	49 (77.8%)	14 (22.2%)	1.55
High risk	19 (65.5%)	10 (34.5%)	
Ever told you had to get treatment as a condition of probation/parole?			
	No	Yes	
Low risk	24 (64.9%)	13 (35.1%)	0.14
High risk	16 (69.6%)	7 (30.4%)	
When you wanted to act violently but chose not to, did you think you would be arrested if you acted violently?			
	No	Yes	
Low risk	19 (20.5%)	70 (79.5%)	0.45
High risk	6 (15.4%)	33 (84.6%)	
Was your decision to not act violently based on concerns that you would be arrested?			
	No	Yes	
Low risk	36 (43.4%)	47 (56.6%)	0.00
High risk	16 (43.2%)	21 (56.8%)	
Have you ever been violent but given a chance to seek treatment rather than go to trial?			
	No	Yes	
Low risk	65 (82.3%)	14 (17.7%)	4.28*
High risk	24 (64.9%)	13 (35.1%)	

*p < .05

Money was the third form of violence-relevant leverage considered (see Table 3). Participants were asked three questions related to violence and money. The low-risk (67%)

and high risk (70%) participants did not differ in reporting that, when they previously wanted to act violently, they were not concerned that someone would withhold their money ($\chi^2(1) = .04, p = .58$). However, more of the high-risk participants (50%) than low-risk (35%) responded that their decision to refrain from violence was due to fear that some or all of their money would be withheld if they acted violently, although this difference was not statistically significant ($\chi^2(1) = .32, p = .58$). Nor did low-risk (63%) and high-risk (56%) participants differ in their reports that, when they have acted violently, their representative payee has not withheld money ($\chi^2(1) = .18, p = .48$).

Table 3

Money as Leverage in High-Risk (N=41) and Low-Risk (N=97) Participants

ICT-Defined Risk Group	Violence Risk-Relevant Money Item (N and % of those responding to item)		Π^2
	Do you now or have you ever had a representative payee?		
	No	Yes	
Low risk	64 (67.4%)	31 (32.6%)	4.40*
High risk	34 (85.0%)	6 (15.0%)	
	Did your representative payee withhold money unless you agreed to go to mental health treatment?		
	No	Yes	
Low risk	21 (72.4%)	8 (27.6%)	5.13*
High risk	1 (20.0%)	4 (80.0%)	
	In the past when you have wanted to act violently but chose not to, did you think your representative payee would withhold money if you acted violently?		
	No	Yes	
Low risk	5 (22.7%)	17 (77.3%)	0.39
High risk	1 (10%)	9 (90%)	
	Was your decision to not act violently based on concern that your representative payee would not give you your money if you did?		
	No	Yes	
Low risk	13 (65.0%)	7 (35.0%)	0.32
High risk	2 (50.0%)	2 (50.0%)	
	In the past when you have acted violently, has your representative payee withheld money?		
	No	Yes	
Low risk	19 (63.3%)	11 (36.7%)	0.18
High risk	5 (55.6%)	4 (44.4%)	

* $p < .05$

Next, participants were asked to rate a statement related to the use of money as leverage: "One way to keep people from acting violently is to hold back some of their money unless they control their behavior." Participants were asked to rate the statement on a scale from one to five, with one being "strongly agree" and five being "strongly disagree." High-risk participants ($M = 3.76$) expressed significantly greater disagreement

with this statement than their low risk counterparts ($M = 3.05$) ($F = 10.65$, $p < .01$). When considered by gender, low-risk and high-risk women did not differ significantly in their response ($F = 2.44$, $p = .13$). However, high-risk male participants did differ significantly from their low-risk counterparts ($F = 5.26$, $p < .05$).

Next, we considered housing as a form of violence-relevant leverage (see Table 4). Participants were asked a series of questions related to violence and housing. As may be seen, high-risk and low-risk participants did not differ in their responses to any of these questions.

Table 4
Housing as Leverage in High-Risk (N=41) and Low-Risk (N=97) Participants

ICT-Defined Risk Group	Violence Risk-Relevant Housing Item (N and % of those responding to item)		Π^2
	Did you ever live somewhere where you felt that you needed to attend mental health treatment to be allowed to live there?		
	No	Yes	
Low risk	61 (63.5%)	35 (36.5%)	2.59
High risk	20 (48.8%)	21 (51.2%)	
	Did you ever live somewhere where you felt that you would not be allowed if you acted violently?		
	No	Yes	
Low risk	47 (50.5%)	46 (49.5%)	0.36
High risk	17 (44.7%)	21 (55.3%)	
	In the past when you wanted to act violently but chose not to, did you think that someone would take away your housing if you did act violently?		
	No	Yes	
Low risk	42 (47.2%)	47 (52.8%)	0.73
High risk	21 (55.3%)	17 (44.7%)	
	Was your decision to not act violently based on concern that someone would take away your housing if you did?		
	No	Yes	
Low risk	8 (17.0%)	39 (83.0%)	0.20
High risk	2 (11.8%)	15 (88.2%)	
	Have you ever acted violently and been told that you have to find somewhere else to live?		
	No	Yes	
Low risk	55 (62.5%)	33 (37.5%)	2.49
High risk	18 (47.4%)	20 (52.6%)	

* $p < .05$

Approximately half of both low-risk and high-risk participants responding reported that they had lived somewhere where they could not act violently if they wanted to continue living there ($\chi^2(1) = .36$, $p = .34$). Participants also did not differ in their responses to questions about whether violence would result in their losing housing. A greater pro-

portion of high-risk participants (53%) compared with low-risk (37%) stated that they had been asked to leave their home because of violent behavior, but this difference was not significant ($\chi^2(1) = 2.49, p = .08$).

Finally, participants were asked to respond to two statements regarding the effect of using housing as leverage. MANOVA indicated that the two groups did not differ in their responses to the statements “Being told to get help in order to keep your housing helps people stay well” ($F = .89, p = .89$) or “Being told that if you act violently you will lose your housing keeps people from being violent” ($F = .001, p = .97$). It is noteworthy that these opinions related to housing were the only domains in which the two groups overwhelmingly agreed. This agreement remained even when participants were divided by gender. High-risk and low-risk men ($F = .03, p = .88$) and women ($F = .06, p = .81$) did not differ significantly in their responses to the questions.

Discussion

High-risk and low-risk participants differed significantly in their perception of how pressure to adhere to treatment had affected their risk for violence. Low-risk participants tended to report that the pressure placed on them to remain in treatment had been beneficial and had kept them from being violent. By contrast, high-risk participants tended to disagree that the pressure to participate in therapy helped them manage their risk for violence. However, gender was important as well. High-risk women did not differ significantly from their low-risk counterparts. High-risk men, by contrast, strongly disagreed that pressure for treatment involvement helped them to refrain from violence—a noteworthy difference from the responses of low-risk men.

Although the amount of coercion to enter treatment reported by the two groups did not differ significantly, the type of coercion did. Low-risk participants tended to report more positive pressure. Interestingly, however, the present results indicated that the two groups did not differ in the amount of negative pressure they experienced. One potential explanation is that low-risk participants were willing to overlook negative pressure in discussing their treatment. Another possible explanation is that high-risk participants are more sensitive to negative pressure; although they are not subject to a greater amount of actual pressure than low-risk participants, they are more affected by the pressure they experience. This is important because, once the individual engages in violent behavior, that person is likely to be subject to more negative pressure as a result of this conduct.

Considering the reported impact of the four specific forms of coercion (outpatient commitment, criminal justice system, money, and housing) on managing risk for violence in the community, the two groups showed some differences. A greater proportion of low-risk than high-risk participants reported that their decision to refrain from violence was due to being on outpatient commitment. The criminal justice system was reportedly a somewhat better source of leverage for low-risk individuals. A greater proportion of high-risk participants reported that their decision to not act violently was based on the concern that money would be withheld if they acted violently.

Although the two groups did not differ in their responses regarding housing, this domain was the most powerful form of leverage for managing risk for violence in the community. More than 80% of both low-risk and high-risk participants reported that their decision to refrain from violent behavior was based on concern that if they did act violently they would lose their housing. This is particularly relevant in light of research evidence that an individual on disability cannot afford to rent an apartment in any major city in the United States without some form of rent subsidy (Monahan et al., 2001). The present results are consistent with the Monahan et al. findings that an overwhelming majority of mental health consumers would be willing to accept the terms of a mental health rider in their lease if it meant getting the housing they wanted (Monahan et al., 2001). Housing also has significant legal ramifications. Allen (1996) suggested that “bundling” housing and services violates the Americans with Disabilities Act, the Fair Housing Act, and the Rehabilitation Act as well as a number of state landlord-tenant laws. However, mental health consumers are rarely in a position to confront landlords on this point. This is part of the larger societal issue concerning public safety versus individual freedom. When violence is *not* a concern, there is clearly less justification for leveraging housing with mental health consumers.

Consistent with therapeutic jurisprudence (Wexler & Winick, 1991) and prior research (Lidz et al., 1995), the *form* of coercion had the greatest impact on how events were perceived. Learning theory would suggest that positive reinforcement following a behavior (e.g., seeking treatment) will increase the behavior and facilitate new learning, whereas punishment (e.g., involuntary commitment) is likely to suppress behavior and will not facilitate new learning (Bandura, 1997). When high-risk participants play a role in the decision-making process by choosing treatment and are positively reinforced for making that decision, new learning (e.g., learning to manage violence with the skills learned through therapy) is more likely to occur. From a risk-management perspective, a case manager or mental health provider who responds to a high-risk patient's refusal to enter treatment by initiating civil commitment proceedings may actually undermine the process of helping that individual learn to manage violence risk on his or her own—although simultaneously lowering the immediate risk of harm to others by altering that individual's situation.

This study represents an early attempt to consider how coercion might be used to manage risk for violence in the community. Participants' reports suggest that three of the four forms of leverage (outpatient commitment, the criminal justice system, and money) were not seen as very effective in managing risk for violence with high-risk participants. It is, of course, a different question as to whether individuals under such forms of coercive influence actually behave in a way that is less violent. Much evidence (Bloom, Williams, & Bigelow, 1992; Swanson et al., 2001; Swanson, Swartz, Wagner, & Burns, 2000; Wiederanders, Bromley, & Choat, 1997) suggests that they do. But present results suggest that however such coercion “works” in reducing violence risk, it is not perceived as helpful (or perhaps even as risk reducing) by individuals at high risk for violence. This is particularly important in light of research indicating that consumers

who have committed serious acts of violence are much more likely to experience leveraged treatment (Swanson et al., 2006).

Both high-risk and low-risk participants did agree that housing could be used effectively to manage risk for violence. Present findings suggest that housing as leverage, when implemented using positive pressure, is likely to hold promise for risk management. This is consistent with the reframing of the debate from whether coercion is desirable to whether both parties satisfy the conditions of a contract (Bonnie & Monahan, 2005), recognizing that fairness and effectiveness are strongly related in the minds of consumers (Swartz, Wagner, Swanson, & Elbogen, 2004; Van Dorn, Swartz, Elbogen, & Swanson, 2005). Even when the choice is not entirely favorable, its existence makes a difference in how leverage is perceived (Griffin, Steadman, & Petrila, 2002). Having the choice to sign a lease with a violence rider may be viewed by mental health consumers as allowing them a voice in the process. Like mental health riders, a violence rider may be acceptable to consumers if required to obtain the housing they want (Monahan et al., 2001).

Among the most significant findings of the present study are the impact of positive and negative pressure on participants' perceptions of coercion and their risk for violence. Consistent with the findings of previous studies on positive and negative pressure (e.g., Hoge et al., 1993; Hoge et al., 1998; Lidz et al., 1995; Shannon, 1976), positive pressure was associated with an overall positive treatment experience, whereas negative pressure was correlated with treatment dissatisfaction. The type of pressure did not distinguish between reported treatment adherence and reduction in violence risk. However, it is possible that greater treatment satisfaction will promote more likelihood of seeking, continuing, and profiting from treatment in the long run. Since treatment adherence was associated with lower violence risk for *both* low-risk and high-risk participants, positive pressure may serve to promote effective risk management even when the circumstances allow both forms of leverage.

The present study is limited in several respects. The sample size is relatively small, and all participant sites were in the geographic area of one large, east-coast U.S. city. Generalizability may be limited accordingly; future investigations should employ sites from different areas (and use multiple geographic areas whenever possible). The present data were also drawn entirely from the self-report of participants. Although consumer perception is an important consideration, it will be more meaningful when accompanied by multi-sourced accounts of relevant behavior (e.g., treatment adherence, violence). Future research should incorporate both perceptions and behavior whenever possible. This should also be considered in different contexts. The present study was conducted entirely outside the domain of the criminal justice system, where most formal coercion is employed. Consequently, formal or negative coercion could not be treated as a current variable. The design of future studies considering these influences in criminal justice contexts (e.g., specialty courts, parole/probation) will not be limited in this respect. Given the importance of both violence risk management and mental health treatment, it is useful to consider approaches that maximize the impact of both when they are deliv-

ered together. The perceptions of the consumers in this study offer some important clues in how this might be accomplished.

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