Stigma and coercion in the context of outpatient treatment for people with mental illnesses

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ABSTRACT

The policies and institutional practices developed to care for people with mental illnesses have critical relevance to the production of stigma as they can induce it, minimize it or even block it. This manuscript addresses two prominent and competing perspectives on the consequences for stigma of using coercion to insure compliance with outpatient mental health services. The Coercion to Beneficial Treatment perspective (Torrey, E. F., & Zdanowicz, M. (2001). Outpatient commitment: what, why, and for whom. Psychiatric Services, 52(3), 337–341) holds that the judicious use of coercion facilitates treatment engagement, aids in symptom reduction, and, in the long run, reduces stigma. The Coercion to Detrimental Stigma perspective (Pollack, D. A. (2004). Moving from Coercion to Collaboration in Mental Health Services DHHS (SMA) 04-3869. In Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration) claims that coercion increases stigmatization resulting in low self-esteem, a compromised quality of life, and increased symptoms. We examine these differing perspectives in a longitudinal study of 184 people with serious mental illness, 76 of whom were court ordered to outpatient treatment and 108 who were not. They were recruited from treatment facilities in the New York boroughs of the Bronx and Queens. We measure coercion in two ways: by assignment to mandated outpatient treatment and with a measure of self-reported coercion. The longitudinal analysis allows stringent tests of predictions derived from each perspective and finds evidence to support certain aspects of each. Consistent with the Coercion to Beneficial Treatment perspective, we found that improvements in symptoms lead to improvements in social functioning. Also consistent with this perspective, assignment to mandated outpatient treatment is associated with better functioning and, at a trend level, to improvements in quality of life. At the same time the Coercion to Detrimental Stigma perspective is supported by findings showing that self-reported coercion increases felt stigma (perceived devaluation–discrimination), erodes quality of life and through stigma leads to lower self-esteem. Future policy needs not only to find ways to insure that people who need treatment receive it, but to achieve such an outcome in a manner that minimizes circumstances that induce perceptions of coercion.

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The policies and institutional practices we create to address social problems are critical for stigma – they can induce it or they can minimize or even block it. The history of treatment for mental illnesses is particularly interesting in this regard as it is checkered with a lush repertoire of policies and procedures that have varied greatly over time (Grob, 1994). This variation is evident at the macro...
level as institutional systems for the management of people with mental illnesses were changed from almshouses, to asylums, to community based settings. It is also evident at a more micro level in the specific procedures used to manage people within these broad institutional forms. A contentious feature of such policies and procedures has always been the degree of coercion they involve. In this study, we provide the first empirical examination of the connection between coercion and stigma in the context of outpatient commitment.

**Coercion in mental health treatment**

Current law in the United States and in most countries around the world allows involuntary civil commitment to inpatient treatment and often to outpatient treatment as well. Within psychiatric treatment settings, physical and chemical restraints are thought to be necessary practices (Cambell & Schraiber, 1989; Fisher, 1994). Data on the frequency of their use is sparse, but one US study puts the prevalence of physical restraint in psychiatric emergency rooms at 8.5% or about 1 in 12 patients (Currier & Allen, 2000). Perhaps, because of the intense controversy surrounding the use of coercion in psychiatric treatment, several investigators have sought to elaborate the concept of coercion more fully (Bonnie & Monahan, 2005; Lovell, 1996; Monahan et al., 2001; Monahan et al., 2005). Lovell (1996) conceptualizes a continuum of practices varying from, “coercion” in which outright force is deployed, to “coerced voluntarism” in which a person chooses to comply because he/she is threatened with force, to “utilitarian compliance” in which a person chooses to comply because compliance is linked to a desired good (housing, employment, food), to “persuasion” in which a person chooses to comply because he/she is convinced by others that doing so is the best thing to do. Members of the MacArthur Research Network on Mandated Community Treatment have pointed out that there is a growing array of legal tools available to “leverage” people with mental illness to participate in treatment such as the threat of prison or jail, access to housing, or the right to manage one’s money (Monahan et al., 2001). Following these conceptualizations coercion in psychiatric treatment can be conceptualized as a continuum of practices that varies in intensity as one proceeds from outright forms of coercion to more subtle manifestations of social control. In the current analysis, we keep broader notions of coercion in mind but situate our inquiry in the context of the debate over outpatient commitment.

Outpatient commitment is a form of involuntary civil commitment that rests on legal statutes involving the dangerous to self or others criterion, issues of mental competence, the use of a “least restrictive environment,” and the right to refuse treatment. Within this broad framework, 42 states in the United States have laws mandating outpatient commitment for people with mental illness. According to Swartz et al. (2006) there are different types of outpatient commitment in the United States including (1) conditional release from inpatient treatment, (2) diversion from inpatient treatment and (3) so called “preventive outpatient commitment” that is applied to people who are presumed to be non-compliant with treatment and/or dangerous to self or others. Additionally, the laws vary substantially in terms of the civil commitment procedures they involve, the interventions they mandate, and the restrictions they carry when non-compliance occurs (for details see http://www.psychlaws.org/StateActivity/NewYork/GuideKL.htm (The Treatment Advocacy Center, 2005) and http://www.bazelon.org/issues/commitment/moreresources/icochart.pdf (Judge David L Bazelon Center for Mental Health Law, 2000)). While the extent of coercion varies, all of these laws involve some degree of coercion as defined by Lovell (1996). Moreover, the experience of such coercion is relatively common in the United States at the present time. A recent study of psychiatric outpatient service recipients in the United States reported a lifetime prevalence of outpatient commitment that varied from 12 to 20% across the five sites studied (Swartz et al., 2006).

New York State established Assisted Outpatient Treatment (AOT) in 1999 as a mechanism through which court ordered outpatient treatment, including case management services, could be mandated for certain individuals with mental illness and a history of multiple hospitalizations or violence toward self or others. Specific legal criteria are required for an assignment to outpatient commitment including a judgment based on a history of treatment non-compliance that the individual is unlikely to voluntarily adhere to treatment and that the person has a high likelihood of benefiting from mandated treatment (for a description of all of the criteria see http://www.omh.state.ny.us/omhweb/Kendra_web/Ksummary.htm). Petitions for outpatient commitment are most commonly initiated by treatment providers seeking to create a structure that bridges services available in the hospital with those in the community. In New York, treatment adherence can be enforced under AOT by the sheriff’s department but in practice non-adherence alone does not justify a sheriff’s pickup. The general idea of the New York legislation is to allow civil outpatient commitment while at the same time funneling financial resources to beneficial treatments. Because the treatment is court mandated some degree of objective coercion is involved. At the same time it remains unclear whether this objective coercion will be perceived as coercive by individuals assigned to outpatient commitment under New York State Law.

**Stigma theory in relation to coercion**

Link and Phelan (2001) indicate that stigma is present “when elements of labeling, stereotyping, separation, status loss and discrimination occur together in a power situation that allows them” (p. 377). This definition is potentially useful for understanding how coercion and stigma might be linked, as coercion involves the exercise of power in placing labeled individuals in separate circumstances and treating them differently. We employ two stigma-related theories, the concept of “secondary deviance” (Lemert, 1967) and “modified labeling theory” (Link, Struening, Cullen, Shroot, & Dohrenwend, 1989), to elucidate these plausible linkages.

The concept of secondary deviance asks us to consider whether and to what extent responses to behaviors that are initially viewed as problematic generate additional,
secondary, differentness that further set the person apart from the mainstream (Lemert, 1967). Thus, to the extent that institutional policies and practices aimed at controlling one set of behaviors disadvantage people with respect to the capacity to work productively, obtain housing, socialize with others and generally function effectively, new elements of differentness are created. If coercive policies and practices backfire by setting people apart in circumstances where opportunities are meager and social networks constrained, one might hypothesize that quality of life and the capacity to function would be compromised. To the extent that this occurs, stigma is deepened as the person’s isolation from mainstream life leads him/her to be different in still other ways.

Modified labeling theory asserts that people learn the social meaning of entering a mental hospital as a part of socialization. Typically, people develop generally negative conceptions about how most people view people with mental illness, whether seeing them as incompetent, untrustworthy or dangerous or believing that people would not want to hire, date, marry, or live in the same neighborhood as someone who has been hospitalized for mental illness. For someone who never develops a mental illness these beliefs are innocuous because they are not self-relevant. But for someone who enters a mental hospital these beliefs are potentially personally relevant as the person must now wonder whether people will devalue and discriminate against him/her. This could be depressing in its own right, or fearing rejection, a person may choose to withdraw or hide as a means of self-protection thereby cutting off opportunities in terms of forming and maintaining relationships, procuring jobs or remaining engaged in helpful treatments. To test modified labeling theory, Link (1987) developed a measure focused on whether people believe that “most people” devalue and discriminate against a person who has been hospitalized for mental illness and called this key construct “perceived devaluation–discrimination.” Subsequent research has shown that scoring high on this measure is associated with unemployment, income loss, demoralization, depressive symptoms, low self-esteem, and delayed treatment seeking in people labeled by hospital treatment (Link, 1987; Link et al., 1989; Rosenfield, 1997; Sirey, Bruce, Alexopoulos, Perllick, Friedman, et al., 2001; Sirey, Bruce, Alexopoulos, Perllick, Raue, et al., 2001; Wright, Gronfein, & Owens, 2000). Given the measure’s track record in predicting important outcomes, the current research examines whether, and to what extent, experienced coercion in treatment influences the modified labeling theory construct of perceived devaluation–discrimination.

Competing perspectives on coercion and stigma in outpatient treatment

These stigma-related theories predict that coercive policies or institutional practices will trigger stigmatization thereby generating harmful outcomes for people with mental illnesses. As such, they are a fundamental aspect of the controversy over the use of coercion in psychiatric treatment in general and in outpatient commitment in particular. However, in the outpatient commitment controversy, distinct and divergent perspectives concerning coercion can be identified. In fact, the dominant perspective is that coercion, when deployed judiciously, can lead to beneficial consequences for patients, for their families and for society in general.

The Coercion to Beneficial Treatment perspective

One of the strongest and most direct articulations of this perspective is provided by psychiatrist E. Fuller Torrey and attorney Mary Zdanowicz who argue that coercion is needed in mental health systems because “many individuals with severe psychiatric illness lack awareness of their illness” (Torrey & Zdanowicz, 2001, p. 337). This lack of insight, the argument goes, stems from biologically based cognitive impairments that are common in severe mental illnesses such as schizophrenia and bipolar disorder (Torrey & Zdanowicz, 2001). As such, some people with these disorders avoid treatment and medication thereby creating a circumstance that “may have many unfortunate consequences for those with severe psychiatric disorders, including homelessness, incarceration, violence and suicide” (Torrey & Zdanowicz, 2001, p. 338). Outpatient commitment and other forms of coercion respond to this set of circumstances to insure that people who need treatment receive it. When treatment is accessed the benefits of treatment become evident, symptoms are reduced, social functioning is improved and quality of life is enhanced.

Previous research on outpatient commitment has objectively evaluated the Coercion to Beneficial Treatment perspective, assessing instances in which its central tenants seem apt as well as examining potential difficulties with the perspective. There is evidence to support this perspective including that outpatient commitment may decrease hospital readmission rates (Swartz et al., 1999), criminal arrests (Swanson et al., 2001), community violence (Swanson et al., 2000) and facilitate adherence with treatment (Swartz, Swanson, Wagner, Burns, & Hiday, 2001). However, evaluations have also shown that substantial numbers of people assigned to outpatient commitment doubt its efficacy and question its fairness (Swartz, Swanson, & Hanson, 2003; Swartz, Wagner, Swanson, & Elbogen, 2004). Additionally, although Swanson et al. demonstrated an indirect positive effect of outpatient commitment on quality of life through treatment adherence and reduced symptoms (an effect consistent with a Coercion to Beneficial Treatment perspective), they also found a weaker indirect negative effect on quality of life through perceived coercion (Swanson, Swartz, Elbogen, Wagner, & Burns, 2003). Compared to findings on the major outcomes mentioned above (readmission, arrest, violence and treatment adherence), these subjective and indirect effects might be considered less compelling leading to the conclusion that past literature on outpatient commitment has generally supported the Coercion to Beneficial Treatment perspective.

The role of stigma in the Coercion to Beneficial Treatment perspective is secondary. Stigma is viewed as a consequence of psychiatric deterioration – symptoms impair social functioning, break social rules and sometimes lead to violent behaviors, thereby inducing strong reactions of disapproval. It follows that to the extent that treatment can curtail symptoms, experiences of stigma should also
wane. As Torrey and Zdanowicz (2001) put it, “... outpatient commitment and other forms of assisted treatment should ultimately decrease stigma related to mental illness” (p. 340). In sum, access to treatment – even through coercion – will have a broad range of benefits including an enhanced quality of life, better social functioning and a reduction of felt stigma. In the Coercion to Beneficial Treatment perspective, the symptoms of the illness are the major driver of subsequent outcomes for people with mental illnesses. Consequently, the exercise of coercion to insure treatment adherence induces a broad range of benefits including reduced stigma.

Coercion to Detrimental Stigma perspective

In the Coercion to Detrimental Stigma perspective, the exercise of coercion has pernicious consequences that can arise through stigma processes associated with secondary deviance and/or modified labeling theory. To the extent that such processes operate, one might expect coercion to erode quality of life, impair social functioning and compromise chances for recovery. Elements of these ideas are strongly endorsed by the National Mental Health Association, which discourages all forms of coercion in psychiatric treatment and explicitly opposes outpatient commitment (Pollack, 2004). The NMHA policy on involuntary mental health treatment indicates “services can only be effective when the consumer embraces it, not when it is coercive or involuntary” (Pollack, 2004). With respect to outpatient commitment, the NMHA is concerned that the coercion involved might “interfere with recovery by compromising personal responsibility and lowering self-esteem” (Pollack, 2004). Consistent with the position of NMHA, secondary deviance theory holds that the exercise of coercion backfires with respect to treatment goals by placing people in circumstances that are so detrimental as to further set them apart from the mainstream in terms of attributes such as personal responsibility and self-esteem. Additionally, the exercise of coercion might be expected to intensify the belief that one has entered a social status that is widely viewed in negative terms and thereby induce processes associated with modified labeling theory. Thus, the Coercion to Detrimental Stigma perspective identifies stigma-related processes as the key drivers of subsequent outcomes.

The current study

The current research presents an unusual opportunity to address the divergent claims of these two perspectives using a year-long, five-wave longitudinal study of 76 people who were assigned to outpatient commitment and 108 individuals from the same treatment settings who were not. In order to investigate the Coercion to Beneficial Treatment perspective, we ask: is the coerced treatment delivered in the context of outpatient commitment associated with reduced symptoms and improved social functioning? We then ask: do perceptions of stigma follow suit, declining as symptoms decline? Finally, does the decline in symptoms lead to improvements in quality of life and enhanced social functioning? In order to test the Coercion to Stigma perspective, we first ask whether the experience of coercion is strongly related to subsequent perceptions of devaluation–discrimination as modified labeling theory suggests. Additionally, we determine whether the experience of coercion erodes quality of life and impairs social functioning in a manner that is consistent with a secondary deviance approach. Finally, we ask whether the stigma-related measure of perceived devaluation–discrimination has negative consequences for people’s self-esteem.

Methods

Sample

One hundred and eighty four individuals between the ages of 18 and 65 were ascertained in treatment facilities in the New York City boroughs of the Bronx and Queens. We sought interviews and reviewed the clinic charts of individuals assigned to outpatient commitment (N = 76) and a comparison group (N = 108) of outpatients from the same clinics who had experienced a psychiatric hospitalization in the 3 months before we contacted them. In accordance with Institutional Review Board specifications, all respondents were screened by a psychiatrist or PhD psychologist, unaffiliated with this study, for capacity to provide informed consent. Individuals judged to have such capacity and who agreed to participate were enrolled in the study and compensated for their time. Interviewers were extensively trained and monitored for adherence to study procedures. All had a minimum of a Masters degree in psychology or social work and all had previous experience interviewing people with severe mental illnesses. Chart diagnoses assigned to study participants were schizophrenia 40.1% (40.3% AOT, 40.0% Comparison group), schizoaffective 32.2% (41.7% AOT, 25.7% Comparison group), major depressive disorder 7.3% (1.4% AOT, 11.4% Comparison group), bipolar 18.6% (15.3% AOT, 21.0% Comparison group) and other 1.7% (1.4% AOT, 1.9% Comparison group). The average age of respondents was 37.0 years (35.8 years AOT, 37.8 Comparison group), most were male 60.3% (68.4% AOT, 54.6% Comparison group), and most were from racial/ethnic minority groups: black 53.3% (59.2% AOT, 49.1% Comparison group), Hispanic 28.8% (23.7% AOT, 32.4% Comparison group). The majority of both AOT (77.3%) and Comparison group (65.7%) respondents were unmarried and had completed high school (56.6% AOT, 63.0% Comparison group). Power to detect a 5% increase in explained variance in multiple regression (Cohen, 1988) is 0.88 with alpha set at 0.05 (two tailed).

Measures

Most measures use multiple-item scales and for those containing positively and negatively worded statements each item is scored so that a high score on the item reflects a high score on the construct being measured. For each scale we sum the scores for each item and divide by the total number of items in the scale. More complete descriptions of all the measures are available by writing to the corresponding author.

One measure of coercion is court mandated outpatient treatment through New York State’s AOT program.
A second measure is a version of the MacArthur Perceived Coercion scale (alpha = 0.86) that was initially developed to assess of involuntary inpatient commitment (Gardner et al., 1993) and later revised for use in studies of outpatient commitment (Swartz, Wagner, Swanson, Hiday, & Burns, 2002; Van Dorn, Swartz, Elbogen, & Swanson, 2005). The scale assesses whether respondents felt free to choose to be in outpatient treatment. Example items are: “It was your idea to get mental health treatment” and “You had more influence than anyone else on whether you got treatment.” Response options are strongly agree (0), agree (1), disagree (2) and strongly disagree (3). The scale likely assesses a broader concept of coercion than might apply to outpatient treatment alone as it shows a substantial association ($r = 0.331, p < 0.001$) with a measure of the number of previous involuntary inpatient hospitalizations.

One measure of stigma is employed and is assessed using an 8-item version of Link’s (1987) Perceived Devaluation–Discrimination Scale ($alpha = 0.74$). The measure asks whether respondents strongly agree (0), agree (1), disagree (2) or strongly disagree (3) with statements indicating that most people devalue or discriminate against current or former psychiatric patients. Example items are “Most people think less of a person after he/she has been hospitalized for a mental illness” and “Most employers will not hire a person who has been hospitalized for mental illness.” Construct validity exists in the form of predicted associations between scale scores and earnings, employment, demoralization, social network ties, self-esteem, and treatment seeking.

Psychotic Symptoms occurring in the past 3 months are assessed using the clinician administered Structured Clinical Interview for DSM (SCID) (First & Gibbon, 2004). From this assessment we created a scale ($alpha = 0.62$) by summing variables measuring the presence or absence of key symptoms (persecutory delusions, delusions of control, though broadcasting and grandiose delusions). We not only highlight the SCID scale in subsequent analyses, but also developed a fixed format self-report symptom scale focused on symptoms with violent content. We did so because declines in symptoms such as these might be particularly important for an assessment of the effectiveness of outpatient commitment given that one of the goals of outpatient commitment is to curb violent behaviors (Link, Monahan, Stueve, & Cullen, 1999). The 10-item scale ($alpha = 0.95$) of threat/control over-ride symptoms (TCO) incorporates but expands upon previous measures used to study the connection between mental illnesses and violent behaviors. Example items in the new measure are “How often did voices tell you to hurt another person?” and “How often did special powers take over your mind and force you to hurt someone?” Response categories are very often (4), fairly often (3), sometimes (2), almost never (1) and never (0). TCO scale correlates highly with the SCID-based scale ($r = 0.490, p < 0.000$) and if the TCO scale is substituted for SCID scale it generates the same key findings in subsequent analyses.

Quality of life ($alpha = 0.91$) is a 14-item self-report scale that is similar in domains of content to Lehman’s more comprehensive scale (Lehman, 1988). The items ask respondents to rate as poor (1), fair (2), good (3) or excellent (4) multiple domains of life such as living conditions, employment, social life, physical health, level of independence, and self-esteem.

Illness-related social functioning (Swartz, Swanson, & Hannon, 2003) ($alpha = 0.80$) is a 7-item scale that asks respondents how difficult it was to complete tasks such as “make routine decisions,” “control the symptoms of your illness,” “deal with day to day stresses” and “concentrate long enough to complete tasks.” Response categories are not difficult (0), somewhat difficult (1), and very difficult (2).

Self-esteem is measured using a version of Rosenberg’s scale ($alpha = 0.81$) (Rosenberg & Pearlin, 1962). Study participants are asked at baseline and 12 months only whether they strongly agree (0), agree (1), disagree (2) and strongly disagree (3) with 10 statements such as “At times you think you are no good at all” and “I feel I have a number of good qualities.”

The number of involuntary hospitalizations is assessed by asking how many times the study participant has been hospitalized against his/her will. Because the resulting frequency distribution is skewed we add one to the number of involuntary commitments and then take the natural log of the sum to create a metric that varies from 0 to 2.77.

In addition to data obtained from interviews, we reviewed clinic charts to obtain the treating clinician’s: (1) assessment of whether the respondent had ever caused bodily harm to another person (1 ever, 0 never), (2) whether a suicide attempt had taken place (1 ever, 0 never), and (3) a rating of the likelihood (low, medium, or high) that the participant might be dangerous in the future. Finally, interviewers were trained to make specific ratings based on all available information from the interview and the clinical charts. One of these ratings assessed the likelihood (low, moderate, high) that the study participant would be “non-compliant with remediation.”

Follow-up

Extensive effort was undertaken to maintain contact with study participants. We obtained names of family, friends, landlords, and treatment staff who were likely to know the whereabouts of study participants. Further, we selected experienced interviewers, trained them to develop rapport with study participants, provided monetary incentives for each interview completed, and generally did all we could to maintain contact with the study sample. Follow-up rates were 84.3, 66.1, 62.4, 73.9% for 3, 6, 9 and 12 months, respectively.

In order to assess the possible impact of loss to follow-up on our analyses we used baseline data to compare individuals we successfully interviewed at 12 months ($N = 133$) to those we did not ($N = 51$). We found those interviewed at 12 months were significantly older (38.3 years) than those lost to follow-up (33.2 years) ($p < 0.006$). Persons lost to follow-up were also significantly more likely to be male ($p < 0.006$) and to have never married ($p < 0.02$). Otherwise, persons interviewed did not differ in race, diagnosis, educational level, or mean number of weeks unemployed in the past year from those lost to follow-up.
**Analytic strategy**

**Step 1**
In this step, our intent is to determine whether basic descriptive facts from baseline data are consistent with the Coercion to Beneficial Treatment and the Coercion to Stigma perspectives.

**Step 2**
The critical issue separating the two perspectives is whether coercion brings treatment that addresses symptoms and reduces perceptions of devaluation–discrimination, improves quality of life and enhances social functioning or whether coercion backfires and increases perceptions of devaluation–discrimination, compromises quality of life and impairs social functioning. But both perspectives could be incorrect if some unmeasured, uncontrolled variable or set of variables is responsible for observed associations between symptoms, coercion, devaluation–discrimination, quality of life and social functioning. For example, it is possible that stable personality traits (e.g. conscientiousness, emotional stability, openness), exposure to childhood trauma or some other variable(s) could underlie observed associations. Although our observational design does not allow a sure-fire method for addressing these concerns, fixed effect regression models are a means of controlling for confounding variables that are stable across time. Fixed effect models remove between-person variance from consideration leaving only within-person variance. By removing the between-person variance, the effects of stable determinants of individual differences are effectively controlled (Allison, 2005). One tests hypotheses on the remaining within-person variance, which in our instance consists of within-person changes in the key variables of interest in the follow-up period.

**Step 3**
The fixed effect approach described above does not allow us to examine the effects of AOT assignment on stigma because this assignment is stable across the time period being investigated. As a result, in the third step of our analysis we further examine associations that survive the challenge of the fixed effect analysis using generalized estimating equations. This approach is specifically designed to address the problem of correlated error between non-independent observations that exist in panel data. In addition, this analysis will allow us to assess the direction of the effects between variables. In order to implement such tests we control for the baseline value of a dependent variable and then examine the effects of a predictor variable on lagged values of the dependent variable. For example, to examine the effect of the Perceived Coercion Scale on stigma (perceived devaluation–discrimination), we control for baseline values of perceived devaluation–discrimination and assess the effect of the baseline Perceived Coercion Scale on month 3, 6, 9 and 12 perceived devaluation–discrimination. In order to examine the effect of perceived devaluation–discrimination on the Perceived Coercion Scale, we reverse the process by controlling for baseline coercion and examining the effect of baseline perceived devaluation–discrimination on 3, 6, 9, and 12-month coercion.

**Step 4**
In this step we test whether, once induced, perceived devaluation–discrimination affects self-esteem and simultaneously whether self-esteem drives perceived devaluation–discrimination.

**Results**

**Step 1. Descriptive analyses**

Recall that according to the Coercion to Beneficial Treatment perspective some people in mental health treatment deny having mental illness and avoid treatment. When this happens people experience multiple involuntary commitments, engage in violent or threatening behavior, and otherwise fail to take adequate care of their own basic needs. It follows that we should find people in our sample who fit this profile and that we should find more of them in the AOT group.

Consistent with this perspective the AOT group is more likely than the outpatient group to score below the midpoint on the 4-item insight scale (37.3% AOT, 21.5% Comparison group, p < 0.05). Further the group assigned to AOT was rated as substantially more likely to pose a moderate to high risk for non-compliance with remediation (90.9% AOT, 66.7% Comparison group, p < 0.001) and also showed a much greater propensity to experience three or more involuntary hospitalizations (50.0% AOT, 25.9% Comparison group, p < 0.001). Clinic charts indicate that a substantial minority of study participants had a history of causing bodily harm and were rated as likely to pose a risk of dangerousness in the future (38.9% AOT, 21.9% Comparison group, p < 0.05). Additionally, while there was no evidence to indicate that the AOT group had a substantially higher rate of suicide attempts than the outpatient group approximately a third of each group reports having attempted suicide (33.3% AOT, 29.5% Comparison group). According to the Coercion to Beneficial Treatment perspective, the way to address this state of affairs is to treat the symptoms of the illness. Evidence from our sample indicates that psychotic symptoms measured by the SCID did not decline significantly over the 12-month period of observation. However, the TCO psychotic symptoms that involve psychotic content do decline significantly over the 12-month period of observation. The critical issue separating the two perspectives is whether self-esteem drives perceived devaluation–discrimination because this assignment is stable across the time period being investigated. As a result, in the third step of our analysis we further examine associations that survive this profile and that we should find more of them in the AOT group.
treatment” (29.0%), “it was your idea to get mental health treatment” (46.4%), “you had a lot of control over whether you got outpatient mental health treatment” (47.0%), “you had more influence than anyone else on whether you got outpatient mental health treatment” (48.9%).

A central prediction of the Coercion to Stigma perspective is that assignment to mandated outpatient treatment should increase reports of coercion. Interestingly, the group mandated to outpatient treatment has not significantly higher in coercion than the outpatient group (AOT mean = 1.45, Comparison group mean = 1.33, t1, 181 = −1.16, n.s.). On the other hand, a history of multiple involuntariness and exploit the full five waves of data available to us.

The Coercion to Stigma perspective also predicts that coercion will be related to negative outcomes. In this regard, we find no significant associations between AOT assignment and either devaluation–discrimination (stigma) or quality of life at baseline. However, results using the Perceived Coercion scale indicate that the more coercion experienced, the greater the devaluation–discrimination (r = 0.331, p < 0.001). Thus, the perception of coercion appears to be driven by a history of coercion and not strongly shaped by the single experience of assignment to mandated outpatient treatment.

The Coercion to Stigma perspective also predicts that coercion to beneficial treatment and the Coercion to Stigma hypotheses. This helps us understand why the proponents of each perspective might come to believe that their view is correct. But we do not know the causal processes that produced these descriptive facts as it is entirely possible that factors associated with only one perspective predominated in creating these descriptive patterns. To generate some insight into the processes that may have produced these findings we turn to the longitudinal data and exploit the full five waves of data available to us.

Step 2. Fixed effect analyses

Can associations between key constructs be explained by confounding variables whose effects are constant across time?

Table 1 shows fixed effect regression analyses that assess whether coercion and psychotic symptoms, the key variables in the Coercion to Beneficial Treatment and the Coercion to Stigma perspectives are related to perceived devaluation–discrimination, quality of life and social functioning independent of the effects of one another and of stable confounders. Results congenial to the Coercion to Beneficial Treatment perspective would show strong associations between SCID-based psychotic symptoms and each of the putative outcome measures. As Table 2 shows there is no evidence of a connection between changes in psychotic symptoms and changes in perceived devaluation–discrimination. However, there are connections between psychotic symptoms and both quality of life and social functioning such that the greater the frequency of symptoms the worse the quality of life and social functioning.

Results supportive of the Coercion to Stigma perspective would show strong associations between coercion and the three outcome variables. We find significant associations in the expected direction between the Perceived Coercion Scale and devaluation–discrimination, quality of life and social functioning suggesting that as coercion increases perceived devaluation–discrimination rises whereas quality of life and social functioning decline. The importance of these findings is in showing that connections between key variables of interest are unlikely to be due to the effects of stable confounders.

Table 2 shows equations that test whether coercion predicts forward to perceived devaluation–discrimination, quality of life and social functioning (as in the Coercion to Stigma perspective) and/or whether psychotic symptoms predict these variables (as in the Coercion to Beneficial Treatment perspective). The Table also shows whether assignment to mandated outpatient treatment helps, harms or has no consequences for individuals assigned to it over this one-year period of observation. As the Table shows, baseline values of the Perceived Coercion Scale have no significant association with social functioning but do predict subsequent perceived devaluation–discrimination and quality of life. Assignment to outpatient commitment has no significant effect on changes in perceived devaluation–discrimination, but is marginally related to improvements in quality of life and significantly related to improvements in social functioning. Finally, psychotic symptoms do not predict forward to perceived devaluation–discrimination or quality of life but do appear to drive illness-related social functioning such that the more symptoms one experiences the worse subsequent functioning is likely to be. In general, the control variables of age, sex, education, race/ethnicity, marital status and psychiatric diagnosis are not independently associated with changes in perceived devaluation–discrimination, quality of life or social functioning. Exceptions are that females and people with higher education were significantly more likely to experience improved social functioning. An examination of possible moderation of the significant effects in Table 2 by gender, race/ethnicity, education or diagnosis revealed only 2 of 32 significant interactions. These were between AOT and a diagnosis of major depression on quality of life and between sex and psychotic symptoms on social functioning. As these were only two of many interaction terms tested and therefore possibly due to chance we do not emphasize them but instead conclude
that in general there was very little evidence that the significant effects shown in Table 2 were modified by gender, race/ethnicity, education or diagnosis.

Table 3 examines the issue of reverse causation and shows a significant association between baseline social functioning and subsequent SCID-based psychotic symptoms. As there is also an effect from symptoms to functioning (Table 2), the evidence is consistent with the possibility of mutual causal influence between symptoms and functioning. However, there is far less evidence for such mutual influence with respect to perceived coercion. Baseline values of quality of life are marginally \((p < 0.10)\) related to lagged values of perceived coercion but baseline values of perceived devaluation–discrimination and social functioning have no bearing on subsequent perceptions of coercion. Thus, the major portion of the influence appears to go from coercion to perceived devaluation–discrimination and quality of life rather than the other way around.

**Step 4. Evidence concerning the effect of perceived devaluation–discrimination on self-esteem**

Table 4 shows results pertaining to whether perceived devaluation–discrimination predicts subsequent reductions in self-esteem. As Eq. (1) shows the greater the perceived devaluation–discrimination at baseline the worse the self-esteem at the 12-month follow-up even with control for baseline self-esteem and other baseline characteristics. Eq. (2) tests whether reverse causation is present and finds that self-esteem has no appreciable effect on subsequent perceived devaluation–discrimination.

**Discussion**

At the outset of this paper, we drew attention to the possible relevance for stigma of a relatively new set of policies that employ outpatient commitment to induce people with severe mental illnesses to adhere to prescribed treatment regimens. One perspective argues that some coercion is necessary to engage individuals in treatment, but also the best way to block stigma and improve quality of life in the long run. Another perspective asserts that coercion is destructive to treatment goals and that when coercion is deployed its consequences can be expected to be uniformly negative for stigma, quality of life, and the ability to function in important social roles.

Descriptive results (Step 1) reveal patterns of associations that provide some support for each perspective. These

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**Table 2**

Coefficients (standard errors) from generalized estimating equations (GEE) to assess the effect of outpatient commitment, coercion, and SCID-based psychotic symptoms on stigma (perceived devaluation–discrimination), quality of life, and social functioning

<table>
<thead>
<tr>
<th>Baseline value of dependent variable</th>
<th>Stigma – devaluation–discrimination</th>
<th>Quality of life</th>
<th>Illness-related social functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline value of dependent variable</td>
<td>0.390*** (0.054)</td>
<td>0.558*** (0.045)</td>
<td>0.445*** (0.053)</td>
</tr>
<tr>
<td>Outpatient commitment AOT</td>
<td>0.008 (0.040)</td>
<td>0.101* (0.057)</td>
<td>0.116* (0.044)</td>
</tr>
<tr>
<td>Baseline perceived coercion</td>
<td>0.087** (0.031)</td>
<td>−0.152*** (0.045)</td>
<td>−0.016 (0.036)</td>
</tr>
<tr>
<td>Baseline Psychotic symptoms (SCID-based)</td>
<td>0.010 (0.019)</td>
<td>−0.007 (0.036)</td>
<td>−0.054* (0.022)</td>
</tr>
<tr>
<td>N of respondents</td>
<td>161</td>
<td>162</td>
<td>161</td>
</tr>
<tr>
<td>N of observations</td>
<td>461</td>
<td>472</td>
<td>461</td>
</tr>
</tbody>
</table>

\(^{p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.}\)

\(^{a}Coefficients adjusted for age, sex, education, race/ethnicity, marital status and psychiatric diagnosis.\)

\(^{b}Lagged values are assessments at \(T_5, T_6, T_9,\) and \(T_{12}.\)\)

---

**Table 3**

Coefficients (standard error) from generalized estimating equations (GEE) to assess the effect of stigma (perceived devaluation–discrimination), quality of life and social functioning on lagged values of coercion and SCID-based psychotic symptoms

<table>
<thead>
<tr>
<th>Baseline perceived coercion scale (^{b})</th>
<th>Lagged values of perceived coercion scale (^{b})</th>
<th>Baseline psychotic symptoms (SCID-based) (^{b})</th>
<th>Lagged values of psychotic symptoms (SCID-based) (^{b})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Baseline perceived coercion scale</td>
<td>0.323***</td>
<td>0.305***</td>
<td>0.357***</td>
</tr>
<tr>
<td></td>
<td>(0.049)</td>
<td>(0.048)</td>
<td>(0.047)</td>
</tr>
<tr>
<td>Baseline psychotic symptoms (SCID-based)</td>
<td>−0.015</td>
<td>−0.019</td>
<td>−0.007</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.029)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Outpatient commitment AOT</td>
<td>−0.035</td>
<td>−0.019</td>
<td>−0.026</td>
</tr>
<tr>
<td></td>
<td>(0.063)</td>
<td>(0.061)</td>
<td>(0.064)</td>
</tr>
<tr>
<td>Baseline quality of life</td>
<td>0.095</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>(0.085)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline illness-related social functioning</td>
<td>−</td>
<td>0.063</td>
<td>−0.095</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.049)</td>
<td>(0.049)</td>
</tr>
<tr>
<td>N of subjects</td>
<td>161</td>
<td>164</td>
<td>163</td>
</tr>
<tr>
<td>N of observations</td>
<td>464</td>
<td>478</td>
<td>473</td>
</tr>
</tbody>
</table>

\(^{p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.}\)

\(^{a}Coefficients adjusted for age, sex, education, race/ethnicity, marital status and psychiatric diagnosis.\)

\(^{b}Lagged values are assessments at \(T_5, T_6, T_9,\) and \(T_{12}.\)\)
descriptive results tell us that proponents of each perspective can find support for the position they hold in cross-sectional data at a fixed point in time. Moreover, by using these descriptive findings each perspective can infer that the issues focused on by the other perspective are the byproduct of the processes that their perspective deems to be central. The significance of our study is that it allows us to probe further into these competing perspectives by using measures of core constructs in a longitudinal design. How did these two competing perspectives fare in the expanded testing our study provided?

### Evidence from the current research concerning the Coercion to Stigma perspective

The Coercion to Stigma perspective is supported by the confluence of four findings. First, psychotic symptoms involving violent content (TCO) declined substantially over the 12-month period for both the AOT and the Comparison group. While this decline cannot be attributed with certainty to treatment as the symptoms may have declined even in the absence of treatment, the evidence is inconsistent with assertions that AOT might be so resoundingly noxious as to sustain or even exacerbate symptoms. Second, fixed effects analyses that control for stable confounders (Step 2) provide stringent tests that might have but did not decrease our confidence in symptoms (as measured by the SCID or TCO) as possible causes of putative outcome variables. Moreover, analysis using generalized estimating equations (Step 3) showed a substantial effect from baseline SCID symptoms to subsequent functioning. These results underscore the importance of addressing symptoms not only because they are important in their own right but because they appear to drive at least one outcome (functioning) that is important to the well-being of people with mental illness. Third, being mandated to AOT is associated with improvements in social functioning and (marginally) with improved quality of life. Fourth, although outpatient commitment involves some degree of objective coercion this objective coercion did not lead AOT recipients to perceive more coercion than people involved in outpatient treatment but not in AOT.

While the findings just reported cohere with past literature evaluating outpatient commitment they also suggest limits on the explanatory power of the Coercion to Beneficial Treatment perspective. Findings in Tables 3 and 4 provide no evidence whatsoever to indicate that SCID-assessed psychotic symptoms strongly determine stigma (perceived devaluation–discrimination), quality of life or perceptions of coercion during the one-year follow-up. The idea that stigma, quality of life and/or perceptions of coercion can be addressed solely by reducing symptoms is not supported in this analysis. Furthermore, perceived coercion has harmful effects, increasing perceived devaluation–discrimination and decreasing quality of life.

### Limitations

We address three limitations that need to be considered in interpreting these findings. First, the results are based on

### Table 4

Coefficients (standard errors) from generalized estimating equations assessing the effect of stigma (perceived devaluation–discrimination) on lagged values of self-esteem and the effect of self-esteem on lagged values of devaluation–discrimination.

<table>
<thead>
<tr>
<th></th>
<th>Eq. 1 Lagged values of self-esteem&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Eq. 2 Lagged values of stigma (perceived devaluation–discrimination)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline self-esteem</td>
<td>0.251** (0.081)</td>
<td>–0.064 (0.087)</td>
</tr>
<tr>
<td>Baseline stigma (perceived devaluation–discrimination)</td>
<td>–0.199* (0.086)</td>
<td>0.352*** (0.085)</td>
</tr>
<tr>
<td>Baseline psychotic symptoms (SCID-based)</td>
<td>0.025 (0.032)</td>
<td>0.033 (0.031)</td>
</tr>
<tr>
<td>AOT</td>
<td>0.006 (0.063)</td>
<td>–0.014 (0.064)</td>
</tr>
</tbody>
</table>

N of respondents 104

N of observations 104

<sup>a</sup> Adjusted for age, sex, education, race/ethnicity, marital status and psychiatric diagnosis.

<sup>b</sup> Lagged value is assessment at t<sub>12</sub>.

<sup>* p < 0.05, ** p < 0.01, *** p < 0.001.</sup>
people in outpatient treatment from selected clinics in the boroughs of the Bronx and Queens in New York City. Although the sample provided a good situation in which to test the competing perspectives we identified, generalization of specific findings to other populations should only be made with caution. Second, although we undertook extensive efforts to follow sample members, and found relatively small measured differences between those we could and could not reinterview, bias is possible to the extent that there are important differences between those who were interviewed and those who were not. Finally, ours is an observational study that is subject to problems of reverse causation and unmeasured (or poorly measured) confounding variables. We used the longitudinal nature of the data to address unmeasured confounding using fixed effect analyses and reverse causation using the analysis of lagged variables in GEE. Because of these efforts it would be difficult to construct a coherent counter explanation based on reverse causation processes or unmeasured confounding that could account for the full pattern of results. These considerations give us confidence that we produced a strong test of the relative utility of the two competing perspectives we set out to test.

Conclusion and implications

In light of the aforementioned strengths and limitations, we conclude that each perspective received solid support for at least some aspects of its claims. At the same time, each perspective also focuses too narrowly on a limited set of factors while making excessive claims beyond their explanatory reach. The Coercion to Beneficial Treatment perspective focuses on symptoms and assumes that when these are addressed, issues concerning stigma and quality of life will follow along in lock step. This idea was not supported in this analysis. The Coercion to Stigma perspective proposes that coercion routinely backfires leading to negative outcomes across the board. The Perceived Coercion Scale, while related to impaired quality of life and perceived devaluation–discrimination, failed to predict functioning or symptoms, and AOT, a form of coercion, appeared to produce positive and not negative outcomes. In sum, each perspective receives strong support for some of its predictions but is also strongly challenged by others. As neither perspective can comprehensively explain the full set of findings it follows that we need both perspectives. This observation helps specify the contribution of this study. As the first study of outpatient commitment to bring processes of stigmatization to bear, our analysis simultaneously supports the idea that some forms of coercion are detrimental because they lead to stigma processes, while also focusing attention on the need to address symptoms and get people into beneficial treatment circumstances. Thus, our main contribution is in showing that perceptions of coercion have a downside that compromises quality of life and induces harmful stigma processes. Future research and policy needs not only to find ways to insure that people who need treatment receive it, but to do so in a manner that minimizes circumstances that induce perceptions of coercion.

References


First, M. B., & Gibbon, M. (2004). The structured clinical interview for DSM-IV Axis I Disorders (SCID-I) and the structured clinical interview for DSM-IV Axis II Disorders (SCID-II). In M. J. Hilsenroth, & D. L. Segal (Eds.), Comprehensive handbook of psychological assessment (pp. 671).


