Perceived Coercion, Client-Centredness, and Positive and Negative Pressures in an Assertive Community Treatment Program: An Exploratory Study

Eric Latimer
McGill University and Douglas Hospital Research Centre

Olivier Farmer
Centre Hospitalier de l'Université de Montréal

Anne G. Crocker
McGill University and Douglas Hospital Research Centre

Todd Jenkins
McGill University

ABSTRACT

Scales initially developed to measure coercion in inpatient psychiatric settings were adapted to the assertive community treatment (ACT) team setting and administered to consenting clients of a high-fidelity team in Montreal (38/68). More than 75% of respondents scored 5 out of 6 or above on the client-centredness

Eric Latimer, Department of Psychiatry, McGill University, and Douglas Hospital Research Centre, Montreal, Quebec; Olivier Farmer, Department of Psychiatry, Centre Hospitalier de l'Université de Montréal, Quebec; Anne G. Crocker, Department of Psychiatry, McGill University, and Douglas Hospital Research Centre, Montreal, Quebec; Todd Jenkins, Department of Psychiatry, McGill University, Montreal, Quebec.

A preliminary version of this paper was presented in poster form at the November 2005 meeting of the Canadian Academy of Psychiatric Epidemiology. This study was indirectly supported (through investigator awards or a fellowship to three of its authors) by the Fonds de la Recherche en Santé du Québec and a training grant from the Canadian Institutes for Health Research (Research in Addictions, Mental Health Policy and Services).

Correspondence concerning this article should be addressed to Eric Latimer, Douglas Hospital Research Centre, 6875 LaSalle Blvd., Montreal, Quebec, Canada H4H 1R3. Email: eric.latimer@mcgill.ca

scale. The remaining respondents, who scored below 5, also tended to report more negative pressures (threat or constraint) and more perceived coercion, and they tended to be lower functioning and to have personality disorders. A simple measure of client-centredness could help ACT teams identify clients who might benefit from a different clinical approach.

Assertive community treatment (ACT) is now a well-established model of care for a subgroup of people with severe mental illness who require especially intensive and comprehensive community-based services. Numerous studies carried out in several countries have indicated that, compared to less intensive forms of care, assertive community treatment tends to reduce hospital days, improve residential stability, and improve subjective quality of life and satisfaction with services (Allness & Knoedler, 2003; Bond, Drake, Mueser, & Latimer, 2001; Stein & Santos, 1998).

Recurrent concerns have been expressed, however, with the potential for ACT teams to coerce clients (Estroff, 1981; Fisher & Ahern, 2000; Gomory, 1999). Coercion has been defined by a U.S. National Institute of Mental Health roundtable as "a wide range of actions taken without the consent of the individual involved" (Blanch & Parrish, 1993), and is understood as existing on a continuum—from friendly persuasion to interpersonal pressure to control of resources to use of force (Lucksted & Coursey, 1995). The term *coercion* will be used here with the same broad meaning.

Some degree of coercion is often used in assertive community treatment, as in psychiatric care more generally, to increase adherence to treatment of clients with high rates of illness recidivism. More coercive means of treatment may include restricting access to resources (money, housing), threatening hospitalization, or actually admitting a client. Use of more coercive means than are called for in a given situation may reflect lack of training or clinical skill on the part of caregivers. Moreover, if clients are or feel unduly coerced, this might inhibit the establishment of a therapeutic alliance. There is evidence that the latter plays an important role in the achievement of positive outcomes on ACT teams (Chinman, Allende, Bailey, Maust, & Davidson, 1999).

A few studies have indicated that ACT teams resort to more or less coercive methods. Out of 25 ACT teams in Indiana, 5 had more than 40% of their clients under outpatient commitment, while 6 had fewer than 5% (Moser, 2007). Researchers conducting a large study that involved 1,564 clients receiving services from 40 Veterans Affairs ACT teams developed a measure of "therapeutic limit-setting" based on staff reports of strategies they had employed with different clients. Staff acknowledged using involuntary hospitalization and external authorities (such as representative payees) on occasion, although with less than 5% of clients. Verbal strategies such as pointing out the negative consequences of a proposed course of action, or behavioural contracting, were used more often than more forceful alternatives. As one would expect, more forceful limit-setting was applied to clients who had more extensive hospitalization histories, a representative payee, recent alcohol or drug use, more arrests, and more severe symptoms (Neale & Rosenheck, 2000). Early qualitative observations of ACT in Dane County, Wisconsin, also raised concerns about paternalism and excessive use of coercive interventions (Diamond, 1996; Estroff, 1981).

As for clients' perceptions of coercion, in one report based on what 182 ACT clients in the state of Indiana liked least about the program, 6% indicated that they found it intrusive, 4% that it was too confining, and 1% that the frequency of service was too high, all of which imply some degree of perceived coercion (McGrew, Wilson, & Bond, 2002). In another survey of 175 ACT clients in Ontario, fewer than 7% of clients, responding to open-ended questions, indicated they saw ACT staff as providing too much care (e.g., clients expressed the desire "that they wouldn't be so controlling," or stated that "they're trying to run my life"; Redko, Durbin, Wasylenki, & Krupa, 2004).

There is little direct evidence on how clients are affected when ACT teams use more or less coercive methods. One study of 54 ACT clients found mixed results concerning the effects of representative payeeship, a form of resource control (Dixon, Turner, Krauss, Scott, & McNary, 1999). On the one hand, 44% of case managers reported incidents in which clients verbally abused them over their management of the clients' money. On the other hand, many clients found representative payeeship helpful in budgeting for housing and other expenses, and in preventing substance abuse. Representative payeeship did not appear to compromise the therapeutic relationship, and clients' objections to representative payeeship appeared to decline over time (Dixon et al., 1999). More directly relevant, a second report from the sample of 1,564 Veterans Affairs' clients of 40 ACT teams suggested that outcomes at 6 months were worse for clients whose clinicians were more likely to use forceful limit-setting (Rosenheck & Neale, 2004). The observational design of that study, however, prevents an unambiguous attribution of causality.

If teams vary in the extent to which they resort to more forceful coercive methods, and if use of more forceful methods can lead to negative client outcomes, then developing a tool to describe, quantify, and compare recourse to different levels of coercive methods in ACT teams becomes essential. Although most previous work has relied on staff reports, measures based on client reports are likely to provide valuable complementary information.

One approach to doing this is to build on work already carried out in the context of psychiatric inpatient admission. Previous studies have used the MacArthur Admission Experience Interview (AEI) and the derivative MacArthur Admission Experience Survey (AES) to develop internally consistent measures of perceived coercion in the inpatient admission process (Gardner et al., 1993). A measure of the patient's perception of respectful and fair treatment during the admission process (which the authors called "procedural justice"), and a measure of legal status, were both associated with perceived coercion, as were patient-reported use of threats and actual force ("negative pressures"). Positive pressures (persuasion and inducement), however, were not (Lidz et al., 1995). Other researchers have slightly adapted the MacArthur AES to measure perceived coercion in outpatient commitment (Swartz, Wagner, Swanson, Hiday, & Burns, 2002).

For the present study, we adapted the measures of positive and negative pressures, perceived coercion, and procedural justice to the ACT setting. We then measured the level of these measures in an actual ACT team. Next, following Lidz et al. (1995), we tested the hypotheses that negative, but not positive, pressures would be associated with higher perceived coercion, and that procedural justice (which we relabelled "client-centredness" for reasons described below) would be associated with lower perceived coercion. Finally, we assessed whether clinical variables were correlated with negative pressures, with client-centredness, and with perceived coercion. Specifically, we hypothesized that negative pressures and perceived coercion would be

higher (and client-centredness lower) for clients who were more symptomatic and less functional, who were substance abusers, and who had personality disorders. We expected these characteristics to be associated with more "difficult" behaviours that would likely elicit from team members greater reliance on negative pressures and a less client-centred approach to treatment; clients would thus have a perception of greater coercion. (We had no prior hypotheses concerning associations of these measures with age, gender, marital status, race, and Axis I diagnosis.)

METHODS

Study Setting

Data were collected between September 2002 and January 2003 among the staff and clients of an ACT team in Montreal, Canada. The ACT team had been operating since 1997, providing services to 68 clients on average during the study. Its fidelity to the ACT model had been evaluated in April 2000 at 4.04/5 on the Dartmouth ACT (DACT) fidelity scale, a rating indicating good fidelity to the ACT model (Teague, Bond, & Drake, 1998). The staffing, services, and organization of the team had not changed significantly since that time. A second measure of fidelity in March 2007 yielded a very similar score of 4.07/5, with nearly identical scores on the organization, staffing, and services subscales of the DACT.

In Quebec, issues related to consent to treatment and involuntary commitment are under the purview of the civil code (Civil Code of Québec, 1991). The civil code stipulates that no person may undergo treatment without his or her consent, unless by court order. Court orders may vary but they typically state where the person must receive treatment (e.g., outpatient facilities) and for how long. Treatment orders usually stipulate that the person must comply with the medications and treatment plan prescribed by the treating physician. If the patient does not comply with the order, the police may be required by the order to bring the patient to the hospital for readmission.

Adaptation of the Perceived Coercion Scale to the ACT Setting

The MacArthur Admission Experience Interview (AEI) includes four questions that seek to measure perceived coercion using the indirectly related concepts of influence, control, choice, and freedom (e.g., "How much control did you have over whether you were admitted – very, some, a little or no/none at all?"). Using a similar approach, the closely related MacArthur Admission Experience Survey (AES) includes five true/false questions about the concepts of influence, control, choice, and freedom as well as that of idea ("It was my idea to come into the hospital"). Psychometric analyses suggest that both scales measure a single underlying latent variable, and that each item has a large positive loading on that variable, presumed to correspond to perceived coercion; moreover, the two scales are highly correlated ($r = 0.79$; Gardner et al., 1993).

Because of its greater simplicity, we chose to adapt the five-item, true/false scale from the AES to evaluate perceived coercion in ACT teams. We did so straightforwardly, by rewording questions posed to clients about their admission to the hospital into similar questions about the treatment and services they received from the ACT team (e.g., "I have a lot of control over what kind of treatments or services I receive from PACT"[1]). Thus the adapted scale also has five true/false items. A "don't know" response is also possible.

Adaptation of the Measures of Positive and Negative Pressures

The AEI's questions concerning positive and negative pressures (Lidz et al., 1995) were adapted to the ACT context following observation of the day-to-day functioning of an ACT team. Over an 8-week period, one of the authors (OF), then a resident in psychiatry, attended team meetings and witnessed client interviews, daily visits, and clinical interactions between staff and clients. He identified and categorized various situations in which ACT staff may have applied coercion of varying kinds and intensities on clients. Three domains emerged as particularly significant: money, housing, and hospitalization.[2] Then, for each of the three domains, four questions were developed, two corresponding to positive pressures (persuasion and inducement) and two corresponding to negative pressures (threat or force). For example, to measure persuasion we asked, "Have PACT team members tried to convince you that taking your medication and following their instructions would help keep you out of hospital?" To measure the use of threats we asked, "Have PACT team members ever threatened to withhold access to your money unless you followed their recommendations?" As in the case of the perceived coercion scale, clients could respond "don't know." Many previous studies have identified money, housing, and hospitalization as issues that have led to client coercion in community treatment settings (Dixon et al., 1999; Elbogen, Soriano, Van Dorn, Swartz, & Swanson, 2005; Luchins et al., 1998; Monahan et al., 2005; Ries & Comtois, 1997; Robbins, Petrila, LeMelle, & Monahan, 2006; Schutt & Goldfinger, 1996; Susser & Roche, 1996), and also specifically in the context of ACT (Moser, 2007) .

Client-Centredness: Adaptation of the Procedural Justice Measure

The AEI also includes four questions about the providers involved in the admission process. These questions ask clients about their providers' motivation ("To what extent did s/he do what s/he did out of concern for you?"), respect ("How much respect did s/he treat you with?"), validation ("How seriously did s/he consider what you had to say?"), and fairness ("How fairly did s/he treat you?"). Each of these questions allows four possible levels of response (e.g., for fairness, "very fair, mostly fair, mostly unfair, very unfair"). Clients are asked these questions concerning each individual involved in the admissions process, and the responses are then averaged across those individuals. Two additional questions pertain to the general admissions process ("How much of a chance did you have to say what you wanted to say about being admitted to the hospital? – very, some, a little, none"), and deception ("Did anyone try to trick you, lie to you or fool you into coming into the hospital? – yes, no").

We adapted and simplified this set of questions in two ways. First, we asked clients about the ACT team as a whole, rather than about individual members (e.g., "ACT team members act out of concern for me"). Second, we rephrased all six questions to allow either a true/false or "don't know" answer. We refer to the measure thus adapted for the context of an ACT team as "client-centredness," because that term is meaningful in the context of an ACT team, and because the items are conceptually related to that construct.

Scoring

The responses were scored as follows. For the first two scales (perceived coercion and positive and negative pressures), answers reflecting "feeling coerced," "not respected," "persuaded," "induced," "threatened," or "forced" to do something were given a value of 1; answers indicating a positive feeling, or the absence

of a negative feeling or event, were given a value of 0; and answers of "don't know" were interpreted as indicating ambivalence and given a value of 0.5. For the third scale (client-centredness), the scoring was done similarly, except in reverse: responses reflective of care being perceived as more client-centred were given a value of 1. Measures of positive and negative pressures, perceived coercion, and client-centredness were then calculated by summing the values thus assigned.

To summarize, the process of adaptation and scoring yielded three scales: a perceived coercion scale, a positive and negative pressures scale, and a client-centredness scale. The positive and negative pressures scale was divided into two subscales. The scales and methods of scoring are listed below:

1. The *perceived coercion scale* contained five true/false items, with a theoretical range from 0 to 5. A higher score indicated a higher degree of perceived coercion.
2. The *positive and negative pressures scale* contained
   (a) a *positive pressures subscale* with six true/false items, with a theoretical range from 0 to 6. A higher score indicated a greater degree of reported positive pressures; and
   (b) a *negative pressures subscale* with six true/false items, with a theoretical range from 0 to 6. A higher score indicated a greater degree of reported negative pressures.
3. The *client-centredness scale* contained six true/false items, with a theoretical range from 0 to 6. A higher score indicated a perception of treatment being more client-centred.

Translation Into French

The adapted scales were originally developed in English. They were subsequently translated into French (the mother tongue of about half of study participants). Two of the authors (EL and OF), who each have a high degree of proficiency in both languages, collaborated on the translation; no back translation was used. Both the original English and the French translation of the scales are available from the authors.

Additional Measures

Diagnostic and sociodemographic data were obtained from the clients' charts. Major mental disorders as well as comorbid substance use disorder or personality disorder were established on the basis of chart reviews using the SCID checklist (First, Spitzer, Gibbon, & Williams, 1997), by one of the authors (OF) with the help of a clinical psychologist trained to use the SCID checklist. Whether the client had a legal guardian or was under representative payeeship, and whether the client's treatment was court ordered, were also ascertained from ACT team records.

Symptoms were assessed using the expanded, 24-item version of the Brief Psychiatric Rating Scale (Overall & Gorham, 1962; Ventura, Green, Shaner, & Liberman, 1993; Ventura, Lukoff, et al., 1993). Each of the 24 symptom constructs is rated on a 7-point scale from *not present* to *extremely severe*. Items are summed for a total score. Higher scores represent more severe psychopathology. The scale was administered by one of the authors (OF), who had been trained in its use using materials developed at the University of California at Los Angeles for this purpose (Ventura, Green, et al., 1993). Due to the large number of comparisons already planned, we did not do any analyses involving subscales of the Brief Psychiatric Rating Scale (BPRS).

Overall client functioning was assessed using the Multnomah Community Ability Scale (MCAS), a widely used 17-item instrument. The questionnaire was completed by the client's primary case manager within the ACT team. The team had prior training and experience in administration of the MCAS. Total scores greater than 63 reflect high functioning, and scores between 17 and 47 indicate low functioning (Barker & Barron, 1997; Barker, Barron, McFarlane, Bigelow, 1994; Corbière et al., 2002).

Study Procedure and Ethics Approval

A leaflet outlining the purpose of the study was distributed by ACT team members to clients, asking if they were willing to receive further information and possibly to participate in the study. An interview was then arranged with interested clients to explain the study in detail, to obtain written, informed consent, and to proceed with the study interview and file review. Participants were offered $20 in compensation for their time, during which the scales were administered and the BPRS completed (approximately 1 to 1 ½ hours), all by the same investigator (OF). In rare cases where clients were unable to complete the evaluation in a single session, generally as a result of attention problems, a second, separate interview was conducted.

Staff were aware of which clients had agreed to participate in the study. Only the resident psychiatrist who administered the measures (OF), however, was aware of individual responses. This did not affect service planning but may have affected the care that the resident psychiatrist provided. Following completion of the analyses, aggregate data were presented to team members, and the manuscript was submitted to the team psychiatrist and team coordinator for review.

The study protocol and consent form were approved by the Research Ethics Board of Douglas Hospital.

Data Analyses

To test our hypotheses concerning the relation between positive pressures, negative pressures, perceived coercion, and client-centeredness, we tested the significance of the correlations between each pair of variables. We then tested the null hypotheses of no correlation between negative pressures, perceived coercion, and client-centredness and level of functioning, psychiatric symptoms, substance abuse, and personality disorder. Additional secondary analyses were also conducted to test the relationships between positive and negative pressures, perceived coercion, and client-centredness, and other demographic and clinical variables (age, gender, married or common-law, and schizophrenia diagnosis) for which we had no a priori hypotheses.

As the distributions of the scales appeared far from normally distributed, non-parametric tests were used. Spearman rank correlation coefficients were calculated and tested using an approximation which, for two-level variables, is equivalent to the Mann-Whitney two-sample rank sum test. Statistical analyses were conducted using Stata SE v. 9 (StataCorp, 2005).

RESULTS

All 68 clients of the ACT team were invited to participate in the study. Of these, 38 (56%) gave their consent to do so. Table 1 summarizes their sociodemographic and clinical characteristics.

Table 1
Sample Characteristics (*N* = 38)

Variable	*n* or Mean	*SD* or %	Min	Max
Female	17	44.7		
Age (years)	46.2	9.4	26.9	65.7
White race	36	94.7		
Marital status				
Single	22	57.9		
Married or common-law	7	18.4		
Divorced	7	18.4		
Widowed	2	5.3		
Diagnosis (*n* = 37)				
Schizophrenia	17	44.7		
Schizoaffective	15	39.5		
Bipolar	5	13.1		
Comorbid personality disorder	26	68.4		
Comorbid substance abuse	17	44.7		
MCAS total score	66.2	9.1	49	85
BPRS total score	42.3	8.6	25	64
Has a legal guardian	7	18.4		
Under representative payeeship[a]	9	23.7		
Under court order	1	2.7		

Note. MCAS = Multnomah Community Ability Scale; BPRS = Brief Psychiatric Rating Scale.

[a] The category "under representative payeeship" indicates clients who do not have a legal guardian. The team arranged to have some degree of control over their income, with the clients' consent.

Table 2 shows the percentages of study participants who responded affirmatively to questions about uses of various forms of pressure in the domains of housing, money, and medication/avoidance of hospitalization. Almost all clients reported that ACT team members make use of positive pressures (persuasion and inducement), especially concerning the use of medications. Forty percent of clients reported that they had experienced some form of threat or constraint. More than 80% of clients reported pressures related to the taking of medications and the implications for avoiding hospitalizations. Also of note, half of the clients who reported positive pressures also reported negative pressures, and negative pressures were only ever applied to clients who reported positive pressures as well.

Table 3 provides descriptive statistics on the client-centredness and perceived coercion scales. Perceived coercion is, on average, slightly above 2.5—half the maximum level of the scale, and one quarter of respondents reported a level near or at the maximum the scale can record, between 4 and 5. The client-centredness measure, in contrast, is near its maximum, between 5 and 6, for three quarters of the clients. Results not

Table 2

Client-Reported Use of Various Degrees of Pressure, by Domain

Type of pressure by domain	*n*	%
Money		
Persuasion (ACT team members give advice on how to spend money)	16	42.1
Inducement (ever promised greater access to own money)	6	15.8
Threat (ever threatened to have access to own money withheld)	6	15.8
Constraint (ever had access to own money withheld)	5	13.2
Any type of pressure	18	47.4
Housing		
Persuasion (ACT team members give advice on upkeep to avoid eviction)	11	29.0
Inducement (ever promised something in exchange for taking better care of apartment)	4	10.5
Threat (ever threatened that city inspectors would be called regarding apartment)	1	2.6
Constraint (ever evicted due to action of ACT team)	1	2.6
Any type of pressure	12	31.6
Medication and avoidance of hospitalization		
Persuasion (ACT team members tried to convince that taking medications would help avoid hospitalization)	31	81.6
Inducement (ever promised rehospitalization would not occur if medications taken)	16	42.1
Threat (ever threatened to be brought to the hospital)	6	15.8
Constraint (ever brought to the hospital against your will)	5	13.2
Any type of pressure	31	81.6
Above three domains combined		
Persuasion	32	84.2
Inducement	20	52.6
Persuasion or inducement (positive pressure)	32	84.2
Threat	13	34.2
Constraint	10	26.3
Threat or constraint (negative pressure)	15	39.4
Positive pressure with no negative pressure present[a]	15	39.4
Positive and negative pressures both present	15	39.4
Negative pressure without any positive pressure	0	0

Note. A pressure is counted as present if the value is at least equal to 1. A single response of "don't know," with no positive response, is counted the same as a response consisting only of zeros.

[a] Two additional clients answered one "don't know" or gave no affirmative response to the negative pressure questions.

shown also indicate that all 38 respondents agreed with the statement, "PACT team members treat me with respect," and so this item did not contribute to variability in the scale. Internal consistencies of the scales in our sample, as measured by the alpha coefficient, were 0.69 (positive pressures), 0.47 (negative pressures), 0.43 (perceived coercion), and 0.54 (client-centredness).

Table 3
Distributions of Scores on Pressure, Perceived Coercion, and Client-Centredness Scales

Scale or subscale (maximum possible range)	Mean	*SD*	Median (IQR)[a]	Min	Max
Pressures experienced as ACT client (0–12)	2.95	2.13	3 (1, 5)	0	7
Positive pressure (0–6)	2.25	1.60	2 (1, 3)	0	6
Negative pressure (0–6)	0.70	0.93	0 (0, 1)	0	3
Perceived coercion (0–5)	2.63	1.24	3 (1.5, 4)	0.5	5
Client-centredness (0–6)	5.53	0.80	6 (5, 6)	3	6

Note. Higher scores indicate greater degree of reported pressure or perceived coercion, or a perception of more client-centred treatment.

[a]IQR is interquartile range (25th percentile, 75th percentile).

Due to the number of comparisons reported in Table 4, we interpret *p*-values less than .01 as indicating statistical significance, and *p*-values between .01 and .05 as indicating a trend. Altogether the results suggest that (a) positive pressures tend to be more frequently reported by more symptomatic clients, but otherwise do not seem associated with any clinical variables, with perceived coercion, or with client-centredness; (b) negative pressures are, as expected from Table 2, strongly associated with positive pressures, and they tend to be more frequently reported by clients who are lower functioning or more symptomatic; (c) clients who report more negative pressures experience their care as less client-centred, but there is no significant association between negative pressures and perceived coercion; (d) clients who are lower functioning (but not those who are more symptomatic) tend to perceive their care as more coercive; (e) clients who experience their care as more coercive tend also to experience it as less client-centred; and (f) clients who are higher functioning, and who do not have a personality disorder, experience their care as more client-centred.

Finally, we examined, in an exploratory way because we had no prior hypotheses, the associations between negative pressures, perceived coercion, and client-centredness on the one hand, and age, sex, diagnosis, and marital status on the other. The only association that might be significant (with a *p*-value less than .01) is the one between schizoaffective disorder and negative pressures ($r = 0.54$, $p = .0005$).

Table 4

Tests of Hypothesized Associations and Correlations Among Clinical Variables

	Negative pressures	Perceived coercion	Client-centredness	Level of functioning (MCAS)	Psychiatric symptoms (BPRS)	Substance abuse	Personality disorder
Positive pressures	0.49 (0.002)	-0.10 (0.57)	0.01 (0.97)	-0.24 (0.14)	0.37 (0.02)	-0.07 (0.67)	0.01 (0.97)
Negative pressures		0.22 (0.18)	-0.38 (0.02)	-0.33 (0.04)	0.39 (0.02)	-0.04 (0.80)	0.28 (0.09)
Perceived coercion			-0.37 (0.02)	-0.35 (0.03)	-0.12 (0.48)	-0.20 (0.22)	0.11 (0.50)
Client-centredness				0.51 (0.001)	-0.15 (0.38)	-0.06 (0.73)	-0.48 (0.003)
Level of functioning (MCAS)					-0.06 (0.69)	-0.12 (0.49)	-0.11 (0.51)
Psychiatric symptoms (BPRS)						-0.08 (0.61)	-0.14 (0.40)
Substance abuse							0.04 (0.80)

Note. MCAS = Multnomah Community Ability Scale; BPRS = Brief Psychiatric Rating Scale.

Spearman's correlation coefficient and nominal *p*-value (in parentheses) are shown. Tests are two-tailed.

DISCUSSION

In this ACT team, pressures appear to be applied in a modulated way. Among the different degrees of pressure we asked clients about, persuasion was most commonly reported, followed by inducement, then threat, and finally constraint. Although one quarter of the sample reported experiencing some form of constraint being applied, the median client reported neither threat nor constraint. No client reported experiencing negative pressures in the absence of positive pressures. Negative pressures tended to be applied, as we had hypothesized, to less functional and more symptomatic clients. We could not confirm, however, that clients with a personality disorder or an addiction reported more negative pressures. In the case of personality disorder, this could be due to the small sample size, as the correlation is moderate (0.28) and almost significant (p = .09). Taken together, these findings suggest that the measures of positive and negative pressures have some validity. Furthermore, in this team, negative pressures appear to have been applied sparingly, suggesting that ACT teams *need not* make frequent use of threats or forceful methods. This finding is consistent with those of other studies reporting wide variation in the extent to which ACT teams rely on coercive means (Moser, 2007; Rosenheck & Neale, 2004). Of course, our findings do not exclude the possibility that this team may have made greater use of negative pressures than necessary.

Perceived coercion exhibited considerable range in our sample, with the score reaching 4 or above for one quarter of the respondents. Although negative (but not positive) pressures have been found to be strongly associated with perceived coercion in the context of inpatient admissions (Lidz et al., 1995), we did not find an association between negative pressures and perceived coercion.

Consistent with findings in the context of inpatient admissions, however, perceived coercion is negatively related to client-centredness, and negative pressures are associated with lower client-centredness. This is somewhat surprising in that in our sample, client-centredness showed limited range, with more than 50% of respondents scoring at the maximum of the scale, and the lowest quartile between 3 and 5 out of 6. It appears that clients who did *not* feel that the team acted out of concern for them or seriously considered what they had to say tended to be the same clients who reported experiencing threats and constraints, and the same who felt that they had little say over the services and treatments that they received. These same clients were likely to be lower functioning or to have personality disorders. Thus, in spite of its more limited range, the client-centredness scale appears to be a more effective indicator than the perceived coercion scale for clients who believe they have experienced coercive treatment.

The absence of association between perceived coercion and client-centredness may indicate that the indirect approach that the AES takes to measuring coercion in the context of inpatient admission does not transpose well to the context of an ACT team. The adapted perceived coercion questions ask clients whether they chose the treatments and services that they receive from the ACT team, whether they have a lot of control over their treatment, and so on. Many clients may believe this is generally true, even though on occasion, perhaps in times of crisis, team members might resort to threats or even force. Alternatively, more compliant clients may feel that they have little say over the treatments and services they receive, but because they are compliant the team does not need to resort to threats or constraints to influence their behaviour. In other words, our data suggest that the degree to which a client influences the services he or she receives, and the extent to which the team resorts to negative pressures with that client, may be somewhat unrelated

constructs. However, the way the team generally treats a client—the extent to which the team takes into account what the client has to say, acts out of concern for the client, and so on—appears to be more closely related to the use of negative pressures and to perceived coercion. A scale similar to the client-centredness one may therefore be more effective at capturing an important dimension of the functioning of an ACT team. Furthermore, the internal consistency of the scale, at 0.54, is encouraging.

As the ACT model has evolved, increasing emphasis has been placed on making it more supportive of client recovery (Salyers & Tsemberis, 2007). Externally observable characteristics such as involuntary commitment to treatment, control of money and housing, and intensive monitoring of medications and substance abuse should be monitored to help identify teams that may tend to resort to excessively coercive practices (Moser, 2007). Measuring the degree to which clients feel heard, respected, and treated fairly may also help to gauge an important subjective dimension related to the use of coercion. It would likely be impractical for an external authority to directly administer such a scale to a team's clients. The team could, however, monitor clients' perceptions of how they are treated as part of a continuous quality improvement effort. In order to minimize social desirability bias, responses could be returned anonymously.

The suggestion that ACT teams should monitor clients' perceptions of how they are treated is of course not intended as a *substitute* for taking concrete actions to promote client empowerment and recovery. ACT teams have been designed, virtually from the beginning and with increasing comprehensiveness and sophistication, to support client gains in areas such as housing autonomy and stability, employment, mitigation of substance abuse, and so on (Allness & Knoedler, 2003). Such gains are clearly associated with empowerment, community integration and, arguably, also recovery (Bond, Salyers, Rollins, Rapp, & Zipple, 2004). The recovery movement is leading to growing recognition that incorporating these basic aspects of the ACT model is not enough, but that more subtle aspects of processes of care, such as coercion or client-centredness, also require attention (Anthony, 2003).

We note five limitations of our study. First, although the scales we used are closely based on previously validated ones, the internal consistencies we measured are modest. The resulting measurement error likely affects the correlations that we report. Second, the sample size is small and, with a 56% response rate, may be somewhat unrepresentative. In particular, although earlier unpublished data collected by two of the authors (EL and AC) suggested that the average age and sex distribution of participating and non-participating clients were about the same, other data collected on this team's caseload (in the fall of 2001) suggested that participants likely had somewhat higher MCAS scores (by about 3 points on the total score). The correlations reported in Table 4 suggest that non-participants would therefore have reported on average somewhat more use of negative pressures, felt somewhat more coerced, and experienced their care as somewhat less client-centred than our sample members did. A third limitation is that the charts on the basis of which diagnoses were established for our study included diagnoses that the team psychiatrist had recorded previously. The relatively high percentage of personality disorders reported here may be somewhat overstated; nonetheless, the plausible signs and relative magnitudes of the correlations between this diagnosis and the measures of positive and negative pressures, in particular, suggest that the diagnosis has some validity. Fourth, symptoms were assessed by a single individual, and therefore inter-rater reliability of the measure could not be assessed. This individual, however, was a psychiatric resident assigned to the team and thus knew the clients well;

furthermore, he was well trained in the use of the measure. Finally, our results were derived from the clients of a single ACT team and may not generalize to others.

To conclude, our results suggest that a simple and brief scale similar to the client-centredness scale may provide an effective means of identifying clients who feel that they are treated unfairly or not listened to, who feel that they have little influence over the treatments and services they receive, and who tend to also experience threats and coercion. Further refinement is needed, however, before it can be used routinely. Such a scale has the potential to help ACT teams monitor more closely the degree to which their practices evoke in clients the sense that the team is truly there to serve them, and it would help the team identify clients whose discontent may call for a different clinical approach. The results of the present study provide a basis and motivation for further development of such a measure.

NOTES

1. The ACT team in question is generally referred to as the "PACT" team, following the acronym, Program of Assertive Community Treatment, and this acronym was used in the questionnaires.
2. Observation of the ACT team suggested a fourth domain in which a type of coercion could be applied: relationship with the ACT team member. We were unable, however, to express degrees of coercion in this domain in terms of the same types of pressure as the others. Because of this conceptual "asymmetry," we do not include questions addressing this domain in the analyses reported here.

RÉSUMÉ

Nous avons adapté au contexte d'une équipe de suivi intensif de type ACT des instruments initialement conçus pour mesurer la coercition lors d'une admission psychiatrique. Ces instruments ont ensuite été administrés aux clientes et clients consentants d'une équipe fidèle au modèle ACT, à Montréal. Plus de 75% des répondants et répondantes ont obtenu un score au-dessus de 5 sur 6 sur l'échelle de centration sur le client. Ceux et celles qui ont obtenu des scores plus bas tendaient à rapporter plus de pressions négatives (menaces ou contraintes) et percevaient leur traitement comme plus coercitif; ces clients et clientes tendaient à avoir un niveau de fonctionnement plus bas, et à avoir des troubles de personnalité. Une mesure simple de centration sur le client pourrait aider des équipes ACT à identifer de leurs clients ou clientes qui pourraient bénéficier d'une approche clinique différente.

REFERENCES

Allness, D.J., & Knoedler, W.H. (2003). *A manual for ACT start-up: Based on the PACT model of community treatment for persons with severe and persistent mental illnesses*. Arlington, VA: National Alliance for the Mentally Ill.

Anthony, W.A. (2003). Studying evidence-based processes, not practices. *Psychiatric Services, 54*(1), 7.

Barker, S., & Barron, N. (1997). *Multnomah Community Ability Scale: A user's manual*. Portland, OR: Network Behavioral Health Care.

Barker, S., Barron, N., McFarlane, B.H., & Bigelow, D.A. (1994). A community ability scale for chronically mentally ill consumers: Part I. Reliability and validity. *Community Mental Health Journal, 30*(4), 363-379.

Blanch, A., & Parrish, J. (1993). Reports of three roundtable discussions on involuntary interventions. *Psychiatric Rehabilitation and Community Support Monograph, 1*, 1-42.

Bond, G.R., Drake, R.E., Mueser, K.T., & Latimer, E. (2001). Assertive community treatment for people with severe mental illness – Critical ingredients and impact on patients. *Disease Management and Health Outcomes, 9*(3), 141-159.

Bond, G.R., Salyers, M., Rollins, A.L., Rapp, C., & Zipple, A.M. (2004). How evidence-based practices contribute to community integration. *Community Mental Health Journal, 40*(6), 569-588.

Chinman, M., Allende, M., Bailey, P., Maust, J., & Davidson, L. (1999). Therapeutic agents of assertive community treatment. *Psychiatric Quarterly, 70*(2), 137-162.

Civil Code of Québec, c. 64. (1991).

Corbière, M., Crocker, A.G., Lesage, A.D., Latimer, E.A., Ricard, N., & Mercier, C. (2002). Factor structure of the Multnomah Community Ability Scale. *Journal of Nervous and Mental Disease, 190*(6).

Diamond, R.J. (1996). Coercion and tenacious treatment in the community: Applications to the real world. In D.L. Dennis & J. Monahan (Eds.), *Coercion and aggressive community treatment: A new frontier in health law* (pp. 51-72). New York: Plenum Press.

Dixon, L., Turner, J., Krauss, N., Scott, J., & McNary, S. (1999). Case managers' and clients' perspectives on a representative payee program. *Psychiatric Services, 50*(6), 781-786.

Elbogen, E.B., Soriano, C., Van Dorn, R., Swartz, M.S., & Swanson, J.W. (2005). Consumer views of representative payee use of disability funds to leverage treatment adherence. *Psychiatric Services, 56*(1), 45-49.

Estroff, S.E. (1981). *Making it crazy: An ethnography of psychiatric clients in an American community*. Berkeley: University of California Press.

First, M., Spitzer, R., Gibbon, M., & Williams, J. (1997). *Structured clinical interview for DSM-IV disorders – Patient edition.* New York, NY: Biometric Research Department.

Fisher, D.B., & Ahern, L. (2000). Personal Assistance in Community Existence (PACE): An alternative to PACT. *Ethical Human Sciences and Services, 2*(2), 87-92.

Gardner, W., Hoge, S.K., Bennett, N., Roth, L.H., Lidz, C.W., Monahan, J., & Mulvey, E.P. (1993). Two scales for measuring patients' perceptions for coercion during mental hospital admission. *Behavioral Sciences and the Law, 11*(3), 307-321.

Gomory, T. (1999). Programs of assertive community treatment (PACT): A critical review. *Ethical Human Sciences and Services, 1*(2), 147-161.

Lidz, C.W., Hoge, S.K., Gardner, W., Bennett, N.S., Monahan, J., Mulvey, E.P., & Roth, L.H. (1995). Perceived coercion in mental hospital admission: Pressures and process. *Archives of General Psychiatry, 52*(12), 1034-1039.

Luchins, D.J., Hanrahan, P., Conrad, K.J., Savage, C., Matters, M.D., & Shinderman, M. (1998). An agency-based representative payee program and improved community tenure of persons with mental illness. *Psychiatric Services, 49*(9), 1218-1222.

Lucksted, A., & Coursey, R.D. (1995). Consumer perceptions of pressure and force in psychiatric treatments. *Psychiatric Services, 46*(2), 146-152.

McGrew, J.H., Wilson, R.G., & Bond, G. (2002). An exploratory study of what clients like least about Assertive Community Treatment. *Psychiatric Services, 53*(6), 761-763.

Monahan, J., Redlich, A.D., Swanson, J., Robbins, P.C., Appelbaum, P.S., Petrila, J., … McNiel, D.E. (2005). Use of leverage to improve adherence to psychiatric treatment in the community. *Psychiatric Services, 56*(1), 37-44.

Moser, L. (2007). *Coercion in assertive community treatment: Examining client, staff and program predictors*. (Unpublished doctoral dissertation). Indiana University–Purdue University Indianapolis, Indianapolis.

Neale, M.S., & Rosenheck, R.A. (2000). Therapeutic limit setting in an assertive community treatment program. *Psychiatric Services, 51*(4), 499-505.

Overall, J.E., & Gorham, D.R. (1962). The Brief Psychiatric Rating Scale. *Psychological Reports, 10*, 799-812.

Redko, C., Durbin, J., Wasylenki, D., & Krupa, T. (2004). Participant perspectives on satisfaction with assertive community treatment. *Psychiatric Rehabilitation Journal, 27*(3), 283-286.

Ries, R.K., & Comtois, K.A. (1997). Managing disability benefits as part of treatment for persons with severe mental illness and comorbid drug/alcohol disorders: A comparative study of payee and non-payee participants. *American Journal on Addictions, 6*(4), 330-338.

Robbins, P.C., Petrila, J., LeMelle, S., & Monahan, J. (2006). The use of housing as leverage to increase adherence to psychiatric treatment in the community. *Administration and Policy in Mental Health, 33*(2), 226-236.

Rosenheck, R.A., & Neale, M.S. (2004). Therapeutic limit setting and six-month outcomes in a Veterans Affairs assertive community treatment program. *Psychiatric Services, 55*(2), 139-144.

Salyers, M.P., & Tsemberis, S. (2007). ACT and recovery: Integrating evidence-based practice and recovery orientation on assertive community treatment teams. *Community Mental Health Journal, 43*(6), 619-640.

Schutt, R.K., & Goldfinger, S.M. (1996). Housing preferences and perceptions of health and functioning among homeless mentally ill persons. *Psychiatric Services, 47*, 381-386.

StataCorp. (2005). Stata Statistical Software: Release 9.0. College Station, TX: Stata Corporation.

Stein, L.I., & Santos, A.B. (1998). *Assertive community treatment of persons with severe mental illness*. New York: WW Norton.

Susser, E., & Roche, B. (1996). "Coercion" and leverage in clinical outreach. In D.L. Dennis & J. Monahan (Eds.), *Coercion and aggressive community treatment: A new frontier in mental health law. Plenum series in social/clinical psychology* (pp. 73-84). New York: Plenum Press.

Swartz, M.S., Wagner, H.R., Swanson, J.W., Hiday, V.A., & Burns, B.J. (2002). The perceived coerciveness of involuntary outpatient commitment: Findings from an experimental study. *Journal of the American Academy of Psychiatry and the Law, 30*(2), 207-217.

Teague, G.B., Bond, G.R., & Drake, R.E. (1998). Program fidelity in assertive community treatment: Development and use of a measure. *American Journal of Orthopsychiatry, 68*(2), 216-232.

Ventura, J., Green, M.F., Shaner, A., & Liberman, R.P. (1993). Training and quality assurance with the Brief Psychiatric Rating Scale. *International Journal of Methods in Psychiatric Research, 3,* 221-244.

Ventura, J., Lukoff, D., Nuechterlein, K.H., Liberman, R.P., Green, M.F., & Shaner, A. (1993). Manual for the expanded Brief Psychiatric Rating Scale. *International Journal of Methods in Psychiatric Research, 3*, 227-234.