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The Helping Alliance in Case Management for Homeless Persons with Severe Mental Illness

W. Dean Klinkenberg, Ph.D.
Robert J. Calsyn, Ph.D.
Gary A. Morse, Ph.D.

ABSTRACT: This study examined the role of the helping alliance in case management with homeless persons who have a severe mental illness. A strong alliance after two months of treatment was marginally associated with three outcomes: higher consumer satisfaction, less severe global symptom severity, and greater hostility. The only outcome associated with the alliance after fourteen months of treatment was consumer satisfaction. Several variables predicted a strong helping alliance at month two, including: being African American, low hostility, more perceived needs, and more program contacts. The only variable that predicted a strong alliance at month fourteen was a strong alliance at month two.

INTRODUCTION

The relationship between a client and a psychotherapist (i.e., the helping alliance) is an important predictor of client outcome, regardless of the therapist's theoretical orientation (Horvath & Symonds, 1991). Al-

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Dr. Klinkenberg is a Research Assistant Professor at the Missouri Institute of Mental Health, University of Missouri School of Medicine. Dr. Calsyn is Professor of Psychology at the University of Missouri-St. Louis. Dr. Morse is affiliated with Community Alternatives, as well as the University of Missouri-St. Louis and the Missouri Institute of Mental Health.

Address reprint requests to: Dr. Klinkenberg, MIMH, 5400 Arsenal Ave., St. Louis, MO 63139.

though most research on the helping alliance has focused on clients with less severe disorders, a few studies have also shown that consumers with a severe mental illness who develop a positive helping alliance with a psychotherapist have better outcomes than consumers who don't (Frank & Gunderson, 1990; Gehrs & Goering, 1994).

Most individuals with a severe mental illness, however, receive mental health treatment from case managers, not psychotherapists. Few studies have extended the helping alliance concept to the case manager/client relationship, perhaps because case managers are often viewed as brokers of services only (Lamb, 1980). Three studies, however (Neale & Rosenheck, 1995; Priebe & Gruyters, 1993; Solomon, Draine, & Delaney, 1995), have reported correlations between the case manager/client alliance and some client outcomes (e.g., reduced symptoms, improved social functioning).

The present study examined the association between client outcomes and the case manager/client alliance for persons with a severe mental illness who were homeless at baseline. Consistent with Frank and Gunderson (1990), we predicted that the alliance rating early in treatment would be a better predictor of client outcomes than the alliance rating later in treatment.

Another focus of this study was to identify client and case manager variables that predicted the strength of the helping alliance. Psychotherapy research has generally reported that clients and therapists with similar demographic characteristics develop a stronger helping alliance than dissimilar client/therapist dyads (Davis & Proctor, 1989). In this study, therefore, we predicted that women, Caucasians, better educated clients, and clients with more income would rate the alliance with their case manager more favorably. Additionally, based on Draine and Solomon's (1996) work, we predicted that older clients would form a stronger alliance than younger clients.

Although global symptom severity has not usually been correlated with the helping alliance in traditional psychotherapy (Horvath, 1994), symptoms which indicated poor interpersonal relationships have been negative predictors (Horvath, 1994). Thus, we expected that the following variables would predict a weaker alliance: hostility, withdrawal, alienation, and the number of conflictual relationships. Further, we predicted that clients who perceived a need to receive social and mental health services would score higher on the alliance measure.

Finally, we hypothesized that tangible actions taken by the case

manager would be correlated with the strength of the alliance. Therefore, we predicted that the case manager's success in meeting the client's basic needs (e.g., housing, income) would also predict a strong alliance, especially early in treatment. We also hypothesized that the number of case management contacts would be positively correlated with the alliance because prior research had found a positive relationship between program contacts and client outcomes (Morse, Calsyn, Allen, & Kenny, 1994; Ryan, Sherman, & Judd, 1994).

METHODS

Sample and Program Description

Respondents for this study participated in a randomized experiment comparing the effectiveness of brokered case management and assertive community treatment (Morse et al., in press). The study reported here only included the 105 individuals who received assertive community treatment; the sample size for the analyses varied from 74 to 93 because of missing data on some measures. Only one of thirty-two attrition analyses was significant; participants who dropped out by month 14 exhibited less denial of illness at baseline ($F(1, 103) = 6.59$, $p < .02$).

To be eligible for the study individuals had to have a severe mental illness (66% had a diagnosis of schizophrenia) and currently homeless or at risk for homelessness. More details on the eligibility criteria and client characteristics can be found in Morse et al. (in press). Case managers assumed comprehensive service responsibility for 10–12 clients including counseling, linkage to psychiatric services, locating housing, teaching community living skills, client advocacy (e.g., with social service agencies and landlords), and 24 hour emergency services.

Helping Alliance Measure

The authors developed a 15-item self-report measure of the alliance from a larger scale originally developed to study client expectancies for counseling (Tinsley, Workman, & Kass, 1980). The items focused on perceived characteristics of the case manager such as honesty, warmth, trust, attentiveness, dependability, and supportiveness. Clients responded on seven-point scales (definitely not true to definitely true). Alpha coefficients were .97 at both months 2 and 14.

Outcome Measures

Client satisfaction with treatment was assessed by an eight-item scale that has been used in numerous mental health programs (Larsen, Attkinson, Hargreaves, & Nguyen, 1979). Clients rated the severity of their symptoms using the Global Severity Index (GSI) of the Brief Symptom Inventory (NCS Assessments, 1993); higher scores indicated greater severity. Master's level psychologists and social workers also assessed the severity of the client's symptoms using the 24-item version of the Brief Psychiatric Rating Scale (Lukoff, Neuchterlein, & Venture, 1986); higher scores indicated more severe symptoms. Based on a confirmatory factor analysis (Burger, Calsyn,

Morse, Klinkenberg, & Trusty, in press) five scales were created: anxiety-depression, hostility-suspicion, thought disorder, withdrawal, and activity. Reliability coefficients for most of the measures were above .80 (Calsyn, Morse, Klinkenberg, & Trusty, 1997), except for the BPRS hostility-suspicion subscale (alpha = .49).

Data on psychiatric hospitalization (0 = no, 1 = yes) and hospital days were based on client self-reports. The distribution for hospital days was skewed because many clients were never hospitalized; as a result, the values used for the analyses were square root transformations of the original values. The GSI was assessed at twelve months following baseline; all other outcomes were assessed at month 15. With the exception of client satisfaction and the hospitalization variables, clients completed a pre-treatment assessment on all outcome measures.

Predictor Variables

Client Variables. Demographic variables included: gender, race, marital status, age, years of education, and monthly income. Psychiatric symptoms at baseline were assessed using the five BPRS scales. In addition, three dummy coded diagnostic variables were recorded: psychosis, personality disorder, and substance abuse. Alienation was assessed using the scale developed by Bahr and Caplow (1973); higher scores indicated greater alienation. The number of conflictual relationships was assessed using the Arizona Social Support Interview Schedule (Barrera, 1981). A two item denial of illness scale was also completed; higher scores indicated greater recognition of need for treatment. The client's perceived needs were assessed by a seven item scale that asked about accepting help for housing, financial assistance, job training, medical care, and mental health treatment. Each item had six scale points ranging from "definitely no" to "definitely yes"; higher scores indicated more perceived needs.

Case Management Variables. The following variables were used to assess case management activities: number of program contacts, the number of services provided by the case manager (as reported by the client), days in stable housing, and the client's income. These variables were averaged over months 1–2 for the prediction of the alliance at month two and over months 3–14 for predicting the alliance at month 14. An additional variable was also coded to indicate whether clients had a community worker, a paraprofessional who assisted with activities of daily living and social/recreational needs.

Data Analysis

The relationship between the helping alliance and each outcome variable was assessed using partial correlations, controlling for the baseline level of the outcome variable. In order to determine predictors of a positive working alliance, data were analyzed using a series of regression equations. Each category of variables was entered in a single step; variables which were significant predictors at the .05 level were kept in the model and entered along with the next category of variables. This procedure was repeated until all categories of variables had been tested. Concerns about the subject-to-variable ratio prompted us to adopt this analytic procedure. Variable categories were tested in the following order: demographic, psychiatric, other relationship, perceived needs, and early outcomes.

RESULTS

Helping Alliance Scores

Clients generally viewed the helping alliance very positively; mean alliance scores at months two and fourteen were 88.5 (SD = 21.6) and 84.0 (SD = 24.7), respectively. The change from month two to fourteen was marginally significant ($t(87) = 1.73$, $p = .09$), indicating that clients came to feel somewhat less positive about the alliance.

Helping Alliance and Client Outcomes

Table 1 displays the means and standard deviations for the outcome variables at baseline and follow-up. Paired t-tests revealed that significant change occurred for symptoms of anxiety-depression ($t(92) = 6.05$, $p < .01$), hostility-suspicion ($t(92) = 4.57$, $p < .01$), thought disorder ($t(92) = 3.45$, $p < .01$), withdrawal ($t(92) = 4.52$, $p < .01$), activity ($t(92) = 4.42$, $p < .01$), and global symptom severity ($t(93) = 3.72$, $p < .01$).

Table 1 also shows the partial correlations between the helping alliance and each outcome variable. Three outcome measures were marginally associated with a positive alliance at month two ($p < .10$): high satisfaction, high hostility-suspicion, and a low GSI score. The only outcome variable associated with the alliance at month fourteen was client satisfaction.

Predictors of the Helping Alliance

Month Two. The final step of the linear regression model predicting the alliance at month two is presented in Table 2. The model is significant ($F(6, 85) = 4.00$, $p < .01$), producing an R^2 of .22; however, only 4 of the 22 variables were significant predictors. Consistent with our expectations, predictors of a positive helping alliance were: low hostility-suspicion, multiple perceived needs, and multiple program contacts. Contrary to our expectations, being Caucasian was associated with a lower alliance score.

Month Fourteen. The final linear regression equation predicting the alliance at month fourteen was also significant ($F(6, 80) = 5.54$, $p < .01$), producing an R^2 of .29. The only predictor of a positive alliance at month fourteen was a positive alliance at month two ($b = .60$; $SE = .11$; $p < .01$).

TABLE 1

Descriptive Statistics and Partial Correlations Between Helping Alliance and Outcome Variables

	Mean Item Scores (SD) for Outcome Variables		*Correlation w/ Helping Alliance Month 2*		*Correlation w/Helping Alliance Month 14*	
Client Outcomes	*Baseline*	*Follow-up*	*r*	*p*	*r*	*p*
Satisfaction[1]	NA	3.2 (.7)	.19	.09	.42	.01
BPRS: Anx-Depr	2.8 (1.1)	2.2 (1.0)	.01	.92	−.01	.92
BPRS: Host-Susp	2.4 (1.1)	1.8 (.8)	.19	.08	.02	.89
BPRS: Thought Disorder	2.2 (1.2)	1.8 (1.0)	.06	.62	−.08	.47
BPRS: Withdrawal	2.0 (.8)	1.7 (.6)	−.07	.51	−.07	.51
BPRS: Activity	2.0 (1.0)	1.6 (.7)	.02	.88	−.11	.32
GSI	1.1 (.7)	.9 (.7)	−.21	.06	−.13	.23
Psychiatric Admission[2]	NA	.51 (.50)	.13	.25	.02	.84
Hospital Days[3]	NA	26 (48)	.14	.19	.08	.46

[1]There was no baseline assessment of client satisfaction, so we have presented simple correlations between satisfaction and the helping alliance.
[2]Number of lifetime admissions was used as the covariate for this partial correlation.
[3]This is the average number of hospital days during the study period, minus the initial length-of-stay for participants who were inpatients at baseline.

TABLE 2

Final Linear Regression Equation for the Prediction of the Helping Alliance at Month Two (n = 92)

Variables	*b*	*SE*	*p*
Race[4]	−11.00	4.25	.01
BPRS: Hostility	−1.50	.64	.02
Perceived needs	2.14	1.27	.09
Income	−.01	.01	.12
Days in stable housing	.12	.21	.56
# of program contacts	.62	.28	.03

[4]0 = African American; 1 = Caucasian.

DISCUSSION

One goal of this study was to determine if a relationship exists between the helping alliance and client outcomes in case management with severely mentally ill clients. A positive helping alliance at month two was marginally associated with three client outcomes: high hostility-suspicion, low global symptom severity, and high client satisfaction. The alliance at month fourteen was also associated with high client satisfaction. In this study, the alliance early in treatment was associated with more outcomes than the alliance later in treatment, a finding that is consistent with the psychotherapy literature but contradicts the only other study which included persons with a severe mental illness (Frank & Gunderson, 1990). Although few outcomes were associated with the helping alliance in this study, our results may have been limited by the fact that our sample consisted only of clients who were receiving intensive case management. Alliance ratings were very high and did not change much from month 2 to month 14; therefore, we may have had few significant correlations because of restricted range.

It should also be noted that this study only measured the helping alliance from the perspective of the client. In the only studies which assessed both the client's and the case manager's view of the alliance, the case manager's view was more predictive of client outcomes (Gehrs & Goering, 1994; Neale & Rosenheck, 1994). Given that research on the helping alliance in case management is in its infancy, future

studies should measure the alliance from the perspectives of both clients and case managers.

Contrary to findings from psychotherapy research (Davis & Proctor, 1989), client gender, education, and income were not related to the alliance at month two. Race, however, was associated with the strength of the alliance, with African American clients reporting more positive relationships with their case managers than Caucasian clients. Given that the treatment staff were mostly Caucasian, this finding is a bit puzzling and runs counter to our hypothesis. We had found in a prior study that a similar ACT intervention was less effective for African American clients than Caucasian clients (Morse, et al., 1994), so it is unclear why we found stronger alliance scores for African American clients in this project. It is clear that more research is necessary to understand the reasons for the racial differences observed in this study.

Another important predictor of the helping alliance appears to be the client's relationship history. Although client self-reports of interpersonal difficulties did not predict the alliance, interviewer judgments of client hostility did predict a weaker alliance. In addition, clients who reported having more perceived needs formed a stronger initial alliance with their case manager.

We also found support for our hypothesis that the number of program contacts would be related to the strength of the alliance, although the correlation was quite modest ($r = .17$). We can only speculate about the reasons for the lack of a relationship between the case manager's ability to meet the client's housing and income needs and the alliance at month two. Case managers appeared to be very diligent in applying for SSI, food stamps, and housing assistance for all of their clients. It may be that, even though case managers were not always successful in obtaining financial and housing assistance by month two, clients may have perceived their case managers as being diligent in their efforts to obtain these resources.

The generalizability of our findings may be limited for the following reasons. First, the sample size was relatively small and restricted to homeless persons with a severe mental illness who were receiving intensive case management. Second, we did not use a conventional measure of the helping alliance, although the dimensions assessed by our measure were quite similar to other measures. Third, the high, stable alliance ratings could have been influenced by clients' unwillingness to rate their case managers unfavorably. Unfortunately, we do not have the data to state confidently that client responses were unaffected by

social desirability. Fourth, this study did not investigate the impact of the experience level or personality characteristics of the case managers on the strength of the helping alliance, variables which have sometimes been predictors (Horvath, 1994). Finally, some of the significant relationships we observed may have been chance findings given the number of statistical comparisons.

Nevertheless, our research has provided some initial insights into the importance of the helping alliance in case management. We found that the alliance, especially as measured early in treatment, was associated with some client outcomes. Further, we identified specific client and treatment variables which appear to impact the strength of the client/case manager alliance. We hope more researchers explore the impact of this largely ignored variable on outcomes of treatment for persons with a severe mental illness.

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