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Support, Mutual Aid and Recovery from Dual Diagnosis

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Abstract

Recovery from substance abuse and mental health disorders (dual-diagnosis) requires time, hard work and a broad array of coping skills. Empirical evidence has demonstrated the buffering role of social support in stressful situations. This paper investigates the associations among social support (including dual-recovery mutual aid), recovery status and personal well-being in dually-diagnosed individuals (N = 310) using cross-sectional self-report data. Persons with higher levels of support and greater participation in dual-recovery mutual aid reported less substance use and mental health distress and higher levels of well-being. Participation in mutual aid was indirectly associated with recovery through perceived levels of support. The association between mutual aid and recovery held for dual-recovery groups but not for traditional, single-focus self-help groups. The important role of specialized mutual aid groups in the dual recovery process is discussed.

INTRODUCTION

The rate of co-occurring substance abuse and mental health disorders in the United States ranges between 29% and 59% (Kessler, 1995; Regier et al., 1990). Such comorbidity is associated with poor prognosis and with "revolving door" treatment admissions (Haywood et al., 1995). Recovering from dual-diagnosis requires more than abstaining from illicit substances and complying with mental health treatment, although these two steps may be considered necessary. Recovery is a long-term, gradual process that requires time, hard work and commitment; it also requires skills and strategies to cope with novel, sometimes stressful, situations and with painful feelings about the past, such as grief and loss (Baxter & Diehl, 1998). For dually-diagnosed persons, the stress of change may be compounded by many other obstacles including stigma, discrimination, low self-esteem, inadequate education, limited vocational skills, housing and financial resources, as well as possible cognitive impairment, emotional lability and side-effects from prescribed medications. Yet individuals do recover from dual-diagnosis, not only maintaining abstinence and emotional stability, but also living independently, being employed and actively involved in the community. Dually-diagnosed

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individuals need to develop inner strengths and learn new coping skills to negotiate the recovery process successfully.

Social Support

The importance of social support in influencing behavior has been shown in a large number of different contexts. Social relationships have been extensively studied as resources for coping with stress. A considerable body of literature has elucidated the mechanisms through which social support promotes physical and mental health and buffers psychological stresses (Greenblatt, Becerra & Serafetinides, 1982; Taylor & Aspinwall, 1996; for a review, see Taylor, 1995). Empirical evidence has linked social support to increased health, happiness and longevity (Berkman, 1985; Lin, 1986). In particular, research has shown the positive influence of social support networks on the course of mental illness (Beard, 1992; Goering, 1992; Kelly et al., 1993; Viinamaeki, Niskanen, Jaeaeskelaeinen & Antikainen, 1996). In a sample of clients suffering from clinical depression, higher levels of social support at baseline were found to predict all but the first episode of depression (Brugha, Bebbington, Stretch & MacCarthy, 1997).

Levels and types of social support are also correlates of alcohol and drug use, treatment outcomes and relapses (e.g., Gordon and Zrull, 1991; Mermelstein, Cohen, Lichtenstein, Baer & Karmack, 1986; for review, see El-Bassel, Duang-Rung & Cooper, 1998). Social support has been linked to better quality of life, both among substance users and individuals with a mental disorder (e.g., Nelson, 1992; Brennan & Moos, 1990). However, few studies have investigated the effect of social support in the course of dual-diagnosis. A pilot study conducted among dually-diagnosed clients reported that combining peer social support with intensive case management was associated with positive outcomes including fewer crisis events and hospitalizations, perceived improvements in quality of life, and physical and emotional wellbeing (Klein, Caanan & Whitecraft, 1998; for a review, see also O'Reilly, 1998).

Self-Help/Mutual Aid

The self-help/mutual aid movement, beginning with Alcoholics Anonymous (AA) in 1935, has grown to encompass a wide spectrum of addictions. Self-help groups are based on the premise that individuals who share a common behavior they identify as undesirable can collectively support each other and eliminate that behavior and its consequences. They learn to accept their problem and to share their experiences, strengths and hopes. The only requirement for attending such a group is the desire to abstain from the problem behavior (Alcoholics Anonymous, 1976). Mutual, honest sharing affords participants a forum where often stigmatized habits can be discussed in an accepting, trusting environment. It also provides a source of strategies to cope with the behavior and an opportunity for more advanced members to become role models to others (White & Madara, 1998). An essential aspect of mutual aid, in contrast to other, more traditional forms of treatment for addictions and/or mental health, is the absence of "professional" involvement; this is experienced by members as encouraging a more active, creative role in their own recoveries (Carpinello & Knight, 1991).

Many, although not all, self-help groups follow some version of the AA 12-step program of recovery emphasizing personal and spiritual growth. Participation in self-help groups in the U.S. is estimated at six million at any one time, with AA participation at 1.6 million (Moos, Finney & Maude-Griffin, 1993); for chemical addictions, Narcotics Anonymous and Cocaine Anonymous are the two largest self-help organizations (Peyrot, 1985). Self-help groups addressing psychiatric disabilities are growing rapidly (Markowitz et al., 1996); Recovery Anonymous and Schizophrenic Anonymous are the best known (Chamberlin, 1990).

Current evidence suggests that involvement in a self-help group has a positive effect on recovery (e.g., Devine, Brody & Wright; Humphreys, Huebsch, Finney & Moos, 1999; McCrady & Miller, 1993; Moos et al., 1999; Timko & Moos, 1997). For example, decreased drinking was associated with AA participation over time (e.g., Emerick, Tonigan, Montgomery & Little, 1993); increased involvement in 12-step oriented self-help groups was associated with higher proportion of abstinence from drugs and alcohol, less severe distress and psychiatric symptoms, and with higher likelihood of being employed at one-year follow-up (Moos et al., 1999). The latter findings held for dually-diagnosed clients as well as for those with only substance abuse disorders. Involvement in Recovery, Inc., a mental health peer group, increased general well-being and decreased neurotic distress (Galanter, 1988). Participation in self-help was associated with better self-concept and improved interpersonal quality of life (Markowitz et al., 1996). Longitudinal studies of alcoholics found no difference in outcomes between clients choosing professional treatment versus AA participation, noting a significantly lower cost of treatment for the AA participants (Humphreys & Moos, 1996; Walsh, Hingson & Merrigan, 1991). For individuals with mental disorders, peer group attendance increased self-confidence and social skills, helped maintain employment, and decreased drugs and alcohol use (New York State Office of Mental Health, 1993).

This article investigates the associations among support (including mutual aid), recovery status, and personal well-being in a sample of dually-diagnosed persons. Based on the empirical evidence reviewed above, the study hypothesized that higher levels of perceived support and longer, more frequent attendance in mutual aid groups would be associated with fewer mental health symptoms and less substance use, as well as with higher levels of personal well-being.

METHOD

Subjects and Setting

Study participants were recruited from individuals attending Double Trouble in Recovery (DTR) meetings throughout New York City. DTR is a mutual aid fellowship adapted from the 12-step AA program of recovery, specifically embracing those who have a dual diagnosis of substance dependency and mental disorder. DTR was started in New York State in 1989 and currently has over 100 groups meeting in the US. New DTR groups are being started continually, some initiated by consumers, others by professionals who believe that mutual help fellowships are a useful addition to formal treatment, especially for the hard-to-engage dually-diagnosed population. DTR, Inc., a small non-profit organization, supports this growth by training consumers to start and conduct groups and by providing ongoing support to existing groups. DTR developed as a grassroots initiative and functions today with minimal involvement from the professional community. Groups meet in community-based organizations, psychosocial clubs, day treatment programs for mental health, substance abuse and dual-diagnosis, and hospital inpatient units. All DTR groups are led by recovering individuals (for a more detailed discussion on DTR, see Vogel, Knight, Laudet & Magura, 1998).

Procedures

Prospective study participants were recruited at 24 DTR groups meetings held in communitybased organizations and day treatment programs throughout New York City. All DTR members who had been attending for one month or more were eligible to participate in the study. Groups were visited approximately three times each during baseline data collection. An estimated 14% of group members declined to participate; the main reasons cited for declining to be interviewed were a concern about confidentiality (especially in groups held in a treatment facility), length of the interview (ranging from 2..5 to 3 hrs), and scheduling conflicts (for some individuals attending intensive day treatment programs). [According to group facilitators, DTR members

who declined to participate were not newer to the groups or less involved than were those who participated; no mention of concerns about potential breach of anonymity were made either to the researchers or DTR groups leaders.] A total of 310 interviews were completed between January and December 1999. Client participation was voluntary based on informed consent; administration of the baseline instrument took about 2.5 hours; and participants were given a \$35 cash incentive.

Measures

The baseline interview is a semi-structured instrument covering sociodemographics and background, mental health status and history, mental health treatment history (including medications), substance use status and history, substance use treatment history, and history of participation in DTR and other 12-step fellowships.

The following measures were used to assess support in the recovery process:

Social support for recovery—After determining through social science database searches that no existing instrument measured adequately the specific social support construct of interest, an instrument was developed to assess support during the recovery process. Scale development is presented in the Results section.

Steady partner support—"Are you currently in a steady relationship and if so with whom? (if more than one steady partner, answer about the one with whom you spend the most time)." Response categories: Legal spouse/common law-marriage; steady male partner; steady female partner; no steady partner. Responses were dichotomized: partner vs. no partner.

Spiritual support—This construct was assessed using an abbreviated, adapted version of the Spiritual Well-Being scale (Ellison, 1983). The 12 most relevant items of the original 20item scale were retained and scored on a 4 point Likert-type index: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Sample items: "my relationship with my Higher Power contributes to my sense of well-being, "I don't have a personally satisfying relationship with my Higher Power." Cronbach Alpha = .85. Higher scores = higher spiritual support.

DTR participation—(a) Length of attendance: "When did you first attend a DTR meeting?" Responses: One to three months ago; 4–6 months ago; 7 months to 1 year ago; 1 to 2 years ago; 2 to 3 years ago; 3 to 5 years ago; over 5 years ago; (b) Frequency of attendance: "How often are you currently attending DTR?" Responses: Less than once a month, once a month, every other week, 2–5 times a week, 6–7 times a week.

DTR networking—"Do you ever speak to other DTR members about your issues?" Resulting dichotomy: networks with other DTR members vs. does not network with other members.

Attendance at 12-step fellowships other than DTR—"Do you regularly attend meetings at a fellowship or self-help group (such as AA, NA) other than DTR?" List of fellowships: Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous, Al-Anon, Sex Anonymous, Emotions Anonymous, Codependence Anonymous, Gamblers Anonymous, Over-eaters Anonymous, Recoveries Anonymous, Other Anonymous (specify).

Involvement with 12-step fellowships other than DTR—An index of other 12-step involvement was created using (a) frequency of attendance for each fellowship attended, (b) frequency of sharing at meetings "(How often do you usually share at meetings?" Never, rarely, sometimes, often, always), and (c) "Do you have a sponsor at (each fellowship attended)." For this index, a higher score represents higher involvement. Although a similar question was asked

for DTR, the variable was not entered into the analyses because only 1% of DTR members reported having a DTR sponsor. DTR is a relatively new fellowship, and sponsorship has not been formalized at this time. As more DTR members progress further in their recoveries over time, it is expected that one-on-one AA-style sponsorship will become more frequent.

The following indicators of recovery and well-being were used:

Mental health—(1) Past year—report of mental health symptoms in the past year was obtained from a checklist of 13 items (e.g., "felt nervous, tense, worried frustrated or afraid," "heard voices, heard or saw things that other people don't think are there," and "felt like seriously hurting someone else"); (b) Past month—severity of mental health symptoms in the past month: "Overall, how troubled have you been by mental health or emotional problems in the past month (30 days)?" Responses: 1 = Not at all, 2 = somewhat, 3 = moderately, 4 = very. For both mental health indices, a higher score represents higher mental health distress.

Substance use—(a) Past year: "In the past year, did you use (name of drug)?" (b) Past month: "[For drugs used past year] In the last 30 days, how many times did you use (name of drug)?" For both substance use indices, a higher score represents higher level of substance use.

Personal well-being—This construct was measured using the Personal Feelings of Well-Being subscale of the Quality of Life Enjoyment and Satisfaction Scale (Endicott, Nee, Harrisson & Blumenthal, 1993) adapted in language for the present study. The scale consisted of 14 items following the question: "Thinking now about your feelings, in the past month (30 days), how often have you felt (item)." Items were rated using five response categories (never, rarely, sometimes, often/most of the time, all the time). Internal reliability for the resulting scale was high ($\alpha = .93$).

Analytic Procedures

A principal-components factor analysis with Varimax rotation was used for the construction of the "social support for recovery" scale. A three-phase procedure was employed to test the hypothesized associations among support, recovery status and well-being. First, the predictor and outcome variables were included in a bivariate correlation matrix. Next, multiple regression analyses with simultaneous entry were conducted entering as predictors only the variables significantly associated with each of the recovery and well-being indices. Finally, each of the support variables that were significantly associated with recovery and well-being indices in the second stage of the analysis were used as dependent variables in multiple regressions, entering as predictors the other support variables. One-tailed tests of statistical significance are used throughout because directional hypotheses are being tested.

RESULTS

Sociodemographics and Background

The study participants were male (72%) and African-American (58%), Hispanic (16%), non-Hispanic white (25%). Ages ranged from 20 to 63 years of age (median = 39 years). Over one-half (59%) finished high school or obtained a GED. Almost all (95%) reported government assistance as their primary income.

Over one-half (52%) lived in a community residence or apartment program; 21% lived in their own apartment or house; 11% with friends/relatives, 10% in a Single Room Occupancy Residence (SRO) and 6% in a homeless shelter. They were single (62%), separated, divorced or widowed (30%), married or in a common law marriage (8%); and 32% reported currently having a steady partner. Most (91%) had no current involvement with the criminal justice

system; 7% were on probation or parole; 2% had a case pending. Six percent reported being HIV-positive.

Drug and Alcohol Use

DTR members' experience with substance use was extensive, starting with their first use at a median age of 14 years. Overall, crack/cocaine has been the primary substance for 42% of members; 34% cited alcohol as primary, 11%, heroin, 10% marijuana, 2% "pills" and 1% other drugs. Nearly one-half (47%) reported having used drugs and/or alcohol in the 12 months preceding the interview; 9% reported using drugs and/or alcohol in the past month. [While self-reported drug use was low, there are reasons to believe that it was not generally being under-reported. Participants were in treatment programs where urine samples are collected and many lived in residences with varying degree of supervision. Further, they were members of a 12-step program that places the utmost emphasis on honesty. All these factors were identified as yielding "highly valid" self-reported substance abuse among non-psychotic dually-diagnosed individuals (Weiss, Najavits, Greenfield, Soto, Shaw & Wyner, 1998).]

Mental Health

DTR members have a long history of mental health symptoms, reporting their first episode in adolescence (median age = 18 years). Almost all (96%) have been diagnosed with a mental health disorder; median age when first diagnosed was 30 years. The most prevalent diagnoses were schizophrenia (43%), bipolar disorder (25%), major depression (26%), schizoaffective (7%), and post-traumatic stress disorder (5%).

Self-Help Participation

Length of DTR attendance among study participants ranged from one month to five years or more; two-thirds (68%) have been attending for one year or more (Table 1), The majority of members attend regularly: 37% more than once a week, 60% once a week.

Three-quarters (75%) also attended traditional 12-step meetings: 73% were to AA and 64% to NA. Among those who attended such meetings, level of involvement was low to moderate, averaging (mean) 5.2 on a possible range of 0 to 11. One-half (49%) only reported discussing mental health issues at these meetings. Those who did not attend traditional 12-step groups said that they felt uncomfortable, judged, or not accepted because of mental health issues or medications, or that DTR met their needs; many added that no other group was necessary because they were not having any problem with drugs or alcohol, such as cravings or slips.

Social Support for Recovery Scale Construction

Support items were developed in collaboration with DTR members consulting on this study, from members' answers to open-ended questions in qualitative interviews reported elsewhere (Vogel et al., 1998) and from what members have been heard to share at open meetings. Principal components factor analysis with Varimax rotation produced two interpretable factors accounting for 25.7% and 14.0% of the variance, respectively. The individual item descriptives and factor loadings are presented in Table 2. The first factor was labeled "Extent of Support and Understanding in Recovery" and the second factor "Sources of Support in Recovery." Internal consistency was high for the first factor (Cronbach $\alpha = .87$) and moderate for the second ($\alpha = .66$); the latter result is not surprising as degree of support may vary considerably across sources (e.g., family, service providers and roommates).

Additional Support Indices

Descriptive findings for individual support variables are presented in Tables 1 and 2. DTR involvement (length and frequency of attendance and networking with other members) was

high, as was perceived spiritual support (Table 1). Members generally reported high levels of social support; in particular, they reported receiving the highest level of support from service providers and from other DTR members (Table 2).

Recovery Indices

Findings for recovery indices (Table 1) indicated that while drug/alcohol use was relatively low, mental health symptoms were moderately elevated, both in the past year and in the past month. Well-being was generally high.

Association Among Recovery Indices

The correlation coefficients among recovery indices ranged from r = -.02 and r = .41. The indices of substance use and mental health symptoms were moderately correlated within domains (r = .33 and r = .41 respectively) but coefficients across domains were low (ranging from r = .07 to r = -.08). Personal well-being was significantly correlated with the mental health indices (r = -.31 for past year and r = -.33 for past year) and substance use in the past year (r = -.12) but not in the past month.

Associations Among Support, Mutual Aid and Mental Health

Bivariate correlations indicated that greater extent of support was associated with less mental health distress in the past year and past month (Table 3). Having more sources of support was associated with mental health in the past year (although not in the expected direction) but not in the past month. Longer attendance at DTR was also associated with less mental health distress in the past year, but not in the past month. Multivariate analyses confirmed the association of both extent (B = .65, p = .002) and sources of support (B = -.65, p = .01) with mental health in the past year; only extent of perceived support was associated with mental health in the past month (B = -.11, p = .05).

Associations Among Support, Mutual Aid and Substance Use

There were significant correlations between social support and substance use (Table 3) such that subjects who perceived high levels of support and more sources of support were less likely to report having used drugs and/or alcohol in the past year and past month. Longer, more frequent attendance at DTR, as well as networking with other DTR members were significantly associated with less substance use in the past year. In multivariate analyses, sources of support and length of DTR attendance were associated with substance use in the past year (B = -.07, p = .02 and B = -.06, p = .03 respectively). Sources of support and length of DTR attendance were also associated with substance use in the past month (B = -.07, p = .03 respectively), as was extent of support (B = -.03, p = .03).

Associations Among Support, Mutual Aid and Well-being

The extent of support participants reported getting from the people in their lives was the strongest correlate of personal well-being (Table 3). Spiritual support and frequency of DTR attendance were also associated with well-being such that those with higher spiritual support and who attended DTR more frequently were more likely to report higher well-being. There was also a modest correlation between well-being and having a steady relationship. Attending meetings at 12-step fellowships other than DTR was associated with lower reported well-being. In the multiple regression analysis, higher levels of well-being had four significant correlates: greater spiritual support (B = .04, p = .00), less attendance at other 12-step fellowships (B = -.29, p = .00), more frequent attendance at DTR (B = -.14, p = .02), and having a steady relationship

Association Among Support Variables

The Social Support scales (Extent of Support and Understanding and Multiple Sources of Support) were found to be associated with both mental health and substance use. To elucidate the relationship between the social support scales and the other support indices, each of these two support scales was entered as the dependent variable in multiple regression analyses, using the other support variables as predictors. (Other support variables that were significantly associated with recovery indices in Table 3 were included). Greater frequency of attendance at DTR was significantly associated with higher levels of perceived support and understanding (B = .20, p = .02), while higher networking with DTR members was associated with more perceived sources of support (B = .46, p = .00).

DISCUSSION

In sum, it was hypothesized that higher levels of perceived support and more participation in 12-step mutual aid groups would be associated with more successful recovery (less mental health symptoms and substance use) and with higher levels of personal well-being. The hypothesized associations among support, dual recovery and well-being were confirmed. The hypothesized associations between participation in 12-step mutual aid and dual recovery were confirmed for dual recovery groups (DTR) but not for traditional 12-step groups. Participation in specialized mutual aid was associated with recovery status indirectly by contributing to perceived levels of support. Personal well-being was directly associated with participation in DTR, and spiritual and steady partner support. The associations were generally moderate, perhaps, in part, because of the skewed distribution of some of the variables (e.g., substance use past month). However, these results are encouraging.

Participants generally reported high levels of support from various sources; in particular, they reported receiving the highest levels of support from both DTR peers and treatment providers. Increases in the number of supportive relationships have been shown to improve quality of life in individuals with mental health disorders (Rosenfield & Wenzel, 1997). In the present study, the various sources of support could intervene at different levels, forming a protective network around participants. For example, DTR peers could share their experiences and coping strategies while treatment providers could offer clinical interventions (such as individual counseling or medication).

Participant's reports of multiple supportive relationships also offered an interpretation for the finding that having a greater number of supportive people was associated with more mental health distress in the past year. While this association seems counterintuitive, an explanation can be proposed for this sample. The majority of study participants lived in settings where various supportive resources are available (community residence, treatment programs, selfhelp groups). It may be that the number of people offering support increased when the individual was showing signs of mental health distress. According to this interpretation, participants would receive support from several people or sources in their everyday lives, and the number of supports would increase when participants were not feeling well. For example, treatment providers and peers would perceive that more support was needed and would rally around the individual through the crisis and for some tune afterwards. The number of sources of support could thus follow rather than precede the crisis. This interpretation is strengthened by the fact that the association between number of supportive people and mental health disappeared when the time frame for mental health symptoms was the past month. Moreover, this interpretation does not contradict or negate the authors' overall conclusion that support enhances the likelihood of recovery; rather, it suggests that recovery from mental health may be associated with having a supportive network that is sensitive to one's need for support at a given moment in time.

The study findings indicate that extent of support is associated with better mental health. Perceived extent of support can be thought of as answering the question: "Am I getting the support that I need?" allowing for the fact that need for support varies. While perceived extent is not the equivalent of satisfaction with levels of support, it can reasonably be interpreted as a measure of the match between need for support and support received. (A large discrepancy between support needed and support received would likely result in low perceived extent of support.) Thus, taken together, the findings suggest that extent of support, that is, support received that matches need, is associated with better mental health.

The association between support and substance use was more straightforward: higher levels of support derived from a greater number of people or sources were associated with less substance use. That support was differently associated with recovery from mental health disorders and addiction suggests that the processes underlying the two recoveries and the role of support networks in each may also be different. It may be that in the case of mental disorders, an imminent crisis is preceded by visible warning signs (e.g., isolation, reported by many DTR members as preceding the recurrence of symptoms) that allow members of one's support group to rally around the individual and "cushion the fall"; in the case of addiction, perhaps because of the strong role of denial, a slip or relapse is not preceded by signs that can be as easily interpreted by members of the support network because the nature of addiction is such that the individual will conceal urges, at least in the early stages of recovery. Empirical investigation of these questions can contribute greatly to understanding the course of the two disorders, particularly in treating dually-diagnosed individuals.

The association between importance of spiritual support and well-being underscores the role of spirituality in the recovery process and calls attention to the need to incorporate spirituality in addiction treatment (for discussion, seeGoldfarb, Galanter, McDowell, Lifshutz & Dermatis, 1996). A previous study reported that dually-diagnosed clients view spirituality as crucial to their recovery, and that staff underestimated both clients' level of spirituality and the importance they placed on such issues (McDowell, Galanter, Goldfarb & Lifshutz, 1996). In the present sample, levels of perceived spiritual support were generally high, which may be expected for individuals who attend 12-step fellowship meetings where spirituality is viewed as the path to recovery.

The results indicate that participating in DTR contributes to dual recovery directly, in the case of substance use, and indirectly, in the case of mental health, by increasing the sources and extent of perceived support. While DTR participation was associated with less substance use, participation in other 12-step fellowships was not, but instead had a negative association with well-being, such that those who attended other 12-step fellowships had *lower* levels of wellbeing. One possible interpretation of this result comes from participants' reported reasons for attending or not attending such meetings. Reasons to attend traditional 12-step meetings generally centered around drugs and alcohol issues, while one of reasons for not attending was that no group other than DTR was necessary since participants were "not currently having cravings or slips." Traditional 12-step fellowships are single problem-focused and members typically attend such meetings to deal with that specific issue. Thus it appears that DTR participants, many who feel uncomfortable at other 12-step fellowship meetings (Vogel et al., 1998), attend these groups only when they are struggling with drug and alcohol issues and need to focus on that. According to this interpretation, decreased well-being and increased attendance at traditional 12-step groups would not be causally related, but rather would occur simultaneously as a result of a current struggle with addiction.

Vaillant (1983) has described the conditions necessary to the process of recovery as abstinence, substitute dependencies, behavioral and medical consequences, enhanced hope and self-esteem, and social support in the form of unambivalent relationships. These factors may be

even more crucial to recovery from co-occurring disorders than for overcoming "simple" addiction or mental disorder alone. As noted, dually-diagnosed individuals are faced not only with a double recovery challenge but may also lack some of the support resources available to those striving to recover from a single disorders. The isolation and ostracism associated with having a mental disorder may be compounded by low self-esteem and inadequate social skills, so that a dually-diagnosed person may not be able to reach out for support—indeed, may not feel worthy of it. This is consistent with the finding that two-thirds of DTR members reported starting to use drugs and alcohol in adolescence to fit in with and be accepted by peers, many adding that using substances made them feel normal for the first time (Vogel et al., 1998).

A recent study of the issues challenging dually-diagnosed individuals in recovery found that dealing with emotions and feelings was reported as "very difficult" by the majority of subjects (Laudet, Magura, Vogel & Knight, 2000). The difficulty of dealing with feelings is understandable for individuals whose addiction is aggravated by mental disorders in which inappropriate affect regulation plays a large role. Dealing with feelings that may have been previously masked by active addiction and addressing feelings associated with entering recovery are crucial issues to work on in recovery. The importance of emotion management is heightened by the fact that how individuals deal with their feelings about the past (e.g., anger, shame, guilt, regret, sadness), the present (e.g., confusion, pain, isolation) and the future (e.g., fear, hopelessness) bears on their sobriety. In qualitative interviews, most subjects asked about slips and relapses to drug use mentioned an emotional cause: loneliness, isolation, and in particular, anger. To cope with these painful, sometimes new, and often confusing feelings, individuals need to explore and express their emotions. Clients with mental disorders function better in treatment climates that are supportive and encourage personal expression (Timko & Moos, 1998). Personal disclosure, the sharing of one's story, is one of the techniques used in group therapy offered at most treatment programs, as well as the hallmark of mutual aid groups. Personal disclosure is difficult and can only be therapeutic in a highly supportive environment where the individual feels that he/she will be accepted and loved, rather than judged, no matter what is disclosed. Unconditional acceptance and understanding are two of the key ingredients members find in self-help groups: personal disclosure among people who share your experience, understand it, and thus will accept you as one of their own.

Involvement in self-help has many recognized benefits, including validating one another's experience, providing a structure for a new sense of self, and helping move from isolation and loneliness to empowerment and reconnection with ordinary life (Baxter & Diehl, 1998). Further, self-help groups based on the 12-step program of recovery, such as DTR, go beyond "simple support" for achieving and maintaining abstinence, offering a forum for members to share information, coping strategies and life skills. For dually-diagnosed persons, the traditional "one-disease-one recovery" 12-step self-help group falls short of meeting their needs because it cannot afford them these benefits. Only a minority of the dually-diagnosed participate in substance use self-help groups, finding them alienating and unempathic (Noodrsy, Schwab, Fox & Drake, 1996). This is also the experience of a substantial minority of participants in this study and present findings show no beneficial association between traditional 12-step attendance and dual recovery. In most cases, many of the critical ingredients of mutual aid, including identifying, bonding, and sharing coping strategies, are not available to dually-diagnosed persons in a traditional 12-step group (for discussion, Vogel et al., 1998). In the cross-sectional analyses reported here, participation in DTR, a mutual aid group of dually-diagnosed individuals, is associated with recovery from both mental health disorders and substance use through members' perceptions of support. Networking with other DTR members is correlated with greater perceived number of sources of support, and greater frequency of attendance is correlated with greater perceived extent of support.

All data presented here were based on self-report. Further, the findings were based on crosssectional data; it is thus not possible to establish causation. Alternative interpretations (e.g., that individuals with less severe symptoms and/or substance addiction feel better, go to more meetings and thus receive more support) cannot presently be rejected. Later in the study, however, the analyses will be repeated using baseline data as predictors of one-year follow-up recovery status and personal well-being. Overall, the fact that the present findings are consistent with those of previous empirical studies of support and mutual aid is encouraging.

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TABLE 1

Support Items and Recovery Indices: Descriptives

SUPPORT ITEMS			
DTR networking	80%		
Other 12-step fellowship attendance	73%		
Steady partner support	32%		
Length of DTR attendance (months)	Mean = 26	SD = 26	
Frequency of DTR attendance	Mean $= 2.7^*$	SD= 6.3	
Other 12-step fellowship involvement			
Full sample $(N = 310)$	Mean= 4.0	SD = 2.9	
Fellowship attendees (N = 226)	Mean = 5.2	SD = 2.2	
Spiritual support	Mean = 48	SD = 5.3	
Recovery Indices			
Any substance use past year	47%		
Any substance use past month	9%		
Mental health symptoms past year	Mean = 8.25	SD = 3.5	
Severity mental health sympt. past month	Mean= 2.26	SD= .93	
Personal well-being	Mean= 3.73	SD= .72	

* 2–5 times per week.

TABLE 2

Social Support Scale: Item Descriptives, Factor Structure and Item Loadings (N = 310)

	Individual Items		Factor Loadings	
	Mean [*]	Standard Deviation	Factor 1 [*]	Factor 2 ^{**}
Factor I: Extent of Support and Understand	ing in Recovery			
The people in my life are no help at all	1.9	0.7	.79	.12
I'm on my own in my recovery, I don't	1.9	0.7	.71	.03
The people in my life go out of their	3.1	0.8	67	00
way to show me support	5.1	0.8	.07	.00
No one in my life really understands me	2.1	0.8	63	12
My friends and relatives don't bother	2.1	0.8	.03	.12
with ma much	2.2	0.8	.02	.04
The mean is in multife up denotes d that I	2.4	0.7	50	10
The people in my me understand that I	5.4	0.7	.39	.18
am working on myself	2.1	0.8	53	07
Service providers do not understand my	2.1	0.8	.52	07
recovery needs	2.0	0.0	16	00
I get a lot of support from everyone I	2.9	0.8	.46	.09
know				
Factor II: Sources of Support and Encourage	ement in Recovery			- 0
Other DTR members are encouraging	3.7	0.6	.19	.68
and supporting me in my recovery				
efforts				
Service providers are encouraging/	3.7	0.8	.09	.65
supporting me				
Members at fellowships other than	2.7	1.6	10	.62
DTR are encouraging/supporting me				
My roommates/housemates are	2.8	1.6	15	.56
encouraging/supporting me				
My friends are encouraging/supporting	3.4	1.1	.17	.55
me				
My relatives are encouraging/	3.1	1.3	.25	.49
supporting me				

*Cronbach $\alpha = .87$;

** a = .66.

TABLE 3 Correlations Between Support and Recovery Indices

Mental Health Substance Use Past Year Past Month Past Year Past Month Personal Well-Being -.19** -.15** .29** Extent of support and understanding Sources of support -.10* -.12* -.12^{*} -.23^{**} -.10^{*} .20^{**} -.12^{*} -.25^{**} -.12^{*} -.04 -.04 .09 Length of DTR attendance -.03 .05 Frequency of DTR attendance DTR networking .15** .02 .05 .10* -.11* .06 -.07 .00 Other 12-step fellowship .09 .00 -.07-.07-.12* attendance Oilier 12-step fellowship -.03 -.06 -.08-.05 .05 involvement .13^{*} .18^{**} Steady partner support .00 -.02 -.04 -.08Spiritual support .02 -.07 -.03 -.06

p < .05;

** p < .01. All one-tailed.