
The Impact of Emotional and Material Social Support on Women's Drug Treatment Completion

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This study assessed how women's perceptions of emotional and material social support affect their completion of residential drug treatment. Although previous research has examined how social support affects recovery, few studies, if any, have examined both the types and the sources of social support. The study hypothesized that women's perceptions of the emotional and material social support they receive from family, friends, partners, drug treatment, child welfare, and welfare agencies will affect treatment completion. The sample consisted of 117 women who were enrolled in a women's residential treatment program. Data were collected in semistructured initial and follow-up interviews using a life history calendar; the Scale of Perceived Social Support, which was adapted for this study; and women's treatment records. The results support the hypothesis. Social support can have both positive and negative effects on treatment completion, depending on the type and source of support provided.

KEY WORDS: *drug treatment; foster care; social support; TANF; women*

According to social network theory, social networks are important sources of social support (Scott, 2000). Individuals who perceive that others will provide appropriate assistance are less likely to view a situation as stressful and tend to feel that they are able to meet the demands of the situation (Lazarus & Folkman, 1984). Women who use drugs and have more social support may resort to substance abuse less often than women with less social support because they may feel less need to turn to drugs in response to stressful life events (Tucker et al., 2005).

This study examined the impact of women's perceptions of the emotional and material social support they receive from family and friends and drug treatment, welfare, and child welfare agencies on their completion of a residential drug treatment program for women in a midwestern state. Women's perceptions of the emotional and material support they received were examined, as research suggests that perceptions of social support are most closely associated with self-efficacy (Bandura, 1990). Items from the Scale of Perceived Social Support (MacDonald, 1998) were used to measure emotional support. Cash assistance and providing a residence for the women or their children were included as types of material support. Women's perceptions of

emotional and material social support were measured on their initial admission into treatment. Emotional social support was also measured in a subset of women at three months to assess whether women's perceptions of emotional support remained stable during the initial months following treatment.

REVIEW OF THE LITERATURE

Although there are many definitions, experiencing some type of positive interaction or helpful behaviors when in need is a common element in all the definitions of *support* (Rook & Dooley, 1985). Beyond this common element, there is no consensus on how social support should be defined, and researchers have used an array of definitions to examine social support. Although some define social support narrowly—for example, according to the type of support received or the nature of the social network—others argue that the concept of social support is multifaceted (Hupcey, 1998). For example, Vaux (1988) argued that social support encompasses support networks, supportive behaviors, and a subjective appraisal of support. Individuals' perceptions of social support, or their subjective appraisal, may be most related to their self-efficacy, or a belief in their ability to accomplish a task (Bandura, 1990). On the basis of Bandura's definition of self-efficacy,

women's perceptions may be most closely related to their sense of self-efficacy and contribute to their drug treatment completion.

For women in recovery, social networks can provide the social, emotional, and material resources they need to address the myriad concerns that confront them, especially in the early stages of recovery (Becker & Gatz, 2005). Women in recovery may have less social support overall than women who are not chemically dependent (Curtis-Boles & Jenkins-Monroe, 2000), and their support system is different from that of recovering men (Dodge & Potocky-Tripodi, 2001; Schilit & Gomberg, 1987). Early research suggests that both heroin-addicted and nonaddicted women of lower socioeconomic status tend to rely heavily on their informal helpers (Marsh, 1980), and ethnicity, age, and primary drug have little effect on women's social networks (O'Dell, Turner, & Weaver, 1998). Women's social networks tend to be long-term, ethnically homogenous, and of high density (El-Bassel, Chen, & Cooper, 1998). Such long-term relationships can be a benefit or a drawback, depending on whether these networks support drug use (Trulsson & Hedin, 2004). For homeless women who use drugs and are not in treatment, negative social support directly predicts more drug use, whereas positive social relationships do not encourage less drug use. For these women, their social support networks may already be fragmented and strained (Galaif, Nyamathi, & Stein, 1999).

Women who are heavily drug-involved generally identify parents and partners as their major providers of practical help and advice. In one study, women in outpatient treatment indicated that they were satisfied with the support they received from family and friends (Salman, Joseph, Saylor, & Mann, 2000). The family of origin, especially mothers, grandmothers, and sisters, can be the chief providers of both emotional and material support (Trulsson & Hedin, 2004). Close friends and family members may be able to provide child care, transportation, and other types of social support to help women make a functional recovery in the community (Metsch, McCoy, Miller, McAnany, & Pereyra, 1999). For women, mothers are often anxious to help their daughters in any way. However, giving the daughter money or basic life necessities often enables her drug use. And although many daughters appreciate their mother's help, there can be an element of distrust and control in these relationships (Strauss, 2001). Furthermore, when women are trauma survivors,

they may view their family members as offering less emotional support than their friends (Savage & Russell, 2005).

The support women receive from their intimate partners is significantly associated with their motivation to successfully complete drug treatment (Riehmman, Hser, & Zeller, 2000). Receiving positive support for recovery from their partner may be especially helpful, though women's partners seldom support their giving up drugs (Rosenbaum, 1981). Living with a partner can be a protective factor for African American women who use drugs (Lam, Wechsberg, & Zule, 2004). African American women look to their partners to provide a sympathetic ear and to their parents for affirmation of self-worth (Strauss, 2001). However, partners can also enable drug use, suggesting that treatment providers should assess the quality of women's social support (Falkin & Strauss, 2003). Because these relationships can often contain elements of power and control, many women choose to end their current relationship when they begin recovery (Trulsson & Hedin, 2004). In addition to partners and parents, women in treatment view children as providing support for their recovery, and this includes children living with them and children who are in the custody of others (Tracy & Martin, 2007). Having the responsibility for caring for children and receiving public assistance can also be protective factors for African American women who use drugs (Lam et al., 2004).

In addition to family, partners, and friends, women in recovery may perceive drug treatment programs to be part of their support system (Salman et al., 2000). Given that their current networks may not support recovery, women may look to drug treatment, child welfare, and welfare agencies and other professionals as important sources of social support (Trulsson & Hedin, 2004).

Social networks and social support are associated with a variety of positive outcomes among women addicts who are in and out of drug treatment. Social support has been shown to be predictive of drug treatment completion (Knight, Logan, & Simpson, 2001), abstinence (Kaskutas, Bond, & Humphreys, 2002; Loudenburg & Leonardson, 2003), less frequent marijuana use and drinking to intoxication (Tucker et al., 2005), and better drug treatment outcomes for women in both outpatient (Comfort, Sockloff, Loverro, & Kaltenbach, 2003) and residential treatment (Alemi et al., 2003). Social support has also been associated with women using more

positive coping strategies in their recovery process (Roberts, 2001), with increased self-esteem, and it has been shown to be a key factor in moderating depression (Dodge & Potocky, 2000). Among women in temporary shelters, higher levels of social support have been shown to predict less frequent marijuana use (Tucker et al., 2005).

Interventions designed to strengthen women's social networks have been shown to improve drug recovery outcomes (El-Bassel et al., 1995). Family members should be engaged in the treatment process, and women have expressed a desire for treatment programs that include family and friends and accommodate their young children (Riehm et al., 2000; Roberts, 2001). If social support is important for women's recovery, strengthening their social networks should be viewed as critical to the recovery process. At least one study has shown that both the size and amount of social support can increase from pretreatment to posttreatment for women who are in continuous recovery for a minimum of six months (Tucker et al., 2005).

Although social support has been shown to affect women's recovery, further research is needed to understand its role in women's drug recovery over time, including the impact of different sources and types of support. For example, little is known about the relative benefits of receiving emotional support from family and friends as opposed to receiving emotional support from staff in drug treatment agencies and social service agencies. Similarly, little is known about whether women who receive agency-based material support, such as cash benefits through Temporary Assistance for Needy Families (TANF), are as likely to complete treatment as are women who receive material support from family, friends, or partners. The current study examined the impact of emotional and material social support provided by family, partners, friends, and agencies on women's treatment completion rate.

METHOD

This study is part of a larger, federally funded research project that examined the impact of a multiple agency service environment on women's drug recovery outcomes over time. The study's hypothesis was that the emotional and material support women received would influence treatment completion. The private nonprofit agency where the study took place provides comprehensive drug abuse treatment in programs designed specifically for women. The

drug treatment program offers inpatient or residential treatment, intensive outpatient treatment, and outpatient treatment in a sequential manner. This study examined women's completion of the 30-day residential treatment program. The residential program provides comprehensive services, including drug treatment, nursing services, housing, on-site day care, and education on HIV and other sexually transmitted diseases. These comprehensive services are the service components found to have positive associations with treatment completion and other desirable treatment outcomes for women (Ashley, Marsden, & Brady, 2003).

Data Collection

Project data were gathered using a panel-based, longitudinal survey research design assessing services and drug treatment outcomes for women in recovery, using both retrospective data collected when women first entered residential treatment and data collected on events occurring during the study period. The analysis reported here includes data collected when women entered residential treatment and three-month follow-up data. The primary data collection instruments were a life history calendar developed for the study and the Scale of Perceived Social Support (SPSS) (MacDonald, 1998). Primary data were collected in a semistructured interview on admission into treatment and at three months. Women's case records were used as a secondary data source to collect demographic data. The agency's intake form, case closure form, and the Addiction Severity Index (Leonhard, Mulvey, Gastfriend, & Schwartz, 2000), completed by agency staff, were the key data sources in women's records. Women's ethnicity, whether they had children, and whether they completed treatment were obtained from the intake and closure forms. The Addiction Severity Index was used to collect data on women's marital status, education, drug treatment history, and drug use in the past 30 days. Participants' case records were also used to compare women's responses during interviews with case record data. Women were asked to clarify any identified discrepancies.

The life history calendar was used to collect data on women's sources of material support, and the SPSS was used to collect data on women's perceptions of emotional forms of social support. Using a life history calendar can improve participants' recall by increasing the respondents' ability to place different activities within the same time frame. Final

development of the life history calendar followed procedures described by Freeman, Thornton, Camburn, and Young-DeMarco (1988).

Initial interviews took place at the residential treatment center in a private office. The follow-up interviews were conducted in locations convenient to the women, such as their homes, halfway houses, or where they received outpatient counseling. Women were paid seven dollars as an incentive for completion of the initial interview and 10 dollars for completion of the follow-up interview.

Sample

The sampling frame was all women entering a residential substance abuse treatment program in the Midwest for women during a 13-month period in 2003 and 2004. Systematic random sampling was used to identify a pool of women to be considered as potential participants. Every other woman entering residential treatment entered the pool. This methodology ensured that women entering throughout the month had an equal chance of being included. Some women declined to participate, and others who were admitted left before they could be included as part of the pool of potential participants. Some left within hours of admission. Twenty to 30 women entered residential treatment each month; the sample included 10 to 15 women entering treatment each month for 13 months. A total of 117 women, approximately one-third of the women entering the program during this period, participated in the study. Although results may be generalizable only to women receiving residential treatment from this program and, more specifically, those who remained in residential treatment for at least three days, systematic random sampling contributes to the study's ability to generalize to a wider population.

The 117 women in the sample ranged in age from 19 to 64 years, with a mean age of 32.5 ($SD = 9.19$). Few of the women (20 percent) were currently married, and 42 women (37 percent) had been married in the past. Although most women had children (108, or 90 percent), only 65 women (56 percent) had children in their home. In terms of ethnicity, 82 (70 percent) were European American, 15 (13 percent) were African American, eight (7 percent) were Hispanic, four (3 percent) were Asian American, and eight (7 percent) were Native American. With regard to educational levels, most of the women had a high school degree or a GED, and a few had some

college. Approximately 47 percent, or 55 women, had either a high school degree or its equivalent, and 21 percent (23 women) had some college or a college degree, usually a two-year degree. Most women (75 percent, or 88) had at least one previous drug treatment episode, and 44 percent (51 women) had two or more previous treatment episodes. Only 25 percent (29 women) had no previous drug treatment history. Slightly under half (42 percent, or 49 women) reported being multiple drug users when they first entered treatment. Marijuana, crack/cocaine, and methamphetamine were the illegal drugs women most often reported using prior to treatment. Demographically, the 38 women who participated in the three-month follow-up were very similar to the sample as a whole. Thus, results from analysis of three-month follow-ups are probably applicable to the whole sample.

In terms of treatment completion, 71 women (61 percent) completed the 30-day residential treatment program. The most common reason for not completing treatment was self-discharge, as 24 women (21 percent) in the study self-discharged. Being administratively discharged or being discharged for inappropriate behavior was second, as 11 women (9 percent) were discharged by the treatment program. The reasons for not completing the program for the remaining women were either not known by the agency or not indicated in their case records. Women who were willing to complete follow-up interviews were a little more likely to have completed treatment (68 percent, compared with 61 percent for the whole sample), which is not surprising.

Variables

The dependent variable is a dummy variable indicating whether women completed the 30-day residential treatment program. Women who completed the residential treatment program, moved to another treatment facility, or were continuing with a second phase of residential treatment were coded as having completed treatment; women who self-discharged or were discharged for inappropriate behavior or other administrative reasons were coded as not completing treatment. The independent variables were material and emotional support. The following categorical demographic variables were included as control variables: marital status, education, drug treatment history, drug use in the past 30 days, ethnicity, and having children.

Emotional support was defined as women's perceptions of whether they felt supported in their drug recovery process. Emotional support variables were continuous variables that indicated the extent to which women perceived they were supported by family, friends, and partners and by drug treatment, child welfare, and welfare agencies in their recovery process. The SPSS has been found to be a valid and reliable measure of the concept of social support (MacDonald, 1998). Additional research is needed to establish how sensitive the scale is to changes in social support over time, however. In this study, we used 10 items from the SPSS, five to indicate perceived emotional support from family and five to indicate perceived emotional support from friends. The women were asked to state their level of agreement with statements such as "My family shows that they care about me." The SPSS was adapted to include social support questions regarding drug treatment, welfare, and child welfare agencies. We added eight questions to evaluate perceived support from the agencies with which the women were involved. The women were asked to give their level of agreement with statements such as "The drug treatment services I am receiving are helpful to my drug recovery process." Responses for all statements were coded as 1 = strongly agree, 2 = agree, 3 = neither agree or disagree, 4 = disagree, 5 = strongly disagree, and 6 = not applicable. It should be noted that "family" may refer to family or partners, as the SPSS does not distinguish between the two.

We created summary variables to measure emotional support. First, the statements "I often feel that my family puts down my efforts" and "I often feel that my friends put down my efforts" were reverse coded so that a lower number meant greater amounts of support, as with the other statements. Then, the responses for the statements "I feel very close to my family," "When I have personal problems, I can count on my family to help," "My family shows that they care about me," and "I often feel that my family puts down my efforts" were added together for the overall family support variable. Responses to the four similar statements regarding friends were added for the overall friend support variable. Responses for "The drug treatment services I am receiving are helpful to my drug recovery process" and "I am treated with dignity and respect when I receive drug treatment services" were added to create a summary drug services variable. Because the other services questions were not applicable to

many women, an overall services support variable could not be created.

Material support was defined as women reporting that they received financial support or a residence or that their children were being cared for in foster care. Women were asked separately whether they were receiving financial support from illegal sources, such as selling drugs, at the time of admission. Thus, the material support they reported receiving from family, partners, and friends was an indication of material support from legal sources. Material support variables were dichotomous and indicated whether women were receiving financial assistance from partners, family, TANF cash benefits, or having a child in foster care and whether they were living with their partner or family prior to admission.

Data Analysis

Bivariate statistics, primarily *t* tests, were used to assess the impact of perceptions of emotional and material social support on women's completion of residential drug treatment. Logistic regression was used to test the effects of the independent variables while controlling for relevant covariates.

FINDINGS

Overall, the study's hypothesis was supported, in that women's perceptions of emotional and material support were associated with treatment completion. At the initial interview, women who perceived that they had emotional support from family were more likely to complete treatment. Receiving financial support tended to be negatively associated with treatment completion, however. Women who indicated that they had financial support from a partner, or who were receiving TANF cash benefits at the time of the initial interview, were less likely to complete treatment than women who did not have this financial support. Having a residence with a partner or family was not associated with treatment completion; neither was having children in foster care.

In terms of the covariates, marital status and whether women had children were related to drug treatment completion. Women with a marital history were somewhat more likely to complete treatment than those who were never married ($\chi^2 = 3.024, p < .05$). Though not statistically significant, women with children were slightly more likely to complete treatment than those without children. Race or ethnicity and age did not seem to affect whether a woman completed treatment. Women with less

education were slightly less likely to complete treatment. Interestingly, drug use and drug treatment history also did not matter.

Emotional Support from Services

In this study, most women reported relatively high levels of emotional social support, similar to previous research (MacDonald, 1998). Women who reported that the drug treatment services were helpful during their initial interview were more likely to complete treatment. The mean score for those who completed treatment was 1.30, and the mean score for those who did not complete treatment was 1.54 ($t = 2.048, p < .05$). The mean levels of satisfaction with support that women were receiving from services were about the same at the three-month follow-up as they were at the time of the initial interviews, however. At both times, women who disagreed with the statement that drug treatment services are helpful to the drug recovery process were less likely to complete treatment. These findings support other research suggesting that treatment of any kind is more likely to be effective when individuals believe that it will be beneficial (Harrington, 1999).

Emotional Support from Family and Friends

Respondents reported higher mean levels of support from family and friends at the three-month follow-up than they did in their initial interviews. In general, the original and three-month follow-up family support responses were somewhat correlated. The friends support and services support measures were not suggesting that for women in recovery, perceptions of social support can change over time.

The three-month follow-up responses, especially regarding support from friends, were more strongly associated with treatment completion than were the original responses. For example, none of the women's initial responses to individual SPSS items that indicated support from friends were associated with treatment completion. However, all of these items were significantly associated with treatment completion at three-month follow-up. Mean scores for women's responses to the statement "My friends show that they care about me" were 1.54 and 2.63, respectively ($t = 3.550, p < .01$), again with 1 = strongly agree. Similarly, mean scores for women's three-month responses to the statement "When I have personal problems, I can count on my friends to help" were also associated with treatment comple-

tion (1.96 and 3.13, $t = 2.98, p < .01$). These findings suggest that women who completed treatment were likely to feel increased social support from friends in the initial months following treatment.

Material Support

Women who reported receiving financial support at the time of admission were less likely to complete treatment, whereas women's residential status, including being homeless when they entered treatment, did not seem to matter. More women reported receiving financial support from partners (38 women) than from family (34 women) or from TANF cash benefits (25 women). Women receiving financial support from a spouse or partner ($\chi^2 = 3.610, p < .10$) or TANF cash benefits ($\chi^2 = 6.431, p < .05$) were less likely to complete treatment than women who did not receive such material support; family's financial support was not significantly associated with treatment completion. In addition to the 25 women receiving TANF cash benefits, six women reported receiving other types of assistance, including medical and food assistance, for a total of 31 women who received some type of material support from the welfare agency. Those who agreed that the welfare services they were receiving were helpful to their drug recovery process were more likely to complete treatment. Mean scores were 1.58 and 2.25, respectively ($t = 2.641, p < .05$). Though 31 of the 47 women who had children in foster care completed treatment, there were no differences in their perceptions of whether child welfare services were helpful to their recovery process.

Multivariate Analysis

Logistic regression analyses were run using data from the initial interviews. The most parsimonious model is shown in Table 1. Family support was reverse coded so that a lower number equals more support. For marital status, 1 = never married and 2 = had been married or currently married. For education, 1 = less than high school, 2 = high school degree, and 3 = college or technical training beyond high school. For receiving financial help from partner or receiving cash benefits, 0 = no financial help and 1 = receiving financial help. Women who reported receiving more emotional support from family members were more likely to complete treatment, as were never-married women and those with more education. Women who reported receiving financial support from a

Table 1: Logistic Regression: Factors Related to Drug Treatment Completion

Variable	Parameter Estimate	SE	Odds Ratio
Family emotional support	-0.124*	0.055	0.883
Never married	0.956†	0.491	2.601
Education	0.648†	0.347	1.912
Receiving financial help from partner	-1.311*	0.514	0.270
Receiving TANF cash benefits	-1.447**	0.554	4.250
Constant	-2.072†	1.211	0.126

Nagelkerke $r^2 = .267^{***}$

Note: 1 = did not complete treatment; 2 = completed.
† $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

spouse or partner and women who reported receiving TANF cash benefits were less likely to complete treatment than women who did not report having a supportive partner or cash benefits.

STUDY LIMITATIONS

As a random sample, the sample seems likely to be representative of the population of women receiving multiple services in this midwestern state, particularly of those receiving the program's services. The sample was small—117 women with a first interview and 38 with a follow-up—so the results should be interpreted with caution. The SPSS has been shown to be valid and reliable, but the questions that we developed to assess women's perceptions of the support they received from services should be tested in other contexts. As has been mentioned, women's perceptions of both social and material support were used rather than measures of frequency or amount of support, and this may also be considered a limitation of the study.

DISCUSSION AND IMPLICATIONS

This study adds to our understanding of the complex dynamics of the impact of social support on women's drug recovery. Though there is no single predictor of women's recovery outcomes (Comfort et al., 2003), social support continues to be an important factor. Although previous research suggests that adequate support with tangible resources can restore women's connectedness (Solarz & Bogat, 1990) and that women with TANF cash benefits fared better (Lam et al., 2004), findings from this study indicate that women who have some form of material support are less likely to complete treatment than

women who do not have material support. Having a residence—that is, living with a partner or family member—was not as strong a predictor as receiving financial support from a partner. This finding lends further support to previous research on self-efficacy, as women who feel supported emotionally may be more likely to have a sense of self-efficacy. Receiving financial support, though helpful in other ways, may reinforce women's sense of dependence on significant others or on welfare agencies.

Overall, women's perceptions of the emotional support they received from family were more important to treatment completion than their reports of financial support received from family or partners. The findings suggest that the SPSS is sensitive to changes in women's social networks. The results also suggest that support from family is more reliable than support from friends, consistent with previous research showing that family members are important resources for women in treatment (Metsch et al., 1999; Strauss, 2001). However, more attention needs to be paid to women's friend networks, because women who reported having support from friends at the second interview were more likely to complete treatment than women who did not have support. These findings are consistent with previous research that suggested support given by friends is judged more positively because it is given without the obligations inherent in family support (Antonucci, 1985).

Having adequate social supports can reduce overall stress, thus decreasing the likelihood of a relapse, as women who use drugs for recreational purposes are more likely than men to use drugs to cope with stress (Sinha & Rounsaville, 2002). Also, treatment agencies should explore ways to maintain or encourage such support, as women who reported lower emotional social support, in general, were less likely to complete treatment.

The follow-up responses had stronger relationships with whether women would complete treatment. Thus, women's perceptions of both emotional and material support and satisfaction with services should be measured at the beginning of and during treatment. Knowledge of the overall strength of women's support networks, whether they perceive that services are helpful and supportive of their recovery process, may assist practitioners in developing plans to strengthen women's social support to complete treatment and foster recovery. This knowledge should include a careful assessment of both the types

and the sources of support for recovery in women's social network.

Further research should focus on how women's social networks affect their decision to enter and complete treatment. Research should also assess how access to financial resources, both public and private, affect women's recovery, especially among poor women where resources are limited. Finally, as with other studies, we cannot assume that women who do not complete treatment or those who refuse to participate in a follow-up interview are not in recovery. However, research has suggested that better outcomes are achieved with treatment completion and longer periods of treatment (Ashley et al., 2003). Strategies designed to strengthen women's social support, especially emotional forms of social support, could improve women's drug treatment completion rates, enhance their sense of self-efficacy, and foster their drug recovery. **HSW**

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Original manuscript received September 28, 2007
Accepted February 11, 2009

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