

BRIEF REPORT

Substance-Abusing Parents' Attitudes Toward Allowing Their Custodial Children to Participate in Treatment: A Comparison of Mothers Versus Fathers

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Attitudes of substance-abusing fathers ($N = 214$) and mothers ($N = 106$) entering outpatient treatment toward allowing their custodial children to participate in individual- or family-based interventions were examined. Only 129 parents (40%) reported they would be willing to allow their children to participate in treatment. A significantly greater proportion of mothers reported they would assent to their children participating ($N = 58$ [55%]) compared with fathers ($N = 71$ [33%]). Factors associated with parents' attitudes toward their children participating included parents' (a) referral source into treatment, (b) level of psychiatric distress, and (c) substance use frequency in the previous year. Thus, parental reluctance to allow their children to participate appears to be a significant barrier in efforts to intervene with these at-risk children.

keywords: fathers, mothers, children, treatment, substance use

It is widely recognized by both the public and scientific communities that children who live with substance-abusing parents often manifest significant emotional and behavioral problems (e.g., Fals-Stewart, Kelley, Cooke, & Golden, 2003). Unfortunately, many children are raised in families in which a parent abuses alcohol or other drugs; the 2001 National Household Survey on Drug Abuse indicated 6 million children (9%) lived with at least one parent who abused or was dependent on alcohol or an illicit drug during the past year (Substance Abuse and Mental Health Services Administration [SAMHSA], 2003b). Given these children's elevated risk for psychosocial adjustment problems, the substance abuse treatment community has been strongly encouraged to address the clinical needs of these children not only to treat any current clinical difficulties but also to help prevent future problems that often emerge as these children enter adolescence and early adulthood (e.g., SAMHSA, 2003a).

Among the most common access points to these children is when a parent enters substance abuse treatment. The success of well-known family-based intervention programs for substance abuse (e.g., Focus on Families Project [Catalano, Gaaney, Fleming, Haggerty, & Johnson, 1999]; Strengthening Families Program [Kumpfer, Molgaard, & Spoth, 1996]) indicates that it is possible to engage some parents in family treatments involving children. Although children of substance-abusing parents are important targets for treatment and prevention efforts, it is not clear what proportion of substance-abusing parents would participate in such programs, if they would allow their children to participate, and what barriers may impede efforts to engage these children in treatment. Moreover, in the case of children, the absence of parental permission for the child to participate in an intervention, even if effective, makes such efforts moot.

Thus, the purpose of this investigation was to examine the reports of parents entering substance abuse treatment as to whether or not they would allow their custodial children to participate in individual- or family-based interventions provided in the substance abuse treatment program or another setting. In particular, we were interested in comparing the willingness of mothers versus fathers to allow their children to participate in treatment. Findings from several studies indicate substance-abusing mothers entering treatment report high levels of guilt and shame because of their perceived failure to provide adequate parenting (e.g., Gomberg, 1999) and often seek treatment for family problems that result from their substance use (McCrady & Raytek, 1993). Moreover, mothers often cite concern about the impact of

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their substance use on their children as a primary reason for seeking treatment (e.g., Wechsberg, Craddock, & Hubbard, 1998). Thus, we hypothesized that mothers entering treatment would be more likely to report that they would allow their children to participate in treatment than would fathers.

Research on the factors that may be associated with substance-abusing parents' attitudes toward their custodial children participating in treatment currently does not exist. Thus, we also conducted exploratory analyses to examine the relationship between substance-abusing parents' reports of whether or not they would allow their children to receive services and several parental substance use, sociodemographic, and background variables. The results of such analyses, in the absence of previous research, can provide preliminary evidence about potential barriers that may impede efforts to involve the children of substance-abusing parents in treatment, which can then serve as the foundation for future hypothesis-driven studies.

Method

Participants

Substance-abusing parents entering one of five outpatient substance abuse treatment programs, who also had at least one custodial child between the ages of 5 and 16 years, were eligible to participate. Patients consecutively admitted to these programs who remained for at least 3 weeks ($N = 382$) were asked to participate in a study examining parental attitudes about allowing their children to participate in treatment; of these, 320 parents (84%) agreed to participate (106 [33%] were mothers). The sociodemographic, background, and substance abuse characteristics of mothers and fathers entering treatment, along with the results of analytic comparisons, are shown in Table 1. Significant differences on several of the variables were found between the mothers and the fathers. In subsequent analytic comparisons between mothers and fathers, these differences were statistically controlled.

Measures

Questionnaire on parental permission. Participants completed a four-item self-report measure that asked whether they would be willing to allow one or more of their custodial children to participate in individual- or family-based treatment provided in either the substance abuse treatment program or another setting. More specifically, respondents were asked whether they would be willing to allow one or more of the children to participate in (a) family-based treatment involving the children and the parents provided in the substance abuse treatment program by a family therapist; (b) individual-based treatment for the children conducted in the substance abuse treatment program and provided by a family therapist; (c) family-based treatment involving the children and the parents provided in a setting other than the substance abuse treatment program (e.g., community mental health program, community family treatment program) by a family therapist; or (d) individual-based treatment for the children conducted in a setting other than the substance abuse treatment program and provided by a family therapist. Additionally, parents were asked to provide written remarks describing why they would be willing or unwilling to allow one or more of their children to participate in treatment.

An evaluation of the measure, conducted before the study, revealed good psychometric properties. For the four items, 2-week test-retest agreement, measured using kappa, ranged from .91 to 1.0 (all $ps < .01$). In view of the inconsistency often found

between attitudes and behavior, we also examined whether or not responses on the questionnaire accurately predicted whether a parent actually allowed one or more of their children to receive services in either the substance abuse treatment program or another setting. To do this, parents not involved in the current study who were entering outpatient substance abuse treatment ($N = 96$) were administered this questionnaire at program admission and were also offered the option of either having their children receive family- or individual-based treatment in the substance abuse program or a referral to another agency for family or child services. When these parents were discharged from treatment, their records were reviewed and the parents were interviewed and asked about any services received by their children. The record review and the posttreatment interviews revealed that 27 (28%) of the parents allowed one or more of their children to participate at some point during the course of their substance abuse treatment. On the survey, 24 (25%) reported they would allow their children to participate. Agreement between the questionnaire responses and the actual behavior of the parents was good ($\kappa = .78, p < .01$).

Substance use. The Addiction Severity Index (ASI; McLellan, Luborsky, O'Brien, & Woody, 1980) is a widely used semistructured interview designed to measure lifetime and recent (past 30 days) severity of problems in seven areas of functioning: alcohol, drug, family-social, employment, legal, medical, and psychiatric. As described in the original reference, composite scores for each area were calculated; scores are based on weighted combinations of individual items and provide reliable, valid, and sensitive measures of problem severity. Composite scores range from 0 to 1.0; higher scores indicate greater impairment.

The Timeline Followback Interview (TLFB; Sobell & Sobell, 1996) is a calendar-based interview used to assess frequency of drug and alcohol use. For the current study, percent days abstinent (PDA) was derived from the TLFB and was operationalized as the percentage of days in the 12 months before entering treatment that the interviewee reported no substance use.

Each patient was interviewed with the substance use modules of the Structured Clinical Interview for *DSM-IV* (SCID; First, Spitzer, Gibbon, & Williams, 1995). The SCID was administered by one of two master's-level interviewers, both of whom were trained by William Fals-Stewart and had extensive experience with the SCID and excellent interjudge reliability.

Procedures

The Health Sciences Institutional Review Board at the University at Buffalo approved this investigation. Individuals were approached and provided a full description of the study and the procedures to be used; those who wished to participate signed an informed consent document indicating their understanding of the study, the procedures to be used, and their willingness to voluntarily participate. Participants were interviewed with the ASI, TLFB, and substance use modules of the SCID within 2 weeks of admission. During the third week, participants completed the four-item questionnaire regarding their attitudes toward allowing their custodial children to participate in treatment.

Brief Description of the Substance Abuse Outpatient Treatment Programs

The treatment programs were located in the northeastern United States; each had a 4- to 6-month planned duration. The programs provided treatment consistent with the Alcoholics Anonymous disease philosophy. Each setting had one counselor who specialized in family-based treatment; in addition, in all programs, family

Table 1
Sociodemographic Characteristics of Parents Entering Outpatient Treatment Who Have One or More Custodial Children

Characteristic	Fathers	Mothers	$\chi^2(1, N = 320)$	$F(1, 318)$
<i>N</i>	214	106		
Sociodemographic and background ^a				
Age	30.1 ± 4.4	27.9 ± 4.3		17.99**
Education (in years)	12.9 ± 1.4	13.2 ± 1.2		3.57
Annual income ^b	32.4 ± 21.3	26.9 ± 17.6		5.73*
No. children in the home	1.5 ± 1.2	1.7 ± 1.1		2.08
Race/ethnicity ^c				
White	126 (59)	60 (57)	0.15	
African American	47 (22)	26 (25)	0.27	
Hispanic	23 (11)	11 (10)	0.01	
Other	18 (8)	9 (8)	0.11	
Living arrangement ^c				
With spouse or partner	180 (84)	40 (38)	57.95**	
With family member(s)	23 (11)	32 (30)	18.82**	
Self (alone)	9 (4)	26 (25)	30.06**	
Other	2 (1)	8 (8)	10.24**	
Referral source ^c				
Self	89 (42)	37 (35)	1.48	
Legal agency	80 (37)	20 (19)	11.31*	
Social service department	17 (8)	39 (37)	40.83*	
Other	28 (13)	10 (9)	0.90	
Substance use ^a				
Years of problematic use	9.6 ± 3.4	7.9 ± 3.9		16.05**
Percent days abstinent	30.4 ± 29.6	42.3 ± 26.8		12.18**
ASI composite scores ^a				
Medical	.19 ± .09	.22 ± .08		8.46**
Employment	.36 ± .11	.38 ± .10		2.49
Alcohol	.34 ± .07	.24 ± .08		131.39**
Drug	.34 ± .09	.29 ± .09		21.88**
Legal	.35 ± .10	.27 ± .08		51.49**
Family/Social	.30 ± .09	.35 ± .12		17.41**
Psychiatric	.26 ± .12	.30 ± .14		6.43**
Abuse/dependence diagnoses ^c				
Alcohol	159 (74)	68 (64)	3.54	
Cocaine	63 (29)	37 (35)	0.99	
Opiates	48 (22)	24 (23)	0.01	
Cannabis	40 (19)	29 (27)	3.15	
Other	49 (23)	32 (30)	1.99	

Note. Legal agency includes probation departments, parole departments, and the court system. Percent days abstinent was derived from the Timeline Followback Interview for the 12-month period before program admission. ASI = Addiction Severity Index. Abuse/dependence diagnoses include diagnoses of abuse or dependence for any of the substances listed, based on results of the Structured Clinical Interview for the *DSM-IV*. Blank cells indicate that a more appropriate statistical test (i.e., chi-square or analysis of variance) was used to compare the groups.

^a Values represent mean ± standard deviation. ^b In thousand dollars, U.S. ^c Values represent numbers, with percentages in parentheses.

* $p < .05$. ** $p < .01$.

treatment was one of the services offered to all participants. The programs selected for this study were a convenience sample.

Data Analytic Strategy

Because the primary outcome variable was binary (i.e., whether or not parents reported they would give permission to allow their children to receive treatment), parameters were estimated using logistic regression model; robust standard errors were used to account for nested data (i.e., participants nested within programs). Wald Zs were used to evaluate the parameters for significance.

For the exploratory analyses, we used the sequential model-building strategies and methods for logistic regression described by Hosmer and Lemeshow (1989). More specifically, we initially conducted univariate analyses; each potential explanatory variable

was considered in separate models. All explanatory variables in the univariate analyses that had a p value of less than .25 were then retained as candidates for inclusion in the final model (Mickey & Greenland, 1989). In addition, explanatory variables were not excluded in the multivariate model if they were found to be multicollinear (i.e., had variance inflation factors [VIFs] greater than 10) with other explanatory variables (Myers, 1990).

Results

Questionnaire Responses

The number of mothers and fathers who reported they would allow their children to participate in the different types of treatment in different settings appear in Table 2.

Table 2
Number of Parents Willing to Allow Their Children to Receive Individual- or Family-Based Treatment in Different Settings^a

Type of treatment and setting	Fathers	Mothers	Z
Individual treatment			
Substance abuse treatment program	51 (24)	48 (45)	2.86**
Other setting	57 (27)	52 (49)	2.94**
Family-based treatment			
Substance abuse treatment program	54 (25)	51 (48)	3.02**
Other setting	56 (26)	50 (47)	2.54**

Note. Z values were derived from univariate binary logistic regression model under a binomial likelihood using robust standard errors, conditional on the sociodemographic, background, and substance use differences between mothers and fathers (as shown in Table 1).

^a Values in parentheses represent percentages.

** $p < .01$.

For all items, mothers were significantly more likely to report that they would allow their children to participate compared with fathers. We also determined whether or not they would allow one or more of their children to participate in any type of treatment in any setting. Only 71 of 214 fathers (33%) reported they would allow their children to participate in any type of intervention; 58 of 106 mothers (55%) reported they would allow their children to participate. After controlling for characteristics that were significantly different between mothers and fathers (see Table 1), the logistic regression revealed mothers were more likely than fathers to report they would allow their children to participate in treatment than fathers ($B = .80$, $SE = .34$, $Z = 2.35$, $p < .05$).¹

Factors Associated With Parental Permission: Exploratory Analyses

To examine factors associated with parents' attitudes toward allowing their children to receive treatment, separate univariate logistic regression models were analyzed for mothers and fathers. Explanatory variables included in the models were sociodemographics, background characteristics, and substance use measures (i.e., all variables shown in Table 1); separate univariate models were run for each of the explanatory variables.

Mothers. For mothers, six variables had p values less than .25 in the univariate models: (a) age (younger mothers were less likely to assent); (b) living with a partner (less likely to assent if living with a partner); (c) referral from social services (more likely to assent if referred from social services); (d) PDA (higher PDA was associated with a decreased likelihood of assent); (e) ASI Family/Social composite score (higher score was associated with greater likelihood of assent); and (f) ASI Psychiatric composite score (higher score was associated with greater likelihood of assent). None of these variables were found to be multicollinear.²

The final multivariate model for mothers is shown in Table 3. When the six variables selected from the univariate analyses were entered simultaneously, the following were

significantly associated with a lower likelihood of reporting a willingness to allow their child to participate in treatment: (a) living with a partner, (b) not being referred from social services, (c) lower levels of family social problems, and (d) lower levels of psychiatric distress.

Fathers. For fathers, seven variables had p values less than .25: (a) age (younger fathers were less likely to assent); (b) referral from a legal agency (less likely to assent); (c) PDA (higher PDA was associated with increased likelihood of assent); (d) ASI Drug composite score (higher score was associated with a decreased likelihood of assent); (e) ASI Legal composite score (higher score was associated with a decreased likelihood of assent); (f) ASI Family/Social composite score (higher score was associated with a decreased likelihood of assent); and (g) ASI Psychiatric composite score (higher score was associated with a decreased likelihood of assent). The ASI Drug composite score had a VIF greater than 10 and was not included in the final multivariate model for fathers².

The final multivariate model for fathers is shown in Table 3. Four variables from the univariate analyses emerged in the final multivariate model as being significantly predictive of a lower likelihood of reporting they would be willing to allow their children to participate in treatment: (a) lower PDA, (b) referral to treatment from a legal agency, (c) higher levels of family-social problems, and (d) higher levels of psychiatric distress.

Discussion

Roughly one third of fathers, but more than half of mothers, seeking treatment for substance abuse reported they would assent to have their children participate in individual- or family-based treatment. As hypothesized,

¹ As a further evaluation of the validity of the survey measure, the medical and administrative records of all participants were examined after they were discharged from their respective treatment programs to determine which parents allowed their children to participate in individual- or family-based treatment in the substance abuse treatment program. As documented in the records, all of these patients were expressly offered the option of allowing their children to participate in individual- or family-based treatment within the program. Of the 320 parents, 215 (i.e., 160 fathers and 55 mothers) reported on the questionnaire they would not allow their children to receive services in the treatment program. Medical records indicated that children from 235 parents did not participate; as noted in the records, these services were offered to these participants but were expressly refused. The agreement between the questionnaire responses and the agency records was $\kappa = .85$ ($p < .01$). Although this level of agreement is high, the questionnaire may, to a certain extent, underestimate the degree to which parents may ultimately refuse to allow their children to participate in services, as least in the context of the substance abuse treatment program. Data were not available on services children may have received in settings other than the treatment program or on their own (e.g., from a counselor in the school system).

² Because of space limitations, detailed results for each of the univariate models (i.e., one model for each variable in Table 1) are not presented. The complete results of these analyses are available from William Fals-Stewart on request.

Table 3
Parameter Estimates for the Logistic Regression Models With Predictors Discriminating Between Whether or Not Parents Reported They Would Be Unwilling to Allow Their Children to Receive Treatment

Fixed effects	<i>B</i>	<i>SE</i>	<i>Z</i>	<i>OR</i>
Mothers				
Age	0.04	.03	1.14	1.04
Living with a partner	1.27	.51	2.49*	3.56
Referral from social services	-1.07	.44	-2.43*	0.34
Percent days abstinent	0.51	.48	1.06	1.66
ASI Family/Social score	-0.99	.50	-1.97*	0.37
ASI Psychiatric score	-0.92	.45	-2.04*	0.40
Constant	-0.63	.48	-1.35	0.53
Fathers				
Age	0.05	.03	1.66	1.05
Referral from a legal agency	1.29	.49	2.63**	3.63
Percent days abstinent	-0.95	.43	-2.21*	0.39
ASI Legal score	-0.61	.60	-1.00	0.54
ASI Family/Social score	1.29	.61	2.11*	3.63
ASI Psychiatric score	1.10	.54	2.01*	3.00
Constant	-1.07	.59	-1.81	0.34

Note. The binary outcome was coded as 1 if the parent reported they would not assent to his or her children participating and 0 if the parent reported he or she would assent. Parameter estimates were derived from binary logistic regression models (one for mothers, one for fathers); robust standard errors were used to account for intra-program clustered data. ASI = Addiction Severity Index; OR = odds ratio.

* $p < .05$. ** $p < .01$.

mothers reported they would be more willing than fathers to allow their children to participate in some form of treatment. Yet it is important to emphasize that, for both the mothers and fathers, the proportions who reported they would be willing to provide consent were low.

Exploratory analyses revealed several factors that were associated with mothers' attitudes toward allowing their children to participate in treatment. In particular, the presence of a live-in partner was significantly associated with unwillingness to allow their children to participate in treatment. Although information about why having a live-in partner was a barrier was not collected systematically, many of the mothers noted in their written comments that their partners either would not allow the children to be involved or would become angry if the children participated. Referral from social services was associated with an increased likelihood of mothers reporting a willingness to allow their children to participate in treatment. Anecdotal information from the counselors who worked in these treatment settings indicated that case workers from the social service agencies who referred to their programs tended to promote family-involved interventions, and many viewed problems systematically; as such, they may have encouraged these mothers to consider including their children as part of treatment. It is also possible that case workers may have indicated to their clients the impact that their substance use may have on their children, thus facilitating the mothers' motivation to allow children to participate in treatment.

For mothers, higher reported levels of individual and family distress were associated with an increased willing-

ness to allow their children to receive help. This is consistent with studies that have found that women entering substance abuse treatment, in contrast to men, are more likely to highlight the effects of their drinking and drug use on their children and family in general, view the source of their personal distress as being related to family problems, and are more likely to seek help in treatment programs that include family services (Straussner & Zelvin, 1997). In contrast, fathers who reported higher levels of dysfunction and distress on the study measures reported they would be less likely to allow their children to receive treatment. Specifically, for fathers, more frequent substance use in the year before program entry, higher levels of family and social problems, and higher levels of psychiatric distress were associated with a decreased likelihood that they would give permission for their children to receive services. In written comments provided by fathers, a substantial number noted they viewed their substance use problem (and related issues) as a personal problem and one best addressed individually. In many respects, this view is consistent with traditional and long-standing views of substance abuse and its treatment, which have highlighted the need for greater emphasis on self-exploration and examination as symptom severity increases (e.g., Jellinek, 1960). It is also possible that, compared with mothers, fathers have less understanding of the impact that substance use and their behavior in general may have on their children.

Fathers who were referred by a legal agency were also less likely to report a willingness to allow their children to participate. Referral from legal agencies decreased the likelihood that fathers would be willing to allow their children to participate in treatment, possibly because of fears that their children might make disclosures that could compromise the fathers' legal position. This stands in contrast to what was found for mothers, for whom referral source, in this case social services, increased the likelihood of maternal consent. The different associations found for referral source likely reflect differing foci and general missions of the referring agencies.

Our results have important clinical implications. If parents are reluctant to allow their custodial children to participate in treatment, it would appear that two important (and complementary) options are available to address the needs of these children. Identifying specific barriers that impede parental permission appears to be an important first step. Although the factors identified in the current study were not specific barriers per se, they may serve as a starting point for soliciting more detailed information from parents about the precise reasons why they would be reluctant to allow their children to participate. Once these barriers are identified, researchers and clinicians can develop methods to reduce these obstacles to parental consent. These results also suggest that very different factors may operate as a function of parent gender, and that mental health professionals who work with these families should be aware of the ways in which parent gender may interact with other variables to influence parental consent for child treatment. It is also important to recognize that, in the case of families in which obstacles to child treatment remain, findings suggest treating substance-abusing parents, either with couples therapy

or a combination of couples therapy with parent skills training, can nonetheless lead to significant improvements in children's functioning (e.g., Kelley & Fals-Stewart, 2002).

Although this study had several important strengths (e.g., a comparatively large sample size, inclusion of mothers and fathers, participation of multiple agencies), limitations of the investigation should also be highlighted. Although the parental consent survey has demonstrated predictive validity, we did not assess actual behavior of the study respondents. In addition, although we obtained written comments from parents on the surveys, we did not systematically solicit information from the substance-abusing parents about specific barriers that led them to report they were unwilling to allow their children to participate.

We also did not assess either children's adjustment directly or parents' reports of children's emotional and behavioral functioning. It is possible that parents' perceptions of their children's need for treatment may be associated with their decisions to assent to child treatment. Parents may not have viewed their children as having difficulties to a sufficient degree to warrant involvement in treatment; in effect, these parents may have viewed treatment involvement as being reserved for "significant problems." Moreover, although patient barriers are clearly important, other barriers, which exist at multiple levels, may also impede child participation, including (but not limited to) the level of the child (e.g., children may refuse to participate), counselor (e.g., providers who are uncomfortable with treating child-related issues may do a poor job of encouraging parents to bring their children for treatment, scheduling problems with families who can only be seen in the evening because of work schedules), and organization (e.g., billing for such services can be problematic in some programs).

The preponderance of the empirical evidence reveals that children living in homes in which a parent abuses alcohol or other drugs are at elevated risk for developing emotional, social, and behavioral problems. Although substantial effort has been placed on the development and dissemination of intervention programs designed to address the needs of these children, many of these intervention packages assume child participation. However, reaching these children, particularly in the face of significant and common parental resistance, is a problem requiring greater attention if these programs, however well-intentioned or effective, are going to work.

References

- Catalano, R. F., Gainey, R. R., Fleming, C., Haggerty, K. P., & Johnson, N. O. (1999). An experimental intervention with families of substance abusers: One-year follow-up of the Focus on Families project. *Addiction, 92*, 241–254.
- Fals-Stewart, W., Kelley, M. L., Cooke, C., & Golden, J. (2003). Predictors of the psychosocial adjustment of children living in households of parents in which fathers abuse drugs: The effects of postnatal parental exposure. *Addictive Behaviors, 28*, 1013–1031.
- First, M., Spitzer, L., Gibbon, M., & Williams, J. (1995). *Structural clinical interview for Axis I DSM-IV disorders (SCID)*. Washington, DC: American Psychiatric Association.
- Gomberg, E. S. (1999). Women. In B. S. McCrady & E. E. Epstein (Eds.), *Addictions: A comprehensive guidebook* (pp. 527–541). New York: Oxford University Press.
- Hosmer, D. W., & Lemeshow, S. (1989). *Applied logistic regression*. New York: Wiley.
- Jellinek, E. M. (1960). *The disease concept of alcoholism*. New Haven, CT: Hillhouse Press.
- Kelley, M. L., & Fals-Stewart, W. (2002). Couples- versus individual-based therapy for alcoholism and drug abuse: Effects on children's psychosocial functioning. *Journal of Consulting and Clinical Psychology, 70*, 417–427.
- Kumpfer, K. L., Molgaard, V., & Spoth, R. (1996). The Strengthening Families Program for prevention of delinquency and drug use in special populations. In R. Peters & R. J. McMahon (Eds.), *Childhood disorders, substance abuse, and delinquency: Prevention and early intervention approaches* (pp. 241–267). Newbury Park, CA: Sage.
- McCrady, B. S., & Raytek, H. (1993). Women and substance abuse: Treatment modalities and outcomes. In E. S. L. Gomberg & T. D. Nirenberg (Eds.), *Women and substance abuse* (pp. 314–338). Norwood, NJ: Ablex.
- McLellan, A. T., Luborsky, L., O'Brien, C. P., & Woody, G. E. (1980). An improved evaluation instrument for substance abuse patients: The Addiction Severity Index. *Journal of Nervous and Mental Disease, 168*, 26–33.
- Mickey, J., & Greenland, S. (1989). A study of the impact of confounder-selection criteria on effect estimation. *American Journal of Epidemiology, 129*, 125–137.
- Myers, J. L. (1990). *Classical and modern regression with applications* (2nd ed.). Boston, MA: Duxbury Press.
- Sobell, L. C., & Sobell, M. B. (1996). *Timeline Followback user's guide: A calendar method for assessing alcohol and drug use*. Toronto, Canada: Addiction Research Foundation.
- Straussner, S. L. A., & Zelvin, E. (1997). *Gender and addiction: Men and women in treatment*. Northvale, NJ: Jason Aronson.
- Substance Abuse and Mental Health Services Administration. (2003a). *Children's Program Kit: For people who work with alcoholics or drug dependent parents*. Washington, DC: Author.
- Substance Abuse and Mental Health Services Administration. (2003b). *2001 National Household Survey on Drug Abuse (NHSDA)*. Washington, DC: Author.
- Wechsberg, W. M., Craddock, S. G., & Hubbard, R. L. (1998). How are women who enter substance abuse treatment different than men? A gender comparison from the Drug Abuse Treatment Outcome Study. *Drugs and Society, 13*, 97–115.

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