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## Individuals in sober living: Effects of contact with substance using family members

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### Abstract

This study examines the effects that substance-using family members have on those working to maintain recovery from substance use disorder. Participants ( $N=229$ ) were recruited from Oxford Houses (OH) across North Carolina, Texas, and Oregon. A stepwise linear regression with variables including abstinence self-efficacy, gender, substance use, attendance of Alcoholics Anonymous, and conflict with family and non-family was run to examine associations between the amount of substance using family members in the participant's social network. The abstinence self-efficacy mean score, gender, and days of serious conflict with non-family members were significantly associated with total number of substance-using family members in a participant's social network. These results may indicate that OH's serve as a buffer between substance using family members and one's abstinence self-efficacy. It remains unclear if individuals are at an increased risk of relapse from this familial influence when perceived abstinence self-efficacy drops. If so, OH residents could benefit from interventions that help them maintain their perceived abstinence self-efficacy.

### Keywords

Family; important people inventory; Oxford House (OH); recovery; social network; substance use

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Social environments are integral components in the initiation, maintenance, and cessation of problematic substance use (Hunter-Reel, McCrady, & Hildebrandt, 2009). While a heavy substance-using social network increases the likelihood of future substance use among adolescents and young adults, individuals who use heavily are also likely to develop social networks that use more heavily (i.e., social selection) (Bullers, Cooper, & Russell, 2001). Studies have demonstrated how an individual's social support system can aid in the recovery from Substance Use Disorder (SUD). Changes in the social network, including the addition of members that support sobriety, have been shown to predict a decrease in substance use (Litt, Kadden, Kabela-Cormier, & Petry, 2009; Longabaugh, Wirtz, Zywiak, & O'Malley, 2010; Worley et al., 2014).

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Decreases in the number of substance-using social network members and increases in the number of abstinent social network members may be a causal mechanism of a behavior change in many interventions. This exploratory study aims to examine the complexities of familial relationships within substance abuse recovery; specifically the substance use of family members who are considered important people to those in recovery from SUD and how this may relate to abstinence self-efficacy, as well as conflict with family members.

Longabaugh et al. (2010) examined the relationship between social support and alcohol-use outcomes using the Important People Inventory (IPI). This instrument was designed to measure frequency of contact and alcohol use of the most important people in the participant's life, as well as the social support they receive from them. Their findings indicate that social support is broken down into two areas: (1) alcohol-specific support and (2) general support. Within alcohol-specific support, there are two sub-groups: (1) network drinking behavior and (2) network response to the individual's drinking. Specifically, the frequency of social network alcohol-use is negatively associated with the percentage of days being abstinent in the four months following treatment, and the amount of social network members who are against participant drinking was positively associated with percentage of days abstinent.

Social networks, coupled with a goal of complete abstinence from all substances, can have positive effects on abstinence maintenance through the facilitation of new social connections. For example, network changes may occur as a result of involvement with a 12-step fellowship (e.g., AA, NA). Oxford House (OH) members who are more involved in self-help meetings fare better than those who choose not to participate (Emrick, Tonigan, Montgomery, & Little, 1993; Litt, Kadden, Kabela-Cormier, & Petry, 2007). The authors found those in the Network Support condition, which consisted of an intervention designed to increase abstinence support in their social network, attended more AA/NA meetings than those in the Case Management condition. However, roughly 40% of those in the Network Support condition did not attend AA/NA meetings but still made new social connections. As noted, this translates to a treatment effect creating change in terms of new friendships or participation in new activities. These results were maintained at a 2-year follow-up (Litt et al., 2009).

Recovery housing exposes individuals to circumstances where substance use is prohibited, and protective factors are bestowed upon residents. The modeling of sobriety and the acquisition of self-efficacy contribute to the maintenance of substance abuse recovery (Davis & Jason, 2005; Jason, Davis, and Ferrari (2007)). An individual's self-efficacy has been shown to determine which actions are taken to achieve a person's goal, the amount of effort they exhibit, the ways in which they navigate adversity, and how close they come to realizing their goals (Bandura, 1997). If an individual believes they have the ability to engage in and maintain sobriety, including when one is around others that use drugs or in environments that facilitate drug use, then they are more likely to achieve their goals. Even after controlling for several demographic factors and history of substance use, self-efficacy still predicted substance use outcomes (Bandura, 1999; Kadden & Litt, 2011).

OH are communal recovery residences that are rented, single-family homes for people recovering from substance abuse (Jason, Ferrari, Davis, & Olson, 2006; Jason, Olson, & Foli, 2008). The houses are resident funded and democratically governed, without restrictions on length of stay, and operate with minimal restrictions other than economic sufficiency, problematic behavioral issues, and a zero tolerance for substance use (Jason, Olson, Ferrari, & Lo Sasso, 2006). Residents may choose to keep substance using familial members in their social support network. This network could be either positive or negative in terms of substance-related abstinence support.

Social networks change throughout the life spans of individuals, coinciding with natural progressions, and there are events that increase or decrease one's social network (Wrzus, Hanel, Wagner, & Neyer, 2013). For example, entering substance abuse treatment can reduce one's social network, as individuals tend to sever ties with those in treatment. Relocation also shows a decrease in the number of individuals in the social networks, especially in relationships that are not familial (South & Haynie, 2004; Wrzus et al., 2013). According to Socioemotional Selectivity theory, as life progresses, individuals become more selective with whom they choose to spend time with due to the amount of perceived time left in their lives (Carstensen, Isaacowitz, & Charles, 1999). Additionally, Social Convoy theory states that relationships are stable over time and familial relationships remain closely connected, as with neighbors and acquaintances (Kahn & Antonucci, 1980). Together these suggest that, by middle age, "family" is the social center-piece that is likely to make up most of an individual's social network.

Research has focused around how an individual's substance abuse affects their families, or how children of substance users are more likely to use themselves (Mellentin et al., 2016). Current literature also focuses on the reasons why romantic partners enable their substance abusing significant others. Intimate partners have shown to partake in enabling behaviors (i.e., engaging in substance use along with their partner), and also hold beliefs that absolve their partner of responsibility (Rotunda, West, & O'Farrell, 2004). Romantic partners can reduce substance use through the aid of family/couples therapy (McCrary, Epstein, Cook, Jensen, & Hildebrandt, 2009; McCrary et al., 2016; Schumm, O'Farrell, Kahler, Murphy, & Muchowski, 2014). However, the literature addressing how drinking or drug use of family members affects those in recovery is minimal. If family members with SUDs stay in a recovering individual's social network, it is unclear what kinds of effects this has on individuals who are working to sustain abstinence-based recovery. While self-efficacy and social networks can predict substance use (Worley et al., 2014), there is a lack of research on how abstinence self-efficacy can influence the make-up of an individual's important person social network. It is important to understand the characteristics that define those who are able to keep family members who use substances in their social network, while remaining abstinent from substances.

## Method

### Participants

The participants ( $n = 229$ ) were OH residents living in 42 homes across three geographic regions (North Carolina, Texas and Oregon). They were part of a larger, longitudinal study.

At present, there are over 2,000 OHs operating across the continental United States. Each OH is a communal residence that is a rented, single-family house for people recovering from substance abuse (Jason et al., 2008). The houses are resident funded and democratically governed, without restrictions on length of stay, and operate with minimal rules other than economic sufficiency, behavioral adherence, and zero tolerance for illicit substance use (Jason, Olson, et al., 2006). Permission to conduct this study was granted by the Midwestern University Institutional Review Board.

Participants' mean age was 38.4 years ( $SD = 10.8$ ), and 82.1% of the sample were Euro-American. Most participants had endorsed attending some college (40.2%), followed by having received a high school diploma/GED (37.1%). OH respondents' employment statuses ranged from employed full-time (67.7%), employed part-time (11.3%), or unemployed (10.9%). The majority of participants never married (63.3%). Only 26 participants endorsed receiving income from their partner, friend, or family within the past 30 days. The range of income received from partner, friend, or family ranged from \$50 to \$1000 (monthly), while the mean amount of dollars received was \$371 [See Table 1 for additional demographics].

## Procedure

Field research staff, during face-to-face interviews, recruited participants in three geographic areas: North Carolina, Texas and Oregon. Individuals were informed about the purpose, objectives, and methodology of the study, and were also informed of the voluntary nature of the study before signing and returning a consent form. Interviews were scheduled and conducted by the recruiters, and included self-report measures of personality, self-esteem, and stress, as well as demographic information. Participants were compensated \$20 for their time.

## Measures

**Abstinence self-efficacy**—The Drug Taking Confidence Questionnaire measures an individual's perceived abstinence self-efficacy. This survey is a revised version of the original 50-item DTCQ, using 8 items on a 20 point gradient. The scale has questions such as "How confident do you feel that you could abstain from your 'drug of choice'" and (What) If (you) wanted to celebrate with a friend? Responses are recorded on a scale from 0, indicating not at all confident, to 100, indicating very confident. The shortened version demonstrated reliability and validity as it accounts for 90% of the variance of the original 50-item DTCQ (Sklar & Turner, 1999).

**Social network**—The Important People Inventory (IPI) assesses important members of an individual's social network (up to 8 important members). Participants include the listed person's relationship with the respondent, gender of the listed important member, how long they have known each other, if the listed member is an OH resident, if the listed person uses substances (including degree of use), and the frequency of contact in the past 3 months with each other (Clifford & Longabaugh, 1991). The IPI demonstrates excellent internal consistency with the Drinking Behaviors of Network Members factor (Cronbach's  $\alpha = .81$ ) (Groh, Jason, Davis, Olson, & Ferrari, 2007). Strong construct validity is demonstrated

across IP subscale indices (0.80) based on respondents' verbal self-reports when compared to information collected from significant others (Groh et al., 2007).

**Substance use**—The Form-90 provides a linear measure of substance consumption within a 90 day time span (Miller & Del Boca, 1994). The three primary measures of the Form-90 that we used are: total number of days of at least one drink containing alcohol, total number of days of illicit drug use, and total amount of Alcoholics Anonymous (AA) or other 12-step meetings attended. The validity and reliability of this widely-used measure have been established (Tonigan, Miller, & Brown, 1997). For example, test-retest reliability is excellent for alcohol total consumption ( $r = 0.91-0.97$ ). However, test-retest reliability for illicit drug usage varied: marijuana ( $r = 0.71-0.98$ ), cocaine ( $r = 0.91-0.99$ ), and opiates ( $r = 0.37-0.99$ ). Test-retest reliability for total AA meetings attended ranged from good to excellent ( $r = .62-.92$ ).

**Interpersonal conflict**—The Addiction Severity Index-Lite (ASI-Lite) assesses problem severity in commonly affected areas of alcohol and substance abuse: medical and psychiatric problems, alcohol use, drug use, illegal activity, family relations, and family history (McLellan et al., 1992). This study used items that measure conflict with family and non-family members. The coefficient alpha of the ASI-Lite is good ( $> .80$ ), and the ASI-Lite has excellent predictive and concurrent validity (McLellan et al., 1992).

## Results

Several independent samples t-tests were conducted to determine if there were significant differences between those who endorsed having at least one family member that uses substances (outside of OH) in their important people network and those who did not. Those who endorsed having at least one family member that uses substances had a significantly higher DTCQ mean than those who did not endorse having substance using family members (Table 2), averaging a .46 higher DTCQ mean. Those who did not endorse having substance using family members in their important people network reported attending more days in AA (Table 2), averaging 8.6 more days.

The number of AA meetings attended, days of serious conflict with family members and with non-family members were centered and entered into a stepwise linear regression model; along with the DTCQ mean score, participant gender, and endorsement of alcohol and illicit drug use in the past 90 days as independent variables. The total amount of family members and the amount of substance using family members in a participant's important people network were entered separately as dependent variables. Lastly, the model that accounted for the most significant amount of variance was selected for interpretation. Upon analyzing the associations of the total number of family members in a participant's important people network, the model that included the participant's gender, amount of days attending an AA meeting, and DTCQ mean score accounted for 12.7% of the total variance (Table 3). Gender ( $\beta = .326, p < .001$ ), and the number of AA meetings attended ( $\beta = -.152, p < .05$ ) were significantly associated with the total number of family members in a participant's important people network. When analyzing the associations of the total number of substance-using family members in a participant's important people network, the model with DTCQ mean

and days of serious conflict with non-family members accounted for 9.0% of the total variance (Table 4). DTCQ mean score ( $\beta = .195, p < .005$ ), gender ( $\beta = .140, p < .05$ ) and days of serious conflict with non-family members ( $\beta = .135, p < .05$ ) were significantly associated with the number of substance using family members.

## Discussion

Findings demonstrated that participants who have substance using family members in their important people network also have significantly higher abstinence self-efficacy than those who did not have substance using family members in their important people network. In addition to having higher abstinence self-efficacy, participants also had larger family units, with a greater number of substance-using non-family members in general. However, these findings were not significantly correlated with participant substance use. These results may indicate that severing ties with substance-using family members is not detrimental to an individual's recovery while residing in an OH. These results may also suggest that those in recovery who remain close to their substance-using family members need more social support in order to remain abstinent. Relationships with substance-using family members may be important to an individual's recovery if they are unable to find recovery-based social support in other places.

As previously mentioned, adding abstinent members to one's social network increases the individual's likelihood of maintaining sobriety despite having substance-using members in their network. The proportion of substance-using family members to the overall network was not examined in this study. However, the main interest was to see how family members affect substance use regardless of how many abstinent members are in the social network given that all the participants were residing in an OH and thus had abstinent members in their network. It is also important to note that both respective groups endorsed having substance-using family members as well as not having any, with both endorsements averaging above 87% confidence in their abstinence-based self-efficacy ( $M_s = 5.72$  vs  $5.25$ ). These results indicate that those that have substance using family members in their important people network have near perfect confidence in their ability to maintain sobriety in any situation that may arise.

Another interesting finding is the association between the amount of interpersonal conflicts with non-family members and the amount of substance-using family members in a participant's important people network. As interpersonal conflicts with non-family members within the past 30 days increased, so did the amount of substance-using family members in their important people network. Despite the important persons' substance use, participants may be utilizing these family members to cope with stressors in their lives, as managing life stressors can aid participants' efforts to maintain their sobriety. In addition, women were more likely to have substance-using family members in their network, and larger overall social networks than their male counterparts. However, there were no significant differences in abstinence self-efficacy scores between male and female OH residents. Based on these results, it is possible that female OH residents place a higher value on maintaining familial relationships than their male counterparts. It is also possible that male OH participants have contact with their family members, but do not consider them important people.



Studies have shown the effect family ties have on substance use treatment efforts (Austin, Macgowan, & Wagner, 2005; Meis et al., 2013). Involving family members in treatment efforts has demonstrated a significant reduction in substance use. Many studies have demonstrated the negative effects of an individual's substance use behavior have on their families. This exploratory study examined the important people networks of OH residents. An emphasis was placed on the relationships of these networks, specifically familial ties and their substance use behaviors. Social Cognitive theory and Socioemotional Selectivity theory argue that it is unlikely participants would fail to have family members in their social networks, given that the average age of participants was roughly 38 years of age. As individual's age, they are more likely to have family members in their network. Our analyses indicated familial ties with members who used substances did not seem to affect the substance use of an individual in recovery. However, without further analyses and longitudinal data, it is difficult to demonstrate at which point individuals in recovery are willing to reduce their involvement with substance-using family members. It remains unclear if individuals should sever ties once their perceived abstinence self-efficacy dropped, or if these individuals would increase their risk of relapse as a result of these familial influences. If it is the latter, OH residents could benefit from interventions that assist their efforts in maintaining their perceived abstinence self-efficacy, such as counseling focused around maintaining relationships with family members who use substances and drawing healthy boundaries concerning their substance-using behaviors.

## Limitations

Limitations include only using cross-sectional data to conduct these analyses. Length of sobriety was unavailable at the time of analysis. The absence of important people network data at time of entry into the OH limited the ability to establish any causal relationships. The relationship between abstinence self-efficacy and maintaining relationships with substance-using family members in one's inner circle is not well understood; it is unknown whether abstinence self-efficacy develops because of maintained social ties with substance-using family member, or if this phenomena is exclusive to those with high abstinence self-efficacy in their ability to maintain relationships with these individuals.

Additionally, the IPI does not distinguish between types of contact with important people. Long distance contact may have a distinct influence, when compared to being within physical proximity of substance-using family members. Longitudinal analyses would allow insight into whether a person's social network changes or stays consistent over time. Prolonged contact with substance-using family members may have an impact on the participant's substance use and/or abstinence self-efficacy. The current study suggests that this sustained contact over time may result in an increase to the recovering individual's abstinence self-efficacy; it may also demonstrate a longitudinal increase in abstinence self-efficacy, regardless of contact with substance using family members. It would be of interest for future studies to monitor these incremental changes in abstinence self-efficacy over time.

Unlike its predecessor, the IPI did not measure support toward alcohol use. However, previous studies demonstrate that alcohol use specific-support does not have an impact on alcohol use (Groh et al., 2007). While findings from this study indicate that maintaining

relationships with substance-using family members is not detrimental toward an individual's sobriety during his or her stay in an OH, given our sample, this relationship is uncertain outside of an OH.

Future directions should include an examination of participants' social networks as they reintegrate back into mainstream society to live on their own or return to live with their families. It is unclear if the protective factors that are acquired or learned during one's stay in an OH (i.e., abstinence self-efficacy) are sufficient enough to help maintain long-term sobriety when living with or keeping in close contact with family members who use substances. The social ties of individuals in recovery may change when leaving or after having left an OH. Tracking this phenomenon would inform us on whether preparation, in managing relationships with substance using family members, should be recommended prior to leaving OH; friendships with OH members and other friends are likely important buffers when maintaining relationships with substance using family members. This exploratory investigation could be particularly beneficial for female OH members, as their greater likelihood of maintaining relationships with substance-using family members could have an effect on their sobriety and abstinence self-efficacy.

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## References

- Austin AM, Macgowan MJ, & Wagner EF (2005). Effective family-based interventions for adolescents with substance use problems: A systematic review. *Research on Social Work Practice, 52*(2), 67–83. doi:10.1177/1049731504271606
- Bandura A (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Bandura A (1999). A sociocognitive analysis of substance abuse: An agentic perspective. *Psychological Science, 10*(3), 214–217. doi:10.1111/1467-9280.00138
- Bullers SM, Cooper L, & Russell M (2001). Social network drinking and adult alcohol involvement: A longitudinal exploration of the direction of influence. *Addictive Behaviors, 26*(2), 181–199. doi:10.1016/S0306-4603(00)00099-X [PubMed: 11316376]
- Carstensen LL, Isaacowitz DM, & Charles ST (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist, 54*(3), 165–181. doi:10.1037/0003-066X.54.3.165 [PubMed: 10199217]
- Clifford PR, & Longabaugh R (1991). *Project MATCH. Manual for the administration of the Important People and Activities Instrument: Adapted for use by Project MATCH for NIAAA 5R01AA06698–05 Environmental Treatment of Alcohol Abusers*.
- Davis MI, & Jason LA (2005). Sex differences in social support and self-efficacy within a recovery community. *American Journal of Community Psychology, 36*(3–4), 259–274. doi:10.1007/s10464-005-8625-z [PubMed: 16389499]
- Emrick CD, Tonigan JS, Montgomery H, & Little L (1993). Alcohol anonymous: What is currently known? In McCrady BS & Miller WR (Eds.), *Research on alcoholics anonymous* (pp. 41–76). New Brunswick, NJ: Rutgers Center on Alcohol Studies Publications.
- Groh DR, Jason LA, Davis MI, Olson BD, & Ferrari JR (2007). Friends, family, and alcohol abuse: An examination of general and alcohol-specific social support. *American Journal on Addictions, 16*(1), 49–55. doi:10.1080/10550490601080084 [PubMed: 17364422]



- Hunter-Reel D, McCrady B, & Hildebrandt T (2009). Emphasizing interpersonal factors: An extension of the Witkiewitz and Marlatt relapse model. *Addiction*, 104(8), 1281–1290. doi:10.1111/j.1360-0443.2009.02611.x [PubMed: 19549057]
- Jason LA, Davis MI, & Ferrari JR (2007). The need for substance abuse after-care: Longitudinal analysis of Oxford House. *Addictive Behaviors*, 32(4), 803–818. doi:10.1016/j.addbeh.2006.06 [PubMed: 16843612]
- Jason LA, Ferrari JR, Davis MI, & Olson BD (Eds.). (2006). *Creating communities for addiction recovery* (Vol. 31, pp. 1–143). The Oxford House model.
- Jason LA, Olson BD, Ferrari JR, & Lo Sasso AT (2006). Communal housing settings enhance substance abuse recovery. *American Journal of Public Health*, 96(10), 1727–1729. doi:10.2105/AJPH.2005.070839 [PubMed: 17008561]
- Jason LA, Olson BD, & Foli KJ (2008). *Rescued lives: The oxford house approach to substance abuse*. New York, NY: Routledge.
- Kadden RM, & Litt MD (2011). The role of self-efficacy in the treatment of substance use disorders. *Addictive Behaviors*, 36(12), 1120–1126. doi:10.1016/j.addbeh.2011.07.032 [PubMed: 21849232]
- Kahn RL, & Antonucci TC (1980). Convoys over the life course: Attachment roles and social support. In: Baltes BP & Brim OG (Eds.), *Life span development and behavior* (pp. 53–86). London: Academic Press.
- Litt MD, Kadden RM, Kabela-Cormier E, & Petry N (2007). Changing network support for drinking: Initial findings from the Network Support Project. *Journal of Consulting and Clinical Psychology*, 75(4), 542–555. doi:10.1037/0022-006X.75.4.542 [PubMed: 17663609]
- Litt MD, Kadden RM, Kabela-Cormier E, & Petry NM (2009). Changing network support for drinking: Network support project 2-year follow-up. *Journal of Consulting and Clinical Psychology*, 77(2), 229–242. doi:10.1037/a0015252 [PubMed: 19309183]
- Longabaugh R, Wirtz PW, Zywiak WH, & O'Malley SS (2010). Network support as a prognostic indicator of drinking outcomes: The COMBINE study. *Journal of Studies on Alcohol and Drugs*, 71(6), 837–846. doi:10.15288/jsad.2010.71.837 [PubMed: 20946740]
- McLellan AT, Kushner H, Metzger D, Peters R, Smith I, Grissom G, ... Argeriou M (1992). The fifth edition of the Addiction Severity Index. *Journal of Substance Abuse Treatment*, 9(3), 199–213. doi:10.1016/0740-5472(92)90062-s [PubMed: 1334156]
- McCrady BS, Wilson AD, Munoz RE, Fink BC, Fokas K, & Borders A (2016). Alcohol-focused behavioral couple therapy. *Family Process*, 55(3), 443–459. [PubMed: 27369809]
- McCrady BS, Epstein EE, Cook S, Jensen N, & Hildebrandt T (2009). A randomized trial of individual and couple behavioral alcohol treatment for women. *Journal of Consulting and Clinical Psychology*, 77(2), 243–256. [PubMed: 19309184]
- Mellentin AI, Brink M, Andersen L, Erlangsen A, Stenager E, Bjerregaard LB, & Christiansen E (2016). The risk of offspring developing substance use disorders when exposed to one versus two parent(s) with alcohol use disorder: A nationwide, register-based cohort study. *Journal of Psychiatric Research*, 80, 52–58. doi:10.1016/j.jpsychires.2016.06.001 [PubMed: 27295121]
- Meis LA, Griffin JM, Greer N, Jensen AC, MacDonald R, Carlyle M, ... Wilt TJ (2013). Couple and family involvement in adult mental health treatment: A systematic review. *Clinical Psychology Review*, 33(2), 275–286. doi:10.1016/j.cpr.2012.12.003 [PubMed: 23321286]
- Miller WR, & Del Boca FK (1994). Measurement of drinking behavior using the Form 90 family of instruments. *Journal of Studies on Alcohol*, 12, 112–118. [PubMed: 7722987]
- Rotunda RJ, West L, & O'Farrell TJ (2004). Enabling behavior in a clinical sample of alcohol-dependent clients and their partners. *Journal of Substance Abuse Treatment*, 26(4), 269–276. doi:10.1016/j.jsat.2004.01.007 [PubMed: 15182891]
- Schumm JA, O'Farrell TJ, Kahler CW, Murphy MM, & Muchowski P (2014). A randomized clinical trial of behavioral couples therapy versus individually based treatment for women with alcohol dependence. *Journal of Consulting and Clinical Psychology*, 82(6), 993–1004. [PubMed: 25045910]
- Sklar SM, & Turner NE (1999). A brief measure for the assessment of coping self-efficacy among alcohol and other drug users. *Addiction*, 94(5), 723–729. doi:10.1046/j.1360-0443.1999.94572310.x [PubMed: 10563037]

- South SJ, & Haynie DL (2004). Friendship networks of mobile adolescents. *Social Forces*, 83(1), 315–350. doi:10.1353/sof.2004.0128
- Tonigan JS, Miller WR, & Brown JM (1997). The reliability of Form 90: An instrument for assessing alcohol treatment outcome. *Journal of Studies on Alcohol*, 58(4), 358–364. doi:10.15288/jsa.1997.58.358 [PubMed: 9203116]
- Worley MJ, Trim RS, Tate SR, Roesch SC, Myers MG, & Brown SA (2014). Self-efficacy and social networks after treatment for alcohol or drug dependence and major depression: Disentangling person and time-level effects. *Psychology of Addictive Behaviors*, 28(4), 1220–1229. doi:10.1037/a0037901 [PubMed: 25347018]
- Wrzus C, Hanel M, Wagner J, & Neyer FJ (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin*, 139(1), 53–80. doi:10.1037/a0028601 [PubMed: 22642230]

**Table 1.**

Participant demographics.

	Family substance use ( <i>n</i> = 98)	No family substance use ( <i>n</i> = 131)	Total ( <i>n</i> = 229)
Age, <i>M</i> ( <i>SD</i> )	37.38 (10.93)	39.12 (10.73)	38.35 (10.82)
Sex, <i>n</i> (%)			
Female	82 (62.6)	44 (44.9)	102 (40.5)
Male	48 (36.6)	54 (55.1)	126 (55.0)
Other	1 (0.8)	0	1 (0.5)
Race, <i>n</i> (%)			
Euro-American	101 (77.1)	87 (88.8)	188 (82.1)
African-American	16 (12.2)	5 (5.1)	21 (9.2)
Hispanic	9 (6.9)	6 (6.1)	15 (6.5)
Other	5 (3.8)	0	5 (2.2)
Education, <i>n</i> (%)			
High school/GED	54 (41.2)	31 (31.6)	85 (37.1)
Some college	51 (38.9)	41 (41.8)	92 (40.2)
College/tech degree	21 (16.0)	22 (22.4)	43 (18.8)
Employment, <i>n</i> (%)			
Full-time	88 (67.2)	67 (68.4)	155 (67.7)
Part-time	13 (10.0)	13 (13.2)	26 (11.3)
Student	4 (3.1)	5 (5.1)	9 (3.9)
Retired/disabled	11 (8.4)	3 (3.1)	14 (6.1)
Unemployed	15 (11.5)	10 (10.2)	25 (10.9)

**Table 2.**

Differences between participants who endorsed having substance-using family members and no substance-using family members.

	No substance use		Substance use		<i>t</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
DTCQ M	5.25	1.04	5.72	.52	-4.415	.000
AA attendance	45.64	28.61	37.07	30.51	2.175	.031
Age	39.12	10.73	37.38	10.93	1.183	.238
Days alcohol	1.08	6.45	1.58	5.81	-.594	.553
Days drug	1.23	7.26	2.30	11.00	-.877	.382
Days conflict w/family	.35	1.67	.87	3.38	-1.389	.167
Days conflict w/non-family	.37	1.56	1.16	3.92	-1.898	.060
Months lived in OH	9.67	12.02	11.19	13.25	-.906	.366

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**Table 3.**

Stepwise regression for total family members in IPI.

	$\beta$	<i>t</i>	<i>P</i>
<b>Model 1</b> ( $R^2 = .104$ )			
Gender	.323	5.059	.000
<b>Model 2</b> ( $R^2 = .127$ , $R^2$ change = .023, $F$ change = 5.793, $p = .017$ )			
Gender	.326	5.161	.000
AA meetings	-.152	-2.407	.017

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**Table 4.**

Stepwise regression for total family members that use substances in IPI.

	$\beta$	<i>t</i>	<i>P</i>
<b>Model 1</b> ( $R^2 = .048$ )			
DTCQ mean	.220	3.341	.001
<b>Model 2</b> ( $R^2 = .072$ , $R^2$ change = .023, $F$ change = 5.544, $p = .019$ )			
DTCQ mean	.202	3.082	.002
Gender	.154	2.355	.019
<b>Model 3</b> ( $R^2 = .090$ , $R^2$ change = .018, $F$ change = 4.303, $p = .039$ )			
DTCQ mean	.195	2.996	.003
Gender	.140	2.132	.034
Days conflict w/non-family	.135	2.074	.039

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