Drug and Alcohol Dependence 133 (2013) 541–547

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

The importance of age composition of 12-step meetings as a moderating factor in the relation between young adults' 12-step participation and abstinence

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ARTICLE INFO

Article history:
Received 20 June 2013
Received in revised form 16 July 2013
Accepted 23 July 2013
Available online 12 August 2013

Keywords:
Young adults
12-Step groups
Substance use

ABSTRACT

Background: Participation in 12-step mutual help organizations (MHO) is a common continuing care recommendation for adults; however, little is known about the effects of MHO participation among young adults (i.e., ages 18–25 years) for whom the typically older age composition at meetings may serve as a barrier to engagement and benefits. This study examined whether the age composition of 12-step meetings moderated the recovery benefits derived from attending MHOs.

Method: Young adults ($n = 302$; 18–24 years; 26% female; 94% White) enrolled in a naturalistic study of residential treatment effectiveness were assessed at intake, and 3, 6, and 12 months later on 12-step attendance, age composition of attended 12-step groups, and treatment outcome (Percent Days Abstinent [PDA]). Hierarchical linear models (HLM) tested the moderating effect of age composition on PDA concurrently and in lagged models controlling for confounds.

Results: A significant three-way interaction between attendance, age composition, and time was detected in the concurrent ($p = 0.002$), but not lagged, model ($b = 0.38$, $p = 0.46$). Specifically, a similar age composition was helpful early post-treatment among low 12-step attendees, but became detrimental over time.

Conclusions: Treatment and other referral agencies might enhance the likelihood of successful remission and recovery among young adults by locating and initially linking such individuals to age appropriate groups. Once engaged, however, it may be prudent to encourage gradual integration into the broader mixed-age range of 12-step meetings, wherein it is possible that older members may provide the depth and length of sober experience needed to carry young adults forward into long-term recovery.

1. Introduction

In most industrialized nations, young adulthood (i.e., ages 18–25 years) represents a transitional developmental stage characterized by increased social and political autonomy, independent living, and greater financial resources (Arnett, 2000, 2005). The required adaptations necessary to successfully negotiate these new challenges and responsibilities carry with them inherent stresses and risks (Arnett, 2005; Chan et al., 2008). Across the life course, for example, the highest rates of psychological distress occur during young adulthood, and rates of alcohol and other drug use and related disorders are higher than at any other time across the life course (Substance Abuse and Mental Health Services Administration (SAMHSA), 2012). For young adults seeking recovery from substance use disorder (SUD) this has important implications, because it may be more challenging to find low-risk, substance free, social environments or obtain specific peer-support to aid recovery efforts (Kelly et al., 2008, 2012).

Twelve-step mutual help organizations (MHOs), such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), are a ubiquitous and easily accessible, recovery-specific community resource that may provide recovery-specific support and new social connections that can facilitate substance free pleasurable social activities for young adults (Kelly et al., 2008; Passetti et al., 2012). A rapidly growing research literature has demonstrated a significant positive effect of 12-step MHO participation in increasing abstinence and long-term remission among adults (Bond et al., 2003; Emrick et al., 1993; Kaskutas, 2009; Kelly et al., 2006; Moos and Moos, 2006; Timko et al., 2000; Tonigan et al., 1996; Vaillant, 1983), but only a handful of studies have been conducted among young adults. While these suggest that this age group can attend at high rates during and following SUD treatment and show significant related recovery benefit (Delucchi et al., 2008; Kelly et al., 2012) compared to older adults, young adults may face additional

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http://dx.doi.org/10.1016/j.drugalcdep.2013.07.021

developmentally-related barriers to MHO participation because the majority of AA and NA members, on average, are substantially older. According to the 2011 AA Membership Survey (Alcoholics Anonymous World Services, 2011) and the 2011 NA Membership Survey (Narcotics Anonymous World Services, 2011), for instance, a majority of AA (51%) and NA (59%) members are between the ages of 41 and 60 years; only 11% of AA members and 13% of NA members are between the ages of 21 and 30, and only 2% younger than 21. While a common maxim within 12-step MHOs is to "look for the similarities and not the differences," such similarities may be obscured, as youth tend to have differing addiction histories and life-contexts (Handelsman et al., 2005; Stewart and Brown, 1995), which may erect further barriers to identification and engagement.

In theory, a sense of cohesiveness or "universality" is deemed integral to successful group therapy operations (Yalom, 1995; Yalom and Leszcz, 2005). Cohesiveness has been found, for example, to be positively related to self-disclosure, which in turn is positively related to clinical improvement (Bertrand et al., 2013; Tschuschke and Dies, 1994); these elements are also likely to be important among non-professional groups like AA. Greater self-disclosure during 12-step meetings, for example, has been shown to be related to greater abstinence over and above the effects from 12-step attendance (Kelly et al., 2012; Kelly and Urbanoski, 2012). From an empirical standpoint, the degree to which an older age composition, specifically, may diminish a sense of cohesion and verbal participation and self-disclosure among young adults is unclear. One professional group therapy study of individuals with an alcohol use disorder comparing young adults treated in young-adult specific therapy group and young adults treated in a mixed adult therapy group found no differences in terms of premature treatment discharge, patient withdrawal or dropout from treatment; however the study did not examine alcohol outcomes (Monras et al., 2006). A more directly relevant study with adolescents (14–19 years) attending 12-step MHOs following inpatient treatment, however, found that a more similar age composition of attended AA/NA meetings at 3- and 6-months after treatment was related to better outcomes (Kelly et al., 2005). This study suggested also that while having similar-aged peers at meetings (i.e., mostly teen or all teen meetings) may be helpful early on, attending all or mostly teen meetings over time may yield diminishing returns (Kelly et al., 2005). Research in this area, in general, however, is lacking and no studies have investigated these relationships among young adults. If the age composition of attended 12-step meetings is found to moderate the recovery-related benefits that young people derive from 12-step participation, this would support the creation of clearer clinical practice guidelines to link young adults more explicitly to groups also attended by similar-aged recovering peers.

To this end, the purpose of this study was to examine the relationships among age composition of attended 12-step meetings, young adult 12-step MHO participation, and alcohol and drug use outcomes following residential treatment. Based on prior work (Kelly et al., 2005), we hypothesized that the presence of similar-aged peers at meetings would be associated with better outcomes in the year following treatment, and that age composition would confer a unique recovery benefit above and beyond that attributable to attendance alone. Also, as noted earlier, the study by Kelly et al. (2005) suggested differential effects of age composition over time with an indication that having too similar aged composition (e.g., mostly or all teens at meetings), while beneficial early post-treatment, may actually yield diminishing returns with time. Consequently, we also explored the nature of these relationships over time to investigate this interaction more formally using rigorous longitudinal modeling. Specifically, we wondered whether the presence of similar-aged peers at AA/NA meetings would be more helpful early rather than later post-treatment.

2. Method

2.1. Participants

The study was conducted in accordance with ethical standards regarding human subjects and was approved by the independent Institutional Review Board at Schulmann Associates. Study participants were young adults ($n = 302$; 18–24 years) entering a private residential SUD treatment program in the Midwestern United States. A total of 607 young adults were admitted during the recruitment period (October 2006 to March 2008). To ensure sufficient representation of all ages within the target range (18–24 years), a stratified sampling procedure was used to select potential participants. All patients aged 21–24 years and every second patient aged 18–20 were asked to participate in the study. Of those approached ($n = 384$), 64 declined. Reasons given for non-participation included not wanting to participate in the follow-ups (44%), not interested (31%), wanting to focus on treatment (14%), and legal issues (2%). Seventeen participants withdrew between enrollment and the baseline assessment. The final sample of 302 represents 78.9% of those approached (see Kelly et al., 2012 for more details). Average age was 20.4 years old ($SD = 1.6$). Participants were predominantly male (73.8%) and all were single. Most were Caucasian (94.7%); 1.7% identified as American Indian, 1.3% identified as African American, and 1.0% as Asian (1.4% reported "other" or missing). At admission, 23.8% were employed full- or part-time, and 31.8% were students. Almost half had completed high school (43.4%) and 39.7% had attended college. The most commonly reported "drug of choice" was alcohol (28.1%) and marijuana (28.1%), followed by heroin or other opiates (22.2%), cocaine or crack (12.3%), and amphetamines (6.0%). Small proportions reported benzodiazepines (2.0%), hallucinogens (1.0%), or ecstasy (1.0%) as their drug of choice. (A small number of participants ($n = 5$) reported more than one drug of choice, such that these proportions do not sum to 100%.)

2.2. Procedures

Research staff conducted assessments at intake and at 3, 6, and 12 months post-discharge. Interviews were completed in person or by telephone, and self-administered surveys were completed online or returned by mail. Participants were reimbursed $30 for the baseline and 3-month assessments, and $40 for the 6- and 12-month assessments. Follow-up rates were 82% ($n = 248$) at 3 months, 72% ($n = 219$) at 6 months, and 71% ($n = 214$) at 12 months.

2.3. Treatment

The sample was from a large private treatment facility based on an eclectic and multidisciplinary residential approach for SUD, founded on the abstinence-based, 12-step, framework of AA (McElrath, 1997). Services were comprehensive and multi-faceted, employing evidence-based interventions based in twelve step facilitation, motivational, cognitive-behavioral, and family therapy approaches. Programming included clinical assessment, individual and group therapy, and specialty groups, such as relapse prevention, anger management, eating issues, dual disorders, gender issues, and trauma. Integrated mental health care was available on-site, including assessment, therapy, and medication management. Average length of stay was 25.6 days ($SD = 5.7$, ranging from 4 to 35 days). The majority (83.8%) was discharged with staff approval.

2.4. Measures

2.4.1. Demographics. Demographic characteristics, including age, gender, ethnicity, education, and marital status, and drug of choice were extracted from patients' records.