

NIH Public Access

Author Manuscript

J Subst Abuse Treat. Author manuscript; available in PMC 2012 January 1.

Published in final edited form as:

J Subst Abuse Treat. 2011 January ; 40(1): 67–76. doi:10.1016/j.jsat.2010.08.008.

Occupational turnover intentions among substance abuse counselors

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Abstract

This study examined predictor, moderator, and mediator variables of occupational turnover intention (OcTI) among substance abuse counselors. Data were obtained via questionnaires from 929 counselors working in 225 private substance abuse treatment (SAT) programs across the U.S. Hierarchical multiple regression models were conducted to assess predictor, moderator, and mediator variables of OcTI. OcTI scores were relatively low on a 7-point scale, indicating that very few counselors *definitely* intended to leave the SAT field. Age, certification, positive perceptions of procedural and distributive justice, and hospital-based status negatively predicted OcTI. Counselors' substance use disorder impacted history moderated the association between organizational commitment and OcTI. Organizational turnover intention partially mediated the link between organizational commitment and OcTI. Workforce stability might be achieved by promoting perceptions of advantages to working in a particular treatment program, organizational commitment, showing appreciation for counselors' work, and valuing employees from diverse backgrounds.

Keywords

Occupational turnover; substance abuse counselors; side-bet theory; organizational commitment; workforce development

1. Introduction

Employee turnover and commitment has gained considerable attention in the workforce development literature but has scarcely been addressed with counselors working in the substance abuse treatment (SAT) field. Turnover can encompass organizational and occupational changes, both of which have been linked to negative organizational and patient outcomes including costs associated with recruitment and training, discontinuity of patient care, and decreased efficiency and effectiveness of health care delivery (Mor Barak, Nissly, & Levin, 2001; Mulvey, Hubbard, & Hayashi, 2003; Scanlon, 2001). Organizational

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turnover refers to a transition where an employee leaves one workplace for another. Occupational turnover, the outcome under investigation in this study, refers to a transition where an employee changes careers.

Organizational turnover and turnover intention is a serious concern among substance abuse counselors with organizational turnover rate estimates ranging from 18% to 25% (Gallon, Gabriel, & Knudsen, 2003; Johnson, Knudsen, & Roman, 2002; McNulty, Oser, Johnson, Knudsen, & Roman, 2007). A widely cited study by McLellan, Carise, and Kleber (2003) shows even higher rates: Over 50% of staff and program directors had been in their current position for less than a year. Variations in organizational turnover estimates might be related to the treatment programs under investigation (e.g., private versus public sector), calculation and assessment of turnover, focus on organizational turnover versus organizational turnover intention, and sample (e.g., counselors only, counselors and administrators combined).

Compared to organizational turnover, even less is known about occupational turnover among substance abuse counselors. Yet, occupational turnover, particularly among competent and experienced counselors, could be more detrimental to the SAT field than organizational turnover. When an experienced counselor with desirable and much needed skills leaves an organization, his/her expertise can be transferred to another substance abuse treatment program. In addition to providing patient care, these counselors can also continue to foster and mentor the next generation of substance abuse professionals. In contrast, when that same qualified counselor leaves the occupation all together, his/her experience and knowledge is diverted and lost from the SAT arena. As a result, there are fewer knowledgeable counselors providing services to patients as well as supply training, guidance, and mentorship to new counselors. Thus, if accomplished counselors are moving around among SAT programs rather than leaving the SAT field, the situation may not be as bleak as it appears.

Drawing on side-bet theory (Becker, 1960) and commitment models (Meyer & Allen, 1991, 1997), the purpose of this study is to examine occupational turnover intention (OcTI) among substance abuse counselors. In a comprehensive meta-analysis of turnover antecedents, Griffeth, Hom, and Gaertner (2000) found turnover intention to be the single best predictor of actual turnover with an effect size considerably larger than any other antecedent. Further, we identify factors that are associated with counselors' OcTI, which is important for developing and implementing interventions that promote a stable workforce, optimal patient outcomes, and quality health care delivery.

1.1. Side-Bet Theory and Occupational Turnover

According to Becker's (1960) side-bet theory, there is a strong link between an employee's commitment to an organization and/or occupation and the perceived "penalty" that he/she would incur as a result of leaving an organization or occupation. That is, an individual contemplates the (dis)advantages of leaving within the context of the investments that he/she has made. Commitment is greater in employees who perceive more penalties as a result of changing jobs and careers. For instance, changing occupations (main bet) could entail decreased income, a move away from family, and loss of friendships (i.e., side-bets). Thus, if the costs outweigh the benefits of changing an occupation, counselors' commitment to the organization should increase.

Side-bets can take on various forms and traditionally have included being male or female, marital status, age, education, tenure, training, wages, alternative opportunities, and attitudes toward workplace justice (Cohen & Lowenberg, 1990; Meyer & Allen, 1997; Ritzer & Trice, 1969; Wallace, 1997). Findings are conflicting on the validity of the side-bet theory, despite its extensive use over the past few decades. Cohen and Lowenberg conducted a

meta-analysis of 50 published articles and noted limited empirical support for side-bets as predictors of organizational and occupational commitment. In contrast, Wallace, based on data from 591 law firm layers, concluded that inconsistent definitions of *commitment* and indirect measures of determinants of side-bets may account for the lack of empirical support and encouraged the "resurrection" of the theory. Our study examines both traditional and direct measures of side-bets and their link to OcTI.

According to side-bet theory, employees with a long history with the organization or in the occupation (e.g., tenure, age), greater occupation specific professional skills (e.g., training, certification), and higher wages have more invested and are, thus, more committed to and less likely to leave an organization. Tenure in the organization and occupation is a more direct measure of organizational commitment than age, because age does not indicate the time of entry into the profession. Knudsen, Ducharme, and Roman (2007), however, using data from 207 substance abuse counselors, have found a negative relationship between counselors' age and organizational turnover intention (OrTI). Researchers have also noted lower turnover among counselors who are certified, have higher incomes, and those with greater organizational and occupational tenure compared to other counselors (Ducharme, Knudsen, & Roman, 2008; Knudsen, Ducharme, & Roman, 2008; Knudsen, Johnson, & Roman, 2003; Mulvey et al., 2003), further endorsing side-bet theory.

Factors that should promote turnover, according to side-bet theory, include higher education, being male, and single. Employees with less education tend to be less marketable and faced with fewer opportunities to leave their current position or occupation. Positive associations have been shown between education and OrTI and OcTI among emergency medical personnel and substance abuse counselors (Blau, Chapman, Pred, & Lopez, 2009; Knudsen et al., 2003, 2006). Furthermore, male and unmarried employees are often thought to be less committed to a job, because they have fewer non-work related obligations (e.g., childrearing responsibility, family-based obligations) and, thus, face fewer penalties for changing jobs/ careers compared to women and married workers. However, McNulty et al. (2007) found that SAT programs with a greater percentage of female employees had higher organizational turnover rates compared to other programs.

Side-bet theory also stipulates that counselors' perceptions of organizational justice (e.g., fairness) are related to organizational commitment and occupational turnover. Employees who believe that they are being treated fairly in the workplace have been found to be more committed and less interested in changing jobs than employees with contradictory beliefs (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Ducharme et al., 2008; Knudsen et al., 2006, 2008; McNulty et al., 2007). There are two distinct types of organizational justice. Distributive justice refers to perceived fairness of outcomes (i.e., what was decided). Procedural justice refers to perceived fairness of procedures to achieve outcomes (i.e., how it was decided).

Finally, we use side-bet theory to investigate organizational characteristics including profit status, hospital-based ownership, and program size based on the number of full time equivalents (FTEs) that may predict counselors' OcTI. Specifically, counselors working in for-profit organizations tend to have larger caseloads and less time to provide individualized services, which could be perceived as a disadvantage. Not surprisingly then, for-profit organizations have reported higher counselor organizational turnover compared to not-for-profit programs (McNulty et al., 2007). Additionally, counselors working in hospital-based programs tend to earn more. In turn, hospital-based counselors may perceive greater penalties associated with occupational turnover. Finally, employees working in larger organizations may have more upward mobility prospects (Stevens, Beyer, & Trice, 1978),

translating into greater perceived benefits and organizational commitment and lower OcTI among counselors.

1.2. Counselors' Substance Use Disorder Impacted History, Commitment Models, and Occupational Turnover

Historically, most substance abuse counselors have entered the SAT field during recovery from substance use disorders (SUDs) (White, 1998). They drew on their life experiences, which put them in unique positions to help other individuals with SUDs achieve sobriety, and had limited education and formal training. This is changing as counseling emerges as a profession and the industry acknowledges the vital role that counselors play in patients' recovery. Counselors are responsible for case management, educating patients and families, staying up-to-date on evidence-based innovations, providing group and individual counseling, and professional consultation (Cannan-Wall, 2003). Their work remains important, because many other "professionals" do not want to work with individuals with SUDs. This is the result of the strong stigma that surrounds the SAT field. In fact, Goffman (1963) coined the phrase "courtesy stigma" to refer to the stigma that envelopes not only family and friends of substance users but also professionals who treat individuals with SUDs.

Cannan-Wall (2003), in a qualitative study of SAT counselors, found three distinct pathways into substance abuse counseling. First, counselors enter the field as recovering substance users with the purpose of helping other people with SUDs ("calling"). Many counselors in recovery have or actively pursue professional degrees (e.g., counseling certification). Second, individuals become substance abuse counselors because they have been affected by a family member's SUD. Similar to recovering counselors, these counselors may have or pursue professional credentials. In addition, they have a "calling" to help individuals with SUDs. The former and latter counselors can be described as *substance use disorder (SUD) impacted counselors*. Finally, non-SUD impacted counselors come to the SAT field without prior personal knowledge of recovery or having had their lives impacted by loved ones affected with SUDs. They often express a more general therapist "calling" rather than a substance abuse counselor in particular. Indeed, many of them stumbled into the SAT field instead of having elected to work with this population and expressed an interest in working in other settings or counseling occupations.

Counselors' SUD impacted history may have implications for employee commitment and OcTI. There is evidence in diverse fields that employee commitment negatively predicts OcTI and OrTI (Chang, Chi, & Miao, 2007; Meyer & Allen, 1991; Mowday, Porter, & Steers, 1982). Commitment commonly refers to organizational and occupational commitment. Both types of commitment are based on an employee's psychological relationship with an organization or occupation (Meyer & Allen, 1997). Organizational commitment, the focus of this study, has been negatively associated with organizational and occupational turnover and turnover intention (Chang et al., 2007; Hackett, Lapierre, & Hausdorf, 2001; Otto, Dette-Hagenmeyer, & Dalbert, 2010; Parry, 2008).

Side-bet theory suggests that substance abuse counselors in recovery and those impacted by the disease via family members and friends are more committed to the organization and occupation compared to non-SUD-impacted counselors. More specifically, SUD impacted counselors would have more invested in the organization and occupation and, thus, more to lose should they decide to leave than counselors not affected by personal or family members in recovery. Thus, it is plausible that counselors' SUD impacted history moderates the relationship between organizational commitment and OcTI. That is, the relationship between counselors' SUD impacted history. In addition to examining moderator effects, we also consider whether

OrTI mediates the relationship between organizational commitment and OcTI among substance abuse counselors. In order to investigate mediation effects, organizational commitment has to be related to OrTI and OcTI and OrTI has to be associated with OcTI, which has been examined and supported in non-SAT studies. Organizational commitment has been found to be associated with OrTI and OcTI (Chang et al., 2007; Hackett et al., 2001; Otto et al., 2010; Parry, 2008). In addition, in a large sample of Canadian nurses, Hackett et al. (2001) have found that OrTI mediated the relationship between organizational commitment and OcTI. Subsequently, we expect similar findings among substance abuse counselors in our study.

One of the criticisms of side-bet theory is the lack of operationalization of organizational commitment. We draw on Meyer and Allen's (1997) three-component model of commitment, which has been widely accepted and adapted. The three components of commitment include affective, continuance, and normative. Affective commitment has been defined as an employee's "emotional attachment to, identification with, and involvement in the organization" (p. 67). Continuance commitment has been explained as "an awareness of the costs associated with leaving the organization" (p. 67). Normative commitment has been referred to as "a feeling of obligation to continue employment (p. 67)." In this study, we focus on affective commitment because it has been identified as the strongest and most reliable predictor of turnover (Allen, Shore, & Griffeth, 2003; Meyer & Smith, 2000; Rhoades, Eisenberger, & Armeli, 2001).

The purpose of the current study is to examine the extent of OcTI among substance abuse counselors working in privately-funded SAT programs. We hypothesize that (1) counselors' side-bets are associated with OcTI, (2) SUD impacted history (i.e., self or family member in recovery) and affective commitment is negatively linked to OcTI, (3) counselor's SUD impacted history moderates the relationship between affective commitment and OcTI, (4) OrTI mediates the relationship between affective commitment and OcTI.

2. Materials and Methods

2.1. Sample and Study Design

Data for the current study were derived from substance abuse counselors working in private SAT programs that participated in the 2007/08 National Treatment Center Study (NTCS). The NTCS is a family of nationally representative longitudinal NIH-funded projects that were conducted by the University of Georgia's Institute for Behavioral Research. All procedures were approved by The University of Georgia's Institutional Review Board. The purpose of the project is to identify changes in the U.S. service delivery within privately funded community-based SAT programs.

"Private sector" refers to programs that receive at least 50% of their annual operating revenues from commercial insurance, patient fees, and income sources other than government grants or contracts. Medicaid and Medicare, which are reimbursements received by programs on an individual patient basis, were defined as private funding. Programs were also required to offer alcohol and drug treatment at a level of intensity that was at least equivalent to American Society of Addiction Medicine (ASAM) patient placement criteria (Mee-Lee et al., 1996). ASAM provides in-depth explanations of different levels of care and criteria for assessing the level of care needed by patients with any substance use disorder. Programs based in correctional facilities, operated by the Veteran's Administration, those offering only detoxification or methadone maintenance, and not located in the community were excluded.

Participating private programs were selected via a two-stage random sampling approach. First, all U.S. counties were assigned to 1 of 10 strata based on population and randomly sampled within strata to ensure the inclusion of urban, suburban, and rural areas. Second, using national and state directories, all SAT facilities in the sampled counties were enumerated. Treatment programs were then proportionately sampled across strata, with telephone screening used to establish eligibility for the study. Facilities screened as ineligible were replaced by random selection of alternative programs from the same geographic stratum.

The present study utilizes both organization- and counselor-level data. Organization-level data were collected in face-to-face interviews with administrators and clinical directors (67% response rate). They then supplied a list of counselors working in their programs. Counselors who agreed to participate in our study completed and returned a mailed questionnaire, which included demographics, workforce development, knowledge of pharmacotherapy adoption, and other items (58% response rate). For the purpose of this study, only full-time counselors were included in the analyses, resulting in a final sample of 929 counselors working in 225 private treatment programs. Counselors' demographic characteristics are shown in Table 1. Briefly, the majority of counselors were women (65%), certified substance abuse counselors (63%), holding a master's degree or higher (51%), and SUD impacted (i.e., self or family member in recovery; 67%). Their mean age was 45.54 years (SD = 11.78).

2.2. Measures

2.2.1 Dependent Variable—Counselors' OcTI was assessed by creating the mean across three items (see Table 2), adapted from Meyer, Allen, and Smith (1993). Response options ranged from 1 = not at all true to 7 = definitely true ($\alpha = .83$).

2.2.2. Independent Variables—Counselors' side-bets included sex (0 = male, 1 = female), marital status (0 = not currently married including divorced/separated/widowed/ single, 1 = currently married), age in years, education (0 = less than master's degree, 1 = master's degree or higher), certification in substance abuse counseling (0 = no, 1 = yes), organizational tenure at the current program in years, occupational tenure in the SAT field in years, and approximate annual wages (see Table 1 for categories). Counselors' perceptions of procedural justice were measured by calculating the mean across six items (e.g., "This center's management makes sure that all employee concerns are heard before job decisions are made."), adapted from Niehoff and Moorman (1993). Perceptions of distributive justice were assessed by calculating the mean across five items (e.g., "I am fairly rewarded considering my responsibilities."), adapted from Moorman (1991). Response options for both scales ranged from 1 = not at all true to 7 = definitely true. Internal consistency was very good for both scales ($\alpha = .92$ for procedural justice and $\alpha = .95$ for distributive justice).

Counselors' SUD impacted history was coded 1 if counselors were in recovery or had a family member in recovery and coded 0 if they were not SUD impacted (neither self nor family member in recovery). Affective commitment, adapted from Meyer et al. (1993), was measured by calculating the mean across five items (e.g., "This treatment center has a great deal of personal meaning to me."). Some items were reverse coded so that higher scores indicate greater commitment. Response options ranged from 1 = not at all true to 7 = definitely true ($\alpha = .78$).

Counselors' OrTI, adapted from Walsh, Ashford, and Hills (1985), was measured by calculating the mean across four items (e.g., "I am actively looking for another job. As soon as I can find another job, I will leave this treatment center."). Response options ranged from

 $1 = not at all true to 7 = definitely true (\alpha = .85)$. One item was reverse coded so that a higher score indicates greater OrTI.

Finally, administrators reported on the three organizational side-bets including profit status (0 = non-profit and 1 = for-profit); hospital-based ownership, which was coded 0 = no (freestanding unit NOT on a hospital campus) and 1 = yes (freestanding unit on a hospital campus, unit/department within a psychiatric hospital, and unit/department within a general or other hospital); and treatment program size, which was operationalized as the total number of full time equivalents (FTEs) working at the treatment program (counselors, case managers, psychiatrists, physicians, nurses, other clinical staff, and administrative staff; log transformed).

2.3. Data Analyses

All analyses were conducted using SAS 9.2. Table 1 lists the descriptive statistics for all variables. The extent of OcTI (i.e., n, %) for each of the three questions is displayed in Table 2. Paired t-tests were run to identify mean differences among the three individual items that made up the OcTI variable. Prior to running hierarchical multiple regressions, the data were checked for normality, outliers, and multicollinearity. Affective commitment was centered around the mean to address multicollinearity regarding the interaction between commitment and SUD impacted history. Administrator-reported data were disaggregated to the counselor-level. Calculation of the intra-class correlation (ICCs) supported the use of OLS regression models without correlated data analysis techniques (ICC=.043; Kreft & de Leeuw, 1998).

The hypotheses were tested with hierarchical multiple regression models. As can be seen in Table 3, 13 side-bets were entered in Model 1 (H1). SUD impacted history and affective commitment were added in Model 2 (H2). The interaction between SUD impacted history and affective commitment was entered in Model 3 to test for the moderation effect (H3). OrTI was inserted in Model 4 as one of the four steps to testing the mediation effect (H4), according to Baron and Kenny (1986).

3. Results

3.1. Occupational Turnover Intention (OcTI)

Overall mean OcTI scores (M = 2.42, SD = 1.58) were relatively low on the 7-point scale (1 = not at all true to 7 = definitely true), indicating low intentions to leave the SAT field. Comparisons among the three items that formed the OcTI variable indicated significant differences (Table 2). Counselors reported more frequently thinking about leaving the SAT field (M = 2.75, SD = 1.86) than exploring other career opportunities [(M = 2.53, SD = 1.99); t = 3.82, df = 923, p < .001] or leaving the field in the next year [(M = 1.99, SD = 1.63), t = 14.85, df = 924, p < .001]. Counselors also noted more frequently exploring career opportunities outside the SAT field than thinking it likely that they would leave the field in the next year (t = 10.90, df = 927, p < .001).

Table 2 also shows that one third (34%) of counselors did *not at all* frequently think about leaving the SAT field. Half (50%) of them also were *not at all* exploring career opportunities outside the field. The majority (61%) also did *not at all* intend to leave the field in the next year. These findings suggest that there is no widespread intention among counselors to change occupations. As a matter of fact, very few counselors were *definitely* thinking about leaving the SAT field (5%), exploring options outside the field (7%), and intending to leave the field within the next year (4%).

3.2. H1: Side-Bets are Associated with Occupational Turnover Intention

Of the 13 side-bets investigated, five were significantly related with OcTI. Although our hypothesis was only partially supported, findings were in the expected direction (Model 1 in Table 3). Older counselors, certified counselors, and those working in hospital-based treatment programs expressed lower OcTI compared to younger, non-certified, and non-hospital based counselors. Counselors who perceived greater procedural and distributive justice also had lower OcTI than counselors perceiving lesser organizational justice. Sixteen percent of the variance in model 1 was explained by the side-bets.

3.3. H2: SUD Impacted History and Affective Commitment is Negatively Related to Occupational Turnover Intention

Model 2 in Table 3 shows that our hypothesis was supported. Counselors who were in recovery or knew a family member in recovery had lower OcTI than non-SUD impacted counselors. Further, counselors with greater commitment to the organization also had lower OcTI. The addition of SUD impacted history and affective commitment explained 32% of the variance, which is an increase of 16% over the first model.

3.4. H3: Substance Use Disorder Impacted History Moderates the Relationship between Affective Commitment and Occupational Turnover Intention

As seen in Model 3 in Table 3, our hypothesis was supported. With the addition of the interaction term, the main effects of affective commitment and SUD impacted history remained significantly negatively related with OcTI. In addition, there was a significant SUD impacted history by affective commitment interaction. Post hoc analyses were conducted to determine the nature of the interaction. Commitment was categorized into high (52%) and low (48%) resulting in a 2×2 analysis of variance (ANOVA) group comparison: Non-SUD impacted counselors with low commitment (17%), non-SUD impacted counselors with high commitment (30%), and SUD impacted counselors with high commitment (36%).

ANOVA analysis with Tukey post-hoc tests showed a significant mean difference between the four groups and OcTI (F = 65.61, df = 3, p < .0001; Table 4). Non-SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment. Non-SUD impacted counselors with low commitment also had higher OcTI than non-SUD impacted counselors with high commitment. Further, non-SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with high commitment. Non-SUD impacted counselors with high commitment had higher OcTI than SUD impacted counselors with high commitment had higher OcTI than SUD impacted counselors with low commitment. Finally, SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with low commitment had higher OcTI than SUD impacted counselors with high commitment and SUD impacted counselors with high commitment.

3.5. H4: Organizational Turnover Intention Mediates the Relationship between Affective Commitment and Occupational Turnover Intention

The mediation was tested in four steps (Baron & Kenny, 1986), with results supporting our final hypothesis. First, we confirmed that there was a significant negative relationship between affective commitment and OcTI in Model 3 ($\beta = -.56$, p < .001). Second, we confirmed that there was a significant negative association between commitment and OrTI ($\beta = -.54$, p < .001 controlling for all of the variables listed in Model 3; not shown). Third, we confirmed that there was a significant positive relation between OrTI and OcTI ($\beta = .58$, p < .001), as seen in Model 4. Fourth, we found that the effect of commitment on OcTI decreased from $\beta = -.56$ in Model 3 to $\beta = -.25$ in Model 4, indicating a partial mediation.

The inclusion of all of the variables in Model 4 accounted for 48% of the variance in the model, which is a 15% increase from Model 3.

4. Discussion

The purpose of the current investigation was to examine predictor, moderator, and mediator variables of OcTI among substance abuse counselors. First, we found no indication of counselors' widespread intention to leave the SAT field. On the contrary, only a small percentage of counselors (< 8%) *definitely* intended to exit the field. Although organizational turnover among substance abuse counselors has been considered a serious concern, it is encouraging to see that the vast majority of counselors are intending to stay in the SAT field. Thus, their skills are transferred among other SAT programs and are not lost to the industry at large.

Second, we found some support for the link between side-bets and OcTI. Side-bet theory (Becker, 1960) suggests that employees evaluate the advantages and disadvantages of working in a particular organization and occupation. If the perceived pros outweigh the cons, employees are more committed and less interested in leaving. We found that older and certified substance abuse counselors expressed less of an interest in leaving the field than younger and non-certified counselors. The theory suggests that counselors with these characteristics (side-bets) are more invested in the field and have more to lose, correlating with lower OcTI. The age difference is an interesting finding considering the prevalence of ageism, particularly discrimination against older adults, in the workforce. It is also important to mention that the relationship between side-bets and OcTI does not indicate whether employees who are more interested in remaining in the field are an asset (e.g., highly skilled, qualified) to the SAT arena. Studies are needed that investigate whether more competent, high performing counselors are more likely to stay in the field compared to other counselors.

Further, as supported by side-bet theory, counselors who perceived greater procedural and distributive workplace justice noted lower OcTI. These findings suggest that interventions targeting workforce stability should focus on improving counselors' satisfaction with workplace justice. This can be accomplished by providing greater training for supervisors and managers in leadership skills, utilizing motivational incentives to reward justice practices, giving counselors more job autonomy, and recognizing counselors for the challenging and essential work that they are performing.

In addition, the only significant organizational side-bet was hospital-based status. Counselors working in hospital-based treatment programs were less interested in changing occupations. Similar findings have been reported by administrators working in SAT programs regarding counselors' OrTI (McNulty et al., 2007). One explanation might be the higher wages that are paid in hospital settings and subsequent greater perceived disadvantages to leaving, according to side-bet theory. Additional analysis confirmed that counselors in our study did get paid more when they worked in hospital-based treatment settings compared to non-hospital settings. Qualitative studies and open-ended items would shed more light on underlying factors that might explain counselors' motivation to stay or leave the occupation.

Third, our results confirmed that affective commitment and SUD impacted history predict OcTI among substance abuse counselors. Prior research on diverse occupations has found a link between organizational commitment and OcTI (e.g., Chang et al., 2007; Hackett et al., 2001; Meyer & Allen, 1991), similar to our findings. SUD impacted history and OcTI, however, is unique to the SAT field. Knudsen et al. (2006) found a negative albeit nonsignificant relationship between counselors in recovery and OrTI, supporting the direction of

our findings on OcTI. It is possible that their "calling" to the profession, as described by Cannan-Wall (2003), explains our findings.

Moreover, SUD impacted history moderated the relationship between affective commitment and OcTI. That is, non-SUD impacted counselors with low affective commitment to the organization had greater intentions to leave the occupation compared to SUD impacted counselors with low and high affective commitment as well as non-SUD impacted counselors with high commitment. Interestingly, we did not see differences between non-SUD impacted counselors with high commitment and SUD impacted counselors with the same commitment level. It could be that counselors with a personal experience with recovery from SUDs find their work intrinsically significant or have a special bond and attachment to the SAT field. Thus, commitment to the organization plays a different role for SUD impacted counselors in terms of intentions to leave the occupation compared to counselors with no personal experience with recovery from SUDs. However, the similarities in OcTI between counselors with high affective commitment regardless of their experiences with SUD recovery could also indicate that organizational commitment is important among counselors who already have overall low OcTI. More research is clearly needed to investigate the dynamics among commitment, SUD impacted history, and OcTI.

Finally, our results showed that OrTI partially mediates the link between affective commitment and OcTI. That could mean that although organizational commitment is a strong predictor of OcTI, OrTI is perhaps a more important factor that contributes to counselors' intentions to leave the occupation. However, considering that the findings indicated a partial rather than full mediation, other factors my account for this finding. For example, results may be different based on the type of organizational commitment investigated (e.g., affective, continuance, normative). In addition, it could be that occupational commitment is a stronger predictor of OcTI than organizational commitment. Subsequently, we might see different outcomes regarding the mediation model. Future studies using different types of commitment may refute or confirm these speculations.

Another limitation of our study is that the sample only represents counselors working in private SAT programs. This restriction is associated with the NCTS that required treatment programs to meet inclusion criteria such as private-sector operation and community-based settings, omitting correctional facilities and methadone-only programs. In addition, the organizational and occupational tenure reported by counselors in our study is suggestive of a relatively stable workforce that might be linked to private treatment programs. It is possible that counselor demographics differ between those working in private compared to other programs. Thus, our findings may not generalize to counselors working in other types of SAT settings (e.g., public sector, correctional facilities). In order to investigate this limitation further, we compared our counselor demographics to counselors working in public, other private, and CTN-affiliated SAT programs. Results were generally similar to our findings (Abraham, Ducharme, & Roman, 2009; Knudsen et al., 2003, 2007), although master's degree and certified substance abuse counselor status was slightly higher in the private sectors. These differences may be related to counselors' overall low intentions to leave the occupation in our study. Future studies with diverse samples may help shed light on this issue.

More studies in general are needed on predictors, moderators, and mediators of OcTI considering that this strand of research is relatively unexplored for counselors working in SAT programs. Qualitative studies and open-ended items could help provide insights into facilitators and barriers of OcTI and the decision-making process that underlies occupational turnover. For instance, it is unclear to what extent counselors evaluate the pros and cons of

leaving the occupation and the types of careers that counselors pursue upon leaving the SAT field.

In conclusion, our investigation added to the sparse literature on OcTI among substance abuse counselors in the following ways. We found no indication that the SAT field is faced with an extensive problem of OcTI among counselors, although OrTI is greater among this population compared to national averages. Interventions aimed at promoting workforce stability might benefit from maintaining a strong focus on addressing organizational turnover. Research has shown that factors such as wages, benefits, job satisfaction, employee recognition, workplace justice, autonomy, professional development, and social relationships, just to mention a few, are associated with SAT counselor turnover (Knudsen et al., 2003, 2006, 2008; McNulty et al., 2007). Programs might benefit from focusing on increasing counselors' perceptions of advantages to working in a particular treatment program, organizational commitment, showing an appreciation for the work that counselors perform, and valuing employees from diverse backgrounds.

Acknowledgments

The authors gratefully acknowledge the research support of the National Institute on Drug Abuse (Grant No. R01DA13110), awarded to Paul M. Roman. The views and opinions expressed are those of the authors and not the granting agency.

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Table 1

Descriptive statistics of all study variables

Variable	М	SD
Occupational Turnover Intention $(1 = not at all true, 7 = definitely true)$	2.42	1.58
Side-Bets according to Side-Bet Theory		
Female (<i>n</i> , %)	601	64.97
Currently married (<i>n</i> , %)	457	49.51
Age in years	45.54	11.78
Master's Degree or Higher $(n, \%)$	470	50.59
Certified Substance Abuse Counselor $(n, \%)$	580	62.84
Organizational Tenure in Years	5.90	6.01
Occupational Tenure in Years	10.98	8.72
Annual Wages ⁺	6.14	1.79
Procedural Justice (1 = not at all true, 7 = definitely true)	4.00	1.54
Distributive Justice (1 = not at all true, 7 = definitely true)	4.04	1.70
For-Profit $(n, \%)$	297	31.97
Hospital-Based (n, %)	255	27.45
Size (FTEs, prior to log transformation)	57.27	84.79
SUD impacted (self/family member in recovery) (<i>n</i> , %)	620	66.74
Affective Commitment/un-centered (1 = not at all true, 7 = definitely true)	5.15	1.37
Organizational Turnover Intention (1 = not at all true, 7 = definitely true)	2.59	1.57

Note.

⁺Annual wages were categorized (1=<\$15,000, 2=\$15,001-\$20,000, 3=\$20,001-\$25,000, 4= \$25,001-\$30,000, 5=\$30,001-\$35,000, 6= \$35,001-\$40,000, 7= \$40,001-\$45,000, 8=\$45,001-\$50,000, 9=>\$50,000).

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Table 2

Means, standard deviations, and extent (%) of counselors' occupational turnover intention (OcTI)

		Not	Not at all					Definitely
OcTI	M (SD) 1 2 3 4 5 6 7	1	7	3	4	S	9	7
I frequently think about leaving the SAT field.	2.75 (1.86) 34 25 11 10 8 7	34	25	Ξ	10	~	٢	5
I am exploring career opportunities outside the SAT field. 2.53 (1.99) 50 15 6 9 7 6 7	2.53 (1.99)	50	15	9	6	٢	9	7
It is likely that I will leave the SAT field in the next year. 1.99 (1.63) 61 17 5 7 3 3 4	1.99 (1.63)	61	17	2	٢	ю	3	4

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Table 3

Hierarchical multiple regression models: Predictor, moderator, and mediator variables of occupational turnover intention⁺

β Female 04 Married .01 Matried .01 Age 14*** Age 07* Master's Degree or Higher .05 Master's Degree or Higher .05 Organizational Tenure/yrs 02 Occupational Tenure/yrs .01 Annual Wages .06	SE (B) 4 .11 1 .10 *** .01 5 .11	β) β - 01	SE(B)	c			
le ied er's Degree or Higher fied Substance Abuse Counselor nizational Tenure/yrs pational Tenure/yrs				2	SE(B)	β	SE(B)
ed er's Degree or Higher fied Substance Abuse Counselor nizational Tenure/yrs pational Tenure/yrs al Wages			.10	01	.10	.01	60.
er's Degree or Higher fied Substance Abuse Counselor aizational Tenure/yrs aal Wages		.03	60.	.04	60.	.05	.08
		10 **	00.	10**	00.	10**	00.
		.01	.10	.02	.10	.01	60.
	₇ * .11	06	.10	06	.10	03	60.
	.01	.04	.01	.04	.01	.02	.01
	10.	.02	.01	.03	.01	.03	.01
	5 .04	.07	.03	.07	.03	.05	.03
Procedural Justice –.20***	*** .04	03	.04	03	.04	.04	.03
Distributive Justice20****	*** .04	* 60.–	.03	* 60'-	.03	01	.03
For-Profit Status .03	.11.	.05	.10	.05	.10	.02	60.
Hospital-Based –.08 *	₃ * .12	08	.10	08	.10	06*	60.
Full-Time Equivalents (log)06	6 .04		.04	05	.04	04	.03
Affective Commitment		46 ***	.04	56 ***	90.	25 ***	.05
SUD Impacted (Self/Family)		** 60.–	.10	** 60 ^{.–}	.10	06*	60.
Affective Commitment X SUD Impacted				.12**	.07	.15***	.06
Organizational Turnover Intention						.58***	.04
F 13.32***	***	27.68 ^{***}		26.57 ^{***}		47.36 ^{***}	
R ²	10	.32		.33		.48	
		.52		<u>کئ</u>		.48	
$^{+}$ N = 892							
* <i>p</i> < .05;							
** <i>p</i> <.01;							
*** n < 001							

Table 4

Post-hoc analysis of variance results: Substance use disorder impacted history moderates the relationship between affective commitment and occupational turnover intention

	NSUDI & LAC ¹	NSUDI & HAC ²	SUDI & LAC ³	SUDI & HAC ⁴
$\operatorname{OcTI}(M, SD)^*$	3.52 (1.76) ^{2,3,4}	2.02 (1.11) ^{1,3}	2.80 (1.69) 1,2,4	1.76 (1.08) ^{1,3}

Note.

 I non-SUD impacted counselor with low affective commitment vs.

 2 non-SUD impacted counselor with high affective commitment vs.

 3 SUD impacted counselor with low affective commitment vs.

⁴SUD impacted counselor with high affective commitment.

 $p^* < .05$ for group comparisons