



Published in final edited form as:

*J Behav Health Serv Res.* 2011 January ; 38(1): 80–90. doi:10.1007/s11414-009-9198-7.

## Supervisory Turnover in Outpatient Substance Abuse Treatment

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### Abstract

Staff turnover is a significant issue within substance abuse treatment, with implications for service delivery and organizational health. This study examined factors associated with turnover among supervisors in outpatient substance abuse treatment. Turnover was conceptualized as being an individual response to organizational-level influences, and predictors represent aggregate program measures. Participants included 532 staff (including 467 counselors and 65 clinical/program directors) from 90 programs in four regions of the USA. Using logistic regression, analyses of structural factors indicated that programs affiliated with a parent organization and those providing more counseling hours to clients had higher turnover rates. When measures of job attitudes were included, only parent affiliation and collective appraisal of satisfaction were related to turnover. Subsequent analyses identified a trend toward increased supervisory turnover when satisfaction was low following the departure of a previous supervisor. These findings suggest that organizational-level factors can be influential in supervisory turnover.

### Introduction

Interest in the substance abuse treatment workforce is increasing while service providers and researchers are attempting to understand the intricate social factors that facilitate or impede service delivery and adoption of new technologies. For agencies to provide consistent services and implement new initiatives, there must be a reasonable degree of stability in staffing. Turnover in health service organizations disrupts service provision, affects client/counselor relationships,<sup>1</sup> hampers their ability to achieve goals efficiently,<sup>2</sup> and interferes with aspects of organizational functioning (e.g., communication) that are important in providing quality care.<sup>3</sup>

Not only can turnover disrupt delivery of client services, but in instances where new clinical initiatives are being put into practice, it can also threaten the implementation and

sustainability of newly embraced initiatives.<sup>4</sup> The importance of managerial/supervisory support has been recognized, and turnover among these key personnel will likely impede efforts to alter practice.<sup>5,6</sup> For this study, “supervisor” is defined as an individual who can either make employment decisions or who has authority to direct daily work activities<sup>7</sup> and therefore includes individuals with job titles such as “Manager,” “Director,” or “Supervisor.” When supervisory staff leave, momentum toward organizational change and improvement can be suspended or lost. Furthermore, operational procedures and goals can change, leading to a period of adjustment. Understanding supervisory turnover is therefore essential.

Turnover among staff and directors is a significant problem in the field of substance abuse treatment.<sup>8–10</sup> Estimates range from 18.5%<sup>11</sup> to 25%<sup>12</sup> across staffing positions. While concern over high turnover rates among counselors has been expressed,<sup>13</sup> there is relatively little information regarding turnover among individuals in managerial positions. The turnover rate for supervisory staff may be higher than that of counselors, with one national study reporting that 54% of directors held their current position for less than 1 year.<sup>13</sup> The degree to which programs experience a “revolving door” with respect to management/supervision is of particular interest because it restricts an organization’s ability to implement and sustain program-level change.

The literature suggests that multiple factors contribute to turnover, some of which are structural and not easily changed (i.e., program ownership and affiliation) and others that are more malleable, such as job attitudes or perceptions of the work environment.<sup>14</sup> Structural aspects of the organization—the context in which treatment is provided—have been found to influence turnover rates. For instance, for-profit agencies tend to have higher attrition than government or not-for-profit organizations,<sup>15</sup> tied in part to the propensity for such programs to increase caseloads in order to raise profit margins, thus placing greater workloads on counselors.<sup>12,16</sup> Affiliation with a parent organization such as a hospital may positively affect turnover rates through higher salaries, better benefits, and a more stable work environment.<sup>17</sup> With regard to size, hospitals with more staff have greater turnover among nurses,<sup>15</sup> perhaps because employees in larger programs experience more stress.<sup>18</sup> Studies of nursing caseloads suggest that those working under higher nurse to patient ratios were more likely to resign.<sup>19</sup> In substance abuse treatment settings, higher caseloads are associated with greater burnout among counselors,<sup>20</sup> and burnout is a reliable predictor of intention to quit.<sup>21</sup> It stands to reason that turnover would be higher in programs where caseloads are heavier—where the workload is greater (i.e., more sessions offered) or client needs are more complex (i.e., higher proportion of special population clients).

Attitudes toward the workplace environment can also impact turnover both positively and negatively. For instance, lower job satisfaction consistently and reliably predicts individual-level turnover.<sup>22–24</sup> Employees who are satisfied in their present job are less likely to consider quitting<sup>19,25</sup> and less likely to express intention to search for a new job.<sup>25</sup> This relationship holds true even when controlling for an individual’s commitment to the organization.<sup>26</sup> Other job attitudes that have implications for turnover include emotional exhaustion (one element of job burnout)<sup>27</sup> and perceptions of leadership. Emotional exhaustion is common among social service providers<sup>28</sup> and tends to increase over time among case managers working with mental health clients.<sup>29</sup> Hence, it is not surprising that emotional exhaustion is associated with higher turnover<sup>30</sup> and intention to quit.<sup>19,21</sup> In fact, burnout has been found to be a stronger predictor of turnover intent than satisfaction, although both are important.<sup>19</sup> Leadership can also influence turnover by shaping the workplace environment.<sup>31</sup> For instance, supervisory support (promoting a sense of belonging and teamwork within the organization) is associated with greater retention among

part-time, blue-collar workers,<sup>32</sup> and higher leadership ratings are associated with lower burnout and higher job satisfaction among substance abuse counselors.<sup>20</sup>

The purpose of this study was to examine turnover from a broader organizational perspective. Rather than focusing on predictors of individual-level turnover among staff, this study focuses on organizational factors—both structural elements of a program and collective appraisals of counseling staff—that are associated with supervisory turnover. For instance, while previous research indicates a consistent relationship between job satisfaction and individual-level turnover, the degree to which staff satisfaction influences supervisor turnover is unknown. Because supervisors work in conjunction with the counselors they manage, and the attitudes of subordinates as a whole contribute to the climate in which they themselves function, it is reasonable to expect that supervisors in working environments where staff as a whole are more satisfied with their jobs, less burned out, and who perceive leadership as more competent will be less likely to leave. These malleable and dynamic organization-level attitudes are also expected to be more important in predicting supervisory turnover than static measures of program structure. In this study, turnover was conceptualized as being, in part, an individual response to organizational-level influences, and predictors represent aggregate program measures.

## Method

### Sample

As part of the Treatment Costs and Organizational Monitoring (TCOM) project,<sup>33–35</sup> data were collected in 2004–2006 from 115 treatment programs in nine states: Florida, Idaho, Illinois, Louisiana, Ohio, Oregon, Texas, Washington, and Wisconsin. Letters describing the project were distributed through Addiction Technology Transfer Centers (ATTCs) in four regions: Southern Coast, Great Lakes, Gulf Coast, and Northwest Frontier. Each ATTC assisted with program recruitment and had a target of approximately 25 programs. Programs were offered monetary compensation, staff training opportunities, and individualized feedback reports in exchange for providing organizational and client data. Participating programs had to primarily provide outpatient substance abuse treatment (could be embedded in the criminal justice or mental health system) and have a minimum of three clinical staff members. Some exceptions were made when a large organization with multiple outpatient units wanted to include all programs in the research project. A naturalistic quota sampling plan was developed to provide adequate coverage of various program types (e.g., varying levels of care) and geographic regions. All programs that met inclusion criteria were enlisted and all participated voluntarily. Data collection plans and study protocols were approved by the university's Institutional Review Board.

The data represent two time points collected approximately 12 months apart: (1) an initial assessment of organizational structure followed by a survey of clinical staff and (2) a second assessment of organizational structure, including staffing changes. The study sample consists of 532 clinical staff (including 467 counselors and 65 clinical/program directors) from 90 programs with both program and staff data across one full project year. Twenty-five of 115 treatment programs that initially agreed to participate did not provide complete data. Eleven of these 25 programs were considered ineligible for the first annual data collection on the basis of closure (6), significant reorganization (3), and rebuilding following Hurricane Katrina (2). Two additional programs were under development and not operational until later. Another 12 programs did not provide either staff rating or turnover data. The 90 programs included herein represent 88% of 102 eligible programs and 78% of programs that originally expressed interest. There were no differences in organizational structure characteristics between the final sample of 90 programs and the initial sample of 115.

Programs were generally private non-profit (74%) and located in urban or suburban settings (24% rural). Twenty-seven percent of programs were regular outpatient (less than 6 h of structured programming per week), 13% were intensive outpatient (minimum of 2 h of structured programming on 3 days per week), and 59% were mixed (providing both regular and intensive tracks). Seventy-three percent were affiliated with a parent organization. On average, clients received 5.6 h of counseling per week. Agencies employed an average of 5.9 counseling staff with caseloads of about 26 clients. Counseling staff were predominantly female (61%), white (72%), in their mid-forties ( $M=46$ ,  $SD=10.78$ ), held a Bachelor's (27%) or Master's Degree (42%), and had over 5 years of experience in drug abuse counseling (64%).

## Procedure

Data collection procedures focused on obtaining a cross-sectional view of treatment program functioning. Upon enrollment in the project (Time 1), a program director or clinical manager completed a Survey of Structure and Operations (SSO),<sup>34</sup> which took approximately 30 min to complete and gathered information about general program characteristics, organizational relationships, clinical assessment and practices, services provided, staff and client characteristics, and recent changes (e.g., director turnover). The SSO was developed as part of the TCOM project and includes selected sections of the Program Identification and Description form,<sup>36</sup> the Program Training Needs form,<sup>37</sup> and the National Survey of Substance Abuse Treatment Services.<sup>38</sup> An abbreviated version of the SSO was completed 12 months later (Time 2).

Shortly thereafter, during a period of approximately 1 month, clinical staff and directors completed a Survey of Organizational Functioning (SOF),<sup>33</sup> an expanded version of the Organizational Readiness for Change (ORC)<sup>36</sup> instrument designed to assess program needs, resources, staff attributes, organizational climate, job attitudes, and workplace practices within social service settings. The Job Attitude scales of the SOF were added to the ORC to more fully assess perceptions of leadership, job satisfaction, and burnout.<sup>20</sup> The SOF took approximately 20 min to complete, and identical forms were administered to directors and clinical staff. The number of SOF respondents from each program ranged from 1 to 28, with a mean of 5.92 ( $SD=4.85$ ). Four programs returned only one survey and were excluded from all analyses using SOF data, reducing the sample to 86 programs with a mean of 6.09 respondents each ( $SD=4.56$ ). The average response rate across all programs was 87% ( $SD=19%$ ). Director responses were received from 65 programs (72%). The lower response rate among directors can be attributed in part to the fact that many did not have direct client contact and felt that the SOF questions did not pertain to them. Due to the sizeable amount of missing data, the fact that directors who serve in a counseling capacity also function as part of the therapeutic team and because the SOF responses are not linked to turnover information (and the research team cannot be certain that the individual who completed the SOF was indeed the program/clinical director that left), director and staff responses were averaged to create a mean score for each program.

## Measures

**Turnover**—Supervisory turnover was a dichotomous measure (0=no turnover; 1=turnover of one or more supervisors) assessed twice in the current study. At the beginning of the project (Time 1) and before measures of job attitudes were collected, informants were asked to indicate whether there had been a change in the program or clinical director within the past 6 months (i.e., prior supervisory turnover). At the beginning of the second year (Time 2), informants were asked if there was any change in program or clinical director in the past 12 months (i.e., Time 2 supervisory turnover; representing the 12-month period after the staff provided job attitude ratings).

**Program structure**—Several elements of program structure were considered as possible correlates of turnover. Directors described their outpatient service approach as regular outpatient (less than 6 h of structured programming per week), intensive outpatient (minimum of 2 h of structured programming on 3 days per week), or mixed (both regular and intensive outpatient).<sup>39</sup> Parent organization affiliation was defined as belonging to a larger organization or agency of which the clinic or program is a part (with either shared or separate financial accounting practices). Ownership was assessed by asking whether the facility was operated by a private for-profit, private not-for-profit, or public entity (i.e., state, local, county, tribal, or federal). Directors were also asked to indicate how many clients were referred from the criminal justice (CJ) system in the last year and how many were dually diagnosed (DD; e.g., both mental health and substance abuse) during that same period. Numbers were then divided by the total annual client count, resulting in proportion of CJ-referred clients and proportion of DD clients.

Counseling hours per week was assessed by asking directors to indicate the number of hours a “typical” client spends in individual and in group counseling sessions per week at their program. Caseload reflects the average counselor caseload (i.e., the number of clients per counselor) at the time of the survey. Information provided on the SSO was verified by comparing responses provided using the Treatment Cost Analysis Tool.<sup>35</sup>

**Job attitudes**—Job attitudes were measured at time 1 and represented three composites: satisfaction, burnout, and director leadership. The psychometric properties of these scales are reported elsewhere.<sup>20</sup> All ratings utilized a 1 to 5 response scale, where 1 indicated “strongly disagree” and 5 indicated “strongly agree.” Scale scores were rescaled to range from 10 to 50, and director and counseling staff ratings were averaged to create a score for the program as a whole. Satisfaction was measured by six items such as “you are satisfied with your present job” and “you give high value to the work you do here” (Cronbach’s coefficient alpha=0.78). Burnout was measured with six items, many of which focused on emotional exhaustion (e.g., “you feel tired,” “you feel depressed”), but indicators of cynicism and inefficacy (e.g., “you feel like you aren’t making a difference”) were also included (Cronbach’s coefficient alpha=0.74). The Director Leadership measure included nine items reflecting both transformational (e.g., “leads by example,” “encourages new ways of looking at how we do our jobs”) and transactional behaviors (e.g., “provides well-defined performance goals and objectives,” “gives special recognition to other people’s work when it is very good;” Cronbach’s coefficient alpha=0.90).

## Analysis plan

Chi-square and ANOVA were used when examining relationships between predictors and supervisory turnover at the univariate level. Variables with *p* values of 0.10 or less were included in a series of two logistic regression models, the first examining program structure only and the second examining job attitudes after controlling for structure. Using Pearson correlations, the final analysis examined the potential moderating effect of Time 1 supervisory turnover on the relationship between staff satisfaction and Time 2 supervisory turnover.

## Results

### Supervisory turnover

Informants from 27 programs (30%) reported supervisory change in the 6 months prior to starting the project (i.e., Time 1), and 30 (33%) reported change in supervisors during the following 12-month period (i.e., Time 2). Eleven (12%) reported change in supervisors within both time periods. While the proportion of programs experiencing Time 2 change

was higher among programs that reported time 1 change (44% with Time 1 change versus 29% with no time 1 change), results were not statistically significant ( $\chi^2_{(1, 91)}=1.85, p=0.17$ ).

### Predictors of supervisor turnover

Means, standard deviations, and percentages of each program structure and job attitudes measure by Time 2 turnover are presented in Table 1. Year 2 turnover was more likely in publicly owned programs and less likely in private-for-profits (see Table 2). In fact, none of the private-for-profit programs reported supervisory turnover. Programs with higher supervisory turnover were more likely to be affiliated with a parent organization and reported significantly lower ratings on two job attitude measures: satisfaction and director leadership. Associations between turnover and three additional structure measures (region, proportion of CJ referrals, and number of counseling hours) were marginally significant ( $p \leq 0.10$ ).

Measures significant at or below  $p=0.10$  were entered in blocks in two logistic regression analyses with supervisory turnover as the dependent variable (see Table 2). The one exception was ownership. Five of the public programs were under the same parent organization and all private-for-profit programs retained all supervisors (resulting in no variability). Results of the structure-only model indicated that three structure measures, gulf coast region, parent affiliation, and number of counseling hours, were associated with supervisory turnover. Programs located in the gulf coast region had turnover rates that were 12% lower than the reference region of Florida (odds ratio=0.12). Programs affiliated with a parent organization had over four times the turnover rate of those not affiliated with a parent (odds ratio=4.45), and each additional hour of counseling per week was associated with a 22% increase in the odds of losing supervisory staff (odds ratio=1.22). Next, job attitudes measures—satisfaction and leadership—were added to the model. Results indicated that parent affiliation and satisfaction were significant predictors after controlling for other structure measures and director leadership. Programs affiliated with a parent organization had 1.5 times the turnover rate of those not affiliated with a parent (odds ratio=1.53, a reduction from 4.45 when not controlling for satisfaction). For every one point increase in overall satisfaction, the probability of supervisory turnover decreased by 20% (odds ratio=0.80).

Subsequent analyses were conducted to examine the role of satisfaction more closely and to determine whether it serves as a buffer against supervisory turnover when prior management change has occurred. Prior supervisory turnover was conceptualized as a moderator in the relationship between staff satisfaction and subsequent supervisor turnover. To test this, two Pearson correlations were conducted between satisfaction and year 2 turnover, one with only those programs that experienced prior turnover (Time 1) and another with programs that did not experience prior turnover. Results indicated a marginally significant relationship between satisfaction and turnover in programs with prior supervisory turnover ( $r=-0.23, p=0.08, n=62$ ), suggesting that when general satisfaction is low following management change, the likelihood of supervisory turnover during the following 12-month period may be higher. The relationship between satisfaction and turnover was not statistically significant in programs that did not experience supervisory change in the prior 6 months ( $r=0.06, p=0.77, n=24$ ). While these trends are in the expected direction, they should be interpreted with caution due to the small sample sizes.

### Implications for Behavioral Health

Results from this study confirm that turnover among supervisors in outpatient drug-free treatment programs is high, with 33% of programs reporting change within a 12-month period. While this percentage is lower than some estimates,<sup>13</sup> it confirms that supervisory

turnover is indeed problematic. Managerial/supervisory turnover has implications for organizational health<sup>2,3</sup> and can affect an agency's ability to implement and sustain new initiatives,<sup>4,40</sup> each of which indirectly affects the quality of services clients receive.

Findings from this study do not confirm the “revolving door” hypothesis which implies that programs that lose supervisors are more likely to experience subsequent turnover. The fact that 12% of programs experienced supervisory change twice in an 18-month period, however, suggests that it may indeed be a chronic issue in some programs. It is not known from these data how lengthy these periods of instability in managers and directors tend to be or whether the change occurred in upper- or middle-management positions (or both). The degree to which disgruntled employees requested transfers to different units within a parent organization is also not known. The finding that parent affiliation was associated with higher supervisory turnover suggests that at least some change is occurring at the middle-management level (i.e., in the form of transfers or promotions) and that mechanisms influencing supervisory change may be different for stand-alone units than for multi-unit agencies.

Collective appraisals of job satisfaction among staff were also predictive of lower supervisory turnover even when controlling for program structure and perceptions of leadership. While this appears consistent with the literature on job satisfaction and individual decisions to quit,<sup>22–24</sup> it is in reality quite different. Job satisfaction in this study reflects the attitudes of staff members as a unit, not simply the satisfaction of the supervisors in question. This is important in that it documents the potential effects that organizational dynamics can have on individual decision making.<sup>16</sup> Presumably, both influence work synergistically during the decision process. The relative importance of personal satisfaction versus staff satisfaction and the ways in which they influence one another are not clear. Are supervisors who work with disgruntled employees more likely to leave even if they are satisfied with their job or committed to the organization? Conversely, are supervisors who work among highly satisfied employees likely to stay even if they are not satisfied with their own job responsibilities? Furthermore, supervisors themselves can actively create a positive work environment, thus contributing to staff satisfaction.<sup>41</sup> To what degree might this be occurring within these treatment settings? Future studies should address these questions by examining individual- and organizational-level factors simultaneously and/or utilizing longitudinal designs spanning multiple time points. Understanding these dynamic relationships can better inform the development of strategies for creating more satisfying work environments, which in turn can facilitate retention among both supervisors and counseling staff.

While collective appraisals of staff satisfaction may impact supervisor turnover, the strength of this relationship may depend in part on historical events—in particular on the program's history of prior supervisor turnover. Trends in these data suggest that low staff satisfaction may compound efforts to retain supervisors when programs have previously experienced supervisor change. Whether this is a function of pervasive organizational problems that persist regardless of who fills the role or reflects staff's negative reaction to the termination of a well-liked supervisor is unclear. To determine the nature of this relationship, it is imperative that future studies attempt to understand more about staff satisfaction surrounding critical events, particularly prior to and following a change in management/supervision. More information about reasons why supervisors leave, the role of the parent organization in the decision (e.g., transfers, promotions), and staff perceptions about leadership's role in the change would be helpful in understanding the interrelated and complex social factors that exist during periods of change.<sup>42</sup>

Several limitations should be noted. First, the way the supervisory turnover measure was constructed limits conclusions that can be drawn. A single question was asked about both program and clinical director change, making it difficult to determine whether turnover occurred within upper or middle management. Furthermore, the measure did not include a count of number of times a change occurred within the 12-month period. It is possible that some programs lost both a program and a clinical director, in which case the rate of turnover was underestimated. Lastly, the measure did not discriminate between voluntary or involuntary departure. While most turnover in the substance abuse treatment field is voluntary,<sup>12</sup> both result in the loss of supervisory staff and can have adverse implications for the organization. A second limitation involves restricted sample sizes due to the lower response rate among directors and the reduction in the sample when examining prior turnover as a moderating variable. Larger samples would enable a more comprehensive examination of factors impacting supervisor turnover (e.g., potential interactions between organizational-level and individual-level influences) and ensure greater robustness and generalizability of findings. Third, other factors, such as the number of staff the supervisor manages or those identified as important in other studies (e.g., director tenure, organizational commitment), were not examined.<sup>12,43</sup> These measures were not available for the current sample and could potentially explain additional variance in turnover rates.

In conclusion, studies of substance abuse treatment are beginning to focus on the workforce and its development, specifically frontline managers and staff. Because managers and supervisors actively shape many aspects of organizational functioning and productivity, turnover among leadership negatively impacts these areas, and because attrition among substance abuse treatment personnel is exceedingly high, it is imperative that agencies strive to minimize turnover within these critical positions to the extent possible. Results from this study suggest that examining staff satisfaction may provide insight into problem areas that can and should be addressed. Intentionally directing efforts toward monitoring and increasing staff satisfaction may prove highly beneficial for retaining managerial staff, with additional benefits beyond retention.

## Acknowledgments

*Funding source* This work was funded by the National Institute on Drug Abuse (Grant R01 DA014468). The interpretations and conclusions, however, do not necessarily represent the position of the NIDA, NIH, or Department of Health and Human Services. More information (including data collection instruments that can be downloaded without charge) is available on the Internet at [www.ibr.tcu.edu](http://www.ibr.tcu.edu), and electronic mail can be sent to [ibr@tcu.edu](mailto:ibr@tcu.edu).

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**Table 1**

Comparison of programs with and without Time 2 supervisor turnover

	No turnover (n=60)		Turnover (n=30)		Total	
	Prop.	M (SD)	Prop.	M (SD)	Prop.	M (SD)
Program structure						
Region *						
Florida	0.16		0.30		0.21	
Gulf Coast	0.33		0.13		0.26	
Great Lakes	0.20		0.33		0.24	
Northwest	0.31		0.23		0.29	
Ownership ****						
Public	0.02		0.20		0.08	
Private, for-profit	0.28		0.00		0.19	
Private, not-for-profit	0.70		0.80		0.74	
Service approach						
Regular	0.25		0.33		0.27	
Intensive	0.11		0.17		0.13	
Mixed	0.64		0.50		0.59	
Rural	0.25		0.23		0.24	
Parent affiliation **	0.66		0.87		0.73	
Avg. proportion of dual diagnosis clients	0.28 (0.3)		0.24 (0.3)		0.27 (0.3)	
Avg. proportion of CJ referrals *	0.60 (0.3)		0.50 (0.3)		0.57 (0.3)	
Avg. caseload	26.5 (14.0)		23.8 (12.3)		25.6 (13.5)	
Avg. no. of counseling hours received weekly *	5.0 (2.5)		6.6 (5.7)		5.6 (3.9)	
Avg. staff size	6.0 (5.2)		5.6 (4.0)		5.9 (4.8)	
Job attitudes <sup>c</sup>						
Satisfaction ****	41.4 (2.9)		39.1 (4.6)		40.7 (3.6)	
Burnout	24.1 (3.0)		23.4 (3.4)		23.9 (3.1)	

	No turnover ( <i>n</i> =60)		Turnover ( <i>n</i> =30)		Total	
	Prop.	<i>M</i> (SD)	Prop.	<i>M</i> (SD)	Prop.	<i>M</i> (SD)
Director leadership**		39.0 (3.1)		37.2 (5.1)		38.5 (3.9)

\*  $p \leq 0.10$

\*\*  $p \leq 0.05$

\*\*\*  $p \leq 0.01$

\*\*\*\*  $p \leq 0.0001$

\*\*\*\*  $p \leq 0.0001$

\*\*\*\*  $p \leq 0.0001$

\*\*\*\*  $p \leq 0.0001$

<sup>a</sup>  $N=60$ ,  $n=26$ , respectively

**Table 2**

Results of univariate and multivariate analyses of supervisor turnover

Measure	Initial analyses (separate analyses per measure)			Structure model			Structure plus job attitudes model		
	F/ $\chi^2$	Est.	SE	$\chi^2$	Odds ratio	Est.	SE	$\chi^2$	Odds ratio
Program structure									
Region	6.86*								
Florida									
Gulf Coast		-2.15	0.93	5.34**	0.12	-1.90	1.06	3.22*	0.15
Great Lakes		-0.16	0.72	0.05	0.85	0.26	0.84	0.10	1.30
Northwest		-1.02	0.73	1.96	0.36	-0.36	0.83	0.18	0.72
Ownership	22.22****								
Public									
Private, for-profit									
Private, not-for-profit									
Service approach	1.62								
Regular									
Intensive									
Mixed									
Rural	0.02								
Parent affiliation	4.89**	1.49	0.71	4.45**	4.45	1.53	0.79	3.75**	1.53
Avg. prop. Dual diagnosis clients	0.55								
Avg. prop. of CJ referrals	2.62*	0.12	0.99	0.01	1.12	0.07	1.16	0.00	1.07
Avg. caseload	0.81								
Avg. no. of counseling hours received weekly	3.46*	0.20	0.08	6.82****	1.22	0.18	0.10	3.06*	1.20
Avg. staff size	0.11								
Job attitudes									
Satisfaction	10.25****								
Burnout	0.11								
Director leadership	6.31**	0.06	0.09	0.42	1.06	-0.22	0.11	4.29**	0.80

\*  
 $p \leq .10$   
\*\*  
 $p \leq .05$   
\*\*\*  
 $p \leq .01$   
\*\*\*\*  
 $p \leq .001$