Published in final edited form as:

J Subst Abuse Treat. 2012 March ; 42(2): 222–230. doi:10.1016/j.jsat.2011.10.011.

The Impact of Organizational Stress and Burnout on Client Engagement

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Abstract

This paper explores the impact of organizational attributes on client engagement within substance abuse treatment. Previous research has identified organizational features, including small size, accreditation, and workplace practices that impact client engagement (Broome, Flynn, Knight, & Simpson, 2007). The current study sought to explore how aspects of the work environment impact client engagement. The sample included 89 programs located in 9 states across the U.S. Work environment measures included counselor perceptions of stress, burnout, and work satisfaction at each program, while engagement measures included client ratings of participation, counseling rapport, and treatment satisfaction. Using multiple regression, tests of moderation and mediation revealed that staff stress negatively predicted client participation in treatment. Burnout was related to stress, but was not related to participation. Two additional organizational measures – workload and influence – moderated the positive relationship between staff stress and burnout. Implications for drug treatment programs are discussed.

Keywords

drug treatment; organizational attributes; client engagement; stress; burnout; satisfaction

1. Introduction

The TCU Treatment Process Model (Simpson, 2004) and supporting empirical studies (Simpson & Joe, 1993, 2004) document that early engagement and the development of therapeutic relationships is an integral component of effective drug abuse treatment. While client factors such as problem severity and readiness for treatment impact client participation (Simpson, 2004), other factors, including organizational health also contribute to the therapeutic process (Simpson et al., 1997). Organizational features (e.g., small size, accreditation) and staff perceptions of the workplace (e.g., better climate, more collaborative workplace practices, and higher staff efficacy) are associated with higher client engagement (Broome, Flynn, Knight, & Simpson, 2007; Greener, Joe, Simpson, Rowan-Szal, & Lehman, 2007). While newer versions of the TCU Treatment Process model depict organizational factors as important (Simpson, 2008), the ways in which organizational factors interact as they affect client outcomes are not specified.

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The current study extends this research by exploring the impact of organization-level stress, burnout, and satisfaction on client engagement within outpatient substance treatment programs. Because the focus is on organizations and how variations in contextual factors affect an organization's ability to engage clients, the unit of analysis is the program. In the sections that follow, literature on burnout, satisfaction, and stress is reviewed. While most of the relevant research has been conducted with health service organizations and has implications for the field of substance abuse treatment, the intent of this study is to examine how these specific aspects of organizational functioning impact client engagement specifically within substance abuse treatment settings. Burnout and satisfaction have been shown to influence client engagement (e.g., Garman, Corrigan, & Morris, 2002; Killaspy et al., 2009), and staff stress has been linked to both burnout and satisfaction (Cummins, 1990; Spielberger & Reheiser, 1995). Further exploring these relationships and their impact on client engagement in these settings will begin to inform the role that organizational factors play in treatment process and identify possible organizational implications.

1.1. Staff burnout, satisfaction, and stress

1.1.1. Burnout—Burnout describes the overall condition of emotional exhaustion due to an overload in demands, including emotional and interpersonal stressors (Boswell, Olson-Buchanan, & LePine, 2004; Iverson, Olekalns, & Erwin, 1998), higher caseloads (Broome, Knight, Edwards, & Flynn, 2009), and inadequate resources (Garland, 2004; Garner, Knight, & Simpson, 2007). Burnout has been shown to affect physical health, mental health, and job performance including turnover, staff absenteeism, and intentions to quit (Belcastro, Gold, & Grant, 1982; Cherniss, 1992; Elman & Dowd, 1997; Kahill, 1988). It is especially salient in human service organizations (Pines & Aronson, 1988) and specifically in substance abuse treatment where clients are apt to deny and minimize their problems (Elman & Dowd, 1997; Farmer, 1995).

Adverse effects of burnout on staff can extend to client engagement. Leiter, Harvie, & Frizzell (1998) found that patients under the care of nurses who reported more emotional exhaustion and expressed an intention to quit were less satisfied with the care they received. Garman et al. (2002) examined team burnout among treatment staff at a psycho-social rehabilitation facility and found higher burnout was predictive of lower client satisfaction. While this relationship is seen in related fields including nursing and health services, the degree to which burnout affects client outcomes in drug abuse treatment organizations is unknown.

1.1.2. Satisfaction—While sometimes considered as conceptually opposite of burnout, staff satisfaction is a distinct construct, comprising beliefs, attitudes, and behaviors towards one's job (Weiss, 2002). Staff satisfaction has been linked to higher levels of job performance including commitment, job retention, and job attendance (Bannister & Griffeth, 1986; Locke, 1976). Given that higher staff turnover is associated with higher client dropout rates and difficulty bonding with counselors (Hiatt, Sampson, & Baird, 1997), staff satisfaction has implications for client engagement. For instance, studies in the field of nursing and community mental health organizations found that when staff reported higher satisfaction and fewer conflicts with clients, clients reported higher satisfaction (Daub, 2005; Weisman & Nathanson, 1985) and were more engaged with treatment (Killaspy et al., 2009). Similar to burnout, the relationship between staff satisfaction and client outcomes has been documented in health service organizations but has not yet been examined within the context of drug abuse treatment.

1.2. Stress

Organizational stress is defined as the level of environmental demand that can disrupt or enhance an individual's physiological or psychological state and change the normal mode of functioning (Schuler, 1980). Environmental demands include time pressures, increases in work load, and lack of organizational resources (Bhagat & Allie, 1989). Stress has been shown to adversely affect organizations wherein staff who report higher levels of stress have lower job satisfaction, increased turnover, increased absenteeism, and lower productivity (e.g., Cummins, 1990; Spielberger & Reheiser, 1995). But while stress has been cited as one cause of burnout and dissatisfaction among staff, it has not yet been shown to directly affect client outcomes. The lack of empirical evidence for a direct staff stress-client engagement link could indicate a more complex set of relationships among stress, burnout, and satisfaction.

While stress has not been linked to client outcomes, stress has been associated with both burnout and satisfaction, two staff attributes hypothesized to mediate the stress-client outcome relationship. Iverson et al. (1998) examined role stress (when a task must be reconciled due to conflicting requirements or through role ambiguity when a task requires clarification and additional information) and found that stress predicted increased burnout among healthcare workers. This stress-burnout relationship is particularly salient in social service agencies where turnover rates are higher, workloads overextend the staff, and staff report high levels of stress and burnout (Johnson, Brems, Mills, Neal, & Houlihan, 2006). Indeed, stress has been found to be a significant predictor of counselor burnout in corrections-based drug treatment organizations (Garner et al., 2007).

Similar patterns exist for the relationship between stress and job satisfaction. Bhagat and Allie (1989) found that high organizational stress was a significant predictor of lower ratings of work, co-worker, and supervisor satisfaction among staff. Similarly, higher role ambiguity (one component of job stress) was a significant predictor of lower job satisfaction within social service organizations (Pasupuleti, Allen, Lambert, & Cluse-Tolar, 2009). Overall, staff who report a stress-filled work environment also report dissatisfaction with their job. Consequently, exploration of how organizational stress affects client engagement should include tests of mediational effects of burnout and satisfaction.

1.2.1. Moderating influences on stress and burnout—As the literature demonstrates, a highly stressful environment cultivates higher burnout. This relationship between stress and burnout has been shown to be influenced by several staff and client attributes, including self-efficacy, influence, and workload. Bandura's behavior change theory (1997) states that people with high self-efficacy (i.e., belief that they can perform a task well) will view difficult tasks as a challenge, carry out more challenging tasks, set higher goals, and achieve them (Bandura, 1997; Schwarzer, 1992). Self-efficacy moderates the relationship between stress and burnout, serving as a protective buffer against the negative effects of stress (Schwarzer & Hallum, 2008). For example, job strain can lead to burnout, but when stress is high, those with high self-efficacy reported less burnout (Borucki, 1987; Schwarzer & Hallum, 2008). Thus efficacy appears to moderate how employees respond to stressful environments.

Similar to self-efficacy, staff influence has been cited as an important component of how individuals cope with stress. According to Johnson and colleagues (2006), stress levels decrease when employees have opportunities to provide input towards changes that affected them directly. In their work, staff influence was found to attenuate the high levels of stress as a result of changes in the workplace. Another potential moderator, workload (i.e., caseload and proportion of clients with severe problems) can also impact the relationship between stress and burnout (Killaspy et al., 2009). Among hospital employees, higher

caseloads are associated with increased emotional exhaustion, depersonalization, and decreased personal accomplishment (Iverson et al., 1998). Within drug treatment organizations, larger caseloads are associated with higher staff burnout (Broome et al., 2009). Because higher caseloads place increased demands on staff, caseload may also impact the relationship between burnout and stress.

Client severity, a second component of workload, also has implications for how staff respond to stress. Staff stress can lead to burnout which in turn leads to complications with clients, including increased premature dropout (Bowen & Twemlow, 1978; Garland, 2004). However, the severity of clients' problems can also adversely affect the staff (Beck, 1987; Farber & Heifetz, 1982). The client to staff component of this bidirectional relationship has been largely overlooked. Working with clients who have major social problems (Beck, 1987) and clients who are unappreciative or hostile towards staff is thought to exacerbate burnout among staff (Farber & Heifetz, 1982). Given that clients with dual diagnoses of mental health and substance abuse have increased severity and needs and may add increased challenges to treatment, a stronger relationship between stress and burnout may exist in organizations that treat higher proportions of these high-severity clients.

As the literature indicates, organizations in which perceptions of self-efficacy and influence are higher and perceptions of workload are lower may exhibit weaker positive relationships between stress and burnout. In this study, these moderation effects are examined to further understand what contributes to burnout at the organizational level. Burnout holds many implications for the entire organization, with over half of the staff at drug abuse treatment organizations reporting high levels of burnout as indicated by depersonalization and emotional exhaustion (Farmer, 1995). Examining the antecedents of burnout are particularly salient for this field.

The current study tested two hypotheses that together address the process through which staff experiences (within substance abuse treatment programs) impact client engagement. The first focuses on organizational factors impacting client engagement whereas the second focuses on organizational factors impacting how organizations respond to stress. Hypothesis one states that there is a negative relationship between organizational stress and better client engagement, and that this relationship is mediated by organizational burnout and satisfaction. Specifically, programs with high levels of stress will also have high levels of burnout, and programs high in burnout will have lower client engagement. An identical pattern was expected for staff satisfaction. Substance abuse treatment programs with high levels of stress but high levels of satisfaction are expected to have higher client engagement ratings. Hypothesis two states that specific organizational characteristics, including workload, influence, efficacy, and client severity will moderate the relationship between stress and burnout at the organizational level. In particular, when high levels of stress combine with greater workloads (i.e., higher caseloads or higher proportion of severe problem clients), programs will experience higher burnout among staff. However, other organizational factors, including influence and efficacy, will weaken this relationship.

2. Materials and methods

Data were collected from 115 Outpatient Drug-Free (ODF) treatment programs from 9 states (Florida, Idaho, Illinois, Louisiana, Ohio, Oregon, Texas, Washington, and Wisconsin) in 2004 and 2005 as part of the Treatment Costs and Organizational Monitoring (TCOM) project. The data comprises an initial assessment of organizational structure and the first of three annual surveys of clinical staff, clients, and costs. All measures used in this study were collected during the first year of the project. With the assistance of Addiction Technology Transfer Centers (ATTCs; including the Southern Coast ATTC, Great Lakes ATTC, Gulf

Coast ATTC, and Northwest Frontier ATTC), the programs selected for this project represent the major types of ODF treatment for adults in diverse geographic locations across the United States.

The study included 89 programs, representing 86% of those eligible. Twenty-one of the 115 programs did not provide data. Eleven of these 21 programs were ineligible for the first annual data collection as three were undergoing reorganization, six closed between the time of the initial assessment and first annual survey administration, and two were being rebuilt after Hurricane Katrina. Ten programs withdrew from the study. Because this study examined client outcomes, program directors were included in the analyses if they saw clients. After removing those who did not see clients, five programs were removed from the analyses for having less than three responses, because three or more responses were necessary for a valid program measure.

Most of the programs provided a mix of regular and intensive care (63%) followed by 24% of programs offering regular outpatient care (less than six hours of structured programming per week) and 16% offering intensive care (minimum of two hours of structured programming three days a week). All programs provided individual and group counseling sessions on-site, and most also provided a variety of wraparound services (see Knight, Edwards, & Flynn, 2010). On average, within the 89 programs, 4.9 staff ($SD = 3.9$, total of 445 across programs) and 52.63 clients ($SD = 63.11$, total of 5013 across programs) responded. The staff had a mean age of 47 years, were predominately White (76.33%), and female (61.81%). A majority were currently certified or licensed (66.44%), had over 5 years of experience in the field (62.22%), and held a bachelor's degree or higher (73.5%). Clients were primarily white (67.53%) and male (64.61%) with a median age of 33. Clients who had been in treatment less than 30 days were removed from the mediation analyses, for a total of 3,285 clients, because they were deemed not to have been in treatment long enough to provide an accurate account of their experience in the program (Simpson, 1979; Simpson, 1981).

2.1. Procedure

Program directors completed the Survey of Structure and Operations (SSO) upon enrollment in the project. This survey gathered information regarding general program characteristics, organizational relationships, clinical assessment and practices, services provided, staff and client characteristics, and recent changes. Directors from each program were then trained on staff and client data collection procedures, including recruitment and consent protocols. All staff with direct client contact completed the Survey of Organizational Functioning (SOF; Broome et al., 2007) which included the Organizational Readiness for Change (ORC; Lehman, Greener, & Simpson, 2002) instrument. This survey addressed perceptions of needs and pressures for change, general resources, staff attributes, organizational climate, job attitudes, and specific workplace practices. Clients completed the Client Evaluation of Self and Treatment (CEST; Joe, Broome, Rowan-Szal, & Simpson, 2002) which assessed their motivation for treatment, psychological and social functioning, and treatment experience. Individual responses were aggregated to form program level measures for each construct. All research methods and procedures were reviewed and approved by TCU's Institutional Review Board.

2.2. Measures

2.2.1. Organizational factors—Five SOF scales were used to assess organizational factors: *Burnout*, *Satisfaction*, *Influence*, *Efficacy*, and *Stress*. Created primarily as program-level indicators (Lehman et al., 2002), individual level responses were transformed into program level measures by taking the average score for all staff at each program. Thus, the

reliability coefficients for each item below refer to the program level. All ratings from the SOF and CEST used a Likert-type scale ranging from one to five in which one indicated “disagree strongly” and five indicated “agree strongly.” The composite scores were rescaled to range from 10 to 50. A higher score on all of the scales indicates a greater amount of the construct being measured.

Six items were used to measure *burnout* ($\alpha = .74$, Knight, Broome, Edwards, & Flynn, 2011). These statements focused on issues of emotional exhaustion (e.g., “You feel depressed”) as well as issues of inefficacy (e.g., “You feel like you aren’t making a difference” and “You feel disillusioned and resentful”). Six items were used to measure *job satisfaction* ($\alpha = .78$, Knight et al., 2011). The statements ranged from broad assessments (e.g., “You are satisfied with your present job”) to specific job elements (e.g., “You like the people you work with”). Six items were used to assess *influence* ($\alpha = .79$, Lehman et al., 2002). These statements assessed the staff member’s general level of influence among their peers (e.g., “You often influence the decisions of other staff here”) as well as their own willingness to share information (e.g., “You frequently share your knowledge of counseling with other staff”). Five items addressed *efficacy* ($\alpha = .68$, Lehman et al., 2002). The statements assessed the staff’s perception of their own skills (e.g., “You have the skills needed to conduct effective individual counseling”) as well as their own sense of effectiveness and self-assurance regarding their job (e.g., “You are effective and confident in doing your job”). Four items composed the measure of *stress* ($\alpha = .90$, Lehman et al., 2002). These statements evaluated strain in the workplace (e.g., “You are under too many pressures to do your job effectively”), signs of stress including frustration (e.g., “Staff frustration is common here”), as well as a general assessment of stress in the workplace (e.g., “Staff members often show signs of stress and strain”).

2.2.2. Client engagement—Three CEST scales were used to assess client engagement: *Treatment Satisfaction*, *Counselor Rapport*, and *Treatment Participation*. Seven items were used to assess clients’ *treatment satisfaction* ($\alpha = .88$, Joe et al., 2002). While the statements included a broad assessment of treatment satisfaction (e.g., “You are satisfied with this program”), specific aspects of treatment were also included (e.g., “You can get plenty of personal counseling at this program”). *Counselor rapport* ($\alpha = .96$, Joe et al., 2002) comprised 13 items. The statements assessed specific counselor qualities (e.g., “Your counselor is well organized and prepared for each counseling session”) as well as the client’s relationship with the counselor (e.g., “You trust your counselor”). Twelve items were used to appraise client’s *treatment participation* ($\alpha = .92$, Joe et al., 2002). These statements addressed the client’s overall engagement in the treatment sessions (e.g., “You always participate actively in your counseling sessions”) as well as attendance (e.g., “You always attend the counseling sessions scheduled for you”).

2.2.3. Workload—Workload was assessed in terms of *caseload* and *client severity*. *Caseload* was defined as the average number of clients per counselor. The scale ranged from one to five, where one indicated 1 to 10 clients and each increase on the scale indicated an increase by 10 clients. These were averaged across all staff at each program. Three measures from the CEST were used to evaluate *client severity*: *Hostility*, *Depression*, and *Anxiety*. These individual level measures were transformed to create a program level measure by taking the average score for all clients at each program. Eight items were used to evaluate client *hostility* ($\alpha = .91$, Joe et al., 2002). The statements assessed general aggression (e.g., “You have urges to fight or hurt others” and “You feel a lot of anger inside you”) as well as specific hostile actions (e.g., “You have carried weapons, like knives or guns”). There were seven items that assessed client *anxiety* ($\alpha = .93$, Joe et al., 2002). The statements included broad measures of tension and nervousness (e.g., “You feel tense or keyed-up”) as well as physical measures of anxiety (e.g., “You have trouble sleeping” and “You feel tightness or

tension in your muscles”). Six measures were used to address client *depression* ($\alpha = .89$, Joe et al., 2002). The statements evaluated general sadness (e.g., “You feel sad or depressed”) as well as specific characteristics of depression (e.g., “You feel hopeless about the future”).

2.3. Analyses

Baron and Kenny’s (1986) test of mediation was used to test hypothesis one. For this part of the study, the mediation effect of burnout and satisfaction in the relationship between stress and client engagement were examined using regression analyses. A mediation effect is said to have occurred when the effect of the combined model of the independent variable and mediator variable on the dependent variable is more than the effect of the independent variable on the dependent variable. Burnout was examined first as a potential mediator in the relationship between stress and client engagement. The same set of regression analyses was used to examine satisfaction as a mediator.

Testing hypothesis two required a test of the potential moderating effect (Baron & Kenny, 1986) of client severity, caseload, influence, and efficacy on the relationship between stress and burnout. To test a moderation effect, the interaction effect between the independent variable and moderator variable must be significant. Each potential moderator was examined in a separate regression analysis examining the relationship between stress and burnout. Moderation allows one to see if the relationship between the independent variable and the dependent variable changes at different levels of the moderator variable.

3. Results

A majority of the 89 programs were free-standing substance abuse centers (80.5%) providing both regular and intensive care to clients (64.4%). Most of the programs were in urban settings (43%) and were private, not for profit facilities (73.6%). Caseloads ranged from 3 to 80 clients with 25 clients as the median. On average, client engagement was high ($M = 41.2$, $SD = 2.3$), while problem severity was low ($M = 24.95$, $SD = 3.17$). For the staff, stress ($M = 30.4$, $SD = 6.4$) and burnout ($M = 22.15$, $SD = 3.1$) were low compared to efficacy ($M = 40.6$, $SD = 3.9$), influence ($M = 36.9$, $SD = 4.17$), and satisfaction ($M = 40.3$, $SD = 4.2$).

Hypothesis 1: Organizational Burnout, Stress, and Satisfaction Related to Client Engagement

Before conducting the mediation regression analyses, the three components of client engagement, treatment participation, treatment satisfaction, and counselor rapport, were regressed on stress in order to meet the first assumption of mediation analyses. According to Baron and Kenny (1986), this initial relationship between the independent variable and the dependent variable must be significant. Treatment participation was the only component of client engagement that was predicted by stress and was thus the only measure examined in the following mediation analyses. The first set of analyses examined the relationship of stress and burnout to treatment participation. The results indicated that stress predicted treatment participation, ($R^2 = .35$, $F(1, 88) = 11.97$, $p = .001$, $\beta = -.35$, $t = -2.23$, $p = .029$, $f^2 = .54$), as well as burnout, ($R^2 = .46$, $F(1, 88) = 75.34$, $p = .001$, $\beta = .33$, $t = 8.68$, $p = .001$) but burnout was not a mediator of the stress and treatment participation relationship.

The second set of regression analyses examined the relationship of stress and satisfaction to treatment participation. Consistent with the findings for burnout, the relationship between stress and treatment participation was not mediated by satisfaction. The standardized regression coefficient between stress and client engagement did not decrease substantially when controlling for satisfaction. Similarly to burnout, satisfaction was not a significant

predictor of treatment participation when controlling for stress, thus violating one condition of mediation. Stress was also not a significant predictor of satisfaction violating another condition of mediation.

Hypothesis 2: Moderators of the Burnout and Stress Relationship

For the second hypothesis, a set of regression analyses were run to test moderation. Satisfaction was not examined due to a lack of significant findings (above) and because the literature suggests burnout as potentially more influential. Burnout was regressed on the focal predictor, the moderator, and the interaction term to test the moderation hypotheses. To facilitate the illustration of significant interactions, stress (the focal predictor) and the significant moderator variables were categorized into high (one *SD* above the mean) and low (one *SD* below the mean) categories. Mean burnout scores by high and low levels of stress and each moderator are displayed in Table 1. Significant interactions were found for two moderators, as described below.

In regards to counselor attributes, the interaction term between stress and staff influence explained a significant amount of variance in job burnout ($\beta = -1.87, t = -2.37, p = .02, R^2 = .30, F(3, 85) = 2.8, p = .045, f^2 = .43$). As shown in Figure 1, when program staff report high levels of influence, ratings of burnout are lower compared to programs with low levels of influence when stress is high. However, when programs have low stress, ratings of burnout are similar across both levels of influence.

The interaction term between stress and number of clients also explained a significant amount of variance in job burnout ($\beta = -1.7, t = -2.63, p = .01, R^2 = .31, F(3, 85) = 3.07, p = .03, f^2 = .45$). As number of clients increases by 10 clients (1 unit on the scale), the coefficient for stress decreases by .17. As Figure 1 shows, with fewer clients, the coefficient for stress is positive (as stress increases, burnout increases) whereas with more clients, the coefficient for stress is negative (as stress increases, burnout decreases).

The interaction term between stress and staff efficacy did not explain a significant amount of variance in job burnout ($\beta = -.58, t = 1.79, ns, R^2 = .064, F(3, 85) = 1.9, ns$), nor did the interaction terms between stress and measures of client problem severity: client hostility ($\beta = -.38, t = -.72, ns, R^2 = .22, F(3, 85) = 1.39, ns$), client depression ($\beta = -1.05, t = -1.06, ns, R^2 = .19, F(3, 85) = 1.05, ns$), nor client anxiety ($\beta = .798, t = 1.44, ns, R^2 = .22, F(3, 85) = 1.39, ns$).

4. Discussion

This study is the first to examine the link between staff stress and client engagement within the field of substance abuse treatment. Findings indicate that within outpatient drug-free treatment programs, higher organizational stress is associated with lower client participation. Burnout is higher in high-stress organizations, and workload and staff influence moderate the stress – burnout relationship. Specifically, stress and burnout appear to be more strongly linked when caseloads are lower and opportunities for staff to influence program practices are few. A summary of these results can be found in Figure 2.

Contrary to the original hypothesis, the link between staff stress and client engagement was not mediated by either burnout or satisfaction. In the current study, staff stress was a positive predictor of burnout, as previous research has shown (Borucki, 1987; Garner et al., 2007; Iverson et al., 1998), but was not a predictor of staff satisfaction despite past research (Cummins, 1990; Spielberger & Reheiser, 1995). While other researchers have found that staff satisfaction positively predicts client engagement in related fields of nursing (Weisman & Nathanson, 1985) and mental health (Killaspy et al., 2009), and that burnout negatively

predicts client engagement (Bowen & Twemlow, 1978; Leiter et al., 1998), relationships among these constructs were not significant in this sample of drug abuse treatment programs. These findings suggest that burnout and satisfaction at the program level may have indirect effects on client engagement. However, while the overall level of burnout and satisfaction at these programs did not relate to client engagement, the overall level of stress did.

The current study also found that the degree to which members of the organization perceive themselves as having influence can moderate the relationship between stress and staff burnout. When influence is higher within a program, stress is not related to burnout. However, when influence is low, higher stress is associated with higher burnout. Thus, influence serves as a buffer against burnout. Programs where staff report more knowledge sharing, influence in the decisions made by the program, and being viewed as a leader by their peers have lower organizational burnout even when stress was high.

Despite previous research that shows that both staff influence and efficacy provide a protective buffer against burnout at the individual level (Bhagat & Allie, 1989; Borucki, 1987; Johnson et al., 2006; Schwarzer & Hallum, 2008), the current study only found influence to be a significant moderator when examined at the organizational level. While influence describes the dynamics of counselor interactions, efficacy reflects the perceived ability of a counselor to successfully engage with clients. This notion is documented by Broome et al. (2007) establishing a link between efficacy and client engagement and suggests that within drug abuse treatment, efficacy may be a counselor-level factor that impacts client engagement rather than an organizational-level factor that impacts staff burnout. Future research should examine these issues further.

Workload was also a significant moderator in the relationship between stress and burnout. In substance abuse treatment programs where staff have smaller caseloads, higher stress is associated with higher burnout. However, in programs with larger caseloads, the positive relationship does not exist and instead, higher stress is associated with slightly lower burnout. This relationship between stress and burnout is supported by previous research (Broome et al., 2009; Iverson et al., 1998; Killaspy et al., 2009), and suggests that when caseloads are large, stress may act as a motivator and buffer against burnout. While Broome et al. (2009) found that burnout was positively associated with number of clients, the current study expands this relationship by examining stress. The increased stress that may arise from a large number of clients appears to invert the caseload and burnout relationship suggesting that increased stress does not necessarily lead to feelings of being overwhelmed and exhausted; instead, it may provide motivation to work harder as the stress is perceived as a “challenge” rather than an obstacle. Research has shown that moderate amounts of stress can impact work outcomes, highlighting the complexity of this construct (Boswell et al., 2004). Perhaps larger caseloads are more common in larger programs where counselors may share the workload and have more resources available to them. Future research could examine perceived workload (Shirom, Nirel, & Vinokur, 2010), the percentage of criminal justice clients (Broome et al., 2009) and other client characteristics, as well as workplace practices to provide further insight into the stress and burnout relationship.

Due to the many facets of stress, some research has divided this construct into several components. Boswell et al. (2004) refer to ‘challenge’ and ‘hindrance’ related stress to distinguish between the positive and negative consequences of stress. This dichotomy is more clearly seen in the moderating effect of staff influence and workload. Individuals with high influence may perceive the stressful situation as an opportunity and challenge rather than a hindrance and disruption. Likewise, stress may be perceived as a ‘challenge’ associated with juggling multiple demands of larger caseloads, rather than a deterrent.

Adding the variable perceived workload may capture how counselors perceive their caseloads and further illuminate the stress and burnout relationship. Distinguishing between these various components of stress may prove to be a fruitful endeavor for future research to fully capture the complexity of stress and its implications for both staff and clients.

Similar to stress, burnout is also a complex phenomenon, and past research has divided it into several components, including emotional exhaustion, depersonalization, and lower sense of personal accomplishment (Iverson et al., 1998). The burnout measurement in the current study captures these individual components in the six questions comprising the scale. However, the lack of agreement with the current study's findings and previous findings (Bowen & Twemlow, 1978; Leiter et al., 1998) may point to the need to separate burnout into these three distinct components rather than examining burnout as a single element. Furthermore, staff with high burnout have been shown to have higher rates of turnover (Hiatt et al., 1997), and some may have already left the program and therefore were excluded in the current analysis. The data to divide burnout into several components is not available, but future research should consider expanding the burnout measure to include these distinct components.

Contrary to expectations, the interaction between client problem severity and staff stress did not account for an increase in staff burnout. The literature remains divided regarding the impact of client attributes on staff attributes (e.g., Beck, 1987; Farber & Heifetz, 1982; Schulz, Greenley, & Brown, 1995). Perhaps client severity directly influences staff stress (rather than burnout). Alternatively, previous research has shown that clients in drug abuse treatment are apt to deny or minimize their problems (Elman & Dowd, 1997; Farmer, 1995). It is possible that clients who would have scored high on problem severity did not respond to the survey or denied the severity of their problems. Furthermore, high burnout among the staff is associated with high client dropout (Bowen & Twemlow, 1978), suggesting that programs with high stress or burnout among staff may be at an increased risk for clients prematurely dropping out of treatment.

The current study has several limitations. First, measures were examined at one point in time, limiting the ability to make causal inferences or make conclusions about directionality. The factors cannot be said to cause changes in another factor as the relationship could be reciprocal. A longitudinal study of staff and clients could examine how staff attributes impact clients over time. For instance, grouping the programs into increasing, decreasing, or stable in regards to stress, burnout, and satisfaction across the data collection period and examining how different trends relate to similar patterns in client engagement would provide important insights into how organizational changes affect clients.

A second limitation involves generalizability due to exclusions in sampling. Clients who had been in treatment for less than 30 days were excluded from the analyses because they had not been in treatment long enough to answer the survey regarding treatment participation, counselor rapport, and treatment satisfaction. However, dropout rates are often highest in the first 30 days of treatment, ranging from 30 to 40% (Galanter & Kleber, 1999). Because this study only included clients in treatment for more than 30 days, engagement ratings are likely to be higher and problem severity lower among this sample compared to the population of all clients in treatment. Future research should extend this issue earlier and study program performance, examining how organizational stress and burnout impact retention during the critical first 30 days of treatment.

Finally, it is important to acknowledge that there are numerous other organizational and contextual factors that contribute to the stress-burnout relationship, beyond those captured within this study. The impact of economic factors, including counselor compensation and

consistency of program funding can have profound effects on perceived stress, particularly when job security is uncertain (Graber et al., 2008; Sharp, 2008). While highly relevant, such measures were not included in the current study.

Despite these limitations, the current study expands research regarding predictors of client engagement by documenting a link between organizational stress and client participation in substance abuse treatment, and identifying important factors that affect the relationship between stress and burnout among counselors. These findings suggest that in their efforts to improve client participation, program managers may want to focus efforts on identifying underlying sources of organizational stress. Furthermore, cultivating a workplace culture where staff members feel influential – where their insights are sought and their views are heard – may serve to diminish the stress-burnout relationship. With implications for both clients and staff, organizational stress may indeed be a crucial element of the treatment process.

Acknowledgments

The authors would like to thank the Gulf Coast, Great Lakes, Northwest Frontier, and South Coast Addiction Technology Training Centers (ATTCs) for their assistance with recruitment and training. We would also like to thank staff at the individual programs who participated in assessments and training in the TCOM Project.

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, and electronic mail can be sent to ibr@tcu.edu.

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Figure 1. Moderating Effects of Influence and Number of Clients

Stress (Focal Predictor) and Moderators (Number of Clients and Influence) are divided into high and low categories corresponding to 1 *SD* above and below the mean.

Figure 2.
Summary Findings

Table 1

Predicted Values of Burnout from Moderation Regression Analyses

Stress (Focal Predictor) and the moderator variables are divided into high and low categories corresponding to 1 SD above and below the mean

Moderators:	Stress	
	High	Low
Influence *	High	21.9 22.4
	Low	24.3 22.5
Efficacy	High	21.2 21.6
	Low	23.8 22
Hostility	High	22.5 21.5
	Low	23 22.6
Depression	High	21.7 21.7
	Low	22.6 21
Anxiety	High	22.2 22.3
	Low	23.5 21.5
Number of Clients *	High	21.7 22.7
	Low	23.4 20.9

* $p < .05$ for interaction