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Detrimental Effects of “Stretch” Goals in Specialty Substance Use Disorder Treatment Organizations

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Abstract

Background—“Stretch” goals, a rarely examined concept that represents seemingly impossible, highly ambitious organizational goals ostensibly established to fill performance gaps and motivate employees, are examined within a sample of substance use disorder (SUD) treatment centers in the United States in terms of their prevalence and effects on organizational behavior. Stretch goals are defined as “seemingly impossible” goals intended to motivate employees to achieve high performance. In light of the high level of environmental change and unpredictability faced by SUD treatment centers in recent decades, we theorize that stretch goals would be both common and often detrimental (in terms of capacity utilization rate and efficiency) in these settings.

Methods—In a longitudinal analysis of data from leaders of a representative U. S. national sample of 219 SUD treatment centers characterized by entrepreneurial management structures, we examined the prevalence of stretch goals and their impact on key outcome variables of capacity utilization rate and efficiency.

Results—Widespread adoption of stretch goals was found, with 43% of our sample falling within the stretch category. Stretch goals had a negative main effect on capacity utilization rate as compared to less ambitious challenging goals. Stretch and prior performance interacted to further predict capacity utilization rate, whereas stretch and slack resource availability interacted to predict center efficiency.

Discussion—Although stretch goals are frequently used in the SUD treatment industry, we find them mostly detrimental to performance. Stretch goals may enhance the efficiency of treatment centers with prior limited resource availability, but they are negatively associated with capacity

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Conflict of Interest

The authors have no conflict of interest to report.

utilization, especially in centers with a record of already strong performance. Despite the high prevalence of such goals and positive values centered on aspirational behavior, these results strongly suggest caution in such goal setting in SUD treatment centers.

Keywords

SUD; goals; stretch; capacity; performance; efficiency

1. Introduction

Among health services researchers, it is widely accepted that organizations engaged in treating substance use disorder (SUD) have for several decades been confronted with environmental challenges that pose substantial uncertainty (Roman, 2013, 2014). SUD treatment center managerial learning occurs and changes ensue as these organizations both thrive and fail to thrive along multiple internal dimensions (Levinthal, 1991). Aside from these internal ambiguities endemic to the growth process, the SUD specialty has experienced both expansion and compression in funding, due to political influence on public funding processes and the advent of managed care as a cost-reduction device adopted in both the public and private sectors (Galanter, Keller, Dermatis, & Egelko, 2000). Legislation affecting reimbursement, levels of care, and duration of care has been haphazardly implemented and enforced (Moran, 2013), causing meaningful environmental instability for SUD treatment providers. As a positive indicator of growing institutional support, SUD treatment is included in the federal Affordable Care Act (ACA), but despite this some vagaries remain in the Act's implementation. With a complex array of stakeholders to satisfy, ACA implementation will likely continue to have unforeseen impacts on the SUD industry's environmental ambiguity. In this context, leaders of organizations delivering SUD treatment are confronted with how to accurately anticipate and adjust to the reimbursement environment and other legislative requirements that challenge their managerial skills and may threaten employee morale (Scheid, 2003).

In the scenario of interest here, managers attempt to rapidly increase their competitive position by "rallying the troops" through adopting operational goals for impressive achievements that, while perhaps unrealistic, appear both exciting and heroic to staff and to stakeholders (Kerr & Landauer, 2004). Operational goals applicable to SUD treatment centers include high levels of growth, revenues, liquidity, and increased operating capacity, as well as expense minimization. Such goal statements are often accompanied by "we can do it" assertions intended to focus organizational culture on commitment and achievement (Denning, 2012). Such approaches are not without empirical support. The association between aspirations and achievements at both the individual and organizational level, while bound to contingencies of particular settings, show that high aspirations have a greater likelihood of being linked with higher achievements (Locke & Latham, 2002). But while emotionally appealing and possibly practical, diffuse and ambitious goals calling for the organization to extraordinarily "stretch" its achievements may not be carefully integrated or embedded in a well-planned strategy (Sitkin, See, Miller, Lawless, & Carton, 2011).

“Stretch goals” (Sitkin et al., 2011) can be differentiated from the more commonly discussed “challenging goals” (Locke & Latham, 1990). Rather than being merely difficult, stretch goals are “seemingly impossible” in light of current organizational resources (Sitkin et al., 2011, p. 545; p. 545), often demanding accomplishment of goals across different (and sometimes competing) organizational priorities. This “impossibility” is however linked to the possibility that they might be achieved, in part through increased inputs by organizational members that are manifest in overall performance. Observers report that stretch goals have become increasingly common in the last two decades as organizational leaders have sought to inspire performance through improved learning, creativity, and motivation (Golovin, 1997; Kerr & Landauer, 2004; Thompson, Hochwarter, & Mathys, 1997). SUD treatment organizations’ environments provide a definite fit with the conditions fostering adoption of such goals, as they are most commonly found in industries and environments marked by instability and uncertainty (Sitkin et al., 2011).

Stretch goals may not always have their desired effects. Impossible targets for achievement could precipitate negative outcomes for organizations as they can demotivate groups and individuals who see themselves as being “set up” for failure (Earley, Connolly, & Ekegren, 1989; Markovitz, 2012; Sitkin et al., 2011). Unfocused growth goals without concomitant targeted strategy can make stretch goals appear seemingly impossible and result in unexpected and unintended negative consequences. Setting unusually high aspirations may be characterized by diffuseness, lack of strategic specificity, and internal conflict among goals: an example specific to SUD treatment, for instance, might be increasing treatment quality while simultaneously lowering treatment costs.

Empirical study of stretch goals remains to be developed. In a singular and comprehensive theoretical review, Sitkin and colleagues (2011) hypothesize that stretch goals are most likely to be implemented by the organizations least likely to actually overcome associated risks and achieve them: namely, organizations with poor prior performance and without slack resources, defined as resources in excess of those needed for normal organizational operation (Cyert & March, 1963). Without a strong past performance record to build on and without adequate slack resources with which to leverage opportunities, they propose that stretch initiatives are doomed to fail. To a degree, this conclusion goes in the face of the large numbers of organizations that have reported using stretch goals (Denning, 2012; Kerr & Landauer, 2004).

For SUD treatment organizations, the questions are whether such goal adoption actually occurs, and whether it is consequential in terms of better organizational performance. In this research, we therefore report a temporally lagged study of different types of goals and their effects across two time periods (2007–08 to 2010–11) using a representative sample of treatment centers. We draw on theoretical work to assess the prevalence of stretch goals, a latent class based on rated importance (in 2007–08) of five financial and operational goals (including generation of high growth, revenues, liquidity, and operating capacity, as well as expense minimization) and ten goals related to patient and treatment effectiveness (such as helping them to achieve complete abstinence from alcohol and drugs, staying out of legal trouble, and maintaining positive physical health). The process of attaining all of these performance goals simultaneously is very unlikely, perhaps impossible. Organizations which

have explicit goals to improve treatment quality while reducing costs, growing revenues, and maintaining liquidity, all at high levels, are arguably engaging in goals with a very high degree of stretch. After identifying and measuring the amount of stretch prevalent in our sample of treatment centers, we then determine how they might impact two subsequently assessed managerial objectives relevant to SUD treatment centers' achievement of longer term performance: capacity utilization rate (CUR), defined as the extent to which the organization's operation, or number of patients, is at the organization's capacity to serve them; and resource efficiency, defined as the organization's payroll costs per patient. (Cassel & Brennan, 2007; Hussey et al., 2009).

1.1 Organizational goals

Our first hypothesis is that these stretch goals exist within the SUD industry as a discernible, distinct category beyond challenging goals. The difficulty of an organization's goals (and their subsequent impact on performance) is typically considered along a linear continuum from less to more challenging (Galinsky, Mussweiler, & Medvec, 2002; Thompson et al., 1997). A stretch goal can be understood as a seemingly impossible target off this continuum, attempting to achieve too much simultaneously given extant organizational capabilities and methods (Sitkin et al., 2011).

Most research has treated goal difficulty as a dichotomy of goals which are either challenging or not (Locke & Latham, 1990; Rousseau, 1997; Sitkin et al., 2011). A meaningful third category of stretch goals should statistically emerge, especially within the complex and unsettled environment of SUD treatment (Ordóñez, Schweitzer, Galinsky, & Bazerman, 2009; Roman, 2014; Sitkin et al., 2011). In addition to the elements of SUD treatment's turbulent environment already reviewed, public support for SUD treatment is ambivalent as both drug and alcohol use disorders are intermingled with the criminal justice system. This is exemplified by conviction of many addicted individuals whose crimes are linked to their involvement with illegal drug supply chains, delivery of treatment within correctional systems, and rapidly expanding drug courts and related "problem solving" courts which also combine treatment and corrections (Nolan, 2003, 2011). While it has succeeded in increasing treatment referrals from criminal justice systems, SUD treatment (via provisions in the ACA) is simultaneously under pressure to become increasingly integrated with primary medical care, an action potentially in conflict with integrated relationships with the criminal justice system, because primary medical care settings may not easily accept or assimilate new clientele whose identities are overwhelmed by their prior criminal activity (Roman, 2015).

We expect (H1) that three distinct classes of organizations will emerge in our SUD sample and fit the data better than solutions with other numbers of categories: those characterized by (1) diffuse **stretch** targets, by (2) traditional **challenging** goals, and by (3) **unambitious** goals (Baum, Locke, & Kirtpatrick, 1998).

1.2 Main effects on SUD center outcomes

In the face of shifting policies, political involvement, and multiple levels of governmental regulation and funding in their external environments, SUD treatment organizations are

particularly challenged to sustain a consistent revenue from provided treatment services (Roman, 2014). Attraction of patients who are the consumers of these services is complicated by the variability in third party support for the services they receive, which often must be negotiated with agents representing these third parties by the treatment center for the patient on a frequent basis. Institutional theory suggests that under conditions of environmental uncertainty and challenge, an organization's agency is reduced as its leaders focus on and mimic peer organizations while acquiescing to environmental pressures (DiMaggio & Powell, 1983). In the difficult SUD industry, such mimicry may involve the choice of unrealistic role model organizations, or even imagined organizations, leading to stretch goal adoption in order to "catch up" with them. Organizational learning that should result from ongoing attention to organizational inefficiencies, needed process improvement, and idiosyncratic organizational innovations necessary for stretch goal accomplishment can be precluded by an external focus on stretch goal mimicry and adoption without concomitant and adequate processes for their realization.

Stretch goals in the SUD industry may be seen by employees as having low odds of achievement. Employees' low confidence in organizational goals can cause reductions in both initiative and commitment, which in turn reduces performance and for some, induces turnover (Brown, Jones, & Leigh, 2005; Erez & Zidon, 1984; Lazarus & Folkman, 1984). Stretch goals also require significant change themselves (Sitkin et al., 2011), which may lead to "change overload" in which organizational members struggle to cope with contradictory and confused information processing (Beer, Eisenstat, & Spector, 1990; March & Olsen, 1976). In such contexts, organizations may also take potentially dangerous risks (Ordóñez et al., 2009). Increased organizational stress, overload, and an inability to resolve decision impasses caused by stretch goals could all contribute to declining performance and inefficiency in SUD treatment centers (Brown et al., 2005; Galinsky et al., 2002).

We therefore propose that SUD treatment centers using stretch goals will have lower capacity utilization rates (defined as extent of operation at capacity) (H2) and resource efficiency (ratio of patient census to payroll) (H3) than centers characterized by challenging goals (which we define consistent with past literature as ambitious and difficult goals, but not ones that might be characterized as seemingly impossible, as such goals have been found to be ideal for performance: Locke & Latham, 2002).

1.3 Moderating effects on SUD treatment center performance

Organizational slack is a resource cushion, over and above that which is needed to maintain operation, sometimes allowing an organization the leeway to adapt and change successfully (Bourgeois III, 1981; Cyert & March, 1963; Zinn & Flood, 2009). In the SUD treatment context, slack resources might be understood as additional manpower and resources above and beyond what would be needed to adequately treat current patients. Goal-setting theory implies that slack resources would be of great importance in supporting the belief that the organization can achieve a "seemingly impossible" stretch goal (Locke & Latham, 2006).

The resource-based-view of organizations similarly positions slack resources as indispensable catalysts for creating the very kind of growth and positive change toward which stretch goals are aimed (Barney, 1991). Slack resources promote experimentation and

risk tolerance, necessary to build new organizational capacities for the achievement of seemingly impossible goals (Nohria & Gulati, 1996; Sitkin et al., 2011). For these reasons, we hypothesize (H4) a positive interaction between stretch goals and slack on subsequent capacity utilization rate, such that higher slack availability enables a more positive effect of stretch goals on capacity utilization rate.

Recent organizational performance is the second proposed moderator of stretch on performance, indicating poor prospects for stretch goal attainment among organizations with below-average past performance. A conflicting prediction, however, perhaps better suited for the SUD context, is provided by theory regarding self-regulation (Bandura, 1991), which is relevant at the organizational level as managers set goals, monitor environmental feedback, and adjust their strategies accordingly (Bandura, 1991; Bandura & Wood, 1989). Carver and Scheier (1998) proposed that management would rely on cues from their past performance to determine the amount of effort they put forth for future goals. If past performance was high, especially in a field as challenging as SUD treatment, these managers might be reluctant to adjust and improve their already successful past efforts to incorporate the learning and innovation necessary for stretch success. From this perspective, we hypothesize (H5) a negative interaction between stretch goals and immediate past performance on subsequent performance: organizations with high prior performance (capacity utilization rate) might put less effort into improving their processes even further, due to their perception that their recent practices have been effective.

1.4 Moderating effects on SUD treatment center efficiency

An organization's efficiency is distinct from its effectiveness and its capacity utilization rate (Ostroff & Schmitt, 1993). Efficiency is an especially important construct in the healthcare sector, where successful organizations including those delivering treatment for SUD are often wasteful, offering redundant and unneeded treatments or failing to obtain payment for treatment services, limiting their long-term organizational viability (Hussey et al., 2009; Scheid & Greenley, 1997). Agency theory (Eisenhardt, 1989) suggests that the availability of slack resources may itself drive organizational inefficiency. The presence of slack is thus a risk factor for reducing attention to efficiency (Jensen & Meckling, 1976; Peng & Heath, 1996).

Agency theory suggests that organizations with high slack resources may be likely to use them freely to achieve seemingly impossible stretch targets, without regard for efficiency (Hollingsworth, 2008; Levinthal, 1990). That is, in the pursuit of overall performance and stretch goal attainment, SUD treatment centers with greater slack resources may minimize concern for efficiency. On the other hand, organizations pursuing stretch targets that have sparse slack will find themselves forced to use what few resources they have efficiently in pursuit of these targets. Thus we propose a negative interaction of slack and stretch on efficiency (H6).

Sitkin and colleagues (2011) suggest that stretching organizations with poor prior general performance would be less efficient, as they are can easily be overwhelmed by the demands of stretch and may "resort to hyper-vigilant, disorganized, or even frantic information processing" (p. 553). Organizations with strong prior efficiency, on the other hand, have

more positive cultures with which to creatively and effectively set efficiency targets (Argyris, 1985), even in the face of turbulence caused by stretch goals. Thus our final hypothesis (H7) proposes a positive interaction of slack and prior efficiency in predicting organizational efficiency. Our full hypothesized model is illustrated in Figure 1.

2. Methods

2.1 Sample and Procedure

Our original sample for this study was 345 randomly selected U.S. substance use disorder treatment centers which attracted over 50 percent of their income from patient fees for service, including self- or third-party payers, Medicaid, Medicare, and private insurance companies. This funding criterion is used as a proxy for entrepreneurial organizations that must steadily interact with the environment in attracting patients, in contrast to organizations obtaining the majority of their funding, at least in the short term, from relatively assured public sources. Generalization to such “private” programs was the intent of the design of the sampling strategy. Treatment programs were selected through a two-stage sampling protocol, first stratifying all U. S. counties by population size and then using national and state directories to enumerate treatment facilities within the counties. Next, treatment programs were randomly selected within each stratum and telephone screening was used to establish eligibility for the study. Programs screened as ineligible were replaced by random selection of alternative programs within the same population stratum. Programs were also required to be open to the general public and to offer treatment services at a level of intensity at least equivalent to the American Society of Addiction Medicine’s Level 1 outpatient services (Mee-Lee, Gartner, Miller, Shulman, & Wilford, 1996). Excluded from the sampling frame were private counselors, transitional living facilities, halfway houses, centers offering exclusively detox services or methadone maintenance, and correctional and Veterans’ Health Administration organizations. There was no exclusion due to size.

Data collection occurred in two waves, the first occurring from 2007–2008, and the second from 2009–2011. We collected data via face-to-face interviews and questionnaires with key informants: the organizational leader (an administrative or executive director) and a clinical director, combined into a single interview when the roles were combined and no clinical director/manager was present. These responses are the source for the organizational level data presented here, including all financial information and patient census. As top managers, the key informants in our sample were knowledgeable about the areas being studied, and were able and willing to communicate about these areas, making them appropriate sources for organization-level data (Kumar, Stern, & Anderson, 1993). Following the completion of the interview, these respondents were given mail-back questionnaires that included individual-level data, a variety of scales inappropriate for interview administration as well as several repeated items for validation purposes.

Of the 515 centers initially included in the sample, found to be eligible by our criteria, 67 percent (N=345) completed the onsite interview. Examination of data on size, specialty functions and organizational location revealed no significant differences between those centers that did and did not elect to participate. For the second wave of data collection, 63 percent of the original 345 centers were still open and provided both onsite interview data

and the interviewees returned questionnaires, providing a final working sample size of 219 organizations. Centers not included in the second wave included both centers that had closed and those that elected not to participate, and a comparison of the latter group with those that participated revealed no significant differences on size, specialty functions, organizational stretch class, slack, or efficiency, suggesting that the data missing was at random.

Within those interviews and questionnaires there was some missing data on individual items that further reduced our sample for some analyses of stretch outcomes. To determine whether our reduced sample affected the representativeness of the data, we analyzed a logistic regression model using missing data as the dependent variable and all of our study predictors and outcomes as independent variables, checking within both the T1 and T2 data for any study variables, control variables, or ratio components associated with missing values on any other variable (Goodman & Blum, 1996). There were no significant differences for any variables as predictors of missing data, suggesting that the data missing is at random across both data collections and not unduly biasing our results. In a similar test, we also found no significant differences in study variables for centers that provided full data for the study, and centers which failed to provide T2 data. Multiple imputation was used to generate goal classes in our latent class analysis (described below), but we used listwise deletion for subsequent analyses, as this has been shown to lead to unbiased parameter estimates (Howell, 2007), and as much of our missing data was in our dependent variables (described below), which may be inappropriate to impute when data is missing at random (Little, 1992).

2.2 Measures

Goals—Organizational leaders were asked to rate the importance of five financial and operational goals (Venkatraman & Ramanujam, 1986) during the face-to-face interview at Time 1. These goals included the generation of high growth, revenues, liquidity, and operating capacity, as well as expense minimization, and were measured on a six-point Likert scale. In the questionnaire data submitted by mail, the clinical directors also answered ten further questions (measured on a seven-point Likert scale), an organizational adaptation of the Addiction Severity Index (McLellan et al., 1992) measuring the organizational importance of several goals related to patients and treatment effectiveness, such as helping them to achieve complete abstinence from alcohol and drugs, staying out of legal trouble, and maintaining positive physical health. All 15 of these items were entered into the Latent Class Analysis (LCA) described below, as financial, operational and patient treatment goals are highly relevant to our sample. We chose this operationalization because it would be a stretch and very unlikely, perhaps impossible, to accomplish all of these diffuse performance and treatment outcomes simultaneously. Organizations which have explicit goals to improve treatment quality while reducing costs, growing revenues, and maintaining liquidity, all at high levels, are arguably engaging in goals with a very high degree of stretch¹.

¹We also reran our analyses post-hoc using the performance goals alone, and the treatment goals alone, and noted no major differences in classification category results among either approach and the results reported here.

Capacity utilization rate (CUR)—To capture a center’s capacity utilization rate, we used a simple ratio of the centers’ total patient census to their total patient capacity, as reported by the organizations’ clinical directors in interviews. We measured this variable at both Time 1 and Time 2. A higher ratio indicated that the center was closer to filling “to capacity,” representing higher capacity utilization rate.

Efficiency—There is little agreement among researchers as to how efficiency should best be measured in the healthcare industry (Zinn & Flood, 2009), but most approaches consider it as a ratio of an objective measure of treatment inputs, to some measurable outputs, most often including financial outputs (Hussey et al., 2009). Our efficiency measure therefore used the log of the ratio of centers’ total current patient census to their total payroll (that is, how their actual patient counts across programs compared to how much they were spending on staff and caregivers to treat them), as reported by the organizations’ leaders in interviews. This variable was measured in both waves of data collection. Higher scores indicated more efficient operations.

Slack resources—Consistent with prior research on samples of SUD treatment centers (Fields, Roman, & Blum, 2012), we calculated slack resources as the ratio of the total number of full-time equivalent employees (FTE) in the center to the average count of patients across treatment programs offered. The count of FTEs was obtained through face-to-face interviews with organizational directors at Time 1, and the patient counts in each program were obtained through face-to-face interviews with the organizations’ clinical directors at Time 1.

Control variables—In our regression analyses we controlled for our outcome variables as measured at Time 1, in order to account for their prior levels. We also controlled in these analyses for the age of the organization (an indicator of greater experience dealing with goal setting), whether it was stand alone or hospital-based (as a hospital foundation would provide additional resources for achieving stretch goals), its nature as for-profit or not-for-profit (as this could relate both to goal demands and outcomes), and the levels of care provided (as this could correlate specifically with efficiency: operationalized as the number of separate treatment modalities offered). The first three control variables were all gathered from administrator interviews at Time 1, whereas the levels of care information was provided by the Time 1 interviews with the center clinical directors.

2.3 Analysis

We used a combination of latent class analysis (LCA), three-step mixture analysis, and hierarchical linear regression (Cohen, Cohen, West, & Aiken, 2003) to test our hypotheses, employing the SPSS and Mplus software packages. Latent class analysis is a type of finite mixture modeling (McLachlan & Peel, 2000) in which continuous variables from individual cases are classified into latent categories inferred from observed data variables. The most appropriate way to test main effect outcomes of these latent classes is through Lanza and colleagues’ (2013) flexible model-based multinomial logistic regression addition to the LCA framework, an improvement to the three-step mixture approach (i.e. Vermunt, 2010). In this analysis, both the standard LCA model and a regression model with the distal outcome are

measured separately, to accurately model the effects of classification on the outcome without allowing the outcome to change the results of the LCA in order to improve overall fit. We then used the latent class membership probability data from the LCA to perform hierarchical linear regressions testing our moderated effect hypotheses (Muthén, 2014).

3. Results

Descriptive details of our sample across the two time frames are presented in Table 1, and the means, standard deviations, and correlations among our variables can be found in Table 2.

3.1 Latent Class Analysis

In order to test our first hypothesis (and to generate the data needed for our further hypotheses), we first conducted a latent class analysis (LCA) on our fifteen goal questions gathered from the administrator/clinical director data at Time 1. We compared LCA models with two, three, and four latent categories of goals to determine which had the best fit using sample-size-adjusted BIC (SSABIC) comparisons and bootstrapped likelihood tests, as extensive Monte Carlo testing has revealed that these are the most accurate tests for determining category fit (Nylund, Asparouhov, & Muthén, 2007).

The best log-likelihood value easily replicated for the two- and three-category models of goals, but the four-category model did not replicate even after exponentially increasing our number of random starting value perturbations. The fit statistics for this four-category model were also consistently below those of the other models, leading us to remove it from our analyses. This left us with the question of whether the two-category model (which might represent the typical model of challenging vs. unchallenging goals) fit the data better than a three-category model including diffuse stretch. Both the two- and three-category model tests resulted in acceptable entropy levels, of .92 (two categories) and .95 (three categories). The three-category model also had the best SSABIC (2-cat: 8679.91; 3-cat: 8615.61). The bootstrapped likelihood test of the two- versus three-category models revealed a significant increment in model fit within the three-category model (H_0 Log-likelihood = -4154.575, $p < .01$). The three-category model's classification was also quite consistent throughout the data, with average latent class probabilities by matching class membership all at 97% or higher. Together, this evidence led us to conclude that the hypothesized three-category model fit the data best.

To increase our confidence in this three-category solution, we also replicated the same latent class analysis on the same 15 goal items gathered from a different sample of 286 SUD treatment centers collected between late 2002 and early 2004 via a very similar procedure to our main sample. In this replication data set, there was not an exclusion for centers receiving more than 50% of their revenues from public sources; otherwise, the process followed to identify centers for the sample was virtually identical. On-site interviews were conducted and, as in the main sample, questionnaires that included the treatment goal questions were returned by the administrative and/or clinical director. The three-category solution again emerged as superior in that sample, with similar category thresholds and sizes, indicating that our final classification system is stable and reliable in the SUD context.²

A subsequent examination of odds ratio reports and probabilities comparing the three classes revealed that the general structure of the three classes conformed to our predictions in our first hypothesis. Organizations within the first (stretch) class were extremely likely to rate all of these diffuse goals with the highest possible importance (average scores of most likely responses = 90.3%), whereas organizations within the second (challenging) class reported still high but somewhat relatively lower scores on these goals (80.7%). Organizations within the third (unambitious) class were likely to have middling scores on all goals (62.9%). The challenging goal class was the largest at 47% of the total sample, followed by the stretch goal class at 43%. Only 10% of our sample fell within the unambitious latent class. Although the small size of this third class did not provide sufficient power to test statistically for differences with the first two classes, those first (stretch) and second (challenging) classes demonstrated significant differences ($p < .05$) for responses to all fifteen goal items, with centers within the stretch class reporting higher scores for fourteen of them. The results of our latent class analysis fully support our initial hypothesis that stretch goals are a meaningful category distinct from traditional challenging goals and unambitious goals, and set the stage for testing of our further hypotheses.

3.2 Tests of main effects

To test the main effects of goal class on organizational outcomes as proposed in H2-H3, we used flexible model-based regression models alongside the results of the latent class analysis. As shown in Table 3, the overall test for capacity utilization rate was significant ($\chi^2 = 7.67, p < .05$), as were the tests of class differences between unambitious and challenging ($\chi^2 = 6.25, p < .05$) and stretch and challenging ($\chi^2 = 6.29, p < .05$) for this outcome. The capacity utilization rate mean value was highest, as predicted, for the challenging-goal class (.85 vs. .60–.64). Interestingly, there were no significant differences for capacity utilization rate between centers in the unambitious and stretch goal classes. Regardless, the significantly higher capacity utilization rate mean for the challenging goal class fully supports H2. The main effect of goal classification on efficiency (H3) was not supported in our data, as both the overall test of class differences ($\chi^2 = 3.58, p > .05$) and the tests between groups ($\chi^2 = 80-2.80, p > .05$) were non-significant.

3.3 Tests of moderated effects

In order to include moderators in our analyses, we used hierarchical regression analyses to test H4-H7, using the organization's probability of stretch goal class membership (a continuous variable, rather than simple categorical membership), as predicted by the LCA model, as the key independent variable. The mixture modeling approach used in our analysis of main effects is the most appropriate and powerful method of assessing consequences of latent categories, but hierarchical regression with continuous class probabilities is most appropriate when interactions must be tested (Muthén, 2014). We exported the stretch class

²An anonymous reviewer asked whether the LCA would hold for the same organizations at Time 2. We did not originally analyze this as our hypotheses do not require consistency in goals across time, but the data shows that there was movement between classes from wave 6 to wave 7. There is a .33** correlation between probability of stretch membership in each of the times, and a .24** correlation between probability of unambitious membership in each of the times. In examining the cross-tabs and chi-square, it appears that stretchers are most likely to stay stretchers, and unambitious are most likely to stay unambitious. It seems most of the movement is coming from the challenging class moving up or down.

probabilities from our 3-category LCA for use in these analyses, and controlled within each regression for its outcome as recorded in Time 1 so as to measure change. Table 4 shows the final models of these regressions, with our two moderators of organizational slack and prior organizational performance for each outcome.

We found that each outcome was uniquely predicted by a different interaction. Our first hypothesized interaction of stretch with slack to predict capacity utilization rate (H4) was nonsignificant. A significant interaction emerged, however, in which stretch and prior CUR together predicted future CUR negatively (H5: $b = -.22$, $p < .01$). We graphed the interaction at high and low levels (plus and minus 1 s.d.) of the prior CUR moderator (Aiken & West, 1991), as shown in Figure 3, across the range of low to high stretch levels found in our sample. Whereas the negative slope for organizations with high prior CUR is significant ($p < .01$), the flatter slope for organizations with low CUR is not ($p > .05$). This plot illustrates that organizations with higher prior capacity utilization rate are, overall, more likely to achieve future high performance on this measure, but this relative advantage significantly declines in the presence of stretch goals. We checked a regression model with both interactions predicting CUR simultaneously, and our results did not change: prior CUR remained a significant moderator (with an unchanged coefficient), whereas the slack interaction was still non-significant. Introducing stretch and the associated interactions to the model added .06 to R^2 , indicating that center goals alone or in conjunction with moderators were responsible for 6% of the variance in CUR, a statistically significant amount.

Whereas previous levels of performance only interacted with stretch to predict CUR, our slack moderator was significant only for the efficiency outcome (H6: $b = -.21$, $p < .01$). We again graphed this interaction at high and low levels of the moderator (in this case, slack resources) to aid in interpretability, and the resultant plot is shown in Figure 4. Simple slopes tests revealed that both the positive slope at low levels of slack resources, and the negative slope at high levels of slack resources, were significant (both $p < .01$). Consistent with our sixth hypothesis this indicates that organizations with relatively low levels of slack resources may maximize their efficiency by utilizing stretch goals, whereas organizations with relatively high levels of slack become inefficient when engaging in stretch goals. Our other hypothesized slack interaction with prior efficiency (H7) was not significant. We again tested both interactions in the same model, and again our results did not change, indicating some robustness of the effects as shown. Stretch and its moderated effects predicted a total of 3% of the variance in center efficiency according to the incremental R^2 values, a statistically significant amount.

Altogether, we find support for H1, H2, H5, and H6, suggesting a prevalent existence of stretch in SUD treatment centers, main effects of stretch on CUR, and one moderated effect of stretch on each of our outcomes of CUR and efficiency. We discuss these findings below.

4. Discussion

Our research is the first to empirically demonstrate that organizational stretch goals distinctly exist, being prevalent within the health care sector of SUD treatment centers. In support of our first hypothesis, our latent class analysis (replicated and verified in a second

industry sample) demonstrated the existence of a statistically distinct category of organizations using diffuse stretch goals, providing a potential platform for future research on SUD organizational-level goals. Prior work has conceptualized organizational goals as simply being challenging or not (c.f. Baum & Locke, 2004; Baum et al., 1998). In our sample, nearly half (43%) of treatment centers used stretch goals, showing simultaneous strong agreement with the multiple goals of generation of high growth, revenues, liquidity, and operating capacity, and expense minimization, as well as ten goals measuring the organizational importance of several goals related to patients and treatment effectiveness, such as helping them to achieve complete abstinence from alcohol and drugs, aiding in resolving legal problems, and maintaining positive physical health. Similar proportions were found in our replication sample. Our research verifies that these diffuse stretch goals exist in abundance in modern SUD treatment organizations, and should be considered in order to fully understand the macro-level impacts of goals on performance (Kerr & Landauer, 2004; Markovitz, 2012; Sitkin et al., 2011).

Efficiency was not directly affected by the goal categorization that was developed here. Although not related to goals in a main effects fashion, efficiency was predicted by the interaction of stretch and slack availability such that stretching organizations were more efficient with previous low slack availability than with high slack. This finding may be of importance to researchers and practitioners in the healthcare field as efficiency is one of the industry's most important metrics, with long-term impacts on both treatment quality and organizational survival (Binder & Rudolph, 2009; Hussey et al., 2009; Scheid & Greenley, 1997). This produces a paradox worthy of consideration: although slack resources may be necessary to assure continued organizational agility and survival for SUD centers, they can discourage efficiency in the context of stretch goals.

Whereas slack is suggested by our results as the moderator of importance for efficiency, prior performance was demonstrated as the salient interaction variable for capacity utilization rate, a measure of the center's market performance. Whereas a recent history of past successes might provide treatment centers the expectancy, perspective, and resources necessary to benefit from stretch goals (Fiol & Lyles, 1985; Gulati, Nohria, & Wohlgezogen, 2010; Sitkin et al., 2011; Vroom, 1964), the revealed interaction demonstrated the opposite effect, more in line with self-regulation theory. The use of stretch goals did not impact capacity utilization rate for centers with poor prior capacity utilization, whereas stretch was harmful to those with a strong record of capacity utilization. This may represent a form of employee burnout, such that staff were demotivated by being asked to perform at much higher levels after a period of some success (Lazarus & Folkman, 1984). Regardless, the lack of any positive effects of stretch on capacity utilization rate in SUD centers, either as a main effect or as an interaction, when combined with the rather high number of SUD centers using stretch goals, may form a cause for concern. Although our results suggest that stretch may bring some efficiency boosts in certain situations, it seems that the use of highly ambitious and unfocused stretch goals is harming many SUD organizations. Future research should investigate whether there are other moderating conditions which might boost the performance of stretching SUD treatment centers. Until then, these results suggest that nearly half of SUD treatment centers may be hurting themselves (or at least, not helping) by utilizing stretch goals.

Altogether, then, our study suggests that consideration of stretch goals is of importance to all of our organizational outcomes explored here, with stretch acting as a significant main effect or moderator for both dependent variables. We conclude that in the context of an unsettled industry such as SUD treatment, seemingly impossible goals may be less fruitful than challenging goals in general. Organizations represented within the stretch category may often lack the ability to simultaneously focus on the plethora of important organizational indicators and treatment categories that comprised our classification system for center goals. The abilities of organizational members to focus on themselves, on others, and on the larger system in which the organization operates (Goleman, 2013) are important ingredients in performance and important competencies for organizational change and success. However, in this highly challenging context, stretch goals seem to give members of struggling organizations useful focus and attention to efficiency details, whereas more successful organizations are ill-served by embarking on stretch. Although most work on stretch goals has focused on their benefits (c.f. Kerr & Landauer, 2004; Thompson et al., 1997), we find in our multi-organizational sample that their results may not be so positive, consistent with the theoretical approach (Sitkin et al., 2011). Considering main effects alone regardless of context and moderation, we also find that small wins might be preferable to stretch goals, as suggested by the change literature (Kotter, 1996). Indeed, across most of our main effects analyses, the benefits of challenging as opposed to stretch goals (or unambitious goals) are clear.

While our study is based on data collected from a large number of SUD treatment organizations at two points in time, it has limitations. First, although missing data analyses suggest that there is not bias in the multidimensional space of variables incorporated into our models, we are cognizant that they might exist. Our analyses comparing centers failing to remain in the study with those in our sample suggest no significant differences, but the presence of attrition remains a limiting factor. Second, the operationalization of our performance measures, as well as our measure of organizational slack, which have been used in other studies, could be questioned. As seen in the differential effects of two different operational outcomes measures, other outcomes or measures might yield different results. Specifically, more direct measures of organizational revenue, profit, or ROA might serve as desirable measures of outcome performance, and variables related to treatment quality might be especially useful and interesting for the SUD treatment industry.

It is possible that social desirability biases in the direction of demonstrating high aspirations may have affected interview responses (although the large range of responses provides some reassurance of the validity of these reports), and the categorization of unambitious, challenging and stretch goals can be questioned. We dealt with this issue by utilizing latent class analysis and conducted the analysis on two different samples of SUD organizations in order to replicate our findings. While some might consider stretch goals to just be an extension of the scale of challenging goals, our results paint them as a different and more complex category by which SUD centers frequently attempt to cope with internal and external pressures, but with limited upside. It is also important to note that our sample was composed of treatment centers receiving more than half their support from private sources; another study would be needed to conclude generalizability of our findings to publicly funded centers where goal-setting may in many instances be qualitatively different than in

privately funded centers. Finally, future research could assess whether leadership, other organizational characteristics, temporal factors, internal and external pressures are associated with stretch goals, operational objectives and ultimately patient outcomes. Several of our proposed mechanisms of stretch's impact are unmeasured in this study, so research on mediators of stretch goals could prove fruitful in the future.

For treatment center managers and directors, these findings offer notes of caution regarding goal-setting. Such a concern is not idle in light of the evidence presented here regarding the high prevalence of stretch goals in the management of SUD treatment. The attraction of stretch goals of varying extremes seems high under conditions of environmental stress and unpredictability, which are increasingly prevalent in the SUD treatment industry (Roman, 2014) as well as, more generally, across industries in recent times (Bennett & Lemoine, 2014). The increasing volatility and uncertainty both in the SUD treatment context, and in general, highlights the importance of further research on stretch goals, as such goals are most likely in these contexts (Sitkin et al., 2011). The leaders of SUD treatment centers would be best served by setting challenging, but not seemingly impossible, goals for their staffs. The question of whether a set of goals is challenging or a stretch is subjective and more difficult to answer; management should consult with staff to determine whether objectives are perceived as realistically attainable given current center capabilities, or whether employees are demotivated by goals they do not believe they will be able to achieve.

While not measured in this analysis, competition may emerge as such a stressor as SUD treatment continues to grow as a distinct medical specialty, and enjoys new support from provisions of the ACA. Such an attraction also has support from basic American cultural values, among which achievement and individuality are markedly prominent (Williams, 1960). Managing SUD treatment is not an established professional specialty, although success in such management is evident among many treatment programs. To those without such prior experience in managerial goal-setting, setting high-reaching goals may seem a harmless exercise with potential high pay-offs. In SUD treatment, most directors of treatment centers have strong treatment backgrounds, and specific management training for these roles is practically nonexistent. This lack of relevant management training may add to the inducements to move toward stretch goals. Finally, while stretch goal adoption may appear as a morale booster for a treatment staff facing uncertainty, there is evidence presented here that such adoption may be far from benign for staff well-being.

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Appendix

Goal items Fin1–Fin5 (financial goal items) were adapted from Venkatraman & Ramanujam, 1986. These items were measured on a 1 to 6 scale (from moderately important to extremely important).

Fin1. How important are generating high, above-average revenues to this center's strategic decisions or commitments of a long-term nature?

Fin2. How important are achieving or maintaining below-average costs of operation to this center's strategic decisions or commitments of a long-term nature?

Fin3. How important are achieving or maintaining above-average occupancy rates (percent capacity) to this center's strategic decisions or commitments of a long-term nature?

Fin4. How important are achieving or maintaining a high, above-average rate of growth to this center's strategic decisions or commitments of a long-term nature?

Fin5. How important are retaining or securing high, above average liquidity and financial strength to this center's strategic decisions or commitments of a long-term nature?

Goal items Trt1-Trt10 (treatment goal items) were adapted from McLellan et al., 1992. These items were measured on a 1 to 7 scale (from strongly disagree to strongly agree), prefaced by "Every treatment center has a variety of goals for its clients. To what extent do you agree that each of the following is an *important* goal for clients in treatment?"

Trt1. Complete abstinence from alcohol and drugs.

Trt2. Steady employment.

Trt3. Positive physical health.

Trt4. Improved spiritual strength.

Trt5. Meeting legally mandated requirements for those with legal problems.

Trt6. Staying out of trouble with the law.

Trt7. Becoming self-supporting.

Trt8. Becoming reunited with their families.

Trt9. Achieving stable living arrangements and staying off the streets.

Trt10. Retaining and regaining custody of their children.

Highlights

- We find a large number of SUD treatment centers (43%) utilize diffuse stretch goals
- Centers with diffuse stretch goals developed smaller capacity utilization rates
- Diffuse stretch goals increase efficiency when slack resources are present
- Diffuse stretch goals decrease efficiency in the absence of abundant slack
- Such stretch goals are especially harmful for centers with poor prior performance

Figure 1.
Hypothesized model of the direct and moderated effects of stretch goals on SUD treatment center organizational outcomes

Figure 2.

Average Likely Responses by Latent Goal Class for all goal items a

^aTo account for the fact that these two sets of items had different response scales (1–6 and 1–7), results are graphed here as % of maximum possible score.

Fin1-Fin5 represent financial goal items. Trt1-Trt10 represent treatment goal items. All items are listed in the Appendix.

Figure 3.

Plot of prior capacity utilization rate and stretch, predicting capacity utilization rate a

^aValues plotted have been adjusted to account for levels of control variables.

Figure 4.

Plot of interaction of stretch and slack predicting efficiency^a

^aValues plotted have been adjusted to account for levels of control variables.

Consequences of Diffuse Stretch Goals in Organizations Treating Substance Use Disorders

Table 1

Characteristics of the Study Sample ($N = 219$).

	Time 1		Time 2	
	Mean or %	s.d. or N	Mean or %	s.d. or N
Hospital-based ^a	29%	64	36%	68
For-profit ^a	36%	79	36%	68
Center age in years	24.63	14.36	27.31	15.06
Levels of care ^b	4.93	3.11	4.45	3.25
Employees (FTEs) ^c	28.63	52.86	34.07	63.95
Total patient census	115.39	166.26	112.05	158.54

^aSome values are shown as percentages for ease of reader interpretation, but all values are calculated as decimals in our analyses.

^bLevels of care represents the total number of treatment modalities offered by the center (i.e. inpatient detox, intensive outpatient, etc.).

^cFTEs=Full-Time Equivalents.

Table 2

Summary Statistics and Correlations of Study Variables

	Mean	s.d.	1	2	3	4	5	6	7	8	9
1. Organization Age ¹	24.63	14.36									
2. Hospital-based ²	0.29	0.46	.08								
3. For-profit ²	0.36	0.48	-.25**								
4. Levels of care ³	4.93	3.11	.15*	.30**							
5. Stretch goals ⁴	0.43	0.48	-.01	-.15*	.05						
6. Slack	1.81	3.83	.14*	.03	-.03	.15*					
7. Capacity Utilization Rate (T1)	.81	.79	.02	.02	-.06	.04	.03				
8. Efficiency (T1) ⁵	.27	.35	-.29**	-.20**	.13	-.18*	.06	-.25**	.10		
9. Capacity Utilization Rate (T2)	.75	.60	.17*	.09	-.03	-.02	-.06	-.04	.28**	-.09	
10. Efficiency (T2) ⁵	.2	.27	-.10	-.23**	.12	-.25**	.15	-.15	-.05	.34**	.10

N= 160–219. Outcomes (9 - Capacity Utilization Rate T2 and 10 - Efficiency T2) measured at Time 2. All other variables measured at Time 1.

¹ Measured in years.

² Dummy-coded variables: Hospital-based: 1=based within hospital, 0=Not based within hospital. For-Profit: 1=For-profit, 2=Not-for-profit.

³ Levels of care represents the total number of treatment modalities offered by the center (i.e. inpatient detox, intensive outpatient, etc.).

⁴ % chance of stretch class membership (from LCA results).

⁵ For ease of presentation, values shown for efficiency ratio means and s.d.s are actual values multiplied by 1,000.

* $p < .05$.

** $p < .01$.

Table 3

Results of three-step mixture analysis of goal outcomes (H2-H3) - equality of means

	H2: Capacity Utilization Rate ^a		H3: Efficiency ^b	
	Mean	S.E.	Mean	S.E.
Unambitious-Goals class	.60	0.07	-9.69	0.38
Challenging-Goals class	.85	0.08	-9.32	0.17
Stretch-Goals class	.64	0.04	-9.00	0.18
	Chi-Square	<i>P</i>	Chi-Square	<i>p</i>
Overall test	7.67	.02 [*]	3.58	.17
Unambitious vs. Challenging	6.25	.01 [*]	0.80	.37
Unambitious vs. Stretch	0.26	.61	2.80	.09
Challenging vs. Stretch	6.29	.01 [*]	1.82	.18

All independent variables measured at Time 1; all dependent variables measured at Time 2.

^aN=182^bN=161: logged ratio is represented^{*}*p* < .05.

Table 4

Results of Hierarchical Regression Analysis of Moderations (H4-H7)

Variables	H4: Capacity Utilization Rate	H5: Capacity Utilization Rate	H4 & H5: Capacity Utilization Rate (full model)	H6: Center Efficiency	H7: Center Efficiency	H6 & H7: Center Efficiency (full model)
Organization Age ¹	.19*	.18*	.18*	.03	.05	.02
Hospital-based ²	.00	-.01	=.01	-.02	-.04	-.02
For-Profit ²	.10	.07	.07	-.02	-.02	-.02
Levels of Care	.00	-.02	-.03	-.13	-.13*	-.13
Stretch goals	-.12	-.10	-.10	.05	.04	.05
Slack	-.04			-.16*		-.18
Prior Capacity Utilization Rate	.29**	.36**	.35**			
Prior Efficiency (T1)				.58**	.68**	.56**
Slack * Stretch Goals	-.02		-.04	-.21**		-.23*
Prior CUR * Stretch		-.22**	-.22**			
Prior Efficiency * Stretch					.05	-.03
R ²	.00	.05*	.04*	.03*	.00	.03*
Adjusted R ²	.08	.13	.12	.47	.47	.46
R ²	.12	.17	.17	.50	.50	.50

Standardized coefficients reported for $N = 175$ (capacity utilization rate) and 144 (efficiency). All outcomes were measured at Time 2; all other variables were measured at Time 1. CUR=Capacity Utilization Rate. Efficiency = logged ratio.

¹ Measured in years.

² Dummy-coded variables: Hospital-based: 1=based within hospital, 0=Not based within hospital. For-Profit: 1=For-profit, 2=Not-for-profit.

* $p < .05$.

** $p < .01$.