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Counselor Perceptions of Organizational Factors and Innovations Training Experiences

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Abstract

Because work environment is central to understanding job performance, drug counselor perceptions of their programs and their skills were examined in relation to their attitudes about innovations training and its utilization. Latent profile analysis of measures on organizational climate and staff attributes for 1047 counselors from 345 programs defined three categories of counselors - labeled as Isolated, Integrated, and Exceptional. All had generally positive views of their professional skills, although the Isolated group scored lower on scales representing professional growth and influence on peers. They were less positive about the "climate" of programs in which they worked and were higher on stress. Program resources predicted the counselor groups, with the Isolated having more limited resources. Counselor categorizations also differed in terms of workshop training experiences, with the Isolated group of counselors reporting significantly less exposure, satisfaction, and program-wide use of workshop training.

Keywords

Workshop training; Readiness for change; Working environment; Counselor typology; Latent profile analysis

1. Introduction

Based on the broad base of evidence that drug abuse treatment is effective (e.g., Prendergast, Podus, Chang, & Urada, 2002; Simpson, Joe, Fletcher, Hubbard, & Anglin, 1999), research in recent years has begun to focus more carefully on how treatment works (Simpson, 2004) and on how evidence-based interventions might be transferred more effectively into routine clinical practice (see Simpson, 2002, for a discussion). In both of these areas, there has been an increased emphasis on the role of organizational aspects of treatment programs. That is, the structural features, staffing, organizational climate, and capital resources of programs influence both the introduction of new interventions into clinical practice (Simpson, 2002) and treatment outcomes (Broome, Flynn, Knight, & Simpson this issue).

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Counselors are key players in both the delivery of treatment, especially in regard to their ability to affect client engagement (e.g., Barber et al., 2001; Joe, Simpson, Dansereau, & Rowan-Szal, 2001; Martin, Garske, & Davis, 2000; Simpson & Joe, 2004), and the transfer process of evidence-based interventions into clinical practice (e.g., Knudsen & Roman, 2004; Knudsen, Ducharme, Roman, & Link, 2005). Indeed, their views of the treatment program as a workplace and its social norms also are associated with the treatment experiences and progress of their clients (e.g., Broome et al., this issue; Moos & Moos, 1998), as well as their own job engagement and satisfaction (e.g., Maslach, Shaufeli, & Leiter, 2001). Counselor perceptions of program needs and self-reported adoption of previous training likewise are predictive of their attitudes towards using evidence-based practices and treatment manuals (Saldana, Chapman, Henggeler, & Rowland, this issue).

In view of the central role of counselors in treatment organization and delivery, the present study examines their perceptions of themselves and their working environment in an effort to gain better understanding of readiness and responsivity to innovations training. Whereas other related research emphasizes how aggregated counselor data describing the program as a whole is related to subsequent use of workshop training (Simpson, Joe, & Rowan-Szal, this issue) and to treatment process indicators for clients (Greener, Joe, Simpson, Rowan-Szal, & Lehman, this issue), the focus here is on the counselors as individuals and on how they differ. That is, the study concerns behavior in organizations rather than behavior of organizations. Also, this study addresses how counselors rate their previous experiences and successes in "adopting workshop training materials," which has been defined in the technology transfer literature to be the "decision to use what was taught in the training" (e.g., Klein & Knight, 2005; Simpson, 2002). Decisions to adopt what was taught in training, which often may be the enhancement of counseling skills, includes trial usage. This stage is a prerequisite for the eventual "implementation" of training on innovations, which occurs when the counselor becomes "increasingly skillful, consistent, and committed in the use" of what was taught in the training (e.g., Klein & Knight, 2005).

An instrument proving to be useful for addressing counselor perceptions of organizational functioning at their respective drug treatment programs is the TCU Organizational Readiness for Change (ORC; Lehman, Greener, & Simpson, 2002). It was constructed by developing scales similar to those used in earlier organizational climate research (Jones & James, 1979), including measures on perceptions of organizational climate, staff attributes, program resources, and program needs and pressures. The ORC measures have been shown to be significant program-level predictors of innovation adoption in drug abuse programs (e.g., Simpson et al., this issue) and of treatment program process indicators (Greener et al., this issue), as well as individual-level predictors of attitudes toward evidence-based practices (Saldana et al., this issue). Saldana et al. report that attitudes toward evidence-based practices were predicted by motivational readiness, training exposure and adoption, and to some extent by staff attributes; however, staff perceptions of program resources and organizational climate were unrelated to these attitudes. In these studies, the focus was on prediction using organizational attributes as separate variables, rather than on identifying or exploring counselor types.

Because perceptions of organizational climate and of other aspects of organizations tend to be correlated (e.g., Jones & James, 1979; Lehman et al., 2002; Greener et al., this issue), it seems reasonable that they should be considered simultaneously in the study of counselor-perceived organizational functioning. One way of doing this and keeping the data as an integrative whole is to use it as a profile to identify types (or subgroups) of counselors. This approach keeps the focus on the counselors rather than on individual measures and can show the interrelated nature of these characteristics while providing insight into "psychological environment" (e.g., Jones & James, 1979) of the drug treatment programs.

ORC assessment domains include perceptions of workplace stress as well as opportunities for professional growth, job efficacy, feelings of importance in the organization, flexibility with regard to changes in their work situations, and work autonomy. These reflect levels of trust in counselor abilities by management and supervisors (Gelsema et al., 2006; Shoptaw, Stein, & Rawson, 2000), as well as important factors pertinent to the study of work environment (Maslach & Leiter, 1997; Turnipseed, 1994). Other dimensions of the ORC that address work environment are communication within the workplace, cohesiveness of the staff, clarity of the goals of the program, and encouragement of staff to improve treatment procedures. All of these dimensions seem directly relevant for exploring a typology of counselors as discussed later.

It is therefore expected that several general patterns, or types, of counselors can be identified from their perceptions of the organizational climate and perceived abilities to perform their jobs, as measured on the ORC. Further, it is reasonable to expect these descriptive patterns to apply across a variety of treatment organization settings. Such a typology of counselors could have implications for treatment program practices, including adoption of what is commonly taught in training workshops. That is, counselors who have more favorable profiles on these dimensions of the ORC should be more engaged in efforts to improve their work performance, in part by taking advantage of training opportunities and attempting to apply what they learned.

1.1. Conceptual background: Perceptions of organizational climate and counselor attributes

Because the constructs that comprise organizational climate - particularly clarity of mission, cohesiveness among the individuals within the organization, communication, and stress - have received considerable study in the field of organizational psychology, they appear to be appropriate for addressing counselor functioning within drug treatment programs. That is, many of the situations that counselors deal with would fit the hypothesis that their work settings give rise to stress through role conflict (e.g., difficulty, internally contradictory expectations, person-role conflict), role ambiguity (which may arise from high rates of change either in technology, in the environment, social structures in the organization, and personnel), and workload (demands). There is considerable support in the organizational literature for these notions (Barling, Kelloway, & Frone, 2005) in that many of these same constructs are integral to the literature on “burnout” in the workforce (Lacoursiere, 2001; Maslach et al., 2001; Shirom, Nirel, & Vinkur, 2006; Turnipseed, 1994; Garner, Knight, & Simpson, & Flynn, in press). For example, reports showing work stress being related to worker strain are common (e.g., Fried, Rowland, & Ferris, 1984; Faucett, 2005; Carayon & Zijlstra, 1999; Carayon, Yang, & Lee, 1995), as is work stress to worker behavior/performance (e.g., Davidson & Cooper, 1986; Jackson, 1983; Matteson & Ivancevich, 1982; Shirom et al., 2006). The importance of other aspects of organizational climate is also implied because of potential links to work stress. For instance, if counselors perceive a lack of clarity in the mission of the program, poor communication, and low cohesiveness among staff, this may foster job ambiguity and load (work demands). In contrast, if there is a perception that the program is open to change, then this may serve as a positive influence on the perceived psychological environment.

In addition, other potential positive factors on counselors’ perceptions of their work environment include autonomy and perceived work efficacy. Control or lack of autonomy has been found to be related to stress and worker strain, particularly to job dissatisfaction (Alfredsson, Karasek, & Theorell, 1982; Arches, 1991; Ivancevich, Matteson, & Preston, 1982; Numerof & Abrams, 1984; Kahn & Byosiere, 1992; Karasek, Baker, Marxer, Ahlbom, & Theorell, 1981; Jayaratine, Vinokur-Kaplan, & Chess, 1995). Also, autonomy (Bakker, Demerouti, & Verbeke, 2004) and clarity of mission may buffer stress effects if the

onset of the stressor is predictable, understandable, and controllable by the individual experiencing it (Sutton & Kahn, 1987). Similarly, perceived work efficacy may be important (Shoptaw et al., 2000), as it reflects adaptability (Kahn, Wolfe, Quinn, & Snoek, 1964). Therefore, in addition to perceptions of the organizational climate, other relevant factors to consider when addressing counseling functioning include perceptions of counseling staff efficacy, adaptability, personal influence (e.g., Lewandowski, 2003; Shoptaw et al., 2000), and opportunities for growth.

1.2. Study Aims

In the current study, three issues are examined. The first concerns the types or classes of counselors that can be identified from a set of measures for organizational climate and counseling staff characteristics. The literature addressing issues of work environment suggests several dimensions should emerge as defining characteristics of the profiles, particularly those of work-related stress, communication, autonomy, and self efficacy.

The second issue involves identifying predictors of these classes of counselors. Those who work with or feel they work with more limited program resources are likely to have a less positive impression of their workplace, as these may also reflect indicators of job overload.

The third issue deals with the relationship of these classes of counselors with job engagement, as represented by previous exposure, use, and satisfaction with workshop training. This seems reasonable in view of the research relating job engagement with role conflict and ambiguity, lack of job resources (e.g., autonomy), and lack of social and supervisory support (Maslach et al., 2001). It is expected that counselors who perceive themselves as being in programs with more optimal organizational dynamics will be more likely to have endorsed and applied innovations training.

2. Method

2.1 Sample

The sample consisted of 1047 counselors from 345 treatment programs in 10 states. Data were collected between June 2000 and June 2003 from programs recruited through four Substance Abuse and Mental Health Services Administration (SAMHSA)-sponsored Addiction Technology Transfer Center networks (ATTCs): Gulf Coast, Mid-America, Northwest Frontier, and Prairielands. All data administration and collection procedures were approved by the Institutional Review Board at Texas Christian University. Program participation was solicited by contacting treatment programs with the help of the four ATTCs, which provided mailing lists and letters of support encouraging participation in ATTC-sponsored workshop training conferences. For those programs responding to the inquiry, TCU research staff then contacted them to explain the nature and scope of the training and related evaluation research, requirements of completing assessment forms, and topics to be included in the training conferences.

Counseling staff at each treatment unit were asked to complete the TCU Organizational Readiness for Change (ORC) survey approximately 3 months prior to the training conference. To insure confidentiality, a postage-paid, preaddressed envelope was provided so that participants could seal and mail their completed survey directly to TCU. An informed consent form was given to the counselors, and passive informed consent was assumed if the ORC survey was returned. In addition, in one state, electronic collection of the ORC was handled via the Internet. Overall, the ORC survey was administered to counselors using paper forms in 180 programs and by electronic (web-based) format in 165 programs.

The overall return rate for the ORC forms completed on paper was about 53%. This is slightly lower than the 56% to 64% rates for employees surveyed by mail as generally reported in the organizational literature (Schneider, Parkington, & Buxton, 1980; Schneider, White, & Paul, 1998). This resulted in an average of approximately three ORC assessments completed per treatment unit. The participation rate for the electronic survey is unknown, but it is assumed to be reasonably good because this was a state-sponsored task given to counselors of all public treatment programs that received their funding from that state. As such, the potential population surveyed included all counselors who were employed at the treatment programs who were interested in sending participants to training workshops sponsored by the ATTCs.

Males comprised 35% of the sample, average age was 45, and 71% were Caucasian, 17% African American, and 12% were Hispanic. About 60% were certified professional counselors; 2% were previously certified, 12% were interns (working to obtain certification), and 26% were not certified or licensed in addiction. The sample varied in counseling experience, with 16% having less than a year, 20% had 1-3 years, 14% had 3-5 years, and 49% had more than 5 years experience.

2.2. Variables

2.2.1. Organizational functioning—The TCU Organizational Readiness for Change (ORC) instrument consists of 129 items and measures 18 dimensions covering four major areas: program Needs/Pressures (indicative of Motivation for Training), Program Resources, Staff Attributes, and Organizational Climate (Lehman et al., 2002). Each item was rated on a 5-point Likert scale (1 = disagree strongly, 2 = disagree, 3 = uncertain, 4 = agree, 5 = agree strongly). In computing the scale scores, responses on the items for a scale were averaged and then multiplied by 10. That is, the possible range of scale scores was 10 to 50. The background and development of these scales have been discussed previously, emphasizing their intended link to organizational change (Lehman et al., 2002). The scales in the Staff Attributes and Organizational Climate domains comprise the profile of measures used in this study for identifying the latent classes of counselors.

Staff Attributes addressed Growth (5 items, coefficient alpha = .68), Efficacy (5 items, coefficient alpha = .68), Influence (6 items, coefficient alpha = .80), and Adaptability (4 items, coefficient alpha = .64). Growth measured perceived importance and opportunities for professional growth. Efficacy covered staff confidence in counseling skills. Influence was a measure of opinion leadership among the staff and thus the willingness and ability of their influence among co-workers. Adaptability was a measure of the ability to adapt to a changing environment.

The scales of Organizational Climate included Clarity of Mission and Goals (5 items, coefficient alpha = .74), Staff Cohesiveness (6 items, coefficient alpha = .88), Staff Autonomy (5 items, coefficient alpha = .56), Openness of Communication (5 items, coefficient alpha = .83), Stress (4 items, coefficient alpha = .82), and Openness to Change (5 items, coefficient alpha = .73). Clarity of Mission and Goals addressed staff awareness of the agency's mission and management's emphasis on goals. Staff Cohesiveness measured trust and cooperation in the work group. Staff Autonomy reflected the latitude given the counselors in working with their clients. Openness of Communication focused on receptivity by management to suggestions from staff and the adequacy of organizational networks in keeping the staff and management informed. The measure of organizational Stress reflected perceived strain, stress, and role overload. Openness to Change addressed perceptions of management's interest and effort to meet new conditions with changes and in keeping up with advances in treatment technologies.

The remaining two domains of the ORC were used as predictors of the groups. These include Needs/Pressures and Resources. The area of Needs/Pressures (Motivation for Training) included the dimensions of Program Need for Improvement (8 items, coefficient alpha = .90), immediate Training Needs (8 items, coefficient alpha = .88), and Pressures for Change (7 items, coefficient alpha = .68). Program Need for Improvement reflect staff perceptions of client assessment and service provision; Training Needs assesses perceptions of need for training in several general staff areas; and Pressures for Change reflect internal and external sources that press for agency changes.

Resources include Offices (4 items, coefficient alpha = .69), Staffing (6 items, coefficient alpha = .74), Training Resources (4 items, coefficient alpha = .63), Equipment (viz., Computer Access; 7 items, coefficient alpha = .77), and Internet (viz., Electronic Communication; 4 items, coefficient alpha = .78). Offices reflect the adequacy of office and physical space. Staffing measured the number and quality of staff members to perform the work. Training Resources concerned management and financial support for counselor training and development. Equipment (Computer Access) dealt with the adequacy and use of computers. Internet (Electronic communication) included the use of e-mail, and professional information access and networking via the Internet.

2.2.2. Measures of previous workshop training experiences—As noted in the introduction, there is an expectation that counselor categorizations developed from a profile of counselor job-related efficacy and climate should also be related to job engagement. In addition to the factors addressing aspects of organizational climate and counselor perceptions of their abilities, 14 questions in the ORC asked about previous workshop training exposure, use, and satisfaction. Four scales were defined. The first tapped *Training Exposure* and consisted of five items that inquired about frequency of attendance at training workshops in the last year, both at the treatment program and offsite, and expectations for attending training in the coming year. Each item had a 5-point response format (1 = none,-2 = 1, 3 = 2, 4 = 3, and 5 = 4 or more). The coefficient alpha reliability for this scale was .62.

Two scales addressed the tendency to “adopt” training innovations and techniques learned in prior workshops - that is, deciding to use it and engaging in its trial use (Klein & Knight, 2005; Simpson, 2002). One of these two scales involved personal applications of workshop training (Individual Adoption), while the other focused on perceptions of program-wide training usage (Program-wide Adoption). Each of the items in these two training adoption scales were measured on 5-point Likert scales (1 = never, 2 = rarely, 3 = sometimes, 4 = a lot, 5 = almost always). *Individual Adoption* consisted of four items that addressed the counselor’s own use of interventions from previous workshops, frequency of previous adoption, encouraging other counselors to use ideas that the counselor had adopted, and responsiveness of clients to newly adopted ideas and materials. (For example, “When you attend workshops, how often do you try out the new interventions or techniques learned?”) This scale had a coefficient alpha reliability of .78.

The *Program Adoption* scale asked the counselor to rate the program-wide use of information learned in previous workshops, and it was comprised of three items that asked the frequency with which new workshop interventions and techniques had been adopted for general use in the program, frequency that workshop ideas are discussed and presented in staff meetings, and support by management of new ideas and techniques for use by all program counselors. (For example, “How often do new interventions that staff from your program learn at workshops get adopted for general use?”) This scale had a coefficient alpha reliability of .81.

A fourth scale consisted of two items measuring *Training Satisfaction*. Its items asked about satisfaction with available training offered at workshops last year and with training opportunities. Each item was measured on a 5-point Likert scale (1 = disagree strongly, 2 = disagree, 3 = undecided, 4 = agree, 5 = agree strongly). The scale composite had a coefficient alpha reliability of .77.

2.2.3. Counselor background measures—As indicated in the sample description, counselor variables included age, gender, race-ethnicity, experience in the drug counseling field (< 6 mos., 6-11 mos., 1-3 yrs., 3-5 yrs., > 5 yrs.), time in present counseling job (< 6 mos., 6-11 mos., 1-3 yrs., 3-5 yrs., > 5 yrs.), caseload size (1 = 1-10, 2 = 11-20, 3 = 21-30, 4 = 31-40, 5 = > 40 clients), and type of treatment program (Outpatient Drug Free, Outpatient Methadone, Residential, Other). These were included as predictors in the classification analyses. Because the data collected on counselor background in the ORC lacks information about some variables found to be predictive of counselor turnover (Knudsen, Ducharme, & Roman, 2006; Knudsen, Johnson, & Roman, 2003) these will need to be addressed in the future.

2.3. Analysis

Latent profile analysis (LPA) of staff attributes and organizational climate measures were conducted using the MPLUS software (Version 3; Muthén & Muthén, 2004). LPA can be viewed as an approach to clustering respondents into groups, where the groups cannot be directly observed. The first step was to determine the number of latent groups of counselors characterized by patterns of organizational climate and staff attributes scales - that is, finding the smallest number of latent groups that adequately described the associations among these 10 measures. From this first step, estimates were obtained for both the patterns of means for each latent group and the proportion of the total sample that each pattern represented. Because counselors were nested within clinics, this was taken into consideration using a two-level model for estimating the patterns, with emphasis on the within-program counselor differences.

An advantage of latent profile analysis is its ability to address incomplete data. Although a typical approach to analyzing such data has been the discarding of individuals without complete data on the variables, this may result in eliminating a large portion of the sample and thereby reducing statistical power and precision in estimation. A better choice is an estimation approach that uses information from all cases (complete or incomplete), and therefore assumes only that missingness is unrelated to the values that are missing. Formally, missingness may be related to characteristics that are measured for the incomplete cases, but once these characteristics are accounted for, there is no difference between individuals with and without missing responses (Little & Rubin, 1987; Rubin, 1976).

Decisions about the appropriate number of latent classes were based on the Bayesian Information Criterion (BIC), adjusted for sample size, and an entropy index (see Muthén & Muthén, 2004). The adjusted BIC balances fit against the number of parameters used, and it favors simpler models that achieve close fit. Smaller values of the adjusted BIC are preferred. Entropy summarizes the classification quality of the model, indicating the degree to which individuals conform to one (and only one) of the identified groups. It ranges from 0 to 1, with larger values reflecting cleaner classification.

In the second step of the analyses, multinomial logistic regressions of the latent grouping variable on program resources, program motivation, and counselor background variables were performed (with the MPlus software) to identify significant predictors of the latent classification patterns. These were done in separate regressions, with each of the three ORC scales from the Motivation for Change domain (Program Needs, Training Needs, Pressures

for Change), the five ORC scales from the Program Resources domain (Offices, Staffing, Training, Equipment, Internet), and demographics (age, gender, race), and counselor background (experience in the field, tenure on job, caseload) used as predictors of the latent classes.

The third step of the analyses addressed the hypothesis that the latent groups were significantly different with respect to each of the innovations training and adoption outcomes. The hypothesis concerning each outcome measure was tested by estimating two models - one in which the means were constrained to be equal and one in which there were no constraints on the means for the groups. The significance was assessed by a chi-square difference test in the two models: χ^2(number of free parameters difference) = -2 [(Log likelihood H_1) - (Log likelihood H_0)].

3. Results

Table 1 presents the descriptive statistics for all variables used in the analysis.

3.1. Latent profile analysis

In identifying the number of latent classes that best fit the data, comparisons were made among the model fit statistics for a two latent profile solution (Log-likelihood = -33297.83, AIC = 66677.65, BIC = 66880.75, Adjusted BIC = 66750.53, Entropy = .88), a three latent profile solution (Log-likelihood = -32886.88, AIC = 65897.76, BIC = 66204.89, Adjusted BIC = 66007.96, Entropy = .87), and a four latent profile solution (Log-likelihood = -32555.61, AIC = 65277.23, BIC = 65688.38, Adjusted BIC = 65424.76, Entropy = .86). The two and three latent profile solutions were fairly close based upon the fit indices, with the two profile solution having a slightly larger entropy (.88 vs. .87), but the three latent profile solution having a smaller AIC, BIC, and Adjusted BIC. The four latent profile solution had a slightly smaller entropy, and it had some better fit indices. However, the groups it identified were substantively very similar to those in the three-group solution. Specifically, the four-group solution duplicated two groups from the other results and split the third group into two that had only minor differences. The largest differences were for the Stress (9.12), Cohesiveness (7.34), and Communication (6.62) scales, with the higher stress group having lower cohesiveness and communication. Therefore, the more parsimonious three latent class solution was chosen for discussion in the present paper and is portrayed in Figure 1, with its means presented in Table 2.

The three classes are interpreted in terms of the counselor perceptions of organizational dynamics in their work environments and are labeled: Isolated (43%), Integrated (43%), and Exceptional (14%). The first group was considered “Isolated” (estimated n = 450) because of their low scores on Communication (26.3) and Cohesiveness (28.2); they also had higher scores on Stress (38.4). Note, however, that their mean scores on the Staff Attributes measures were similar to those in the next group (Integrated) on Efficacy and Adaptability. The Isolated counselors were somewhat lower on professional growth opportunities and influence within their treatment programs. In general, this group takes a positive view of their own skills related to efficacy and adaptability, but is less positive about their programs’ organizational climate.

The means on the organizational climate scales for the Integrated group (estimated n = 449) lay between those for the Isolated and Exceptional classes. Their means on mission clarity, cohesiveness, autonomy, communication, and openness to change means were above 36, suggesting a positive view of the programs’ climates. Additionally, Stress (28.7) might be viewed as moderate for this group. On the staff attributes, this group had mean scores that ranged from 37.1 (Influence) to 40.0 (Efficacy), further suggesting that as a group its

counselors felt positive about their ability and opportunities to do their work. However, a comparison of the patterns for the Isolated and Integrated groups invite questions about how these groups can be similar on perceived ability and opportunities for growth and yet be so different with respect to their perceptions of their organizational climates. Implications of group membership for longer-term job performance or technology transfer can also be raised.

When compared to the Isolated group, the Exceptional group (estimated n =148) has the reverse pattern on the organizational climate scales, with Stress being the lowest (24.6) and the other organizational climate scales being the highest (40.4 to 44.4), with Cohesiveness at the top. The overall high ratings in this group are the reason they are considered "Exceptional." Also, the staff attributes for this class were the highest for the three classes.

3.2. Correlates of latent profiles

Measures of counselor background, including demographic variables (age, gender, and ethnicity) and selected professional attributes (education, certified professional, experience in the field, and tenure in the job), needs and pressures, program resources, and treatment program characteristics were assessed as correlates (discriminators) of the latent classes in multinomial logistic regression models. Because these variables were measured at the same time as those used in identifying the latent classes, they are interpreted as correlates of the latent classes contrasts even though their significance are assessed using a regression model. In these analyses, the latent class labeled as Isolated served as the reference group. The results are presented in Table 3, with the first set of coefficient estimates being those for predicting the contrast of the Integrated (second latent class) versus the Isolated, and the second set of coefficients for the Exceptional versus Isolated classes contrast. The corresponding means on these variables for the latent classes are given in Table 4.

Each variable was considered singly in order to determine the simple relationships with group membership. Table 3 shows that of the demographic variables, only race was significant, and this discriminated the Exceptional versus the Isolated (African Americans were more likely to be in the Exceptional group). Of the other counselor background variables, tenure in the current job and professional certification were significant in at least one of the contrasts. Those with longer tenure were more likely to be in the Isolated group when compared to the Integrated group. However, with regard to professional certification, being an intern was more characteristic of being in the Exceptional class or Integrated group than in the Isolated group. Possible interpretations of these results for tenure and professional certification are varied. One may be that newer staff and interns tend to be in communication with others in their programs as part of their orientation and training, and therefore view the whole program as more integrated and supportive. However, a more discouraging possibility cannot be ignored - which is that more experienced counselors may drift from enthusiasm for their work to possible frustration and "burnout" later in their careers (e.g., Maslach et al., 2001;Garner et al., in press).

The domain of Needs/Pressures for Change also contained significant correlates. Isolated counselors were more likely to have higher scores on Program Needs and Training Needs than either of the other groups. Additionally, they were likely to report more Pressures for Change than the Exceptional group.

The source of strongest discrimination came from the program resources domain. Basically, all of the scales in program resources were strong discriminators of the level of organizational dynamics of the work environment, with those perceiving better Offices, Program Staffing, Training Resources, Equipment, and Internet more likely to be in the two

higher treatment organizational dynamics work environment groups when compared with the Isolated group.

3.3. Previous innovations training experiences by latent classes

As a function of those counselors more likely to be engaged in their work, it was hypothesized that the measures of previous innovations training exposure, adoption, and satisfaction would be related positively to the counselors' perceptions of the organizational dynamics of their work environments. That is, counselors who feel integrated in their jobs and work environments would be more likely to have received, used, and be satisfied with training. This hypothesis was borne out in the analyses where level of organizational functioning in the work environment was found to be related significantly to various training-experience measures. These included exposure opportunities for training [$\chi^2(2) = 25.97$, $p < .01$], satisfaction with training opportunities [$\chi^2(2) = 97.75$, $p < .0001$], individual adoption [$\chi^2(2) = 33.05$, $p < .01$], and program adoption [$\chi^2(2) = 148.34$, $p < .0001$]. Table 5 displays the results of these analyses.

In comparing the two largest groups, the Isolated and Integrated groups were significantly different with respect to training exposure [$\chi^2(1) = 7.28$, $p < .01$], program-wide adoption [$\chi^2(1) = 11.22$, $p < .001$], and training satisfaction [$\chi^2(1) = 44.38$, $p < .0001$]. The Isolated group was significantly lower than the Integrated group for each of these measures. In contrast, the groups were not significantly different on individual adoption. This suggests counselors in these two groups differ in adoption measures even though they are similar in their Staff Attributes. This is not too surprising since the groups are mainly different with respect to their organizational climate perceptions and these training-related "outcomes" have to do more with program influences and less with individual counselor differences.

4. Discussion

The present research had three aims. The first was an investigation of "types of counselors" based on self-perceptions of their work environment and their own abilities in their work places. This focused attention on the integrated attributes of the counselors rather than on the individual variables and provides some insight into counselor perceptions of their ability to do their jobs, attachment to their organization, and their commitment to their jobs. In the three groups that were identified as Exceptional, Integrated, and Isolated, the findings supported expectations that the counselor types were defined not by one or two scales, but by the broad set of scales in the organizational climate domain and the staff attributes of personal growth opportunities and influence. The groups and the defining variables were in accord with the literature on work environment, particularly that dealing with job stressors (Maslach et al., 2001). The importance of perceived stress supported expectations that it would be a significant concept among staff in drug treatment programs, just as it has been in other work situations (Kahn & Byosiere, 1992). However, communication, cohesiveness, and mission clarity appeared to be equally important. This reiterates the notion that poor communication, poor staff cohesiveness, and lack of mission clarity are related to stressful work situations for counselors as it has in other organizations (e.g., Barling et al., 2005). By using these measures to identify "types," it helps preserve their interrelated effects when examining their relationship to aspects of job engagement, such as the measures of previous training exposure, adoption, and satisfaction. Where the concept of "counselor types" gains importance in the area of technology transfer is that all counselors may not be equally ready to adopt and eventually implement training of skills to improve their counseling or to use an intervention. Individuals who feel "isolated in their work situations" may be too detached from their counseling jobs to commit to use the training or intervention effectively.

From these patterns some other observations can be noted. First, considering the combined percentages of the Integrated and Exceptional classes, a majority of the counselors (57%) have positive perceptions of their work environments. These positive perceptions are important as they suggest a sense of "community" (e.g., Royal & Rossi, 1996) and job satisfaction which have been shown to be related to job retention (e.g., Ogborne, Braun, & Schmidt, 1998). Second, a large majority feel efficacious about their jobs (the scale score for every class was near or above 40 for efficacy and adaptability).

The second study aim was to investigate counselor background and program-related variables that might be associated with the counselor subgroups. The major discriminating factor was program resources, with the perception of more limited resources separating the Isolated from both the Exceptional group as well as the Integrated group. These findings were consistently significant across all dimensions measured for resources, and this domain was much more prominent than counselor demographics, counselor tenure, experience, or caseload. In comparing the two large groups, the observed differences between the Isolated and Integrated groups point to the perceptions of their program situations, to their job tenure, and to professional counseling background - but not to education, caseload, or treatment modality. There was some indication that counselors who perceived their organizational climates to be worse also are some of the more established counselors. The predictors that discriminated the Isolated group from the others included being longer tenured, not being an intern, and perceptions of more program and training needs. The finding that more experienced counselors were less likely to report an integrated and supportive environment - which is so valuable in adopting new techniques - raises special concerns. These results suggest this group be studied further.

The third aim dealt with the relationship of the typology to previous training exposure and adoption of materials and techniques learned in workshops. The present study identifies organizational climate as an important predictor. Previous studies have examined these counselor-level measures mainly as separate predictors, and in terms of their "unique contributions" to the prediction when used simultaneously in multiple regression. However, in the present analyses the individual-level counselor information from this domain and from staff attributes were used so that the focus was placed on the counselors (rather than on each characteristic) through the use of latent class analysis to identify "counselor types." Subsequently, these counselor groups were shown to differ in their previous workshop training exposure, satisfaction, and adoption. These results provide a greater understanding of the role of the counselor in the TCU Program Change Model (Simpson & Flynn, this issue), particularly in that counselors who feel involved in their programs are more likely to receive and to utilize training. This investigation follows from the literature showing work-related factors correlate with job engagement (Maslach et al., 2001). It was anticipated that counselor types who perceived themselves as being more integrated in their organizations would be more likely to be engaged in their work as espoused by a positive affect toward innovations training. Another aspect of the present research related to the adoption and exposure measures is that it addressed a significant issue uncovered in the study on attitudes toward evidence-based practices using the ORC scales (Saldana et al., this issue). In that study, individual-level measures of adoption and exposure predicted evidence-based practice attitudes, but organizational climate and resources did not. The present research establishes the relationship of organizational climate as an aide in identifying whether counselors may be ready to engage in the adoption process. Further, it showed that resources are related to the counselor types.

These findings have implications for future research both in moving health services forward as well as technology transfer. For example, if some counselors within an organization feel somewhat "isolated" with respect to the other counselors and supervisors, then this may

have effects on their counseling practice through their being less ready and enthusiastic about using treatment improvements advocated by management and other counselors in the program. Some consideration might be given to long-term, older counselors who do not have close ties with others in the workplace. Eventually, a lack of improvement in their counseling may make them less effective than they might be with their clients. As noted by Courtney and colleagues (Courtney, Joe, Rowan-Szal, & Simpson, this issue), promoting better “program community” would be a goal that needs to be achieved before technology transfer can be more effective.

The alpha reliabilities of seven of the eighteen ORC scales were below .70. Four of these (Pressures for Change, Offices, Growth, and Efficacy) were either .68 or .69. Resources for Training (alpha = .63), Adaptability (alpha = .64) and Autonomy (alpha = .56) were noticeably lower than .70. With respect to the present study, the counselor types were developed with the 10 scales comprising Organizational Climate and Staff Attributes, with Growth, Efficacy, Adaptability, and Autonomy included in this profile. While these were important in identifying the groups, the mean differences on these measures also fitted the patterns of the other scales. Autonomy, which had the lowest reliability, appeared to have the least discrimination among the organizational climate measures. The mean differences among the classes on the Staff Attributes were generally less than among the Organizational Climate measures.

In terms of improving the reliabilities of the scales, both Resources for Training and Adaptability are four-item scales and future research should consider increasing the number of items comprising the scales. In examining the Autonomy scale, when one item concerning the counselor supervisor was removed, the reliability rose from .56 to .62. Replacing this item with a better one would likely improve this scale further.

Principal limitations of the present research are that the counselors and their programs represent a convenience sample gathered from a large number of treatment programs covered by four ATTCs, and the data are cross-sectional in nature. Participating programs in many cases were highly motivated to receive innovations training being offered, so caution is recommended in making extrapolations of findings (such as the proportions of counselors classified in the three groups). Examining longitudinal measures prospectively of future adoption of training among a wider sample of programs and counselors would provide evidence for generalization of the findings. Larger samples could permit cross-validating the results and examining the professional background of counselors in more detail as factors affecting counselor perceptions of their work environments. The measures of previous workshop training exposure, use, and satisfaction asked information on these topics at a global level. More specific measures for different types of skills training and interventions and for different times covered in the past would likely yield a more complex relationship to that found in the present research.

Nevertheless, this study provides a better understanding of some of the factors that affect the counselors, and as noted earlier, this is crucial to any discussion about factors that affect client engagement and outcomes. The results emphasize the importance of considering communication, staff cohesiveness, clarity of mission, and work stress as key components in the organizational dynamics of counselors in their workplace. Issues are raised that are in need of further research, including how counselor types may relate to interactions with clients in drug treatment and whether improvement in perceived work environment will result in improvement in counselor behaviors in the treatment program.

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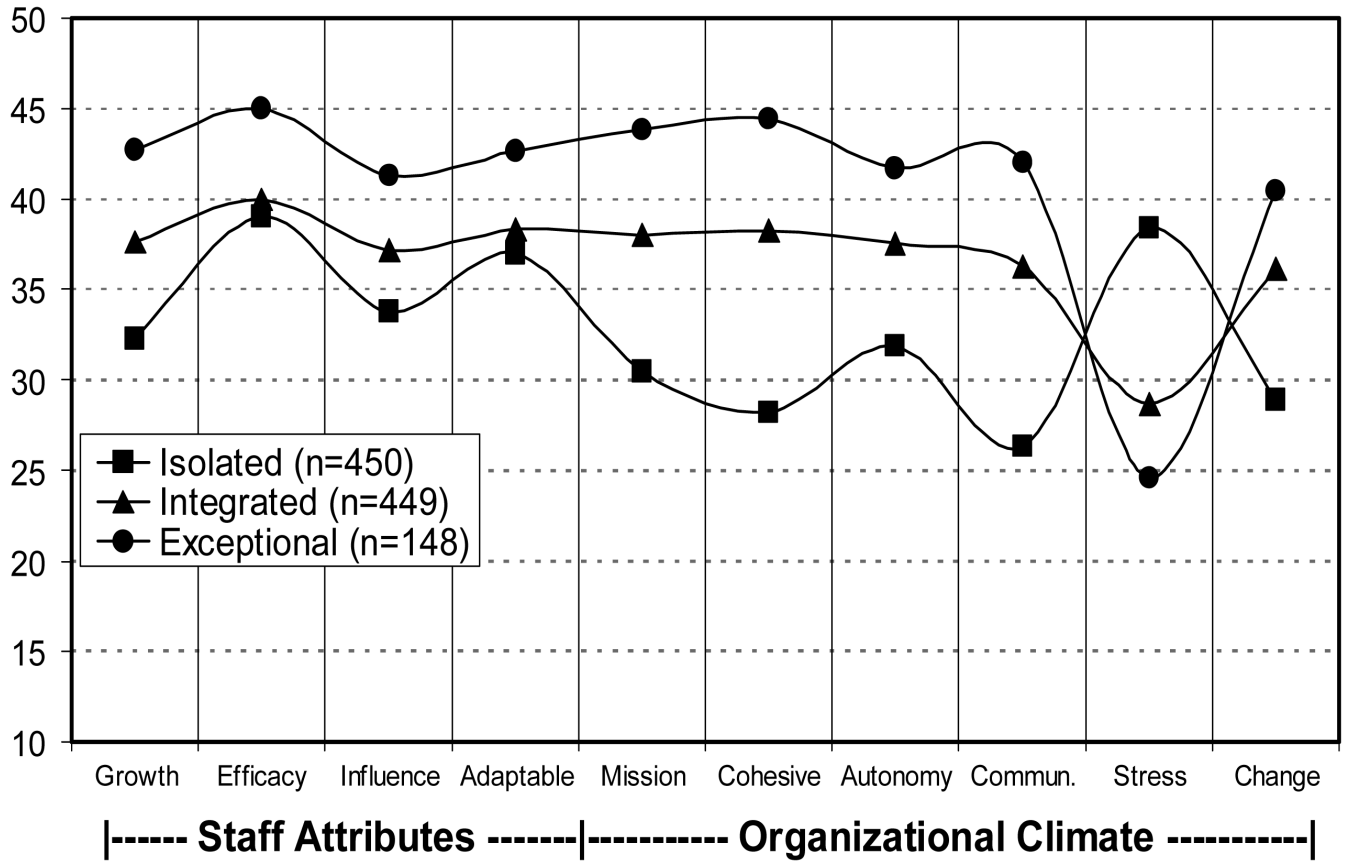

Figure 1.
Mean scores on predictor scales for the 3-group solution of latent profile analysis.

Table 1

Sample Description (N = 1047)

Scale	Mean	SD
Background		
Age	44.9	11.1
Male	.35	.48
Race		
Caucasian	.71	.45
African American	.17	.37
Hispanic	.12	.32
Experience in field	3.9 (i.e., 3-5 years)	1.4
Tenure on job	3.2 (i.e., ~3 years)	1.3
Number of clients	2.2 (i.e., ~ 20 clients)	1.3
Motivation/needs		
Program needs	31.1	9.5
Training needs	29.8	8.8
Pressures for change	30.2	6.6
Resources		
Offices	33.3	9.1
Staff	31.9	7.2
Training	34.6	7.8
Equipment	32.2	8.5
Internet	30.0	10.9
Staff Attributes		
Growth	36.1	6.4
Efficacy	40.2	5.1
Influence	36.2	6.2
Adaptability	38.4	5.5
Organizational Climate		
Mission	35.6	6.9
Cohesiveness	34.8	8.9
Autonomy	35.7	6.0
Communication	32.8	8.1
Stress	32.3	9.1
Openness to change	33.6	6.7
Outcomes		
Training Satisfaction	3.0	.49
Training Exposure	3.1	.91
Individual Adoption	3.4	.67
Program-wide Adoption	3.1	.80

Table 2

Latent Class Analysis of ORC Staff Attributes and Organizational Climate for Programs

Profile	Total N = 1047	Level of Organizational Dynamics[a]		
		Isolated Estimated n = 450 (43%)	Integrated Estimated n = 449 (43%)	Exceptional Estimated n = 148 (14%)
		Estimated Means (SD)		
Staff Attributes				
Growth	36.0 (6.4)	32.3 (6.3)	37.6 (4.2)	42.7 (4.4)
Efficacy	40.6 (5.1)	39.0 (5.8)	40.0 (3.6)	45.0 (3.9)
Influence	36.0 (6.2)	33.8 (6.8)	37.1 (4.4)	41.3 (4.8)
Adaptability	38.5 (5.5)	37.0 (6.4)	38.3 (3.9)	42.6 (4.7)
Organizational Climate				
Mission	35.9 (9.9)	30.5 (6.4)	38.0 (3.5)	43.8 (4.1)
Cohesiveness	34.1 (8.9)	28.2 (8.0)	38.2 (5.1)	44.4 (5.4)
Autonomy	34.9 (6.0)	31.9 (5.9)	37.5 (3.5)	41.7 (4.4)
Communication	32.8 (8.1)	26.3 (6.8)	36.3 (4.1)	42.0 (4.3)
Stress	32.0 (9.1)	38.4 (6.8)	28.7 (7.3)	24.6 (8.5)
Openness to change	33.3 (6.7)	28.9 (6.3)	36.1 (3.5)	40.4 (5.0)

Note. Loglikelihood = -32886.88, Number of Free Parameters = 62, Akaike Information Criterion = 65897.76, Bayesian Information Criterion (BIC) = 66204.89, Adjusted BIC = 66007.97, Entropy = .87

[a]Estimates from 2-level mixture model with cluster sampling

Table 3

Correlates of Comparisons among Levels of Organizational Dynamics (N = 1047)

				Comparison of Organizational Dynamics Levels			
				Integrated vs. Isolated		Exceptional vs. Isolated	
Correlates	**Entropy**	**AIC**	**BIC**	**b-weight**	**t-test[a]**	**b-weight**	**t-test[a]**
Background							
Age	.87	63380.60	63547.73	-.01	-.91	.02	1.73
Male	.87	63516.24	63683.48	-.01	-.07	.40	1.88
Race	.87	62536.02	62712.51				
African American				.14	.61	.64	2.32*
Hispanic				.23	.82	.14	.30
College Degree	.87	65139.11	65307.17	-.10	-.62	-.42	-1.83
Certified Professional	.87	64577.53	64765.03				
Previous certified				-.87	-1.13	-.40	-.36
Currently certified				-.02	-.10	.49	1.61
Intern				.67	2.22*	1.22	2.93**
Experience in field	.87	64402.52	64570.22	-.11	-1.50	.15	1.66
Tenure in job	.87	64720.85	64888.72	-.19	-2.94**	-.15	-1.88
Number of clients[b]	.87	34719.08	34865.99	-.03	-.38	.08	.62
Motivation for Change							
Program needs	.87	65099.31	65267.38	-.06	-6.33***	-.12	-4.60***
Training needs	.87	64929.44	65097.41	-.03	-2.87**	-.10	-6.11***
Pressures for change	.87	64752.89	64920.69	-.01	-1.36	-.07	-3.99**
Resources							
Offices	.87	65596.80	65765.22	.10	8.59****	.21	7.52****
Staffing[c]	.87	43770.39	43925.22	.21	10.77****	.37	9.56****
Training	.87	65465.25	65633.64	.13	10.58****	.30	9.30****
Equipment	.87	65211.68	65379.81	.06	5.60***	.14	6.19**
Internet	.87	65594.72	65763.05	.03	4.25**	.08	4.80***
Treatment Characteristics							

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				Comparison of Organizational Dynamics Levels			
				Integrated vs. Isolated		Exceptional vs. Isolated	
Correlates	**Entropy**	**AIC**	**BIC**	**b-weight**	**t-test[a]**	**b-weight**	**t-test[a]**
Treatment modality[d]	.88	36044.85	36219.30				
Intensive ODF				-.22	-.65	.12	-.24
ODF				.34	1.04	-.77	-1.54
OMT				.18	.23	.60	.62
Residential				-.44	-1.48	-.76	-1.67

Note. Base Model (no predictors): Loglikelihood = -32632.01, Number of Free Parameters =62, Akaike Information Criterion = 65388.01, Bayesian Information Criterion (BIC) = 65695.20, Adjusted BIC = 65498.28, Entropy = .87

[a] Estimates from 2-level mixture model with cluster sampling

[b] N = 556

[c] N = 702

[d] N = 579

Table 4

Descriptive Statistics for Correlates of Counselor Perception Patterns of Organizational Dynamics

	Level of Organizational Dynamics		
	Isolated	**Integrated**	**Exceptional**
Profile			
Background			
Age (s.d.)	45.0 (11.1)	44.2 (11.0)	47.2 (11.1)
Male (%)	33.5	33.2	42.8
Race (%)			
African American	14.6	15.7	26.2
Hispanic	11.6	12.4	11.9
Caucasian	74.2	71.0	62.7
College degree (%)	75.5 (86.9)	73.6 (.85.8)	66.3 (81.4)
Certified professional (%)			
Uncertified	26.6	25.6	16.3
Previously certified	1.6	.6	.7
Currently certified	63.2	57.7	65.1
Intern	8.5	16.1	17.9
Experience in field [A]	3.93	3.67	4.29
Tenure in job [A]	3.40	3.06	3.14
Number of clients [B]	2.23	2.16	2.40
Motivation for Change			
Program Needs	34.6	29.6	25.0
Training Needs	31.7	29.7	24.4
Pressures for Change	30.9	30.4	27.7
Resources			
Offices	28.4 ()	36.2	39.9
Staffing	26.9	34.3	38.5
Training	30.2	36.6	41.6
Equipment	29.3	33.5	37.2
Internet	27.2	31.1	35.3
Treatment Characteristics			
Intensive ODF	23.0	22.1	33.6
ODF	15.9	27.0	11.3
OMT	1.7	2.2	4.5
Residential	47.4	34.9	32.8

[A] (1=0-6mos, 2=6-11mos, 3=1-3yrs, 4=3-5yrs, 5=over 5yrs)

[B] (1=1-10, 2=11-20, 3=21-30, 4=31-40, 5=over 40)

Table 5

Previous Training Experiences for Latent Classes of Organizational Dynamics

		Level of Organizational Dynamics			Hypotheses		Test
Training Experiences	**Total N = 1047**	**Isolated Est. n= 450 (43%)**	**Integrated Est. n= 449 (43%)**	**Exceptional Est. n = 148 (14%)**	**H_1: constraint of equal means, nfp = 36**	**H_0: no constraints on means, nfp = 38**	**χ^2 Difference df = 2**
Training Exposure	3.10 (.91)	2.92 (.92)	3.18 (.89)	3.50 (.81)	-33659.02	-33646.031	25.97**
Individual Adoption	3.40 (.67)	3.33 (.63)	3.34 (.51)	3.84 (.62)	-33473.549	-33457.021	33.05**
Program-wide Adoption	3.09 (.81)	2.60 (.73)	3.37 (.62)	3.69 (.70)	-33562.724	-33488.552	148.34****
Satisfaction	3.34 (.74)	2.92 (1.01)	3.54 (.78)	4.19 (.81)	-33680.986	-33632.113	97.75****

Note. Est. = Estimated, nfp = Number of Free Parameters, Estimates from 2-level mixture model with cluster sampling