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What is This?

# EFFECTS OF ORGANIZATIONAL FACTORS ON USE OF JUVENILE SUPERVISION PRACTICES

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A growing literature emphasizes the importance of strengthening organizational contexts to support the adoption and use of best practices in correctional environments. The current study examines the relationships between organizational factors and use of current best practices in a juvenile correctional agency. Using survey data for 393 probation officers and supervisors in 33 field offices in a statewide juvenile correctional agency, the authors examined the relationships between staff's self-reported use of service-oriented supervision practices and their perceptions of organizational functioning within their offices. The results from a hierarchical model demonstrated that lower levels of staff cynicism for change, more favorable perceptions of supervisory leadership, and greater integration with community-based service providers were significantly related to greater use of service-oriented practices among supervision staff. Office climate and integration with the judiciary and mental health agencies are not significant. Findings and their implications for research and practice are discussed.

*Keywords:* juvenile justice; probation; supervision; cynicism for change; interagency coordination; leadership; organizational climate

Juvenile corrections underwent a metamorphosis beginning in the 1970s, when pressures mounted to control rising rates of juvenile-related crime. This shift permeated the system, transforming juvenile probation from a social welfare model focused on rehabilitating youth to one focused on controlling youth with surveillance and sanctions (Boyd, Huss, & Myers, 2008). But a recent and growing tide of research on juvenile offenders has demonstrated their high levels of service needs—needs that are often related to their delinquent behavior and that put youth at risk for future offending. Approximately 25% of youth involved with the juvenile justice system have a diagnosable substance abuse disorder (Wasserman, McReynolds, Ko, Katz, & Carpenter, 2005), and up to 65% exhibit mental health disorders (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). Many of these youth also present unmet educational needs (Dembo et al., 1991; Kelly, Macy, & Mears, 2005), family problems (Kelly et al., 2005), and physical health issues (Bullis, Yovanoff, & Havel, 2004; Forrest, Tambor, Riley, Ensminger, & Starfield, 2000).

Acknowledging the psychological and social burden of the juvenile justice population, researchers and policy makers have argued that control-oriented supervision undermines efforts to provide essential services to youth with mental health and substance abuse problems. Countering the control model, they advocate for using the juvenile justice system as a primary access point for youth to receive services to address unmet needs that affect their delinquent behavior (Abram, Teplin, McClelland, & Dulcan, 2003; Nissen, 2006; Teplin et al., 2002). The service-oriented view is supported by a growing literature that demonstrates that participation in certain well-implemented interventions, particularly, cognitive-behavioral programs and those that address youths' multiple needs, can reduce juvenile offenders' risk for recidivism (Lipsey, Wilson, & Cothern, 2000; Lipsey & Cullen, 2007). Although not ignoring public safety risk, this view seeks to replace the focus of supervision from surveillance or control to service provision.

The emphasis on effective interventions has spawned an expanding literature describing evidence-based and best practices and providing guidance in their use (e.g., Begich et al., 2007; Dishongh et al., 2007, Schinke, Brounstein, & Gardner, 2002). Evidence-based practices (EBPs) generally constitute programs and practices that demonstrate positive results in research studies. Common criteria to constitute an "evidence base" require that these studies use experimental approaches and that at least two studies result in similar findings. Juvenile supervision practices have not been subjected to rigorous, experimental research; thus the identification of EBPs in this area is premature. But a consensus among researchers and practitioners has evolved a core set of principles and interventions that are effective in reducing delinquent behavior (e.g., Andrews, Zinger, Hoge, Bonta, & Gendreau, 1990; Borum, 2003; Drug Strategies, 2005; Griffin & Torbet, 2002; Lipsey et al., 2000; Nissen, Butts, Merrigan, & Kraft, 2006). In this article, we use the term *best practices* to define this combined set of clinical and research-based practices that are considered important to achieving improved outcomes among youth, recognizing that few experimental studies exist to confirm an evidence base.

Currently, best practice recommendations in juvenile supervision include (a) using standardized, validated assessment tools to assess risk and identify service needs; (b) making placements and service referrals appropriate to those risks and needs; and (c) targeting youth who present the highest risk for reoffending for services (Kelly et al., 2005; Young, Moline, Farrell, & Bierie, 2006). Other important research-based practices include motivational interviewing and enhancement techniques used to engage and motivate youth as part of the change process (Miller & Rollnick, 2002; Taxman, 2002). Generally speaking, these practices constitute a service orientation toward working with youth. This client-centered approach to supervision seeks to reduce the risk of recidivism by addressing the youth's underlying needs and encouraging the youth to take responsibility for his or her behaviors. Taxman and colleagues (Taxman, Sheperdson, & Byrne, 2004) implemented a similar model of supervision, which embodied the core principles stated above, in adult corrections and demonstrated that this approach can improve outcomes (see Taxman et al., 2004, for a description of the model and Taxman, 2008, for study findings).

As knowledge on EBPs and best practices has accumulated, attention has shifted to developing a better understanding of the organizational characteristics that propel certain agencies and jurisdictions to adopt these practices and to move away from a control or punishment approach. Research has documented the importance of organizational context

in the adoption and implementation of EBPs in substance abuse, mental health, and most recently, correctional settings (e.g., Glisson et al., 2008; Glisson & Green, 2006; Henderson et al., 2007; Henderson, Young, Farrell, & Taxman, 2009; Taxman, Henderson, & Belenko, 2009; Taxman & Kitsantas, 2009; Young, Farrell, Henderson, & Taxman, 2009). Empirical evidence demonstrates the importance of intra-agency characteristics, such as supervisory leadership style (Aarons, 2006), health services background of administrators and personal perspectives supporting rehabilitative goals (Friedmann, Taxman, & Henderson, 2007; Henderson et al., 2009; Henderson & Taxman, 2009), agency climate (Glisson & Green, 2006; Glisson & Hemmelgarn, 1998; Henderson et al., 2009), and the adequacy of training and resources (Friedmann et al., 2007; Henderson et al., 2009), on the adoption of EBPs. Interagency dynamics, such as collaboration among organizations and integration of service delivery across health and correctional systems, are also related to the adoption and use of innovative practices (Taxman et al., 2009). Most studies emanate from the adult corrections field, however, with only a few focusing specifically on understanding factors that affect the adoption and implementation of best practices in supervising justice-involved youth (see Glisson et al., 2008; Glisson & Green, 2006; Glisson & Hemmelgarn, 1998; Glisson & James, 2002; Hemmelgarn, Glisson, & James, 2006; Henderson et al., 2007, 2009; Henderson, Taxman & Young, 2008).

The purpose of the present study is to examine the association of organizational characteristics with the use of current best supervision practices in one state-operated juvenile supervision agency. This study assesses the extent to which juvenile probation and aftercare staff report implementing service-oriented practices that encompass juvenile assessment, service referrals, youth and family involvement in treatment planning, and compliance with treatment orders. Furthermore, it examines factors that have been found to predict adoption and implementation of innovative practices and EBPs in other human service agencies, focusing on organizational climate, cynicism for change, supervisory leadership, and interagency coordination. This study advances a greater understanding of the factors that influence use of service-oriented probation practices in juvenile corrections.

## ORGANIZATIONAL FUNCTIONING IN THE USE OF BEST PRACTICES

Often characterized as having bureaucratic, paper-oriented management; high turnover; poorly paid line personnel; and inadequate supervisory training, juvenile justice agencies present a difficult environment for introducing and sustaining change (Altschuler & Armstrong, 1995; Glisson & James, 2002; Hemmelgarn et al., 2006). This is particularly the case in those settings where workplace norms reinforce cynical responses by entrenched line staff to the latest top-down effort at "reform" by agency administrations that change with each gubernatorial election (Young, 2004; Young et al., 2006). In a constantly changing, often politicized environment, security and control concerns frequently trump education and rehabilitation efforts with committed youth (Altschuler, 1998). Greater understanding about organizational factors that influence the use of new practices in these tumultuous environments can benefit future change efforts.

Employing a methodology similar to the one used in the present study, Henderson and colleagues (2007) explored organizational factors associated with use of substance abuse

treatment EBPs in correctional facilities and community-based programs serving juvenile offenders. Based on responses from facility and program directors to the National Criminal Justice Treatment Practices (NCJTP) survey (Taxman, Young, Wiersema, Rhodes, & Mitchell, 2007), this study found that a climate of support for new programming, training resources, and more extensive interagency networks was positively related to EBP use. Friedmann et al. (2007) conducted a similar analysis of NCJTP responses from directors of facilities and programs serving adult offenders and found that adoption of EBPs in these settings was also related to larger interagency networks as well as a performance-oriented work climate and administrators who have human service backgrounds, knowledge of EBPs, and favorable attitudes toward rehabilitation.

Using item response methods (Rasch modeling) to improve the dependent EBP measure from these studies, Henderson et al. (2008) reported significant associations between adoption of EBPs in juvenile correctional agencies with management emphasis on quality treatment, quality facilities, and network connectedness with other agencies. In a subsequent analysis, Henderson and colleagues (2009) accounted for the multilevel structure of the NCJTP survey methodology and used hierarchical linear modeling (HLM) with a similar Rasch outcome measure of EBPs for a sample of both adult and juvenile correctional administrators. The results demonstrated the complicated nature of EBP adoption when agencies are nested within larger organizations, indicating both direct and interaction effects for state- and local-level organizational characteristics for the use of EBPs in local facilities. This study showed that in addition to the importance of local-level organizational functioning, states with more integrated justice and health service agencies (i.e., network connectedness), more stable and adequate staffing at the executive level, and administrators who hold favorable attitudes toward correctional treatment were more likely to report adoption of EBPs.

The importance of organizational climate, such as support for innovation, quality services, or a performance orientation, has received mixed support in studies of practice adoption in juvenile settings. Using a sample of 250 youth serviced by 32 public children's service offices in one state, Glisson and Hemmelgarn (1998) found that a favorable organizational climate, as characterized by low conflict, cooperation, role clarity, and personalization, was the primary predictor of positive service outcomes for youth involved with these systems. Organizational climate was also a significant predictor of service quality. More recent studies from this research group have suggested that organizational culture rather than climate is a prevailing influence on staff practices and youth outcomes (Glisson et al., 2008; Glisson & Green, 2006).

Notably, cynicism regarding change, an attitude closely related to organizational climate, was assessed in the NCJTP research but was not found to be related to EBP use (Friedmann et al., 2007; Henderson et al., 2007, 2008). Anecdotally, cynicism is plainly evident among many longer-tenured line staff working in the agency in the present study (Young, 2004), and cynicism would be a predictable response to the "passive-defensive cultures" that Hemmelgarn et al. (2006) characterize as common in many juvenile justice systems: "These bureaucracies require extensive documentation, supervisory approval, and conformity against intense public criticisms, administrative sanctions, and frequent litigation" (p. 76). One possible explanation for the lack of findings regarding cynicism in the NCJTP research is that the respondents to this survey were facility directors in management positions, and had few direct, front-line responsibilities.

Given the difficult working environments of juvenile supervision staff, perceptions of leadership may play an important role in either attenuating or exacerbating these difficulties. Several juvenile justice staff in the present study expressed strong, supportive views of their immediate supervisor and described how they rely on that supervisor to buffer directives and demands from more senior administrators in the agency. Research on the organizational functioning of public- and private-sector businesses has demonstrated the importance of leadership style in workforce performance (Aarons, 2006); however, this factor has not been thoroughly explored in studies involving juvenile corrections or service delivery. Henderson et al. (2007) did not find a relationship between leadership style and the use of EBPs as reported by juvenile facility and program directors; analyses of NCJTP responses from adult facilities similarly found no effect for leadership (Friedmann et al., 2007).

The NCJTP study has also shed light on the importance of interagency collaboration in the provision of EBPs by correctional agencies (Fletcher et al., 2009; Lehman, Fletcher, Wexler, & Melnick, 2009; Taxman & Bouffard, 2000). Improving the collaboration and coordination between correctional and substance abuse treatment agencies is recognized as a way of improving the ability of drug-involved offenders to successfully complete probation or parole and transition into productive citizens (Osher, Steadman, & Barr, 2003; Taxman & Bouffard, 2000; Zhang, Roberts, & Callanan, 2006). The national Reclaiming Futures Initiative stresses interagency collaboration as a strategy for addressing the multiple needs of juvenile offenders, and systems integration has been identified as a centerpiece of their work with juvenile justice systems (Akers et al., 2007). The strength and scope of interagency networks was found to be predictive of EBP use in all three of the NCJTP studies that analyzed data from juvenile settings (Henderson et al., 2007, 2008, 2009). On the other hand, Glisson and Hemmelgarn (1998) found that interagency coordination had a negative effect on service quality and no effect on youth outcomes. They noted that staff involved in cooperative relationships with other agencies were more likely to assume the other agency would make decisions and take action with the youth, resulting in fewer services for youth. The value of interagency coordination may vary depending on whether one is examining organizational outcomes, such as the adoption of EBPs, or individual-level outcomes, such as youth involvement in services.

To summarize, the literature reveals several organizational factors that may affect adoption and implementation of service-oriented practices by juvenile probation and aftercare staff. The present study adds to this literature by examining four primary organizational characteristics—organizational climate, supervisory leadership, staff cynicism for change, and interagency coordination—as viewed through the lenses of staff supervising juvenile offenders in one eastern state. Analyses examined relationships between juvenile probation officers' self-reported use of supervision practices and their perceptions of organizational functioning within their offices. The survey respondents worked in 33 offices across the state; accordingly, we employed HLM to simultaneously assess the effects of staff- and office-level organizational characteristics on the practices outcome. At the staff level, we predicted that more positive perceptions of office climate and supervisory leadership and lower reported cynicism for change would be related to greater use of service-oriented practices by staff. At the office level, we predicted that greater connectedness with external agencies that serve juvenile justice youth would also be positively related to reported use of service-oriented practices. The findings from this study will contribute to a growing literature

that emphasizes the importance of strengthening organizational contexts to support the adoption and use of best practices in correctional environments.


# METHOD


The Juvenile Justice Agency (JJA) in this study has statewide jurisdiction over intake processing, detention facilities, dispositional placements, and community-based probation and aftercare services. The system consists of 33 field offices (at least one office in each county). A survey was administered in all field offices to describe and assess current assessment, treatment planning, referral, and monitoring practices of field staff in this JJA. The survey also consisted of measures to evaluate the agency's offices on organizational factors that influence the use of consensus-based supervision practices in juvenile probation and aftercare.

## SURVEY PROCEDURE

In December 2006, project staff administered surveys in each of the 33 JJA field offices. All staff, including probation officers, supervisors, social workers, resource specialists, addictions specialists, investigators, and court liaisons, were eligible for survey completion; only those in administrative roles were excluded. Surveys were administered to groups of staff members at each office, who were provided with food and beverages for their participation. Research staff described the project, handed out the paper-and-pencil surveys to field office staff, and remained available during the survey session to answer any questions. A few surveys were left behind at each office for those who were not in attendance at the survey session or could not complete the survey during the session. These surveys were either mailed back in a prepaid envelope or picked up by an assistant of the research team. Participation in the survey was voluntary, and all participant responses were confidential.

Overall, 544 staff members were eligible to complete the survey; of these, 445 (82%) completed surveys, including 353 who finished it during the office visit and 92 who mailed in the completed survey. The response rate was the same across 32 offices; in 1 office, only a 50% response rate was achieved. The lower response rate was in an office that was substantially larger than the typical field office. The overall response rate for the state excluding this office was 89% (396 of 446 eligible staff members).

Because of the focus on supervision practices with youth, only probation officers and their supervisors are included in the current study. Supervisors in this particular state system often carry a small caseload themselves in addition to overseeing officers; thus they are relevant for inclusion in the present analysis. The final sample for analysis is 393 staff members.

## MEASURES

*Organizational scales.* The survey instrument incorporated organizational measures used in prior research (see Fields, 2002, for a comprehensive discussion of organizational measures as well as evidence regarding the reliability and validity of scales). For the analysis below, some of the staff responses are assessed at the individual level, whereas others are treated as office-level characteristics (aggregated at that unit). Specifically, at the individual

level, we measured staff cynicism for change, organizational climate, and perceptions of their supervisor's leadership. At the office level, we measured integration with courts, the state mental health agency, and community-based service providers.

Staff cynicism for change was measured using a 5-item scale that indicates the extent to which the staff member is pessimistic about the organization's ability to change procedures or improve (Tesluk, Farr, Mathieu, & Vance, 1995). Participants were asked to respond on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) to items such as "Efforts to make improvements in this agency usually fail." The scale reliability was assessed using Cronbach's alpha, which was .899 for this sample.

Office climate reflects the degree to which individuals view their organization as open to change and supportive of new ideas. This variable was assessed using four subscales—Management Focus on Performance, Support for Development, Support for Innovation, and Communication—which were summed and divided by the total number of items (14). These scales were derived from the NCJTP project (Taxman et al., 2007; see also Orthner, Cook, Sabah, & Rosenfeld, 2003; Scott & Bruce, 1994). The Management Focus on Performance subscale indicates the extent to which staff are provided with performance measures and the use of performance measures to improve officers' practices. The Support for Staff Development subscale measures the extent to which staff are provided with information or opportunities to learn new skills related to their practices. The Support for Innovation subscale reflects the extent to which management promotes and encourages staff to be innovative. Finally, the Communication subscale assesses the effectiveness of both formal and informal communication channels. Each of these subscales was strongly correlated with one another; thus they were combined to create a single measure indicating a favorable organizational climate. This scale had high reliability—the Cronbach's alpha was .951.

Leadership of immediate supervisor was assessed with items adapted from questionnaires developed by Bass and Avollio (1995); Arnold, Rhoades, and Drasgow (2000); and Podsakoff, MacKenzie, Moorman, and Fetter (1990). This scale consisted of eight items that indicate the extent to which a staff member feels his or her supervisor "leads by example" and "provides well-defined performance goals and objectives." All items were measured using a Likert-type scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*); higher scores on this scale reflect more supportive leadership styles.[1] This scale demonstrated moderate to low reliability, with a Cronbach's alpha of .662.

Three separate scales quantify the office's interagency integration with the courts, the state mental health agency, and community-based service providers. These were summated scales, which totaled the number of activities out of a possible eight that the office shares with these agencies (e.g., training, funding for services, protocols for sharing youth information, etc.). These items were adapted from the NCJTP survey (Fletcher et al., 2009; Taxman et al., 2007). Whereas the cynicism, climate, and leadership measures were assessed at the individual level, these integration measures were aggregated and incorporated into subsequent analysis at the office level.

*Juvenile Service-Oriented Practice Scale (JSOP).* The JSOP is a summated scale of 10 practice measures that exemplify core components of effective youth supervision. Each item in the JSOP represents a practice that probation and aftercare officers may use with their caseloads. The practice items were created by the researchers and were pilot-tested with a small sample representative of juvenile justice staff prior to the survey administration. In

**TABLE 1:    Summary and Frequency of Juvenile Service-Oriented Practice Scale Components ($N = 393$)**

| Component | Criterion | % | n |
|---|---|---|---|
| Use of screening instrument | Uses at least 1 tool with at least half the youth | 45.3 | 178 |
| Use of assessment instrument | Uses at least 1 tool with at least some of the youth | 24.2 | 95 |
| Needs assessment | Assesses at least 4 of 8 items with most of the youth | 26.0 | 102 |
| Assessment referral | Considers at least 3 of 4 factors when recommending youth for formal assessment with most of the youth | 15.5 | 61 |
| Program referral considerations | Considers at least 5 of 7 factors when making referral decisions with most of the youth | 46.3 | 182 |
| Treatment plan components | Incorporates at least 3 of 4 procedures with most of the youth | 39.7 | 156 |
| Youth involvement | Includes youth in treatment planning most of the time | 60.8 | 239 |
| Family involvement | Includes families in at least 2 of 3 treatment planning processes most the time | 54.5 | 214 |
| Ensure placement | Uses at least 4 of 6 procedures with most of the youth | 67.2 | 264 |
| Improve treatment compliance | Uses at least 6 of 9 procedures with most of the youth | 35.4 | 139 |

*Note.* Mean JSOP score $= 4.15$ ($SD = 2.31$).

initial analyses of the scale and its components, we found that single, dichotomous items generally overstated staff use of the practice, as persons who occasionally or rarely employed the practice were included in the *used* group. A refined measure was developed, and this measure was verified by a review of 46 case files that showed considerable variance in staff use of practice elements and their application across the full caseload. These measures of each practice also allowed us to separate conceptually different steps that a juvenile justice agency can take to further implementation of these service-oriented supervision practices. Refer to Table 1 for a summary of the JSOP components as well as the frequency distribution of each practice for the current sample.[2] (Typical of community supervision responsibilities in many juvenile agencies, the caseloads of officers in the present study primarily comprised probation youth while also including some youth assigned to aftercare [also known as parole] supervision. To ease reading, most of the text that follows refers to probation officers, even though these staff may also supervise youth on aftercare.)

The first set of measures examines the extent to which probation officers use screening and assessment tools. Specifically, staff indicated whether they use at least one standardized screening tool and, in a separate item, whether they use at least one standardized assessment instrument. In addition to measuring use of these instruments, we asked probation officers to indicate the proportion of youth assigned to their office who are formally assessed in a variety of needs areas. The needs assessment item measures the extent to which probation officers assess youth needs above and beyond traditional factors, such as mental health and substance abuse (e.g., family and social supports, trauma, motivation, and strengths or skills). The assessment referral item reflects the extent to which probation officers consider factors other than judicial orders when making these decisions. For instance, this component accounts for whether probation officers refer youth for assessments on the basis of screening instruments or because of need demonstrated in the youth's case file. Probation officers may also consider a range of factors when making referrals to treatment programs. The program referral considerations item reflects

whether probation officers consider program appropriateness for individual youth when making referrals. To measure elements of the treatment planning process, the survey included several items that inquired about factors probation officers consider when making program referral decisions, sources they use to find appropriate providers, youth and family involvement in treatment planning, and the components incorporated into treatment service plans. The treatment service plan components item reflects the extent to which probation officers incorporate procedures for scheduling different services, overcoming potential barriers for treatment, making clinical reassessments, and modifying the plan. These procedures go beyond simply identifying services or needs that the youth may need addressed. Involving the youth and family in treatment planning is a widely recognized best practice. Youth involvement is indicated by whether probation officers involve youth in treatment planning meetings. The family involvement item measures whether probation officers involve family members in creating and updating the plan as well as determining services.

Regarding placement and monitoring, the JSOP includes two primary items. The first item evaluates the extent to which officers used multiple procedures to ensure placement in programming. These procedures include confirming the initial treatment appointment with the youth and family members, discussing treatment admission procedures with the youth and family, accompanying the youth and his or her family to the initial treatment appointment, submitting a referral packet to the service provider, and establishing a schedule for the treatment provider and the youth to report the juvenile's progress and attendance in treatment. The second item assesses whether officers use multiple procedures (e.g., graduated sanctions and incentives, behavioral contracts, youth and family participation) to improve a youth's treatment compliance. All together, these 10 items cover a broad range of best practices that fall within current research and consensus-based opinion on juvenile supervision.

*Control variables*. In understanding the effects of these organizational characteristics on the use of best practices, it is also important to control for person-level factors. Rogers (1995) contends that level of education and attitude toward change should affect whether individuals adopt innovative practices. Research in addiction treatment suggests that staff qualifications significantly affect the intent to adopt different type of EBPs; staff with graduate degrees are more likely to adopt innovations (Aarons, 2004; McCarty et al., 2007; McCarty, Edmundson, & Hartnett, 2006; Roman & Johnson, 2002). Accordingly, several control variables were included in the following analyses. At the staff level, we controlled for gender, educational level, job tenure, and whether he or she works in a special unit that supervises specific types of youth, such as females or sex offenders. The special units tend to deliver services and provide supervision customized to the needs of the youth. In addition, we controlled for the geographic location of the field office. Prior research has found that distinct cultures and climates are likely to emerge within work units in an organization when the agency is large and the units work independently under separate supervisors in different geographical locations (Trice & Beyer, 1993). To operationalize location, each office was classified as urban, suburban, large town, or rural on the basis of its population size, population density, and proximity to metropolitan areas.

**ANALYSIS**

To examine the relationships between the individual staff characteristics and organizational measures, Pearson correlation analyses were conducted to examine zero-order

correlations between all staff-related measures, organizational measures, and the JSOP. Then, regression analyses were conducted to examine the associations of individual- and organizational-level predictor variables with the JSOP. Because staff members were nested within offices, HLM analyses were conducted to control for potential correlations between responses within offices (Raudenbush & Bryk, 2002). When analyzed as independent observations, hierarchically nested data violate important assumptions of multiple regression models, typically resulting in downwardly biased standard errors and inflated Type I error rates (Kreft & de Leeuw, 1998). All of the models presented in this article were estimated using HLM, Version 6.05, using restricted maximum likelihood estimation.

We used a traditional approach to model building within the HLM framework (e.g., Aarons & Sawitzky, 2006; Raudenbush & Bryk, 2002). First, a base model was estimated including only the intercept and dependent variable in the model. This allowed for an assessment of the magnitude of the intraclass correlation (ICC) and office-level effects. Second, we added individual staff member characteristics at Level 1 to the model and assessed ICCs again, allowing an examination of the associations of individual-level predictors with office-level residual variance accounted for in each model. The individual-level model included staff gender, education, job tenure, whether the staff member works in a special unit, cynicism for change, and perceptions of office climate and supervisory leadership. Because of the high correlation between job tenure and age (0.767), only job tenure was included in the regression analysis. Third, organizational characteristics at Level 2 were included, and associations between individual-level covariates and organizational-level predictors with the JSOP were assessed. The Level 2 predictors included the office region and the interagency integration scales.[3] All continuous predictor variables were grand-mean centered.

## RESULTS

### DESCRIPTIVE STATISTICS FOR THE PARTICIPANTS

Overall, the analysis examines the responses of 332 (84.5%) probation officers and 61 (15.5%) supervisors. Forty-one percent ($n = 160$) of the study participants worked for a special unit. On average, staff had worked for the agency for 12.14 years. In terms of demographic characteristics, 215 (54.7%) of the participants were female, 197 (50.1%) were non-White, and the average age was 41 years old. Twenty percent had a graduate-level degree. Regarding geographic distribution, 3 offices (9%) were located in an urban region, 11 offices (33%) were in suburban locations, 8 offices (24%) were in large towns, and 11 offices (33%) were in rural regions. Table 2 presents descriptive statistics for the participants.

### DESCRIPTIVE STATISTICS FOR THE ORGANIZATIONAL MEASURES AND JSOP

Descriptive statistics for the JSOP, including its components, are presented in Table 1. The average score for the JSOP was 4.15 (scale ranged from 0 to 10). Generally speaking, staff reported lower use of practices in areas related to screening and assessment relative to

**TABLE 2:  Descriptive Statistics for Participants and Organizational Measures**

| Variable | % | n | M (SD) |
|---|---|---|---|
| Staff characteristics ($N$ = 393) | | | |
| Female | 54.7 | 215 | |
| Non-White | 50.1 | 197 | |
| Age (years) | | | 40.92 (11.89) |
| Graduate degree | 20.4 | 80 | |
| Position | | | |
| Supervisor | 15.5 | 61 | |
| Case manager | 84.5 | 332 | |
| Works in a special unit | 40.7 | 160 | |
| Job tenure (years) | | | 12.14 (10.50) |
| Cynicism for change (range = 1-4) | | | 2.93 (0.95) |
| Organizational climate (range = 1-4) | | | 3.15 (0.92) |
| Supervisory leadership (range = 1-4) | | | 3.65 (0.94) |
| Office characteristics ($N$ = 33) | | | |
| Location | | | |
| Urban | 9.1 | 3 | |
| Suburban | 33.3 | 11 | |
| Large town | 24.2 | 8 | |
| Rural | 33.3 | 11 | |
| Integration with courts | | | 3.10 (0.95) |
| Integration with mental health agency | | | 2.40 (0.98) |
| Integration with community-based service providers | | | 3.73 (0.93) |

treatment planning and program referrals. One quarter of the staff (24.2%) reported using a standardized assessment instrument. A higher proportion of staff reported using standardized screening instruments (45.3%), although this is still less than half. In terms of treatment planning and program referrals, more than half of the staff reported involving youth (60.8%) and family members (54.5%) in the process. More than two thirds (67.2%) reported using practices related to ensuring placement, yet only approximately one third (35.4%) used procedures to improve treatment compliance.

Descriptive statistics for the organizational measures are presented in Table 2. With regard to organizational measures at the office level, staff reported relatively low levels of agency integration with courts, the state mental health agency, and community-based service providers. Out of a possible 8 activities, on average, staff reported that their office engages in 3.10 shared activities with juvenile courts, 2.40 with the state mental health agency (SMHA), and 3.73 with community-based service providers (CBSPs).

**CORRELATION ANALYSES**

Several variables are significantly related to the dependent variable, JSOP scores. In terms of staff-level characteristics, working in a special unit ($r$ = .171, $p$ < .01), organizational climate ($r$ = .106, $p$ = .037), and supervisory leadership ($r$ = .162, $p$ < .01) are significantly and positively related to the use of service-oriented practices. On the other hand, the relationship between staff cynicism for change and the JSOP is negative and significant ($r$ = −.195, $p$ < .001). Gender, age, having a graduate degree, and job tenure are not correlated with use of these supervision practices. At the office level, all three measures of agency integration are positively associated with JSOP scores (courts, $r$ = .177, $p$ < .01;

SMHA, $r = .168$, $p < .01$; CBSPs, $r = .228$, $p < .001$). Geographic location is not correlated with the JSOP.

Some of the organizational measures also yield high correlations with one another. Cynicism for change has a moderate to high negative relationship with office climate ($r = -.598$). Also, office climate has a moderate to high positive relationship with supervisory leadership ($r = .505$). In addition, the interagency integration measures tend to be moderately correlated with one another. For this reason, it is important to monitor the direction and strength of relationships in the subsequent multivariate regression analysis for evidence of multicollinearity. (See Table 3.)

**REGRESSION ANALYSES**

According to the results from the unconditional model, the variance of JSOP scores between offices is significant, but this proportion is small (4%). Although most of the variation in service-oriented practices exists between staff members, this finding suggests that the use of HLM is still warranted for the subsequent analysis. Furthermore, when the Level 1 predictors are included in the second model, the between-office variance component is still moderately significant ($p = .06$), suggesting that the Level 2 predictors may enhance our understanding of the use of these supervision practices.

The full HLM model results are presented in Table 4. Results from these analyses indicated that several staff and office-level factors exert direct effects on the JSOP. At the office level, location was significantly related to the JSOP, where staff in urban offices ($b = 1.035$, $SD = 0.41$, $t = 2.53$) had significantly higher JSOP scores relative to those in suburban areas. In addition, staff in offices that have greater integration with community-based services providers were more likely to use service-oriented practices ($b = 0.240$, $SD = 0.13$, $t = 1.79$). Neither the court nor mental health agency integration measures were significant; however, it should be emphasized that with so few degrees of freedom at this level of analysis, power to find statistically significant relationships is limited.

At the staff level of analysis, those who worked in a special unit ($b = 0.772$, $SD = 0.23$, $t = 3.36$) and reported higher ratings of their supervisor's leadership ($b = 0.279$, $SD = 0.14$, $t = 1.97$) had significantly higher scores on the JSOP. And higher reports of cynicism for change was significantly related to lower scores on the JSOP ($b = -0.394$, $SD = 0.11$, $t = -3.50$), all else equal. Staff gender, education, and job tenure were not related to JSOP scores. Finally, perceptions of organizational climate were not significantly related to JSOP scores.

## DISCUSSION

The current study sought to identify organizational factors that influence the use of best practices among juvenile justice probation and aftercare officers. For the purposes of this study, these practices consisted of consensus- and research-based activities, such as the use of assessment, case planning, treatment and other service referrals, and monitoring procedures, that reflect a service-oriented approach to working with youth. We created an inventory measure of 10 service-oriented practices that reflected the level of implementation of these processes into the casework of staff supervising youth on probation and aftercare. By using multiple indicators of each practice, and assessing the extent to which staff reported

**TABLE 3:  Correlations**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. JSOP | — | | | | | | | | | | | | | | | | |
| 2. Female | .048 | — | | | | | | | | | | | | | | | |
| 3. Non-White | .140* | .109* | — | | | | | | | | | | | | | | |
| 4. Age | -.074 | -.239** | -.161** | — | | | | | | | | | | | | | |
| 5. Graduate degree | -.034 | .007 | .006 | .110* | — | | | | | | | | | | | | |
| 6. Special unit | .171** | -.012 | .081 | -.104* | .033 | — | | | | | | | | | | | |
| 7. Job tenure | -.055 | -.259** | -.207** | .767** | .006 | -.124* | — | | | | | | | | | | |
| 8. Cynicism | -.195** | .035 | .026 | .068 | -.073 | -.027 | .138** | — | | | | | | | | | |
| 9. Climate | .106* | -.128* | -.242** | -.034 | -.103* | .003 | -.084 | -.528** | — | | | | | | | | |
| 10. Leadership | .162** | -.067 | .009 | -.090 | -.045 | .067 | -.092 | -.289** | .505** | — | | | | | | | |
| 11. Urban | .078 | .020 | .428** | .130* | .051 | -.044 | .134** | .077 | -.325** | -.066 | — | | | | | | |
| 12. Suburban | -.090 | .116* | .065 | -.087 | .019 | .052 | -.060 | .154* | -.197** | -.004 | -.422** | — | | | | | |
| 13. Large town | .027 | -.075 | -.265** | -.056 | -.041 | .042 | -.060 | -.138** | .293** | .015 | -.286** | -.451** | — | | | | |
| 14. Rural | .003 | -.091 | -.257** | .043 | -.015 | -.070 | .002 | -.132** | .282** | .062 | -.222** | -.350** | -.237** | — | | | |
| 15. Courts | .177** | -.153** | -.073 | -.102 | -.089 | .102* | -.060 | -.080 | .117* | .042 | -.102* | -.077 | .135** | .061 | — | | |
| 16. SMHA | .168** | -.063 | -.083 | -.090 | -.059 | .067 | -.017 | -.044 | .181** | .050 | -.240** | .024 | .157** | .055 | .414** | — | |
| 17. CBSP | .228** | -.053 | -.042 | -.123* | -.059 | .088 | -.108* | -.068 | .166* | .028 | -.087 | -.087 | .164** | .024 | .464** | .437** | — |

*Note.* JSOP = Juvenile Service-Oriented Practice Scale; SMHA = State Mental Health Agency; CBSP = community-based service providers.
*p < .05 (two tailed). **p < .01 (two tailed).

**TABLE 4:   Hierarchical Linear Modeling Regression of Use of Juvenile Service-Oriented Practices on Staff and Office Characteristics**

| Variable | β | SE | t |
|---|---|---|---|
| Staff characteristics | | | |
| Female | 0.219 | 0.16 | 1.36 |
| Graduate degree | −0.067 | 0.29 | 0.82 |
| Works in a special unit | 0.772 | 0.23 | 3.36*** |
| Job tenure | −0.001 | 0.01 | −0.08 |
| Cynicism for change | −0.394 | 0.11 | −3.50*** |
| Organizational climate | 0.007 | 0.24 | 0.03 |
| Supervisor leadership | 0.279 | 0.14 | 1.97** |
| Office characteristics | | | |
| Location (Suburban suppressed) | | | |
| Urban | 1.035 | 0.41 | 2.53 |
| Large town | −0.081 | 0.37 | −0.22 |
| Rural | 0.062 | 0.39 | 0.16 |
| Integration with courts | −0.069 | 0.20 | −0.35 |
| Integration with mental health agency | 0.232 | 0.15 | 1.56 |
| Integration with community-based service providers | 0.240 | 0.13 | 1.79* |

$*p < .10.$ $**p < .05.$ $***p < .01.$

using it with youth on their caseloads, the inventory reflected an advancement on indicators employed in earlier studies in which practices were assessed dichotomously (as used or not used) and summed (Henderson et al., 2007; Knudsen & Roman, 2004).

Overall, the JSOP showed low to moderate use of these core practices, although there was substantial variation among the individual components. Less than half of the staff indicated that they use standardized assessment instruments, consider program appropriateness when making service referrals, and monitor treatment use with most of the youth on their caseload. Although not unexpected, these results are indicative of the influence of the surveillance-control model of supervision, which has dominated both juvenile and adult probation and parole in the United States. Efforts to reform juvenile justice are often hampered by the conflicting goals of probation—whether it should be law enforcement or social work (Taxman et al., 2004). Furthermore, given the research support behind client- and service-centered models, these results illustrate a need to clarify the mission of juvenile justice if the goal is to reduce recidivism among delinquent youth (see Akers et al., 2007; Glisson & Hemmelgarn, 1998).

The results from the hierarchical model illustrate factors related to a more service-oriented supervision approach in a juvenile justice environment. Two staff-related organizational variables were identified as significant predictors of the use of these supervision practices—organizational cynicism for change and perceptions of supervisory leadership. Staff who reported a lower degree of cynicism and greater supervisory leadership were more likely to report using service-oriented practices. Further implementation of these practices will require attention to these factors, particularly, a reduction in cynicism. That is, it appears that implementation will be hindered in an environment in which the staff hold cynical beliefs about the organization. Addressing factors that make staff question organizational values and leadership is particularly important in an arena where there is a constant tension between service and surveillance-control orientations. Resource support, such as training, team meetings, and on-site work teams, have been found to be important components

in the adoption of EBPs (Friedmann et al., 2007; Henderson et al., 2007, 2008) and may be useful in addressing organizational cynicism. The survey also revealed the importance of front-line supervisors in reinforcing the mission of the organization. Strong, well-respected supervisors were clear about the importance of a service orientation and promoted the integration of services into the supervision environment.

Working relationships with other agencies also had an impact on the use of service-oriented supervision practices. Integration with community-based service providers was significantly related to JSOP scores, although neither integration with the judiciary nor with the state mental health system were related in the multilevel models. Again, this suggests the importance of defining the services needed and of collaboratively working with the appropriate agencies to access and provide these services to youth. In this case, it appears that field offices that had better, more developed working relationships with community-based service providers sent the message that service use is important and that services are expected to be provided by office staff. This can be done through adoption of interagency agreements with community-based service providers where information sharing about youth, resource sharing, shared office space, and other visible coordination activities demonstrate that services are central to the agency's mission and goals.

Related to these working relationships is the presence of special units that are assigned to deal with the unique needs of girls or youth with specific behavioral problems, such as truancy, substance abuse, or anger and aggression. Working in a unit devoted to specialized services was associated with greater use of service-oriented practices—again, probably because of the clarity of mission associated with the special unit. These very visible units reinforce the importance of services in a way that generic, indiscriminant caseloads cannot achieve.

Somewhat surprisingly, organizational climate was not related to staff use of the core supervision practices, suggesting that the current climate is not independently associated with front-line service-oriented activities. Other factors, such as relationships with community-based providers, supervisory leadership, and presence of specialized units, appear to influence these supervision activities in a given office. The findings that staff characteristics, such as job tenure, education, and gender, were unrelated to the use of service-oriented practices also illustrate the importance of organizational factors.

This study is the first to examine organizational factors that may influence adoption and implementation of a service-oriented supervision model in juvenile justice agencies. The results show that even within one state, there can be substantial variation in reported practices among front-line workers. In assessing factors influencing practice implementation, it is important to clarify the organizational unit, as offices appear to vary in their congruence with the stated goals and mission of the larger juvenile justice agency. Differences in mid-level management skills, organizational supports, resources, and communication with the central office can have a dramatic impact on local organizational units.

Study findings suggest factors that juvenile justice agencies must address to advance integration of services within the fabric of the agency. For one, it is clear that staff who have more favorable ratings of their supervisors and who feel less cynical about their office's ability to change are more likely to use best supervision practices. Again, to cultivate use of these practices, officials may supplement training and resources for new service-oriented approaches with additional training and policies that facilitate leadership and decrease

cynicism. Perhaps by including staff in the adoption process, they can foster enthusiasm for implementing new skills and tools.

## STUDY LIMITATIONS

Although the results of this study point to potentially important relationships between organizational factors and the use of service-oriented practices among juvenile probation and aftercare staff, several factors found to influence practices in other human service organizations were not significant in this study. This may be attributed to the study's limitations. The JSOP measure is limited in that it did not encompass some important supervision components and principles, such as motivational interviewing and a strength-based focus with youth. Furthermore, this measure was based on staff-reported practices, and more objective measurement techniques may yield lower (or higher) levels of implementation. This study was also not able to address several factors at the organizational and individual levels that have been shown to affect staff behaviors in other human service organizations. Notably, we were not able to assess the organizational culture or training and funding resources. In addition, we were limited in the number of predictor variables that could be included at Level 2 because of the relatively small sample of offices in the state.

Further, the data used for this analysis were cross-sectional; thus we could not establish the causal direction of the relationship between organizational factors and use of service-oriented practices. Indeed, it is possible that the use of these practices within an office could lower cynicism, improve perception of climate and supervisory leadership, and drive the connectedness with external agencies. Causal relationships among these factors can be properly assessed only with longitudinal data or experimental methods.

## CONCLUSION AND FUTURE RESEARCH

Interest in the impact of organizational characteristics on the adoption and implementation of innovative practices has attracted growing attention among human service and correctional organizations, such as juvenile justice agencies. The present study establishes a relationship between certain organizational factors and staff use of service-oriented practices with youth on their caseloads. Given the nascent nature of research in this area, and the diverse structural and operational arrangements of juvenile justice nationally, there is much more to be learned simply by conducting similar studies in other states and localities. Research is also needed to evaluate the potential impacts of staff training and other directive efforts to encourage use of service-oriented supervision practices. An extension to the current study includes controlled research comparing the effects of training staff on a client-centered supervision model using a conventional 3-day training format, enhanced booster training, and in-house coaches on the outcomes of youth being supervised by these groups with a control sample of staff. Finally, research must move the field from consensus to an evidence-based knowledge on these practices. Future studies are needed to improve measurement of staff practices and to confirm the impacts of these supervision practices on youth service use, reductions in reliance on punitive sanctions, and improvements in delinquency outcomes with this population.

# NOTES

1. This leadership scale combines items that have been previously used to distinguish between transformation and transactional leadership styles (e.g., Podsakoff, MacKenzie, Moorman, & Fetter, 1990).

2. An appendix containing a more detailed description of each component, including an assessment of the component's reliability, is available from the corresponding author.

3. Because of the moderate to high correlation between office location and staff race (0.428), only office location was included in the regression analysis.

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