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The Impact of Training Interventions on Organizational Readiness to Support Innovations in Juvenile Justice Offices

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Abstract

OBJECTIVE—Clinical trials on technology transfer models are rare, even with the interest in advancing the uptake of evidence-based practices in social service agencies. This article presents the results from a trial examining different transfer strategies to assist juvenile justice caseworkers in using screening, assessment, and case planning practices to address mental health and substance use needs. Study findings examine factors that promote organizational readiness.

METHODS—A clinical trial was conducted examining the mpact of three post-training strategies: an external coach to build the social network of the justice office (build social climate), an external coach to educate staff (build skills and knowledge), and a control condition consisting of traditional management directives (directives to staff of agency priorities). All groups were exposed to a one day refresher course in motivational interviewing. The social network and skill building groups also attended an intensive three-day training followed by three on-site booster sessions over a 12 month period of time. Twelve juvenile justice offices (with their 231 juvenile justice staff) were assigned to one of three conditions. The study examined the impact of different transfer conditions on organizational readiness to implement the innovation of screening, assessment, and referral strategies.

RESULTS—External coaching targeting the social climate of the justice office to support innovations improved organizational readiness to change, regardless of office size. Coaching that targeted either the social climate or staff knowledge and skills both improved organizational readiness for change compared to management directives, but social climate coaching resulted in greater improvements in receptivity to change. No individual level features of case workers (e.g., age, gender, years of experience) significantly predicted organizational readiness to change. Unexpectedly, the skill and knowledge building approach did not perform any better than management directives only (no post training) efforts.

CONCLUSIONS—Organizational readiness has been found to be an important factor supporting agencies' adoption of evidence-based practices. Techniques devoted to attending to the social

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climate are critical to increasing organizational readiness. External coach facilitators can accomplish this through modest means (three post training booster sessions) that build internal expertise and resiliency in support of the change. This is a low cost method of preparing a low resourced environment such as juvenile justice agencies to use evidence-based practices.

The estimated 800,000 youth involved in the juvenile justice system have a higher burden of substance abuse and mental health disorders than the general adolescent population (Wasserman, et al., 2008). In response to these extensive needs, a screening→assessment→service coordination model is recommended by the Robert Wood Johnson Foundation's (RWJF) *Reclaiming Futures* initiative, which itself is based on research on strategies to address adolescents' unmet service needs (Binard & Prichard, 2008) (Drug Strategies, 2005; NIDA, 2006, 2009; NIC, 2004). This model relies on supporting evidence suggesting that detention-and community-based services are effective in reducing youthful offending behavior (Liddle, Dakof, Henderson, & Rowe, 2011; Wasserman et al., 2008). However, successfully implementing any change, specifically one that focuses on using evidence-based practices in juvenile justice settings, involves surmounting several organizational challenges, such as staff hesitancy to use standardized assessment instruments due to a lack of confidence in the tools, preference for using professional judgment over research-supported practices, and lack of familiarity with the service landscape (Young, Moline, Farrell, & Bierie, 2006; Taxman & Belenko, 2011). Similar to other science-to-practice gaps, individuals working in juvenile justice systems recognize the merits of using assessment instruments but often cite organizational barriers that limit their implementation (Taxman, Cropsey, Young, & Wexler, 2007; Young, Dembo, & Henderson, 2007).

Organizational strategies that focus on increasing administrative and staff support for evidence based practices have resulted in reducing rates of undesirable outcomes such as out of home placements (Glisson et al., 2010), but the science is slowly evolving on which implementation strategies may be the most effective in shaping efforts to improve the readiness for organizational change in service and justice settings. In fact, the pace of developing knowledge on how to modify organizational factors that can either enhance or impede EBP implementation lags far behind the discovery of effective interventions. More attention is needed to furthering the knowledge about how evidence-based practices and treatments can best be implemented.

The *Juvenile Justice Assessment Planning Referral Placement* (JARPP) study addresses this research gap through a randomized trial designed to assess the impact of three different training strategies to further the use of standardized assessment and case planning tools (i.e., assessment protocols) in juvenile justice settings. The randomized trial provides a framework for understanding the type of training efforts that are needed to support and sustain an organizational climate that is supportive of EBPs (i.e., the regular use of standardized assessment tools, case plans that target need behaviors, evidence-based treatments). The study compared three training models for implementing a standardized screening, assessment, and case plan service procedure in a large juvenile service agency. The first model (Social Networking) focuses on improving the social support among organizational members to promote the innovation, increasing staff comfort in using the innovation, and improving staff perception regarding the inherent risks in trying something new. This model relies on internal change agents to increase use of the protocol (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). The second model (Skill and Knowledge Building Expertise) focuses on educating staff on the effectiveness of assessment tools, as well as effective referral techniques to match youth to the most appropriate services based on the results of the assessments. The emphasis is on skill and knowledge development regarding assessment tools, case plans, and service agencies (the technological aspects). The

third model (Traditional Management Directive) involves a top-down approach to EBP implementation through management directives and ad-hoc staff meetings. The JAARP study assesses which of these approaches—social network, skill and knowledge development, and management directives—most affect staff perception of organizational readiness for change. The study hypotheses are that social networking and skill/knowledge building training efforts should have stronger impact on organizational readiness for change than management directives.

1. Technology Transfer

Translating research-supported assessment and clinical placement models to juvenile justice contexts is typically predicated on strong training models that are generally offered in short but intensive training sessions. However, research suggests that intensive multi-day training programs may be ineffective in changing standard practices (Georgenson, 1982), with around 10 percent of the knowledge obtained in training being used in practice (Goldstein, 1997). The failure to translate training into practice is attributable to several factors, such as knowledge decay, the inability to align the new information to existing business practices, and the practical realities of management structures and agency-level priorities that may interfere with the emphasis placed on new material. Recent systematic reviews on technology transfer methods (Aguinis & Kraiger, 2009; Burke & Hutchins, 2007) suggest that the innovation transfer process should consist of efforts to facilitate the stages of organizational change such as exploration, installation, adoption, piloting, and routinization or sustainability (seeFixsen et al., 2005; Liddle et al., 2002; Roman & Johnson, 2002; Simpson, 2002; Taxman and Belenko, 2011 for various discussions of models of organizational change).

Researchers have started to evaluate the effectiveness of implementation efforts in multisite trials, providing a glimpse of strategies that might facilitate transfer in real-world settings. These studies have focused on a variety of topics, including therapist (as well as supervisor and trainer) selection, training, certification, and supervision impact on a myriad of outcomes such as treatment fidelity, treatment outcome, staff turnover and subsequent training approaches for replacement staff (Baer, 2006; Garner, 2008; Miller, Sorensen, Selzer, & Brigham, 2006). Overall researchers have noted an array of effective procedures (Fixsen et al., 2005) but little or no formal assessment of how these procedures affect either the quality or fidelity of the intervention or the transportability in justice settings. However, there seems to be a high degree of consensus that effective transfer models should include three key components: (a) declarative knowledge (what to do), (b) procedural knowledge (how to do it), and (c) strategic knowledge (when to do it) (Burke & Hutchins, 2007). Further, the transfer process should involve staff (trainees) in a series of exercises that bridge cognitive and interpersonal factors to advance processing factual, cognitive, and behavioral information.

Recent studies have focused on understanding how staff attitudes and behaviors might affect their willingness to use innovations introduced in training sessions. Substance abuse treatment staff who are report a desire to change are more likely to be characterized as having a higher perception of need for changes in practice, viewing more external pressures for change, and having less access to formal training. And, in programs where there is a greater consensus among staff on the agency priorities and the commitment to using new materials, there is also a higher likelihood of staff following through to use the information presented in training (Courtney, Joe, Rowan-Szal, & Simpson, 2007). Another study found greater support for EBPs in substance abuse treatment programs when staff perceived a need for improving current practices, had access to the internet, experienced a greater degree of peer pressure for change, had more opportunities for professional growth, and worked in

organizations with a stronger sense of organizational mission and less organizational stress (Fuller et al., 2007). While these studies highlight important predictors of staff willingness to use materials learned in training sessions, they also point to the need for organizational commitment to the innovation. That is, the staff must believe that the organization is committed to the innovation and is willing to take risks associated with changing procedures and implementing new therapies. This is consistent with Rogers' (2003) emphasis on the underlying social structure of an organization taking steps to affirm the value of the innovations to the whole system.

Within juvenile justice agencies, Glisson and colleagues developed the ARC (Availability, Responsiveness, and Continuity) organizational model to address service barriers in organizational and community contexts in juvenile justice and mental health settings (Glisson, 2007; Glisson, Dukes, & Green, 2006; Glisson et al., 2008). The ARC model was tested in communities in Tennessee, where the emphasis was on using change agents to facilitate relationships between various service agencies to expand access to care. In ARC, the goals were to establish organizational tools (e.g., teamwork, goal setting, feedback loops), to articulate principles underscoring effective service delivery (e.g., mission-driven, results oriented), and to develop service provider behaviors and attitudes that support improvements. A recent implementation trial integrating the ARC organizational strategy with an evidence-based intervention (Multisystemic Therapy, MST) found that the ARC +MST experimental arm had fewer youth out-of-home placements than either the MST- or ARC-only groups. There was also evidence that MST was delivered with greater fidelity in the ARC+MST condition (Glisson, et al., 2010).

Emerging from the sparse research on adopting evidence-based practices is the need to better understand the models that advance staff utilization of innovations. Although research is limited, a broad conclusion can be drawn that implementation efforts must involve changes at the staff, management, and organizational system (e.g., climate) levels. In a systematic review of the transfer process, Burke and Hutchins (2007) found that the transfer process needs to affect the workers' readiness to change, perceived utility/value of the new practices, and workers' self-efficacy in implementing the new practices. In addition, the transfer process must be accompanied by clear goals and objectives, emphasize job relevance, set proximal goals for using the training materials, elicit participants' feedback, and provide ongoing reinforcement and remediation once the practices begin to be implemented. A supportive environment should focus on social networks of peers or colleagues that support new practices, opportunities to use the new knowledge, and support from leadership or management of the organization. Training effectiveness should not be viewed solely on the satisfaction with the training but whether the organization (both leadership and staff) supports implementing the innovation.

The JARPP study compared strategies designed to impact organizational readiness to change, specifically as it relates to the implementation of new evidence-based screening, assessment, and service referral protocol for justice-involved youth with mental health and substance abuse concerns. The study did not seek to improve use of a particular type of technique such as motivational interviewing, r therapy, or a specific instrument; instead the protocol focused on using standardized assessment information to guide referrals and placement of youth in appropriate community programs to address substance abuse and mental health issues. This study focuses on the techniques to impact organizational readiness to change. Prior research has shown that improvements in receptivity to change impact utilization of desired procedures (Taxman and Belenko, 2011). While the study trial was implemented in juvenile justice agencies, the findings are likely to be relevant to other social service agencies undertaking efforts to install EBPs in their operations. The study adds to an emerging literature on organizational change in justice and service agencies.

2. Experimental Methods and Procedures

This study examined the use of different post-training procedures to impact the readiness for change within a juvenile justice setting. The Juvenile Assessment, Referral, Placement, and Treatment Planning protocol (JARPP) promoted the use of standardized assessment tools and case planning to identify the mental health and substance use needs of delinquent youth and to increase access to appropriate community clinical services. The JARPP protocol included: 1) a series of standardized assessment tools that were adopted by the agency, 2) practice guidelines for treatment matching based on assessment results, and 3) referral procedures for specific service providers. The JAARP procedures focused on refined case management processes that staff did not routinely use. The emphasis of the training was to acquaint the staff to the JAARP protocol of screening→assessment→case planning through service coordination as part of routine practice.

The study focused on which post-training efforts affected the organization's receptivity to using the JAARP procedures. Post-training efforts are generally designed to reinforce goals highlighted in initial training sessions as well as to provide continuous "on the ground" learning. Training goals typically focus on knowledge enhancement and reinforcing the importance of the new innovation. Successful models typically incorporate methods designed to facilitate staff: 1) learning and rehearsing the skills over a period of time, with clear performance criteria (Baer, 2006; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004); 2) employing on-site experts and "champions" of the innovation to model and guide staff in the use of the skills (Fixsen et al., 2005; Ford et al., 2007; Rogers, 2003); and, 3) using booster sessions to address organizational contextual issues related to the specific stage of innovation implementation (Fixsen et al., 2005).

The study procedures were as follows. All staff in the agency participated in a survey regarding the use of screening procedures, assessment tools, referral preferences, and case planning processes. Survey results were used to select 12 offices to be in the study. All staff in the 12 selected sites was invited to participate in a one-day training session on motivational interviewing. Then sites were randomly assigned to one of three arms: social network, skill/knowledge building, and management directives (as a "usual practice"). Staff in the social networking and skill/knowledge building arms both participated in an intensive training session on the JAARP procedures and then three booster sessions provided by external facilitators with expertise in juvenile justice casework over 12 months. Organizational surveys were conducted prior to the intensive training and then at 6 and 12 months post the intensive training session. Further details are provided below.

2.A. Participants of the Study

Participants were 231 staff in the 12 juvenile justice offices where, 73 % were classified as case workers and another 17 % were managers, or front-line supervisors. On average, participants were 41 years old, most were female (58%), Caucasian (46%), and had bachelors degrees (70 %); 13% had masters degree. The average participant had been employed in the present agency for 11.52 years. The average caseworker supervised a mean of 20 youth on formal supervision and 4 youth on informal supervision.

2. B. Design and Procedures

Twelve juvenile probation offices were randomly assigned to participate in one of three organizational change strategies tested in this intervention: social network, skill/knowledge building, and management directives (as a "usual practice"). Institutional review for this study was received by two university boards. The hypotheses for the study were that the social networking and skills/knowledge development conditions would result in improved

staff attitudes towards the organization, increased perception that the juvenile justice organization was committed to the JAARP protocol as part of standard practice, and less cynicism about the innovation. Further, we hypothesized that the social network group would have better overall outcomes than either the skills/knowledge building group or management directives group (no post-training).

2.B.1. Baseline and Post-training Surveys—Organizational surveys were administered to the managers and staff in each of the 12 offices by research staff at baseline (prior to the motivational interviewing training) and then at 6 and 12 months after the intensive training sessions. Research staff went on-site to juvenile justice offices and offered lunch on these three occasions, during which surveys were collected. At follow-up, juvenile justice workers who moved offices (12%) were provided mailed surveys with self-address stamped envelopes. The resulting response rates were 92% at baseline, 87% at 6 months, and 90% at 12 months.

2.B.2. Universal Training—Like most agencies, a memorandum was provided to all participants that the agency wanted them to use the standardized assessment tools and case plan, and the emphasis was on developing case plans that were responsive to specific needs of each youth. The directive clarified agency procedures regarding the use of assessment tools, the importance of case planning, and the use of appropriate referral strategies. The overall goal was to increase service utilization by youth under community supervision. Participants in all 12 sites received a one-day session to review motivational interviewing concepts. The one-day motivational enhancement course was designed to refresh the individual caseworkers' skills in using open-ended questions (Miller & Rollnick, 2002) and in engaging the youth and their families in conversation conducive to making difficult changes. Motivational strategies have shown promise in justice settings to help motivate offenders to change their substance use and other harmful behaviors (McMurran, 2009).

2.B.3. Post-training Conditions—At the site level, participants were randomly assigned to one of 3 conditions, in the "Management directive" (control) sites, staff and manager participants in four sites received only the one day MI training and the above-discussed memoranda.

Participants in the remaining eight sites participated in intensive three day training on the JAARP protocol and then were assigned to receive one of the two experimental conditions (social networking or skill/knowledge building). The post-training booster efforts included three booster sessions, each was three hours in duration. The booster sessions were facilitated by external coaches with expertise in juvenile justice casework. The trainers of the intensive session were each assigned to one coaching approach—SN or KB—after the training session.

The intensive three day training was on JAARP—the screening→assessment→case planning through service coordination protocol (see the senior author for a copy of this training). The training covered the key components of declarative, procedural and strategic knowledge described above, and participants were involved in a series of role playing and case studies to rehearse the JARPP procedures (see Taxman, James-Andrews, & Yeres, 2009; Taxman, 2008). To facilitate the procedural and strategic application of the JAARP materials, trainees were grouped by office to allow each team to integrate JARPP concepts into their office procedures and to share information about key service providers within their local community.

Social Network Booster Sessions (SN group): The underlying framework was to develop more internal champions for the JAARP protocol to address comfortability in using and

more client-centered approaches in their case planning efforts. Within each office, the management and the external coach selected line staff to be designated as "JARPP specialists". Responsibilities of internal experts included meeting with the coach three times after the intensive training session. Experts were selected based on their interest in JAARP procedures and respect within the agency. The internal JARPP specialists worked with the external coach on developing a social network within the office to support the change process including being the "on-site" expert (go to person) on JAARP protocols. The meetings were focused on the questions that specialists had about their agency's priorities regarding referral services, the JAARP protocol, and the handling of daily pressures of being a juvenile caseworker (i.e. difficult youth and/or families, changing management priorities, judges and other system actors that had their own demands, etc.). The coach met with the specialists for the purpose of building a greater appreciation for JAARP, but also to demonstrate how to navigate the pressures related to a fast-paced, constantly changing juvenile justice setting. The goal of these meetings was to help the internal JAARP specialists become champions of JAARP procedures. The external coach went on-site with the specialists three times that year to discuss specific youthful offender cases. The JAARP specialists would solicit from the staff any cases that were challenging. At the booster session, the JAARP specialist led the discussion with the assistance of the external coach regarding the case and/or office-related challenges. Juvenile justice caseworkers were not expected directly to improve their skills but the technique was assigned to improve the commitment to the goals of the agency, with a focus on the JAARP protocol. Interviews and focus groups confirmed that specialists and staff found the social network (SN) process to address the social climate and contributing to a "how to do" (procedural knowledge) environment.

Skill/Knowledge Building Booster Sessions (KB group): A different external coach (who also co-facilitated the intensive three-day training) was assigned to four offices in experimental arm to offer booster sessions. The goal was to build knowledge and skills of the line staff in using the JAARP protocol. The booster sessions were essentially refresher courses on the core skills/knowledge provided in the intensive three day training. The goal was to increase the staff's knowledge and confidence in their knowledge about the EBPs (declarative knowledge) of the staff. Staff focused on skills such as motivational interviewing, using assessment and referral procedures, and communication strategies with youth.

2. C. Measures

Organizational Scales—The survey instrument incorporated several organizational items that measured staff perception of their office's resources and support, workplace climate, and integration with other agencies. 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 or improve procedures (Tesluk, Farr, Mathieu, & Vance, 2006). The scale reliability was assessed using Cronbach's alpha, which was .90 for this sample.

Four subscales administered in the National Criminal Justice Treatment Practices survey (Orthner, Cook, Sabah, & Rosenfeld, 2006; Scott & Bruce, 1994; Taxman, Young, Wiersema, Rhodes, & Mitchell, 2007) were used to examine organizational climate. The management *focus on performance* subscale indicates the extent to which staff is 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 is 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. All of the alphas were above .80.

Leadership of immediate supervisor was assessed with items adapted from questionnaires developed by Bass and Avolio (1994), Arnold, Arad, 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." This scale demonstrated acceptable reliability with a Cronbach's alpha of .66.

Comfort with Using Motivational Approaches was developed and adapted from Carroll, et al. manual on motivational interviewing (NIDA Blending Product, 2007; Farrell, et al., 2010). The scale consists of eleven items that measure the degree to which the caseworker self-reports the use of open ended questions, reflections, summaries, and engaging youth and families in the case planning experience. These components reflect emphasis on motivational strategies and not specifically on using motivational interviewing. The scale has a Cronbach's alpha of .71.

Staff-Agency Value Concordance—This eight item scales measures the congruence in values of staff and the agency (Caldwell, Chatman, & O'Reilly, 1990) such as priorities, how issues are addressed, the goals of the agency, and other factors that affect the demands on the staff. The scales alpha is .91.

Emphasis on Case Management Approaches—This is a summary scale of ten areas of case management practice used in the JAARP protocol such as use of assessment tools, use of placement tool, needs assessment procedures, referral techniques, program placement strategies, treatment planning, youth involvement in treatment plan, family involvement in treatment plan, placement criteria, and using treatment compliance strategies (see Farrell, et al., 2010 for a description of the tool). This tool measures the degree to which the individual engaged in these JAARP related protocols.

Socio-demographic control variables—Demographic variables include age, gender, racial background, years of experience, and number of degrees of juvenile justice caseworkers. Office-related variables consisted of office location (i.e., urban, suburban, large town, or rural), population size, population density, and proximity to metropolitan areas.

2.D. Analysis Plan

We analyzed change in individual case managers' perceptions of the organization using an extension of latent growth curve (LGC) modeling, multilevel LGC (MLGC; (Duncan, Duncan, & Strycker, 2006), which is designed to accommodate the nesting of multiple caseworkers (staff) working in 12 juvenile probation offices. MLGC modeling combines two analytic approaches. First, at the individual participant level, MLGC involves a basic LGC model in which individual-level change across measurement occasions is estimated in terms of growth components such as initial status (intercept), linear change (slope), and curvilinear change (quadratic). LGC modeling then aggregates individual change trajectories with respect to the mean and variance of each growth component. Second, the MLGC involves a multilevel analysis that is used to estimate the variance of intercept and slope components due to hierarchical nesting (i.e., caseworkers nested within juvenile probation offices). The analysis allowed us to identify the extent to which variation in organizational

functioning change trajectories were due to caseworker perceptions (within level variance) or the offices in which they worked (between level variance).

MLGC modeling using Mplus (Muthén & Muthén, 2007) proceeded in two steps. First, we tested a series of growth curve models, representing possible forms of growth (i.e., no change, linear change, curvilinear or quadratic change), to determine the overall shape of the caseworker change trajectories. These models included no covariates at the caseworker level (Level 1); however, to accommodate nonindependent data due to caseworkers working in the same office, we included office at level 2. Second, we added intervention condition along with other covariates—dummy codes representing gender and ethnicity, comfort with motivational interviewing techniques, and flexibility in considering referral options[1]--at Level 1 to the models to test the impact of type of post-training process (transfer strategy) on initial status and change over time. We also included office size (number of caseworkers in the office) as a Level 2 covariate based on results from Farrell, Young, and Taxman, 2010, which suggested that larger offices were associated with having more service resources in their region.

We used two approaches to detect intervention effects, which were tested in separate MLGC models. In the first approach, we collapsed the SN (social networking) and KB (skill/ knowledge building) experimental conditions and contrasted any intervention with the control condition to address whether any intervention impacted caseworkers' perceptions of their organizations' readiness to change more than the control condition. In the second, we dummy coded the three interventions into two dichotomous variables with SN serving as the reference category (Pedhazur, 1997). This approach allows us to isolate the intervention effects more specifically by examining whether either or both of the experimental interventions had a greater impact than the control. In the second approach, we collapsed the SN and KB conditions and contrasted any intervention with the control condition. Treatment effects were demonstrated by a statistically significant slope parameter, as tested by the pseudo-z test—calculated by dividing the coefficient by its standard error—associated with intervention condition.

Prior to conducting the MLGC analyses, we factor analyzed the organizational variables to produce factor scores, which served as our dependent variables in MLGC models. We did this because these variables all measured some aspect of organizational functioning, none of which we considered a primary outcome because research examining relationships between organizational functioning and service delivery is in its very early stages, particularly when it concerns the justice system (Taxman, Henderson, & Belenko, 2009). We factor analyzed the organizational variables using principal components analysis and direct oblimin rotation (delta = 0; see (Fabrigar, Wegener, MacCallum, & Strahan, 1999). We repeated the analysis at each of three time points. For the baseline data, a single-factor solution (eigenvalue = 3.96) explained 66% of the variance in the organizational variables, and the scree plot indicated a substantial drop in the magnitude of eigenvalues between the first and second factors. Each organizational variable was substantially correlated with the underlying factor, which we referred to as readiness for change (range = .70 [absolute value] to .93, see Table 1). As shown in Table 1, the results of the factor analyses conducted at the 6- (eigenvalue = 4.11, 68% of the variance) and 12-month follow-ups (eigenvalue = 4.12, 69% of the variance) were virtually identical. Further, we conducted multiple group confirmatory factor analyses to verify that the measurement of the readiness to change factor is invariant at the

[1]We examined other covariates as well, including years working with juvenile offenders, years working in the Department of Justice Services, age, educational level, and whether the case manager supervised youth on formal and informal probation, but none of these variables were related to baseline organizational functioning, or change over time, and therefore these variables were dropped from further consideration.

levels of factor loadings, item intercepts, and residual variances meeting Meredith's (1993) criteria for strict invariance. These analyses are beyond the scope of this paper but are available from the authors by request.

3. Results

3. A. Preliminary Analyses

Means and standard deviations of the organizational readiness to change factor scores are shown in Table 2 along with intraclass correlations. Results indicated that 18% of the variance in organizational functioning was attributable to setting (office) at baseline, 21% at the 6-month follow-up, and 21% at the 12-month follow-up, with the remaining variance at each follow-up due to individual differences among caseworkers. There were no differences between intervention conditions on the readiness to change factor at intake (F [2, 211] = 1.85, *ns*).

3. B. Multilevel Latent Growth Curve Modeling Analyses

Unconditional Models—Results of likelihood ratio tests for unconditional MLGC models (i.e., no covariates) established that quadratic Level 1 models[2] with no change at Level 2 (an intercept only model) fit the readiness to change trajectories [$\Delta\chi^2(1, N = 218) = 4.29, p < .05$] better than a linear slope at Level 1 (and no change at Level 2). Adding a linear slope at Level 2 significantly improved model fit [$\Delta\chi^2(3, N = 218) = 12.22, p < .01$], while adding a quadratic term at Level 2 did not [$\Delta\chi^2 (1, N = 218) = 0.41$, *ns*]. Results of these tests indicated that the best-fitting unconditional model was one in which readiness to change trajectories were modeled including intercept, linear, and quadratic growth components at Level 1 (caseworkers) and intercept and slope components at Level 2 (office).

Results of this model showed no significant variation in case workers' perceptions of readiness to change at Level 2 (i.e., between offices, standardized estimate = 0.01, SE = 0.01, *pseudo* z = 1.43, *ns*) or Level 1 (i.e., between individuals, standardized estimate = 0.01, SE = 0.02, *pseudo* z = 0.95, *ns*). However, case workers' baseline perceptions showed a trend toward differing between offices (albeit, not at the conventional level of $p < .05$; standardized estimate = 0.17, SE = 0.09, *pseudo* z = 1.89, $p = .059$) and significantly differed across individuals (standardized estimate = 0.65, SE = 0.08, *pseudo* z = 8.06, $p < .001$). With respect to average change, in general caseworkers perceived their organizations' readiness to change as trending toward decreasing over time (standardized estimate = −0.08, SE = 0.04, *pseudo* z = −1.90, $p = .057$).

Post-Training Intervention Effects—Regarding our first research question, whether social networking (SN) or skill/knowledge building (KB) experimental groups improved readiness to change over the control condition, we first examined intervention effects by collapsing the two training conditions and comparing them with the management directive (control) condition (intervention = 1, control = 0). We added this dummy coded variable to the unconditional model described above as a Level 1 covariate, along with the other covariates described previously. Case worker gender, ethnicity (African-American or other), comfort with motivational techniques, and referral considerations tended to be marginally associated with organizational functioning at baseline ($p < .10$). That is, African-Americans and males, staff who had more comfort with motivational techniques, and staff who preferred to use service referral options were all more likely to perceive their workplace as being more receptive to change at baseline than other staff. However, none of these

[2]Please note that the quadratic variance term was fixed to 0 to achieve model convergence.

descriptive or control variables predicted linear or curvilinear change over time. Intervention effects showed a nonsignificant trend toward decreasing linearly over time (intervention coefficient for slope = −0.23, *SE* = 0.12, *pseudo z* = −1.88, *p* = .060) and significant for the quadratic component of the model (intervention coefficient for quadratic = 0.13, *SE* = 0.05, *pseudo z* = 2.60, *p* = .009). Case workers in the SN and KB groups were more likely to show reductions in their readiness to change during the baseline and 6 month observational periods than staff assigned to the management directive (control group). In the 6 and 12 month follow-up, case workers in both experimental conditions reported higher levels of readiness to change compared to baseline, while those in the control condition reported reduced levels of organizational readiness.

Our next research question concerned which of the post-training conditions (i.e., SN, KB, control) was most effective in improving readiness to change. In this case, we used a dummy coding strategy in which we created two dichotomous variables with the management directive (control) group representing the reference category in both instances. Results indicated that the post-training intervention effects reported above were specific to the SN condition compared to the control condition (intervention coefficient for slope = −0.60, *SE* = 0.27, *pseudo z* = −2.22, *p* = .026; post-training intervention coefficient for quadratic = 0.69, *SE* = 0.29, *pseudo z* = 2.36, *p* = .018). Results comparing the KB condition with the control were not significant (post-training intervention coefficient for slope = -0.01, *SE* = 0.15, *pseudo z* = −0.03, *ns*; post-training intervention coefficient for quadratic = −0.24, *SE* = 0.31, *pseudo z* = −0.78, *ns*). In post hoc comparisons between the two experimental conditions, those in SN improved more between 6 and 12 months than did those in the KB condition. As stated earlier, both experimental post-training interventions reported an initial decrease in perception of organizational readiness to change between baseline and 6 months (post-training intervention coefficient for quadratic = 0.16, *SE* = 0.07, *pseudo z* = 2.37, *p* = .018).

Office Effects—Recall that we included office size as a Level 2 covariate to examine the extent to which it predicted changes in perception of readiness to change. Office size showed a nonsignificant trend toward improvements in perception in receptivity to change (size coefficient for slope = 0.001, *SE* = < 0.001, *pseudo z* = 1.92, *p* = .054) although larger offices tend to show more readiness to change over time.

4. Discussion and Conclusion

This study examined how different post-training efforts impact staff perception of the organization's readiness for change, particularly on agency receptivity to implement evidence-based assessment and referral services. Impact of post-training efforts on use of the JAARP protocol is the subject of an ongoing study. The present results do not consider the impact of different post-training efforts on youth outcomes. But, in another study we report (using logistic and Cox regression) on the results for 1,518 youth tracked for 12 months after the last booster training session; those results show that youth supervised in the SN condition show a pattern of reduced recidivism (re-arrest for new crimes and detention in secure facilities) compared to youth managed by offices in the KB or control conditions (Young, Farrell, & Taxman, 2012).

The importance of improving organizational readiness for change is a major theme in the literature regarding uptake of innovations in social service agencies (Fixsen, et al., 2005; Simpson, 2002; Lehman, et al., 2002; Taxman & Belenko, 2011). Building on the literature demonstrating the efficacy of external coaches or consultants working as change agents (Fixsen et al., 2005; Glisson et al., 2006) and the importance of combining training with post-training sessions (Joyce & Showers, 2002; Burke & Hutchins, 2007), the present investigation compared two styles of post-training efforts to standard practice of "top-down"

management directives. The social networking (SN) booster group relied on an external coach to build a supportive environment for the JAARP innovation, fostering the development of internal champions, helping case workers learn to manage their daily workload and external pressures, and then practicing the use of the JAARP skills. The knowledge/skill building (KB) post-training strategy focused on enhancing knowledge and skill expertise through refresher sessions using material from the original intensive training. Building knowledge and skills was based on the premise that staff might have experienced information overload in the intensive training session; booster sessions provided similar information over a period of time, thereby providing repeated exposure. Both interventions were compared to a management directive (control) condition involving no-post training booster experiences. The management directive control condition represented the traditional organizational scenario of a top down approach where staff are given directives that mandate the use of new instruments or case plans (work materials) but are not provided with specific guidance in determining how to integrate into daily work processes. The expectations were that both experimental conditions would outperform the traditional, no-post training approach. In contrast, we found that intervention effects were concentrated in the social networking (SN) condition that sought to create a supportive environment for the innovation. Unexpectedly, those in the knowledge building (KB) condition were not distinguishable from counterparts in the management directive (control) group. There were also changes over time in level of perceived organizational readiness--staff in both experimental conditions initially reported declines in perceptions of readiness for change, which were subsequently reversed between 6 and 12 month follow-up period. By 6-months post-follow-up, case workers in both experimental groups were more likely to their organizations were ready to change, while those the management directive control condition consistently reported their organizations were not ready to change. This curvilinear relationship may reflect that post-training booster sessions initially made staff more aware of barriers to change, due to the booster sessions. It appears that staff in the experimental arms gradually observed an organizational commitment to the change process. In another study focused on implementing evidence-based practices in an adult correctional settings, we observed the same pattern over time, where staff perception of change decreased shortly after the training, followed by overall increases in reports of correctional agency's readiness for change (Lerch, Viglione, Eley, James-Andrews, & Taxman, 2010).

Rogers (2003) and Fixsen, et al. (2005) both emphasize the importance of the social fabric of the organization as a critical component of successful diffusion and uptake of innovations. The social network influences the impression of the technology from the inception of the new idea through impressions of the added value, alignment with existing practice, and "costs" associated with retooling practice with the innovation. Building support for innovations involves more than the initial commitment by management or staff. In fact, organizational scholars recommend incorporating penetrating the social structures and networks to address the concerns of the staff as well as the practicalities of how the content would be implemented in each specific organization. The staff reaps both the benefits and losses associated with using the innovation, and ultimately are the ones responsible for determining whether the new practice(s) will be integrated into their work repertoires. Much attention is placed on using champions or opinion leaders early in training to garner support for implementing innovations; however, frequently little attention is paid to the processes that engage the social networks during the change process. Research emphasizes that there is a need to have change agents or coaches mobilized to assist the staff and agency in these processes (Fixsen et al., 2005; Glisson et al., 2010). The present work furthers previous research by demonstrating a relatively easy process of institutionalizing a change agent process *within* organizations. The JARPP specialists were identified by the management of the agency and assigned, along with existing duties, to become experts in the JAARP

innovation area and to be internal consultants with their offices. That is, the external coach worked within the agency to prepare other staff to be internal change agents.

Building the social networks within organizations also appears to produce a number of collateral benefits. First, the fact that individuals in management positions assisted in the identification of the JARPP specialists within their organizations signaled that management acknowledged that implementing the proposed protocols may have required expertise beyond their current capacity. In this sense, implementing the JAARP protocol led to capacity building as it ensured that staff devoted specific attention to a better understanding of the innovation, with the purpose of guiding others in how to use the protocol. Second, the process served to demonstrate to staff that management viewed the JAARP innovation as a new set of skills that required assisting staff to build he skills. The external coach reaffirmed management's commitment to the innovation by providing resources that were only available to the consultant. Finally, use of internal staff illustrated confidence in using existing staff to become internal champions for using the new procedures. In the long run, this strategy supports sustainability given the organizational commitment to the initiative.

The external coach who worked with the JARPP specialists (those selected in each organization) noted that building social networks required attention to other related organizational issues. Much of the time with the JARPP specialists was devoted to teaching staff time management skills; interviews with staff revealed that much of the resistance towards the innovation (in this case, the case planning and referrals) was a consequence of staff being pulled in many directions in their jobs. The emphasis on time management was noted as an important skill given the uneven, often chaotic, nature of juvenile probation work. The JARPP specialists identified many work-related skills with which staff need assistance, including stress and time management, conflict resolution skills (particularly conflict with supervisors/managers and external agencies such as service providers or prosecutors), and interoffice communication. The specialists then helped address each issue throughout the office. Related activities were devoted to identifying and understanding organizational concepts such as low productivity and high negativity, unclear messages from central administrators, and other common scenarios that needed attention. By having an interagency team, the specialists were able to implement specific problem-solving measures to handle these typical work scenarios.

This study was designed to identify what (if any) post-training efforts might best advance strategies to implement "best practices" regarding screening, assessment, and service referral for justice-involved youth. The link between organizational readiness and uptake of innovations has been established in prior studies (Taxman & Belenko, 2011). This present study's findings clearly identify that certain post-training efforts—specifically, those that develop strong social networks focusing on a climate supportive of innovations—are effective in enhancing staff perceptions of organizational functioning. Organizational readiness is not a static perception, but rather it can be influenced throughout the implementation process. Prior work in this area has not addressed the need for continued organizational commitment in developing procedural and strategic knowledge over time and the impact that this sustained commitment (along with implementation of specific strategies such as developing social networks) can have on improving staff perceptions of organizational functioning. In turn, favorable staff perceptions of organizational functioning have been found to enhance juvenile justice practices and youth outcomes (Glisson et al., 2010; Young, Farrell & Taxman, 2012). The combination of ongoing organizational commitment and favorable strategies to innovation implementation are more influential in changing staff perceptions than merely increasing knowledge about a technique or innovation, although such knowledge building efforts are the core of most current training efforts (Miller & Mount, 2001). For complex organizations, such as juvenile justice

agencies, this important lesson demonstrates the importance of helping staff learn to integrate the innovation into their work processes. It also signifies that post-training efforts are important in getting a stronger commitment to making the changes in work practices necessary to sustain best practices in the juvenile justice system.

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References

Aguinis H, Kraiger K. Benefits of training and development for individuals and teams, organizations, and society. Annual Review of Psychology. 2009; 60(1):451–474.

Arnold JA, Arad S, Rhoades JA, Drasgow F. The Empowering Leadership Questionnaire: The construction and validation of a new scale for measuring leader behaviors. Journal of Organizational Behvaior. 2000; 21(3):249–269.

Baer, RA. Mindfulness-based treatment approaches: Clinician ' s guide to evidence base and applications. Academic Press; 2006.

Bass, BM.; Avolio, BJ. Improving organizational effectiveness through transformational leadership. SAGE; 1994.

Binard, J.; Prichard, M. Model policies for juvenile justice and substance abuse treatment: A Report by Reclaiming Futures. Princeton, NJ: Robert Wood Johnson Foundation; 2008.

Burke LA, Hutchins HM. Training transfer: An integrative literature review. Human Resource Development Review. 2007; 6(3):263–296.

Caldwell D, Chatman J, O ' Reilly C. Building organizational commitment: A multifirm study. Journal of Occupational Psychology. 1990; 63(3):245–261.

Courtney KO, Joe GW, Rowan-Szal GA, Simpson DD. Using organizational assessment as a tool for program Change. Journal of Substance Abuse Treatment. 2007; 33(2):131–137. [PubMed: 17433861]

Drug Strategies. Bridging the gap: A guide to drug treatment in the juvenile justice system. Washington, DC: Author; 2005.

Duncan SC, Duncan TE, Strycker LA. Alcohol use from ages 9 to 16: A cohortsequential latent growth model. Drug and Alcohol Dependence. 2006; 81(1):71–81. [PubMed: 16006054]

Fabrigar LR, Wegener DT, MacCallum RC, Strahan EJ. Evaluating the use of exploratory factor analysis in psychological research. Psychological Methods. 1999; 4(3):272–299.

Farrell J, Young DW, Taxman FS. Effects of organizational factors on use of juvenile supervision practices. Criminal Justice and Behavior. 2011 (in press).

Fixsen, DL.; Naoom, SF.; Blase, KB.; Friedman, RM.; Wallace, F. Implementation research: A synthesis of the literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network; 2005.

Ford JH, Green CA, Hoffman KA, Wisdom JP, Riley KJ, Bergmann L, Molfenter T. Process improvement needs in substance abuse treatment: admissions walkthrough results. Journal of Substance Abuse Treatment. 2007; 33(4):379–389. [PubMed: 17499961]

Fuller BE, Rieckmann T, Nunes EV, Miller M, Arfken C, Edmundson E, McCarty D. Organizational readiness for change and opinions toward treatment innovations. Journal of Substance Abuse Treatment. 2007; 33(2):183–192. [PubMed: 17434708]

Garner, G. Careers in social and rehabilitation services. McGraw-Hill Professional; 2008.

Georgenson DL. The problem of transfer calls for partnership. Training & Development Journal. 1982; 30:75–78.

Glisson C. Assessing and changing organizational culture and climate for effective services. Research on Social Work Practice. 2007; 17(6):736–747.

Glisson C, Dukes D, Green P. The effects of the ARC organizational intervention on caseworker turnover, climate, and culture in children ' s service systems. Child Abuse & Neglect. 2006; 30(8): 855–880. [PubMed: 16930699]

Glisson C, Landsverk J, Schoenwald S, Kelleher K, Hoagwood KE, Mayberg S, Green P. Assessing the organizational social context (OSC) of mental health services: Implications for research and practice. Administration and Policy in Mental Health. 2008; 35(1–2):98–113. [PubMed: 18085434]

Glisson C, Schoenwald SK, Hemmelgarn A, Green P, Dukes D, Armstrong KS, Chapman JE. Randomized trial of MST and ARC in a two-level evidence-based treatment implementation strategy. Journal of Consulting and Clinical Psychology. 2010; 78(4):537–550. [PubMed: 20658810]

Goldstein, I. Training in organizations. New York: Brooks/Cole; 1997.

Joyce, BR.; Showers, B. Student achievement through staff development. ASCD; 2002.

Lerch J, Viglione J, Eley E, James-Andrews S, Taxman FS. Organizational Readiness in Corrections. Federal Probation Journal. 2011; 75(1):1–10.

Lehman WEK, Greener JM, Simpson DD. Assessing organizational readiness for change. Journal of Substance Abuse Treatment. 2002; 22(4):197–209. [PubMed: 12072164]

Liddle, B. Demographic dynamics and sustainability: Insights from an integrated, multicountry simulation model. Rostock, Germany: Max Planck Institute for Demographic Research; 2002. Retrieved from http://ideas.repec.org/p/dem/wpaper/wp-2002-039.html

Liddle HA, Dakof GA, Henderson CE, Rowe CL. Implementation outcomes of Multidimensional Family Therapy-Detention to Community: A reintegration program for drug-using juvenile detainees. International Journal of Offender Therapy and Comparative Criminology. 2011; 55:587–604. [PubMed: 20427547]

McMurran M. Motivational interviewing with offeners: A systematic review. Legal and Criminological Psychology. 2009; 14(1):83–100.

McReynolds LS, Wasserman GA, Fisher P, Lucas CP. Diagnostic screening with incarcerated youths. Criminal Justice and Behavior. 2007; 34(6):830–845.

Meredith W. MI, factor analysis and factorial invariance. Psychometrika. 1993; 58:525–543.

Miller WR, Mount KA. A small study of training in motivational interviewing: Does one workshop change clinician and client behavior? Behavioural and Cognitive Psychotherapy. 2001; 29:457–471.

Miller, WR.; Rollnick, S. Motivational interviewing: Preparing people for change. Guilford Press; 2002.

Miller WR, Sorensen JL, Selzer JA, Brigham GS. Disseminating evidencebased practices in substance abuse treatment: a review with suggestions. Journal of Substance Abuse Treatment. 2006; 31(1): 25–39. [PubMed: 16814008]

Miller WR, Yahne CE, Moyers TB, Martinez J, Pirritano M. A Randomized trial of methods to help clinicians learn motivational interviewing. Journal of Consulting and Clinical Psychology. 2004; 72(6):1050–1062. [PubMed: 15612851]

Muthén, LK.; Muthén, BO. Mplus: Statistical analysis with latent variables: User ' s guide. 5th ed.. Thousand Oaks, CA: SAGE Publications; 2007.

National Institute of Corrections. Implementing evidence-based practice in community corrections: The principles of effective intervention. Washington, DC: National Institute of Corrections; 2004.

National Institute on Drug Abuse. Principles of drug abuse treatment for criminal justice populations: A research based guide. NIH Publication No. 06-5316. Bethesda, MD: National Institutes of Health, National Institute on Drug Abuse; 2006.

National Institute on Drug Abuse. Principles of drug addiction treatment: A research based guide, second edition. NIH Publication No. 09-4180. Bethesda, MD: National Institutes of Health, National Institute on Drug Abuse; 2009.

NIDA Blending Team. Motivational Interviewing Assessment: Supervisory Tools for Enhancing Proficiency(MIA:STEP). Washington DC: 2007. Retrieved from http://www.nattc.org/explore/priorityareas/science/blendinginitiative/miastep/product_materials.asp

Orthner DK, Cook P, Sabah Y, Rosenfeld J. Organizational learning: A crossnational pilot-test of effectiveness in children ' s services. Evaluation and Program Planning. 2006; 29(1):70–78.

Pedhazur, EJ. Multiple regression in behavioral research: Explanation and prediction (3rd ed). Fort Worth, TX: Harcourt Brace College Publishers; 1997.

Podsakoff PM, MacKenzie SB, Moorman RH, Fetter R. Transformational leader behaviors and their effects on trust, satisfaction, and organizational citizen behaviors. The Leadership Quarterly. 1990; 1:107–142.

Rogers, EM. Diffusion of innovations. Free Press; 2003.

Roman PM, Johnson JA. Adoption and implementation of new technologies in substance abuse treatment. Journal of Substance Abuse Treatment. 2002; 22(4):211–218. [PubMed: 12072165]

Scott SG, Bruce RA. Determinants of innovative behavior: A path model of individual innovation in the workplace. The Academy of Management Journal. 1994; 37(3):580–607.

Simpson, BM. [Retrieved December 22, 2010] The knowledge needs of innovating organisations. 2002. Article, from http://strathprints.strath.ac.uk/4417/

Taxman; James-Andrews; Yeres. JAARP Curriculum. Fairfax, VA: George Mason University; 2009.

Taxman FS. No illusion, offender and organizational change in Maryland's proactive community supervision model. Criminology and Public Policy. 2008; 7(2):275–302.

Taxman, FS.; Belenko, S. Implementation of evidence-based community corrections and addiction treatment. Springer; 2011.

Taxman FS, Cropsey KL, Young DW, Wexler H. Screening, assessment, and referral practices in adult correctional settings. Criminal Justice and Behavior. 2007; 34(9):1216–1234. [PubMed: 18458758]

Taxman FS, Henderson CE, Belenko S. Organizational context, systems change, and adopting treatment delivery systems in the criminal justice system. Drug and Alcohol Dependence. 2009; 103(Supplement 1):S1–S6. [PubMed: 19423241]

Taxman FS, Young DW, Wiersema B, Rhodes A, Mitchell S. The National Criminal Justice Treatment Practices survey: Multilevel survey methods and procedures. Journal of Substance Abuse Treatment. 2007; 32(3):225–238. [PubMed: 17383548]

Tesluk PE, Farr JL, Mathieu JE, Vance RJ. Generalization of employee involvement training to the job setting: Individual and situational effects. Personnel Psychology. 2006; 48(3):607–632.

Wasserman GA, McReynolds LS, Whited AL, Keating JM, Musabegovic H, Huo Y. Juvenile probation officers' mental health decision making. Administration and Policy in Mental Health and Mental Health Services Research. 2008; 35(5):410–422. [PubMed: 18642071]

Young DW, Farrell J, Taxman FS. Impacts of Juvenile Probation Training Models on Youth Recidivism. Justice Quarterly. 2012

Young D, Dembo R, Henderson C. A national survey of substance abuse treatment for juvenile offenders. Journal of Substance Abuse Treatment. 2007; 32(3):255–266. [PubMed: 17383550]

Young D, Moline K, Farrell J, Bierie D. Best implementation practices: Disseminating new assessment technologies in a juvenile justice agency. Crime & Delinquency. 2006; 52(1):135–158.

Table 1

Factor Loadings for Readiness for Change Variables at Baseline, 6 Month Follow-Up and 12 Month Follow-Up

Variable	Baseline	6 Mo. Follow-Up	12 Mo. Follow-Up
Staff-Agency Value Concordance	.74	.76	.82
Climate for Learning	.94	.94	.93
Formal and Informal Communication	.91	.92	.90
Cynicism Toward Change	−.75	−.81	−.70
Supervisor Leadership	.60	.60	.71
Emphasis on Case Management Activities	.88	.89	.89

Table 2

Observed Sample Means and Standard Deviations for Readiness to Change Factor Scores

	Baseline	6 Month Follow-Up	12 Month Follow-Up
Training Condition	***M* (*SD*)**	***M* (*SD*)**	***M* (*SD*)**
Social Networking	−0.16 (1.10)	−0.15 (1.12)	0.07 (1.14)
Skills/Knowledge Building	0.04 (0.91)	−0.03 (0.83)	0.07 (0.82)
No Post-Training	0.14 (0.94)	0.19 (0.99)	−0.13 (0.98)
ICC	0.18	0.21	0.21

Note. M = Mean, SD = Standard deviation, ICC = Intraclass correlation coefficient