HHS Public Access

Author manuscript

Adm Policy Ment Health. Author manuscript; available in PMC 2022 June 10.

Published in final edited form as:

Adm Policy Ment Health. 2020 May ; 47(3): 410–426. doi:10.1007/s10488-019-00996-1.

Mixed methods analysis of implementation of Interpersonal Psychotherapy (IPT) for major depressive disorder in prisons in a Hybrid Type I randomized trial

Jennifer Johnson[1], **Maji Hailemariam**[1], **Caron Zlotnick**[2], **Fallon Richie**[1], **Joshua Sinclair**[1], **Adam Chuong**[3], **Shannon Wiltsey Stirman**[4]

[1]Michigan State University, Division of Public Health, College of Human Medicine, 200 East 1st Street, Flint, MI 48502.

[2]Butler Hospital and Brown University, 345 Blackstone Blvd, Providence, RI 02906; University of Cape Town, South Africa.

[3]Brown University, 700 Butler Dr., Providence, RI 02906.

[4]National Center for PTSD, Dissemination and Training Division, and Stanford University, Department of Psychiatry and Behavioral Sciences, 795 Willow Road (NC-PTSD 334), Menlo Park, CA 94025.

Abstract

This article describes a mixed methods evaluation of implementation of interpersonal psychotherapy (IPT) in the first fully-powered trial of any treatment for major depressive disorder in an incarcerated population. Assessments in this Hybrid Type I trial included surveys of prison providers and administrators (n=71), measures of feasibility and acceptability to prison patients (n=90), and a planned document review (n=460) to assess potential determinants of implementation. Quantitative and qualitative results indicated that IPT was a good fit for prisoners, and that prisoners and providers were enthusiastic about IPT. Providers were open to feedback, open to learning evidence-based practices, and committed to helping their clients. Limited treatment staff and variable supervision and collegial support may pose implementation challenges. For widespread prison implementation, scalable models for ongoing IPT training and supervision are needed.

Corresponding Author: Jennifer E. Johnson, PhD, Division of Public Health, College of Human Medicine, Michigan State University, 200 East 1st Street, Room 366, Flint, MI 48502, Voice: 810-600-5669 (external); Fax: 810-600-5609, Jennifer.Johnson@hc.msu.edu.

Disclosure of potential conflicts of interest: None of the authors have any conflicts of interest to report.

Research involving human participants: All procedures performed in this study were in accordance with the ethical standards of Brown University's Institutional Review Board (FWA 00004460), the regulatory bodies overseeing prison research in participating states, and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

Keywords

Implementation science; Prisons; Interpersonal psychotherapy (IPT); Major depressive disorder; Group psychotherapy

On any given day, United States (US) correctional facilities house 2.2 million individuals (Kaeble & Cowhig, 2018), many of whom have mental health problems. Major depressive disorder (MDD) is the most common serious mental illness in prison settings (Fazel & Danesh, 2002; James & Glaze, 2006). A national survey of state prisoners found that 23.5% met criteria for MDD within the past 12 months, three times the national 12-month prevalence (James & Glaze, 2006).

The World Health Organization indicates that major depression is the leading cause of suffering and disability worldwide. In-prison consequences of MDD can include dropout from correctional treatment programs (Brady, Krebs, & Liard, 2004; Hiller, Knight, & Simpson, 1999), rejection by other incarcerated individuals (Marcus, Hamlin, & Lyons, 2001), inability to assertively protect oneself, physical victimization, aggressive acting out (Blitz, Wolff, & Shi, 2008; Varese, Pelowski, Riedel, & Heiby, 1998), and increased suicide risk (Charles, 2003). In addition, once individuals leave prison, MDD increases risk of prison recidivism (Baillargeon et al., 2009). Therefore, it is important to know how to successfully implement evidence-based MDD treatments within prisons, settings with potentially unique and challenging implementation climates (Johnson et al., 2016; Taxman & Belenko, 2011).

Unfortunately, research guiding implementation of evidence-based mental health interventions in justice settings is sparse. This article reports implementation data from a Hybrid Type I randomized trial (Curran et al., 2012) of Interpersonal Psychotherapy (IPT) for MDD in two state prison systems (Johnson et al., 2016; 2019). The trial was the first fully-powered randomized MDD treatment trial in any incarcerated population. It examined whether a community-standard dose of an evidence-based MDD treatment could be delivered in a way (i.e., groups led by available prison counselors) that was inexpensive enough and improved outcomes enough to justify its use in prisons to decision-makers. Effectiveness results are reported in Johnson et al. (2019).

IPT was chosen because of its evidence-base in non-incarcerated populations (Elkin et al., 1989; Hollon & Shelton, 2001), its fit for the target population, its potential for uptake, and pilot data suggesting that it is acceptable and effective for MDD among incarcerated women (Johnson & Zlotnick, 2008; 2012). IPT's focus on addressing recent life stressors, such as grief, life changes, and conflict, is a good fit for incarcerated populations, who are faced with interpersonal conflicts, traumatic bereavement, and other disruptive life events at rates much higher than the general population (Keaveny & Zauszniewski, 1999). Furthermore, IPT does not require highly trained mental health providers (Bolton et al., 2003). Frontline, bachelor's-level prison counselors can adherently and competently conduct IPT (Johnson, Williams, & Zlotnick, 2015). This is an advantage because prison systems can often afford few mental health providers and task-shifting may increase access to care (Johnson et al., 2015; 2016). The current trial included both master's-level mental health

professionals and non-mental health specialists (such as bachelor's-level re-entry planners) as study counselors.

Results of the randomized effectiveness trial among 181 male and female prisoners indicated that IPT reduced depressive symptoms, hopelessness, and posttraumatic stress disorder symptoms, and increased rates of MDD remission relative to prison treatment as usual (TAU) alone (Johnson et al., 2019), making it the only MDD treatment for incarcerated individuals supported by evidence from a full-scale randomized trial. However, we did not find evidence that IPT was significantly better than prison TAU alone at improving in-prison functioning outcomes (enrollment in correctional programs, discipline reports, and aggression/victimization), which are important outcomes in prison settings. IPT was inexpensive ($575 per patient for established programs) relative to the typical cost for psychosocial MDD treatments in the community, but we did not observe cost-offsets for IPT (meaning that IPT was not cost-neutral; Johnson et al., 2019).

The current manuscript describes a planned mixed method analysis of additional factors (i.e., other than effectiveness and cost) potentially influencing implementation in prisons. The goal is to inform choice of future implementation strategies for IPT for depression in prisons. Although some of our assessments are specific to IPT, many are relevant to implementing evidence-based mental health treatments in prisons and jails in general, an important effort that is still in its infancy with limited evidence to guide it. Assessments included feasibility and acceptability of IPT to all stakeholders (including patients, providers, and administrators), surveys of providers and administrator attitudes, competencies, and perceptions of organizational readiness, and a planned qualitative document review of implementation and supervision process notes. The Consolidated Framework for Implementation Research (CFIR; Damschroder et al., 2009), which identifies potential determinants of implementation success including intervention characteristics, inner setting (i.e., agency/prison) characteristics, outer setting (i.e., outside the agency/sociopolitical) characteristics, and characteristics of individuals affecting the implementation, guided the evaluation. The fifth CFIR dimension (implementation processes) will be examined separately.

Methods

This Hybrid Type I implementation trial was approved by Brown University's Institutional Review Board (FWA 00004460) and regulatory bodies overseeing prison research in the participating states. The trial was registered at clinicaltrials.gov (NCT01685294). Study procedures are described in detail in Johnson et al. (2016). This manuscript is a mixed methods report of prospectively collected implementation data from the trial.

Participants and Recruitment

This study reports data from three sources. First, the study reports attendance and treatment satisfaction data from the 181 randomized prisoner participants. These participants were sentenced state prisoners ages 18 to 65 incarcerated in 3 women's facilities and in 3 men's medium security facilities in two northeastern U.S. states. Average daily census at the men's facilities ranged from 700 to 1400, and at the women's facilities ranged from 100 to 470.

Prisoner participants: (1) met DSM-IV-TR criteria for current non-substance-induced MDD; and (2) reported being likely to stay at their current facilities for at least 6 months, providing enough time to complete study procedures. Individuals who met lifetime criteria for bipolar disorder or a psychotic disorder other than MDD with psychotic features were excluded. Recruitment is described in Johnson et al. (2016; 2019).

Second, this study reports data from two sets of implementation surveys offered to all prison mental health and substance use providers (including those serving as prison study counselors), prison clinical supervisors, and administrators at participating facilities in the two state prison systems. Two separate provider/administrator surveys took place near the beginning (January 2012) and near the end (June 2014) of the trial, using two separate consent processes. Survey data was not intended to be part of a pre-post design, but rather to describe implementation barriers and facilitators at two different points in time. Therefore, some of the provider participants were the same across time and some were not (see Results section) due to turnover at the facilities and changes in roles. At each time, provider participants were recruited using announcements at prison provider meetings and through phone outreach using provider, supervisor, and administrator contact information from prison administrators. Our study staff approached potential participants privately by phone; those who agreed were included. Study staff explained the study, gave the providers a consent and paper survey to complete along with a self-addressed stamped envelope, emphasized the voluntary and confidential nature of study participation, and then followed up with study participants over the next few weeks to remind them to complete and mail their surveys. Study surveys included attitudes and competencies of all the providers in the system (including 8 who participated as IPT providers and others not involved in IPT), and therefore survey data yields information about provider and system capacities, attitudes, and system functioning potentially relevant to future implementation.

The final source of data from the study consisted of a systematic, planned document review of 100% of the existing documentation kept by the study team throughout the study period (2012 – 2014), in order to create a structured description of implementation as it occurred. A small subset (n = 8) of prison providers were providing IPT for the study at the participating prison facilities as part of the larger randomized trial; these counselors were being trained and supervised in IPT by study clinical supervisors (JJ and JN). Document review data sources included structured process notes of clinical supervision sessions (n = 359) kept by study clinical supervisors (JJ and JN), relevant email exchanges between the intervention team, prison management and prison study counselors (n = 46), minutes from study team and prison meetings (n = 18), internal memos (n = 10), and other files that documented implementation processes (official letters, training manuals and intervention goals; n = 27). To aid with the document review, structured supervision process notes kept by the study team included the following questions: “What IPT elements went well?”, “What challenges were encountered? What was recommended?” “Did the counselor drift from the protocol/use elements of another treatment?”, “How did the counselor respond to the feedback?” “Specific barriers/facilitators discussed at the facility, counselor, client, or state prison system level.”

Interventions

TAU.—Prisoner participants randomized to TAU were offered referrals to prison mental health staff for TAU. Nationally, TAU for MDD within prisons often consists of antidepressant medications (either tricyclics or selective serotonin reuptake inhibitors), with reasonable compliance (75–80%; Baillargeon, Contreras, Grady, Black, & Murray, 2000). Psychosocial interventions in prison are often psychoeducational and highly structured. IPT was not being provided in participating facilities other than through our study.

IPT + TAU participants received standard group IPT using the study treatment manual (Johnson et al., 2016) in addition to TAU. IPT was delivered using 20 90-minute group therapy sessions over 10 weeks with 4 individual (pre-group, mid-group, post-group, and maintenance) sessions. The individual sessions were used to prepare patients to use the group effectively and to keep group members focused on their interpersonal goals.

Supervision.—The study hired prison counselors as moonlighters to offer IPT. Counselors were employed at participating prisons, with at least a bachelor's degree and at least one year of experience working with incarcerated individuals. Study clinical supervisors (JJ and JN) were external to the prisons. Study supervisors provided study counselors a 1.5-day IPT training and then ongoing IPT supervision, consisting of weekly review of counselors' audiotaped IPT sessions and weekly individual phone consultation. TAU (including TAU offered by study counselors to non-IPT participants) was naturalistic and did not include supervision from study supervisors.

Quantitative Measures

Study measures assess outer and inner context and characteristics of the intervention and individuals affecting the implementation (Damschroder et al., 2009). Measures and timing of administration are shown in Table 1. The study team identified the most appropriate measures available at the beginning of the study to measure the targeted constructs. To reduce participant burden, quantitative measures were selected to broadly assess outer and inner context factors and the CFIR was used for the planned qualitative analysis and to guide integration of quantitative and qualitative results. Therefore, some quantitative scales assess constructs from multiple CFIR domains. Scales are listed with their primary domain.

Intervention characteristics.—Measures of ***feasibility and acceptability of IPT to prisoner participants*** included treatment attendance, completion (attending 18+ of 24 sessions, or all sessions if released early), and satisfaction (using the well-validated 8-item Client Satisfaction Questionnaire-Revised; CSQ-8-R; Larsen, Attkisson, Hargreaves, Nguyen; 1979) as well as reasons for termination. Treatment retention (i.e., attendance, completion, reasons for termination) and satisfaction are important markers of treatment feasibility and acceptability (Proctor et al., 2011).

Acceptability, relative advantage, relative priority, and compatibility of IPT to prison providers and administrators were assessed using the Stakeholder Acceptability Survey (SAS). Subscales included the Awareness and Concern (with subscales of Awareness, Concern, and Interest) and Rogers's Adoption Questions (with subscales of Relative

Advantage, Complexity, and Observability) measures from Steckler, Goodman, McLeroy, Davis, and Koch (1992). In Steckler et al., subscales of these measures had internal consistency reliabilities of 0.76, 0.72, 0.62, 0.88, 0.83, and 0.77 respectively. The SAS also included written open-ended questions assessing ease of delivering IPT, perceived helpfulness of IPT, and fit of IPT for the prison.

Inner setting.—*Organizational readiness* was evaluated using the Dimensions of Organization Readiness – Revised (DOOR-R) survey (Schoenwald et al., 2008). The DOOR-R is consistent with CFIR subdomains of learning climate, access to knowledge, networks and communication, tension for change, available resources, and patient needs and resources. The DOOR-R includes open-ended responses and Likert scales assessing the perceived importance of intervention characteristics for implementation, factors promoting and inhibiting implementation of new interventions, and overall organizational capacity. Subsections also ask about supervision practices, resources, and caseloads. DOOR-R responses were analyzed descriptively at the item level. The DOOR-R has been used in previous studies to obtain a comprehensive description of the capacity of mental health service systems (Schoenwald et al., 2008). Because the DOOR-R is long, to balance survey length, it was only administered at the end of the study.

Outer setting.—We also used DOOR-R items to assess the importance of outer setting factors (especially external policy and incentives) for implementation in respondents' facilities.

Characteristics of individuals affecting implementation.—The three scales described below are consistent with the CFIR subdomains of knowledge and beliefs about evidence-based practice, goals and feedback, individual perceptions of organizational culture (norms, values, and assumptions of individuals in the organization), and other personal attributes.

Prison provider and administrator attitudes toward evidence-based practices was assessed using the Evidence-Based Practice Attitude Scale (EBPAS-50; Aarons, Cafri, Lugo, & Sawitsky; 2012). The EBPAS-50 has 50 items scored from "0 = not at all" to "4 = very great extent" reflecting social service provider attitudes toward evidence-based mental health practices, and their openness to and interest in adopting those practices. EBPAS subscales are shown in Table 5. The EBPAS has good factorial validity, with factor correlations ranging from 0.01 to 0.56. Subscale internal consistencies range from 0.77 to 0.92 (Aarons et al., 2012).

Prison provider and administrator attitudes toward rehabilitation and punishment were measured using an established measure (the Attitudes Toward Rehabilitation and Punishment scale) adapted by Taxman from Cullen and Fisher (2000; Taxman, Cropsey, Melnick, and Perdoni, 2008). The scale has 12 items about respondents' perceptions of the best way to reduce crime, scored from "1 = strongly disagree" to "5 = strongly agree." Its subscales are shown in Table 6. Internal consistencies for subscales are 0.79, 0.82, 0.85, and 0.60, respectively (Taxman et al., 2008).

Provider/administrator competencies were assessed with the Competency Assessment Inventory (CAI; Chinman et al., 2003), which assesses the attitudes, knowledge, and skills needed to provide high-quality mental health care to individuals with serious mental illness (e.g., learns and respects clients' preferences about treatment, creates opportunities for clients to practice skills). Thus, this scale falls under CFIR's the Other Personal Attributes, and measure key provider attitudes and activities that may influence delivery of EBPs in a prison setting. The CAI assesses 15 provider attitudes and competencies on a scale from 0 to 100% competency. Subscales are shown in Table 7. Internal consistency for CAI subscales range from 0.67 to 0.93, with the exception of client preferences, natural supports, stigma, and team value, which range from .52 to .60 (Chinman et al.). All items correlate more strongly with their own subscales than with any other subscale, demonstrating good item discriminant validity (Chinman et al.). Most CAI scales have good internal consistency, test-retest reliability, and validity, and the CAI has been recommended as a useful tool for mental health care quality improvement efforts (Chinman et al.). Because the CAI is long, it was only administered at the beginning of the study.

Data Analysis

Quantitative measures were analyzed descriptively and interpreted in terms of CFIR constructs that may be facilitators and barriers of IPT implementation in the two prison systems.

Qualitative data analysis.—The approach to analysis was informed by framework analysis, a structured and systematic approach to management and synthesis of policy-oriented health services research (Gale, Heath, Cameron, Rashid, & Redwood, 2013; Smith & Firth, 2011). Framework analysis was chosen because: (1) the study involved large datasets that would have been difficult to manage using many other approaches, (2) multiple researchers (n=5) contributed to the process of coding and analysis, and (3) the approach enables a holistic description of the steps followed for analyzing the data (Gale et al., 2013; Srivastava & Thomson, 2009).

Documents were imported into NVivo software (Robins & Eisen, 2017) for coding. The CFIR (Damschroder et al., 2009) was used as the *a priori* framework during data reduction and analysis, with major codes reflecting intervention characteristics, inner setting, outer setting, and characteristics of individuals affecting implementation. Prior to coding, JJ and SWS created a comprehensive codebook with the CFIR dimensions, and defined subcodes relevant to the study. Four coders (JJ, JS, FR and MH) with previous qualitative experience and familiarity with the study topic conducted the coding. The first 10 files were independently coded and then the four coders met as a team to establish consensus. The rest of the data were coded separately by two pairs of coders who later held pair consensus meetings. Whenever discrepancies emerged during the coding process, the two coders discussed and reached agreement. The final consensus NVivo files from the two pairs of coders were integrated into the master file for analysis. Themes were organized around CFIR constructs, but the coding process allowed other themes that emerged to be captured. Quantitative and qualitative data were integrated using a QUANT-qual approach for contextualization, validation, and triangulation (Spillane et al, 2010; Palinkas et al.,

2013) to understand how contextual factors influence perceptions and implementation of IPT in prisons.

Results

At the beginning of the study, 66 providers and administrators from participating prison facilities were invited to complete the survey; 47 responded, for a response rate of 71%. At the end of the study, 61 were invited and 35 responded (57% response rate); 8 had been prison study counselors. These response rates are consistent with other paper-based surveys of justice providers and administrators (Taxman, Young, Wiersema, Rhodes, & Mitchell, 2007 had a 69% response rate) and better than the average response rate in meta-analyses of provider surveys (50%; Cho, Johnson, & VanGeest, 2013). About a third (11) of the respondents in the second set of surveys had responded to the original survey, and 24 were new respondents (41 of the 61 invited to the second survey were new relative to the first survey). This was due to adding new recruitment sites during the course of the study and to clinician turnover, which ranges from 30% to 60% in many publicly funded human services settings (Mor Barak, Nissley, & Levin, 2001). Of the 71 total unique respondents, 78% were female, 92% reported their race as “White,” and 6% identified as Hispanic. Respondents’ average age was 38 years (range 23 – 68 years). Most had master’s degrees (70%) or bachelor’s degrees (21%) as their highest degree. They worked as providers (80%), supervisors (17%) and administrators (13%; some respondents had more than one role). Respondents provided mental health treatment (78%), substance use treatment (56%), case management/discharge planning (66%), and “other” (21%; e.g. crisis intervention, risk assessment).

Table 2 highlights barriers and facilitators under each CFIR construct, identified from patient, provider survey, and document review data. Intervention and individual characteristics were largely perceived as facilitators. Outer setting factors and many aspects of the inner setting were perceived to be barriers to IPT implementation. Below, we describe findings in each area.

Intervention characteristics

Feasibility and acceptability of IPT to prisoner participants (attendance and satisfaction data). Ninety study participants were assigned to IPT. One study counselor became sick during the study and was not able to return IPT attendance records. Of the 67 participants for whom we have attendance records, the median number of sessions attended was 22 of 24 (mode of 23 sessions). The vast majority of participants (87%) completed treatment. Reasons for termination included being unable to attend (e.g., moving facilities unexpectedly, being sent to segregation, early release) and being shy or uncomfortable with other group members. As reported in Johnson et al. (2019), treatment satisfaction for IPT was high (27.5 on an 8 to 32 point scale) and was significantly higher than satisfaction with prison TAU. Therefore, IPT was feasible and acceptable to prisoner participants, indicating a potential implementation facilitator.

Acceptability, relative advantage, and relative priority of IPT among prison providers and administrators in general (SAS; n = 71). Prison providers and administrators viewed

treating MDD among prisoners as very important, were interested to very interested in evidence-based treatments for MDD, and were aware (but could be more aware) of evidence-based treatments for MDD. They disagreed that IPT would be hard for clinicians to learn. They slightly agreed that IPT would be more effective in treating MDD than what they were currently using and would improve the overall quality of mental health treatment at the prison. They were unsure if methods for assessing the impact of IPT on patients were readily available.

Acceptability, relative advantage, and perceived effectiveness of IPT among prison providers who were study counselors (assessed using additional quantitative SAS survey questions; n = 8) was high. At the end of the study, on a scale from 1 = "not at all" to 7 = "very," the 8 counselors who delivered IPT were very satisfied with IPT treatment, with the IPT training they received, and with IPT's helpfulness to their clients and to them as clinicians. They reported being very enthusiastic about IPT, very likely to recommend that a friend learn IPT, and very likely to continue to use IPT approaches outside research. They reported that it was moderately easy to easy to learn IPT, but very easy to use once they learned it, very easy to keep using it, very worth the effort it took to get trained, and that it very easily integrated into their other clinical care.

When study counselors were asked what they liked most about using IPT (in open-ended written responses on the SAS), they described enjoying seeing participants' symptoms improve and watching them work through issues. For some, the semi-structured (rather than highly structured) nature of IPT was new and positive. They noted that IPT allows participants to lead sessions, focusing on what they need to talk about, with counselors using reflective listening and helping participants talk about feelings with "*the perfect amount of guidance*." Counselors thought that because groups were focused on interpersonal issues and emotions, there was a stronger therapeutic bond within the groups (relative to non-IPT prison groups which were often psychoeducational) that facilitated treatment. Counselors described IPT as practical for patients, using readily available resources (in other words, relationships) and being solution focused with quick and tangible results. Finally, counselors noted that IPT has specific goals, and helps participants identify and express feelings and gain communication skills that they can continue to use.

Compatibility.—When completing the SAS, the 8 study counselors also provided written open-ended answers about ways in which IPT fit or did not fit the prison setting. They described IPT as a good fit because it allows participants to identify and process feelings in a safe, supportive environment inside a system that often is not supportive. Counselors said that incarcerated individuals need people to listen to them and benefit from having a safe area to talk about their feelings rather than being told what to do or how to feel. Counselors appreciated that IPT helps clients to make their own goals and conclusions rather than being entirely didactic. Counselors also saw IPT as a good fit because it is a solution focused, time limited treatment that educates patients about their depression and gives them skills, and the groups were "*simple but helpful*."

Study counselors also suggested that some prisoners may do better one-on-one than in groups, those who do open up in group lose support when the group ends, and

group members with challenging personality disorders could *"set groups back."* However, counselors also commented that the small study groups were better than the larger, mixed diagnosis groups that were often used in prison TAU due to limited staffing.

Our **document review** identified potential ***implementation facilitators*** included acceptability, relative advantage, and low to moderate complexity. The document review (largely consisting of structured supervision notes) reinforced the finding that IPT for MDD was positively perceived among prison study counselors and prisoner participants. The IPT groups were popular among prisoner participants because they provided a safe environment to express emotions and vulnerabilities which otherwise are mostly shut off in prison settings. They described the groups as "*the one place to vent*", saying that IPT enabled them process difficult feelings. As a result, counselors described the need for additional IPT groups or similar services.

> Women are making the women outside the group jealous… [because they] can be real, can get your feelings [out]. Other women are asking when the next group will start.
>
> Counselor ID 04

Counselors also welcomed the opportunity IPT provided to help group members address emotions and difficult life events, and expressed enthusiasm for the user-friendly intervention protocols and improvement they saw in the lives of prisoners. One of the counselors (counselor ID03) described her experience running her IPT group as "*a ray of sunshine*" in her day.

> She [Counselor ID01] said she is surprised how much she likes IPT – she's enjoying the group and 2 of the 3 women seem a lot better. [One participant is smiling and laughing for the first time that the counselor has ever seen].
>
> Supervisor ID 02

Intervention-related ***implementation barriers*** noted in the document review related to misunderstanding the nature of MDD and/or treatment. Counselors reported that there was misconception about the meaning of MDD. Some incarcerated individuals equated "major depressive disorder" with severity of depression and didn't sign up for the groups assuming that their problem was severe and would not get better. Despite psychoeducation provided as part of IPT, counselors mentioned a few group members who discontinued participation stating that they are "*not that depressed*". Moreover, counselors reported that some participants believed that talking about problems is not helpful, experienced emotional distress as other group members shared strong feelings and difficult issues, or had difficulty opening up in group settings.

> [Participant] is more comfortable 1-on-1, not as many people looking at her at once. Sometimes she gets nervous and doesn't know what to say… In the community, she doesn't go out except to get drugs, more of a homebody.
>
> Counselor ID 01

On the counselors' side, one area that took some practice was finding the balance between reflective listening and structure/therapeutic work while running a group.

> This is the second counselor that I told they could be slightly less structured, and then they got way too unstructured…
>
> Supervisor ID 01

However, once counselors learned this balance between reflecting listening and structure required for a semi-structured therapeutic approach, they reported liking it.

Inner setting characteristics

Organizational readiness (DOOR-R survey; n = 35). ***Learning climate, access to knowledge, networks and communication.*** Providers and administrators reported a wide range of supervision practices in their settings (from nothing to weekly to daily team triage). Most supervision time was spent on discussion of specific clinical cases; review of recorded sessions was rare, potentially making adequate supervision of a new treatment challenging. About two thirds (22 of 30) reported that their agencies provide formal training programs including policy, legal, and/or clinical trainings. Two thirds (22 of 32) reported that their agencies would reimburse for continuing education. Average item-level scores on the DOOR-R collegial support subscale were reasonable (5.3 = “slightly agree” on a 1–7 scale for items such as “I have colleagues in my treatment setting who are sources of advice and information in my clinical work”). However, respondents varied widely in their collegial support (within-provider averages ranged from 1 to 7). When they needed information or advice, respondents often turned to supervisors or more experienced peers within their settings, but some reported that they turned elsewhere because they did not have peers in their settings. Therefore, outside consultation may be needed to implement IPT in some facilities.

Treatment priorities and capacity (DOOR-R). Potential inner setting implementation facilitators included the priority that prisoners, providers, and administrators put on improving prisoner mental health and unmet mental health needs among prisoners. On a 1 to 7 scale from “not important” to “extremely important,” mental healthcare at respondents’ prison facilities was ranked as “very important” to individuals who were incarcerated (M = 5.6), “important” to the facility in general (M = 5.4) and to the state Department of Corrections (M = 5.0).

Tension for change and available resources (DOOR-R). Unmet mental health need metrics from respondents are shown in Table 3. In addition to data shown in Table 3, respondents strongly agreed that staff are overworked and/or do not have enough time to get done what they need to do. They agreed that they have difficulties adequately staffing their facility/location, that they do not have enough staff to meet the mental health needs of their facilities, and that they would significantly expand mental health programs or services if adequate staffing were available. They mildly agreed that their facilities have trouble affording and retaining highly competent staff. However, on average, they neither agreed nor disagreed that funding is a barrier to providing adequate mental healthcare or implementing evidence-based practices in their settings, or that staff lack access to or time for needed mental health training programs. A majority of respondents (69%) reported multiple attempts to obtain more resources for mental health by someone in their system, with a range of success (average of no impact to slightly unsuccessful, with 38% mildly to

moderately successful). Most outpatient caseloads ranged from 40 to 60, but some were as high as 300. Median frequency of individual visits was monthly, but it ranged from weekly to every 90 days. This often means that available interventions are group interventions.

Factors driving implementation of other programs in respondents' settings (DOOR-R). Participants identified 17 new clinical programs, services, or treatment models that had been started at their facilities in the last 5 years. In response to an open-ended DOOR-R question about how respondents defined "successful" when it comes to implementing a new program or service, the most common written answers related to decreases in self-injury, suicide attempts, outside hospitalizations, and assaultive behavior. Positive feedback from patients was also mentioned several times. In response to an open-ended DOOR-R question about what prompted their clinics to adopt their most successfully implemented programs, the most common written answers were: clinical needs in terms of volume (i.e., increased caseloads, looking for ways to reach more clients), clinical needs in terms of increasing rates of suicide attempts and self-injurious behaviors, evidence from other prisons or from the literature, and lawsuits related to mental health treatment accessibility or suicide rates at the prisons. In response to an open-ended DOOR-R question about the major factors that made it possible for their organizations to successfully implement the new program (i.e., implementation facilitators), the most common written answers related to inner context buy-in from the prison administrators and treatment staff. Less-common answers related to infrastructure (money, space), and to lawsuits and settlement agreements providing the money for the change. In response to an open-ended DOOR-R question about the major factors that made a difficult for the organization to implement the program (i.e., implementation barriers), written answers reflected: (1) shortages of space, time, money, and appropriately trained clinical staff, and (2) lack of inner-context buy-in, including from correctional staff ("*opposition of correctional staff regarding rehabilitative efforts that are intended to assist the offender population*"), from the intended providers, and to some extent from the facilities themselves in terms of finding time and space for the program to run.

Table 4 shows respondents' rankings of the importance of various factors in the successful implementation of clinical programs in general at their sites. Support from leadership and prisoner needs were ranked as most important. Support from other staff and logistical issues (i.e., feasibility, number of staff, and space) were next most important.

Document review.—During supervision, counselors described features of the prison setting primarily as implementation barriers, though a few facilitators were noted.

Implementation facilitators.: Groups that were held in locations outside incarcerated individuals' regular prison wing were more interactive as described below:

> Guys' group has been interesting and entertaining, because it's different – they tell [the counselor] more – there are no consequences; they have confidentiality, because it's not held in the mental health wing. That helps them trust [the counselor], it changes the dynamic.
>
> Counselor ID 01

Implementation barriers.: Structural characteristics (i.e., the physical and administrative architecture) of prisons often served as a barrier to implementation. Prisoners have limited control over their schedules. Late-running times for receiving store orders, late count, or facility lock-downs resulted in late arrivals to IPT groups or missed sessions. Unexpected delays at security entrances sometimes made counselors late to groups. In addition, finding quiet, stable and confidential locations to hold groups was often a challenge:

> The noise from next door church services were incredibly loud…. this was a particularly emotional session and the noise was a pretty big distraction.
>
> Counselor ID 02

Organizational climate and culture could pose additional barriers. In fact, study counselors sometimes used study IPT supervision for support in coping with their challenging work environments. Daily hassles included rigid bureaucracy, inconsistently applied rules, and arguments with correctional staff or administrators. Prison study counselors also confided in their (non-prison) study supervisors about misconduct of colleagues, harassment by other colleagues, and job-related stress and burnout. These more serious issues were present at a minority of the facilities, but they contributed to turnover: during the 3-year study, two prison study counselors quit their original prison positions abruptly (but kept offering IPT for the study as moonlighters).

Outer setting characteristics

The highest ranked DOOR-R items in terms of importance in the implementation of previous successful programs related to inner context. Outer context factors (such as public relations, the public, former offenders, consumer groups) were ranked lower in importance for implementation in this sample (Table 4). The most common answer to a written open-ended question about external pressures involved in the decision to implement was “lawsuits.” Prison provider and administrator respondents perceived prisoner mental health as only somewhat important to outer context stakeholders (local legislators and to the public; M = 3.6 and 3.4, respectively on a scale from 1 to 7).

Our document review revealed few outer setting barriers and no facilitators. One incident where a prisoner with a common, mild mental health condition killed someone after release resulted in the parole board denying parole on the basis of even mild mental health concerns. This made some incarcerated individuals reluctant to disclose mental health problems. Mental health awareness in general among the parole board and parole officers was reported to be a challenge:

> They don’t know about mental health, so they make really inappropriate recommendations such as denying parole on the basis of taking any psychotropic medications, requiring people to have Assertive-Community-Treatment level support before they leave prison – even if someone had just mild depression.
>
> Counselor ID 01

Parole requirements sometimes posed additional difficulty to building supportive social networks:

> People on probation or parole can't be around convicted felons. This makes relationships and support after release tricky, because a lot of their loved ones/ friends are felons.
>
> Counselor ID 04

Characteristics of individuals affecting implementation

Prison provider and administrator attitudes toward evidence based practices (EBPAS-50; n = 70) appeared to be implementation facilitators. Analysis of EBPAS subscale scores (Table 5) indicated that providers and administrators liked feedback and were open to learning new EBPs, especially if they, their clients, or colleagues liked it, and training was provided. They had low levels of endorsement for many common barriers to adopting evidence-based care (e.g., knowing better than researchers how to care for clients, perception that evidence-based practices [EBP] are too narrow, or feeling that they don't have time to learn anything new).

Prison provider and administrator attitudes toward rehabilitation and punishment (Attitudes Toward Rehabilitation and Punishment Scale; Table 6). Prison providers and administrators strongly agreed that the best way to reduce crime is rehabilitation. They disagreed with deterrence (making an example of prisoners), incapacitation (keeping prisoners off the streets), and Just Desserts (making sure prisoners get what they deserve) goals of incarceration. These attitudes toward justice system goals are compatible with IPT implementation.

Prison provider and administrator competencies (CAI; n = 45) are shown in Table 7. Providers were 77% competent in helping clients cope with triggering stressors, 73% competent in helping clients cope with being stigmatized, 71% competent in helping clients set and keep goals, and 66% competent in respecting clients' preferences regarding treatment, all skills needed for IPT. They were less competent (43%) at encouraging clients to choose, find, and use their own natural supports. Family education (56%) and family involvement (5%), skills potentially relevant for IPT, were more mixed, possibly because family involvement in treatment is difficult in prisons.

Our **document review** evaluated characteristics of patients, providers, and prison administrators influencing implementation.

Facilitators.—Among clients, trust in IPT groups sometimes formed more easily among participants who already knew each other. Study counselors mentioned that these preexisting relationships facilitated intervention delivery by shortening the time taken to build trust.

> The 4 women who attended were very open and talkative during both groups…. the women already [had] a level of comfort with each other which has enabled the group to feel like a safe space.
>
> Counselor ID 02

However, a few individuals chose not to participate in groups that included members with whom they already knew they were uncomfortable. Study counselors also mentioned that

individuals serving longer sentences (more than a few months) were more focused on using IPT and other prison services as opportunities for growth than those who had been incarcerated for less time.

Counselors' desire to help their clients, receptiveness to feedback, and commitment to the study population were also identified as potential implementation facilitators. Counselors were motivated to improve care for prisoners and were enthusiastic about IPT and about learning evidence-based treatments in general. In conversation, many prison administrators and providers bordered on desperate for approaches to more effectively meet massive systemic mental health needs (i.e., high tension for change).

Implementation barriers.—Study counselors described men's groups as being slower to open up and quicker to shut off their feelings than women's groups because the men's prison environments allowed less room for vulnerability. Counselors described many men as adopting a "tough personality" as a survival strategy while in prison. In most cases, counselors reported having to work harder to get the men's groups to engage with emotional topics. For example:

> ….he presented as a really depressed individual, but tries to put on a macho thing in front of the other guys….[It has] been hard to get back to the emotion in the group. [He] wants to keep this tough guy persona going, rather than do the real work…Sometimes I see other guys get upset with him for being all macho.
>
> Counselor ID 01

Counselors reported learning to be aware of potential shame in group when men connected to their emotions (such as grief), because some men in prison equated emotions with weakness.

In addition, some of the counselors without formal mental health training were comfortable when groups went as planned, but struggled with unanticipated situations or difficult participants.

> [Another study counselor] can sometimes get stuck when group members bring up material that isn't exactly on target and doesn't always know where to go with other clinical material that is brought up.
>
> Counselor ID 06

Discussion

Prisons represent a unique context for implementation of mental health treatments. This study describes perspectives of providers, administrators, and patients regarding select dimensions of implementation of IPT and other mental health treatments, obtained via surveys and written documentation. These perspectives may inform future efforts to implement IPT and other mental health treatments in prisons and perhaps in other justice contexts. They may also be useful in guiding the design and testing of implementation strategies that can be successful in these contexts.

Our results identified potential implementation facilitators that could be harnessed. Intervention-related implementation facilitators included IPT's acceptability to prisoner participants and to prison study counselors. Both groups were enthusiastic about IPT, describing it as a good fit for the needs of individuals in prison because it allowed for affectively-laden discussion of personal issues in safety, and it was time-limited, practical, and solution-focused. Potential inner setting implementation facilitators included unmet mental health needs among prisoners and the priority that prisoners, providers, and administrators put on improving prisoner mental health. Individual-level facilitators of IPT implementation included prison administrators and providers who were interested in EBPs for MDD, open to feedback and to learning new EBPs, are deeply committed to helping their clients, who viewed rehabilitation (vs. punishment) as the prisons' primary goal, and were competent in many of the skills needed to deliver IPT (such as helping clients set goals and respecting client preferences). The finding that respondents reporting liking feedback suggests that detailed clinical supervision, information on patient outcomes, and/or incentives may be useful in this setting. Prison providers and administrators also described large mental health needs in their facilities and limited resources to address them; some were motivated to the point of being almost desperate to improve services. There was high tension for change and high relative priority, which could be leveraged in future implementation efforts.

Perceived facilitators of implementation of *past* successful programs included a need for ways to reach more clients and evidence from other prisons or from the literature. Therefore, explaining IPT's evidence base in prisons and in general, and the fact that IPT can be led by non-mental health specialist counselors, may aid in implementation. Prison providers and administrators defined success of past programs in terms of positive feedback from patients, as well as decreases in self-injury, suicide attempts, outside hospitalizations, and assaultive behavior. IPT at least partially fits respondents' definition of a "successful" program. IPT showed high acceptability with prison patients and providers, and effectiveness at reducing depressive and PTSD symptoms among prisoner participants (Johnson et al., 2019). IPT also dramatically reduced hopelessness (which can be related to suicidality). However, we did not observe differences in suicide attempts or assaultive behavior (Johnson et al., 2019), possibly due to low base rates of these events in the study sample. Explaining that IPT resulted in positive feedback from patients, and decreases in depressive symptoms, hopelessness, and PTSD, may benefit future efforts to implement it in prisons.

Providers and administrators emphasized inner context buy-in from prison administrators, leaders and treatment staff as most important for past implementation successes. Next most important were prisoner needs, support of correctional officers, and logistical issues (such as number of staff and space). In contrast to some other previous summaries of the literature which have included perspectives of state policy-makers, agency directors, and directors of state Departments of Correction, including probation and parole (Taxman and Belenko, 2011), outer context factors were seen as less salient for implementation in this sample. It is unclear whether outer context factors were less relevant to implementation in these facilities or whether our survey respondents (who were all from the inner context) were less aware of outer context factors affecting implementation. In any case, results suggest that in

our sampled facilities, inner context buy-in is important (though perhaps not sufficient) for implementation of prison mental health practices.

We also identified potential barriers to IPT implementation in prisons to be addressed by implementation interventions. One intervention-related implementation barrier may be mental health stigma (i.e., prisoners not wanting to be labeled as having MDD, a factor which may also reflect inner and outer context factors). Another may be the need to help counselors who are used to highly structured interventions learn reflective listening and balance listening and addressing goals in a semi-structured intervention. Counselors were able to learn these strategies and reported liking them once they learned them, but mastery and comfort took time. Potential inner setting barriers include a shortage of treatment staff (which is why we developed a group intervention that could be used by non-mental health specialist counselors), challenges obtaining additional resources, stressful collegial relationships, space shortages, and varied organizational readiness. Potential outer setting barriers included rules that led some prisoners to deny mental health symptoms for fear they would not be paroled. Finally, although there was no differential effectiveness of IPT by sex (Johnson et al., 2019), study counselors stated that men's groups took longer than did women's groups to become comfortable discussing emotionally laden issues. Several of these barriers are also relevant to other mental health treatments in prisons. Addressing mental health stigma (especially in men's facilities and with parole boards), scalable provider training models, strategies to improve organizational and implementation climate, and financial strategies (to provide resources to hire additional providers, provide additional supervision, and reduce stress on existing providers), may help address these barriers.

Strengths of the current mixed methods evaluation include the prospective plan to collect implementation data, a novel and important research question (how best to implement an evidence-based mental health practice in the high-need but challenging prison setting), a mixed method, multi-faceted approach to examining implementation (including client data, provider and administrator data, and study team process notes), documentation of implementation processes as they were occurring in real time, and attempts to index constructs from the CFIR framework with existing rather than "home-grown" measures.

One potential limitation is generalizability. Although this trial took place at multiple prison facilities across two states, it is possible that other facilities in other states may have different implementation levers. A second set of potential limitations relates to the provider/administrator surveys. We did not compare answers of the 8 survey respondents involved in delivering IPT to other survey respondents or compare characteristics of those who did or did not respond to the survey. However, these were not part of our planned analyses. In addition, some of the respondents in the beginning-of-study surveys were the same and some differed from those in the end-of-study surveys. This was expected because provider/administrator surveys were intended to capture snapshots of attitudes in the facilities at two separate points in time for descriptive purposes and provider turnover was anticipated. Given that this was described transparently and no attempts were made to draw conclusions based on similarities or differences in the survey responses over time, this has no implications

for our conclusions. Finally, internal consistency reliability on 4 of the 13 CAI subscales is "fair" (0.52 – 0.60), but this has minimal or no implications for our conclusions.

Given the motivation and enthusiasm expressed by administrators, providers, and clients in this study, the primary IPT implementation task for the future may be finding scalable training and supervision models for resource-poor prison systems. In the current trial, ongoing supervision by the study team cost more than study counselor time to provide IPT (Johnson et al., 2019). We have had prisons reach out to us for IPT training because they were interested in IPT. One large system could afford a one or two-day initial training, but not ongoing consultation. Unfortunately, studies of implementation of other psychosocial interventions find that single workshops typically have little effect on provider competence (Herschell et al.). Therefore, efforts to implement IPT in prisons may benefit from examining scalable ongoing training models, such as the ECHO model (University of New Mexico, 2019), to provide centralized support and consultation for prison providers to learn IPT and other evidence-based practices. Such approaches can increase the availability of evidence-based interventions for underserved populations in low-resource settings.

Acknowledgments:

This work was supported by a grant from the National Institute of Mental Health (R01 MH095230; Johnson, PI). We would also like to acknowledge Marlanea Peabody, Collette Williams, Jen Kao, and Karen Fernandes, who helped to collect the data, and Dr. Jessica Nargiso who provided study supervision and kept process notes.

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Table 1:

Measures of facilitators and barriers of implementation of IPT for MDD in prisons

	Beginning of Study	Throughout Study	End of Study
Patient measures			
Treatment attendance and completion		X	
Reasons for termination		X	
Client Satisfaction Questionnaire (CSQ-8-R)		X	
Provider/administrator measures			
Stakeholder Acceptability Survey (SAS)	X		X
Evidence-Based Practice Attitude Scale (EBPAS-50)	X		X
Attitudes Toward Rehabilitation/Punishment	X		X
Competency Assessment Inventory (CAI)	X		
Dimensions of Organizational Readiness (DOOR-R)			X
Implementation process notes and documents		X	

Table 2:

Summary of CFIR dimensions, barriers and facilitators from quantitative and qualitative measures

CFIR dimensions	Barriers	Facilitators
IPT intervention characteristics	**Finding the right format (small-group, individual, large group) in a system where staffing is tight but trust can be low** Some potential participants (esp. men) did not want to be labelled as having MDD, did not believe that it helps to discuss problems Counselors used to highly structured treatments needed practice to learn to balance reflection and structure	**Feasible, acceptable to prisoner participants** **Prisoner participants were enthusiastic about IPT (a safe place to discuss real issues and emotions)** **High enthusiasm among study counselors who used IPT (a safe place to talk about emotions, time-limited, practical, solution-focused, effective)** When counselors learned to balance reflection and structure, they liked it and viewed it as beneficial to clients
Inner setting	Not enough treatment staff, treatment staff overworked Efforts to obtain more resources often unsuccessful Stressful working environment and difficult interactions with other prison employees led to provider turnover Organizational readiness (including supervision frequency and practices, collegial support) varied widely across facilities and programs Space, scheduling can be challenging	Unmet mental health needs Study counselors liked IPT and saw it as a bright spot in their challenging days Prisoner mental health is very important to prisoners, and important to facilities and state prison systems Individuals who are incarcerated can be drawn to something new or different
Outer setting	Prisoner mental health is only “somewhat important” to local legislators and the public Parole and probation requirements led some prisoners to deny mental health problems, could provide challenges to building social support	
Characteristics of individuals affecting implementation	Men’s prisons are less conducive to vulnerability than women’s prisons; it took men’s groups longer to open up (but there was no differential effectiveness by gender; Johnson et al., 2019). Counselors without formal mental health training learned IPT well, but it took longer	Prison administrators and providers: are interested in EBPs for MDD **are open to feedback and to learning new EBPs** are deeply committed to trying to help their clients view rehabilitation (vs. punishment) as the prisons’ primary goal are competent in helping clients set goals, cope with triggers, and respecting client preferences **very much want new and better strategies for treating their clients** Women’s groups and groups of individuals with longer sentences may form trust more quickly

Bolded = factors that emerged in both quantitative and qualitative results

Table 3:

Prison providers' perceptions of their facilities' mental health treatment capacity relative to mental health need (n = 35)

	M (range)
What is the waiting time for a mental health appointment at your facility (in days) for open mental health cases?	11 (1 – 30)
What is the waiting time for a mental health appointment (in days) for someone who is not an open mental health case?	12 (1 – 60)
Is there a waiting list in place at your facility for MH services?	23% yes
What percent of inmates requesting mental health services at your facility are turned down because there isn't space on facility caseloads for them?	15% (0 – 100%)
What percent of inmates who could use mental health services don't receive them because there isn't space on facility caseloads for them?	14% (0 – 80%)
How many more therapists would be needed to meet the mental health need at your facility?	4 (0 – 10)

Table 4:

Importance of factors in successful implementation of clinical programs in general at your clinical site (from the DOOR-R; n = 32)

Factors potentially influencing successful implementation (1 = not important, 4 = moderately important, 7 = extremely important)	Mean (SD)
Leadership support from director for the new treatment or service	6.4 (0.7)
Support for it by your management staff	6.3 (0.9)
Fit or match between the clinical needs of the populations served by your clinical site and the target population served by the new clinical program	6.1 (1.3)
Needs of the prisoner/probationer/parolee	6.1 (1.1)
Fit or match of it with the philosophy or mission of your organization	6.0 (1.0)
Staff qualifications	6.0 (1.2)
Potential impact on inmates' disruptive behaviors	6.0 (1.3)
Support for it by your clinical staff (therapists, psychiatrists, psychologists)	5.9 (1.5)
Feasibility	5.9 (1.3)
Support for the new service by particular individuals in the agency (other than the director) who are respected by others within the agency	5.8 (1.3)
Adequate number of staff	5.8 (1.3)
Availability of and support from staff already knowledgeable about the program	5.7 (1.2)
Availability of space	5.6 (1.7)
Description of the treatments / services that implied they were "evidence based" or "scientifically tested"	5.5 (1.4)
Support for it by agencies with which your organization has contracts	5.5 (1.8)
Group consensus on willingness to implement	5.5 (1.1)
Available resources	5.5 (1.6)
Time required to implement	5.5 (1.5)
Amount of training required	5.5 (1.4)
Potential impact on recidivism	5.5 (1.5)
Policies and regulations	5.5 (1.5)
Fit or match of it with the techniques or therapies already used by your staff	5.4 (1.2)
How it impacts the current routine in this facility	5.4 (1.7)
Inner context individuals (clinicians, unions, correctional officers, parole/probation officers, administrators, medical directors)	5.2 (2.0)
What other facilities are doing/have done	5.1 (1.5)
Fit or match of it with the clinical supervision practices already in place	5.1 (1.4)
Fit or match of it with the clinical training practices already in place	5.0 (1.6)
Cost of implementation	5.0 (1.9)
Fit or match of it with the administrative training already in place	4.7 (1.6)
Support for it by clients of your clinical site	4.7 (2.0)
Support for it by accreditation agencies	4.6 (2.0)
Financial support	4.5 (2.2)
Level of administrative burden	4.4 (1.7)
Support for it by the relevant public agency (i.e., mental health, child welfare, health, juvenile justice, education)	4.2 (2.1)
Compatibility with existing equipment and technology	4.0 (1.7)
Affiliated treatment providers/agencies	3.8 (2.0)

Factors potentially influencing successful implementation (1 = not important, 4 = moderately important, 7 = extremely important)	Mean (SD)
Government and community agencies (state and local governments)	3.6 (2.0)
Political pressures from lawmakers and the public	3.5 (1.9)
Fiscal benefits from adoption of it (e.g. ability to bill Medicaid)	3.4 (2.4)
Compatibility with current Management Information System	3.4 (1.8)
Public relations implications	3.4 (1.7)
The public (such as victim advocates, lawsuits, media coverage)	3.4 (1.8)
Former offenders (such as advocates, lawsuits)	3.3 (2.0)
CJ agencies (including judges and attorneys)	3.2 (2.1)
Communications from advocates	3.0 (1.6)
Support for it by consumer groups in your county	2.3 (1.5)

Table 5:

Attitudes toward Adopting Evidence-Based Mental Health Treatments (EBPAS-50)

Subscale	Meaning	Beginning of Study (n = 47) M (SD)	End of Study (n = 34) M (SD)
Feedback	I enjoy getting and benefit from feedback on my job performance	3.54 (0.65)	3.50 (0.51)
Appeal	I would adopt a new practice if it made sense to me and if I had colleagues using it who were happy with it	3.45 (0.60)	3.46 (0.56)
Fit	I would adopt an evidence-based practice (EBP) if I could choose it and if my clients wanted it	3.35 (0.60)	3.50 (0.43)
Organizational support	I would learn an EBP if continuing education, training, or ongoing support were provided	3.22 (0.91)	3.11 (0.82)
Openness	I am willing to try new types of treatment	3.16 (0.65)	3.26 (0.68)
Requirement	I would adopt a new treatment if it was required by my supervisor, agency, or state	2.89 (1.07)	3.07 (1.03)
Balance	Therapy is both an art and a science	2.76 (0.63)	2.62 (0.65)
Job security	Learning an EBP will increase my job security and competitiveness for a new job	2.29 (1.16)	1.70 (1.28)
Monitoring	I prefer to work without being monitored	1.29 (1.18)	0.81 (0.98)
Divergence	I know better than researchers how to care for my clients	1.17 (0.67)	0.90 (0.58)
Limitations	EBPs are too narrow or keep me from addressing my clients' needs	0.72 (0.82)	0.48 (0.69)
Burden	I don't have time to learn anything new	0.70 (0.75)	0.47 (0.59)

0 = not at all, 1 = to a slight extent, 2 = to a moderate extent, 3 = to a great extent, 4 = to a very great extent

Table 6:

Attitudes toward Rehabilitation and Punishment

Subscales: The best way to reduce crime is to use…	Beginning of Study (n = 47) M (SD)	End of Study (n = 35) M (SD)
"Rehabilitation" as a goal of incarceration	4.68 (0.85)	4.87 (0.26)
"Deterrence" by making examples of prisoners	2.07 (0.85)	1.57 (0.72)
"Incapacitation" to keep prisoners off the streets	2.17 (0.78)	1.90 (0.76)
"Just Desserts" to make sure prisoners get what they deserve	1.71 (0.81)	1.36 (0.58)

Items are rated on a 1 to 5 Likert scale (from 1 = strongly disagree to 5 = strongly agree)

Table 7:

Skills and knowledge in treating serious mental illness (SMI) – Competency Assessment Inventory (n = 47)

Subscale	Meaning	Mean % competency M (SD)
Stress	Helps clients understand and cope with stressors that trigger deterioration	77 (22)
Stigma	Works with clients to cope with being stigmatized	73 (15)
Goal functioning	Assists clients in acquiring the skills needed to set and keep their chosen goals	71 (24)
Client preference	Learns and respects clients' preferences regarding treatment	66 (15)
Team value	Provides services as part of a coordinated treatment team	64 (15)
Evidence-based practice	Perceives evidence-based practices as effective for their clients	63 (18)
Holistic approach	Helps clients achieve functioning across life domains	60 (16)
Medication management	Teaches clients symptom and side-effect self-monitoring skills	59 (20)
Community resources	Enough employment, self-help, and rehabilitation resources exist in the local community so that shortages do not get in the way of client functioning	58 (17)
Family education	Feels confident educating family members about mental illness and treatment options	56 (25)
Optimism	Assesses the degree to which providers believe that their clients will improve and have positive outcomes.	48 (13)
Rehabilitation	Practices professionally accepted psychiatric rehabilitation	47 (13)
Skills advocacy	Creates opportunities for clients to practice life skills	44 (20)
Integration/natural supports	Encourages clients to choose, find and use their own natural supports (including AA, hobby groups, and others)	43 (19)
Intensive case management	Helps clients obtain services and housing	16 (14)
Family involvement	Involves family members and helps them cope effectively	5 (12)

* subscale scores are on a scale from 0 = absence of competency to 1 = complete competency