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Integrating Psychotherapy Research with Public Health and Public Policy Goals for Incarcerated Women and other Vulnerable Populations

Jennifer E. Johnson

Brown University, Providence, RI

Abstract

In this article, I review my research applying interpersonal treatments and interpersonal principles from psychotherapy for major depression and substance use to broader public health goals for incarcerated women and other vulnerable populations. A public health focus has led me to expand the boundaries of psychotherapy research to include partners such as prisons, parole officers, and bachelor's level providers; behaviors like risky sex; service delivery challenges; and ultimately to research with an eye toward informing policy and advocacy. A public health perspective provides context and rationale for conducting sound psychotherapy research; the combination of public health and psychotherapy-specific perspectives can lead to novel research.

Keywords

Therapeutic alliance; interpersonal relationships; interpersonal psychotherapy; prisoners; psychology of women; addiction; major depression

Psychotherapy research is part of a larger research effort to improve public health, which also includes pharmacotherapy research, prevention research, epidemiology, research to improve the efficiency and effectiveness of health systems, dissemination and implementation research, and public policy research and advocacy. Working in a medical school has heightened my awareness of the need to take a public health perspective in framing research questions. This perspective focuses research so that answers can best contribute to reduced disease (including mental illness), reduced disease burden, and improved functioning across populations, especially those which are vulnerable and understudied. This review describes my journey from conducting group psychotherapy process research to seeking to apply knowledge gained in psychotherapy research to pressing public health problems. The goal is to illustrate why it might be important to consider problems that expand the range of traditional psychotherapy research and how this can be done. Specifically, the review illustrates how (1) relational and interpersonal principles from psychotherapy research, particularly group psychotherapy research, can be applied to research aimed to improve mental illness, including major depression and substance use disorder among incarcerated women and other vulnerable populations, and (2) how my efforts to apply psychotherapy principles to these public health problems led to a sense of urgency to consider research questions that could most meaningfully inform broader concerns such as service delivery challenges, resource allocation, and public policy.

1. Relational Principles from Group Psychotherapy Research

I was trained as a psychotherapy researcher in a clinical psychology graduate program. I gravitated toward interpersonal aspects of psychotherapy research: group psychotherapy and therapeutic relationship. My research included studies of therapeutic relationship in group psychotherapy (e.g., Johnson, Burlingame, Strauss, & Borman, 2008; Johnson, Pulsipher et al., 2006), efforts to make a group parenting intervention clinically friendly and approachable for low-income parents (Berge, Law, Johnson, & Wells, 2010; Wells, Law, and Johnson, 2001), and reviews of the group treatment literature (e.g., Burlingame, Strauss, & Johnson, 2008; Johnson, 2009a; Johnson, 2009b; Orchowski & Johnson, 2012) to identify areas in need of further research (e.g., if a therapy has empirical support as an individual treatment, can it be assumed to be effective as a group treatment and vice versa?; Johnson, 2008).

One example of this research was a study designed to reduce construct confusion about therapeutic relationship in group treatment. While reviewing the literature linking therapeutic relationship to outcome in group psychotherapy (Burlingame, Fuhrman, & Johnson, 2001; Burlingame, Fuhrman, & Johnson, 2002), my co-authors and I noticed that a primary barrier to understanding how in-session interactions contributed to therapeutic change in group psychotherapy was an overabundance of ways to measure and conceptualize them. For example, we found more than 20 measures of group cohesion used in 31 studies that covered different content areas and different within-group relationships (e.g., “cohesion to the group,” “cohesion to the leader”). Because of this variation in measures, findings were often mixed and few results had been replicated. In an effort to distill the core group therapeutic relationship principles to help organize and unite the literature, my team and I collected a sample of 662 group members from 111 psychotherapy and personal growth groups across 16 sites. Using multilevel structural equation modeling to account for the grouped nature of the data, we examined the definitional and statistical overlap among four key group therapeutic relationship constructs—group climate, cohesion, alliance, and empathy—across member–member, member–group, and member–leader relationships. Hypothesized one-factor, two-factor (Working and Bonding factors), and three-factor (reflecting relationships with members, leaders, or the group as a whole) models based on existing group therapeutic relationship theories did not fit the data. An exploratory model with Bonding, Working, and Negative factors provided the best fit to the data, indicating that group members' primary conceptual distinctions among within-group relationships were made by relationship qualities (e.g., therapeutic bond, therapeutic work, empathic failures) rather than the status or role of others (i.e., leader, member, or whole group), and that group members saw positive and negative relationship factors as orthogonal, rather than as opposite ends of a single continuum (Johnson, Burlingame, Olsen, Davies, & Gleave, 2005). This new model has been replicated several times (Bakali, Baldwin, & Lorentzen, 2009; Bormann, Burlingame, & Strauss, 2011; Bormann & Strauss, 2007; Krogel et al., 2013; Thayer, 2012) and has provided an organizing conceptual framework for subsequent efforts to study group processes (AGPA Core-R Task Force, 2006; Burlingame, Krogel, & Johnson, 2008; Krogel et al., 2013).

2. Application of Relational Principles to Vulnerable, Underserved Populations

When I came to Brown University Medical School as a researcher, I was initially disoriented because I thought only in terms of psychotherapy research and its subdivisions, such as “group,” “individual,” “process research,” and “outcome research.” However, the medical school had nearly 3,000 faculty across 13 clinical, 6 basic science, and 4 affiliated public health departments, of which psychiatry (which housed the clinical psychologists) was only

one. I began to realize that psychotherapy research is part of a larger research effort to improve public health and health-related functioning. From this, I began to better understand the “public health perspective”. Suddenly, my collaborators and colleagues included psychiatrists and other MDs, epidemiologists, public policy researchers, experimental psychologists, geneticists, neuroscientists, economists, and many others, all of whom were conducting their work in the service of a larger public health goal. Furthermore, the goal of the National Institutes of Health (NIH), our primary source of research funding, is to support research which has significant potential for improving public health, roughly defined as reducing morbidity, mortality, or prevalence of severe disease conditions (in my case, mental health and substance use disorder) for as many people as possible. Establishing the public health significance of a problem at the very least required an understanding of its epidemiology, consequences, and existing pharmacologic as well as psychosocial interventions. With this new perspective in mind, I began to look for ways to apply my background in research on group psychotherapy and interpersonal relationships to pressing public health problems.

2.1. Interpersonal treatment for women prisoners with comorbid substance use and depression

I chose to begin this effort by focusing on incarcerated women because they were a complex, high-need, multi-problem population of high public health significance, who had many interpersonal challenges, and for whom treatment research was desperately needed. More than 14 million individuals pass through the United States criminal justice system (including prisons, jails, probation, and parole) each year (Glaze & Parks, 2011; Sabol & Minton, 2008). In fact, the U.S. incarcerates the most people in the world in both absolute and relative terms; one-quarter of the people, and one-third of the women, incarcerated in the world are incarcerated in the U.S. (Walmsley 2006, 2012). Despite calls for attention to the poor health and mental health of prisoners in high-profile journals such as the *Lancet* (Fazel & Baillargeon, 2011), research on treatment of mental disorder within criminal justice systems is scarce, especially for incarcerated women. This lack of research is concerning because incarcerated women have high rates of current or recent mental health problems (73-75%; James and Glaze, 2006), lifetime mental health conditions (70% for substance use disorder, 20-25% for depressive disorder, 30-35% for PTSD; Jordan, Schlenger, Fairbank, & Caddell, 2006; Teplin, Abram, & McClelland, 2006), and physical and sexual victimization (more than 50% each; Browne, Miller, & Maguin, 1999).

In response to research showing that mental health problems, such as depression, were particularly common among women in prison substance use treatment programs, I conducted an open pilot trial of group interpersonal psychotherapy (IPT) for women in prison substance use treatment programs who were experiencing major depressive disorder (MDD). IPT seemed to be a good fit for this population because of its empirical support for treating MDD and its emphases on improving social support and addressing relationship problems and life stressors, which are ubiquitous among incarcerated women (Johnson & Zlotnick, 2008). Many of the treatment needs and challenges of incarcerated women are interpersonal in nature (e.g., violent and conflictual romantic relationships, loss of parental rights to children or difficulties negotiating with children's current caretakers to ensure the children's well-being, family members and friends who are still involved in drugs and crime), and social support is linked to a variety of important mental health, life, and re-entry outcomes among incarcerated women (Johnson, Esposito-Smythers et al., 2011). This open trial, funded by the Group Psychotherapy Foundation, found good pre-post outcomes for group IPT for MDD among incarcerated women, and the resulting paper described the clinical utility and acceptability of the treatment in this population (Johnson & Zlotnick, 2008). Because most interventions within the criminal justice system emphasize structure

and behavioral principles, I was surprised at how natural a fit IPT seemed for this population and the extent to which IPT's main elements (work with emotions, addressing grief and feelings about life changes, work with interpersonal conflicts) seemed to address the women's core issues: the things about which they felt most strongly and that kept them up at night. These included sadness and worry about their children, concern about whether romantic relationships would or should last, and grief over traumatic or violent deaths. Participants had no shortage of interpersonal life stressors, and reported that having a small, private place to talk about their "*real feelings*" was a relief.

A subsequent trial (Johnson & Zlotnick, 2012), funded by the National Institute of Drug Abuse (NIDA), randomized 38 women in prison substance use treatment programs to group IPT or to an attention-matched control condition. Sample characteristics highlighted the need for effective treatments for MDD in this population. Participants' mean intake Hamilton Rating Scale for Depression score was 28, indicating severe depression, despite the fact that 63% were taking antidepressant medications at baseline. The median number of past depressive episodes was "10 or more." The sample was young, unmarried (87%), and low-income (74% had annual legal income less than \$10,000 prior to incarceration), all of which are characteristics often associated with poor treatment outcome. Other typically negative treatment indicators, including physical (84%) and sexual abuse (63%) histories, past suicide attempts (40%), and borderline (37%) and antisocial (42%) personality disorders, were also common in the sample. Intent-to-treat analyses showed that IPT resulted in lower depressive symptoms and greater decreases in interpersonal problems [$B = -3.2$, $SE(B) = 5.1$, $t = -2.6$, $p = .013$] than did the control condition (Johnson & Zlotnick, 2012). In contrast to the thousands of randomized trials among individuals diagnosed with MDD in the community (150 published in 2007 alone; Weinberger, McKee, & Magure, 2010), this small study was the largest randomized controlled trial of any psychosocial or pharmacologic treatment for MDD in an incarcerated population to date and the first such study involving women.

Results of this trial (which also collected post-release depression and substance use outcomes) were promising. However, I noticed that most women who re-initiated substance use did so in the first two weeks after prison release (Johnson, Schonbrun, Nargiso et al., in press), which was much too soon to be effectively prevented by the 6 weekly post-release sessions the initial treatment had offered as a bridge to other post-release treatment. To better understand what was happening during women's first days and weeks of re-entry and how to intervene, we conducted qualitative interviews with women with co-occurring substance use and depressive disorders who had recently re-entered the community from prison (Johnson, Schonbrun, Nargiso et al., in press). Results highlighted the importance of relational and emotional factors in women's first post-prison substance use. Partners' drug use or trafficking as well as difficulties in romantic relationships were often cited as triggers for first post-release substance use, as were uncomfortable emotions: "*I found out he was with his ex-girlfriend the night before. This is the cause of a lot of my problems. The drinking is because he always blows me off, so I started drinking*" (p. XX). Women emphasized the importance of emotional and practical support at community re-entry, but said that it can be difficult to reach out to others when they are having life problems or drug cravings because they have burned out support sources ("*I used to call him really bad, but he's tired of hearing it*", p. XX), or act impulsively and then feel embarrassed to ask for help. As one woman explained, "*the hardest thing is finding somebody who doesn't judge you*" (p. XX, Johnson, Schonbrun, Nargiso et al., in press).

We also interviewed criminal justice and community providers and administrators serving re-entering women, who also identified relationship problems and depression as triggers for first post-release substance use (Johnson, Schonbrun et al., under review). Triggering

relationships included those that were violent: *“if there's a lot of violence in a home obviously the return, relapse happens a lot faster”*; antisocial: *“some of their biggest problems are... their boyfriends and the antisocial behavior of the boyfriend”*; or otherwise challenging: *“the mindset of a lot of the women here is so kind of like skewed that they don't even recognize or acknowledge that some of their relationships are abusive or really unhealthy and likely to contribute to relapse”* (p. XX). Other interpersonal challenges described included a lack of sober female role models starting in childhood, *“You've watched your mother and your grandmother smoke pot, shoot up in some families. You know, women who tell you, that was breakfast, they lined up the cocaine lines... So where do you go from there?”* (p. XX), trauma or exploitation, *“They needed a place to stay, and so this 60-year-old guy that you say, ‘ugh, I wouldn't even wanna be next to him in a grocery store’, picks them up because he is giving them a room and they just have to do a little something, and then you know where it's gonna go [substance use], because you're already destroyed internally by having to do that”* (p. XX), and lack of support *“women leave prison wanting to do the right thing, but their families have all disconnected or their friends are negative supports anyway... some just have nobody”* (p. XX, Johnson, Schonbrun et al., under review).

In particular, providers and formerly incarcerated women highlighted the importance of a specific kind of support, network support for sobriety, in avoiding substance use relapse at prison release. In addition to emphasizing the importance of spending enough time with the “right” people, both participants and providers independently chose “being with the ‘wrong’ people” out of a list of more than 20 potential triggers as the top precipitant of relapse for women after release from prison (Johnson, Schonbrun, Nargiso et al., in press; Johnson, Schonbrun et al., under review). Most of the women who used substances after release from prison were in the company of drinking/using others at the time of first use (Johnson, Schonbrun, Nargiso et al., in press). This, in concert with results of a literature search to identify empirically supported substance use treatment principles that were theoretically consistent with IPT, yielded the idea of integrating IPT for MDD with strategies designed to strengthen network support for sobriety (e.g., Litt, Kadden, Kabela-Cormier, & Petry, 2007, 2009; Zwyiak et al., 2009) to create Sober Network IPT for co-occurring substance use and MDD (Johnson, Williams, & Zlotnick, under review).

Although the idea of Sober Network IPT made sense, we still had a challenge in terms of service delivery over the re-entry period. It was unclear how we could provide women with more assistance to cope with drug triggers, mental health problems, violence, unexpected housing problems, and other challenges in the first days and weeks of community re-entry until they could form new helping relationships and become established with community care. Johnson and Zlotnick (2012) had showed that our 6 weekly post-release sessions as a bridge to other post-release treatment were too little, too late for most women. We knew from our work and that of others (Bloom, Owen, & Covington, 2003; Green et al., 2011; Johnson, Schonbrun, Nargiso et al., in press; Johnson, Schonbrun et al., under review) that the therapeutic relationship was important to women in prison. We also knew that in the days and weeks after community re-entry, women would reach out to people they already knew and trusted, but were unlikely to reach out to strangers (even professional strangers) for help (Johnson, Schonbrun, Nargiso et al., in press; Johnson, Schonbrun et al., under review). However, maintaining contact with familiar providers, such as prison counselors, after release can be challenging because women may return to locations hundreds of miles away from where they were incarcerated and they often have unreliable transportation and unreliable access to telephones (Johnson, Williams, & Zlotnick, under review).

To find out more about the feasibility and acceptability of a variety of ways for women to maintain contact with prison counselors after release, we conducted focus groups with

women in prison substance use programs (Johnson, Williams, & Zlotnick, under review). We asked about their interest in maintaining relationships with their prison counselors after release, how often they would like to talk with their prison counselors, and whether phone or in-person sessions would be more appealing and feasible. Because it was difficult for women to travel and they wanted to be able to talk to their counselors on an as-needed basis, women said that they would be comfortable with phone sessions, particularly since they would already know the counselor with whom they would be talking. We discussed many ways of trying to help the women have adequate post-release telephone access, including reimbursement for using minutes on their own phones. However, after group discussion, the idea of providing women with inexpensive cell phones (“sober phones”) programmed to call sober resources (e.g., the prison counselor, 12-step organizations, substance use and mental health resources, medical resources, housing and job resources, sober friends and family, crisis lines) seemed the most practical. Women said that they would be motivated to speak with their counselors for phone sessions after release because “*we will already have relationships with them*” (Johnson, Williams, & Zlotnick, under review). To increase likelihood of post-release contact with other sober resources, we discussed other ways to help women become familiar with as many other sober resources and people as possible while still in prison.

A subsequent feasibility trial (Johnson, Williams, & Zlotnick, under review) provided Sober Network IPT in a group format in prison and then individually post-release via the use of “sober phones” to 22 incarcerated women with co-occurring MDD and substance use disorder. The sober phones allowed women to be in daily contact with their prison counselors until they could become established with their post-release treatment, bridging the high-risk period immediately following prison release. Depressive symptoms and substance use improved significantly from baseline (in prison) to the end of the active phase of study treatment (3 months post-release). Women talked to counselors by phone an average of 22 times (32 calls were scheduled) during the first 3 months post-release. Participants valued the opportunity to maintain contact with familiar prison treatment providers by phone after release (to “*call someone in time of need*”), and used the study cell phones for service linkage, support, and crisis management. Despite having trusting relationships with their study counselors, a few women said that when they had used or were thinking about using drugs or alcohol, it could be harder to call because they felt “*guilty*,” or “*embarrassed*,” but even then they were still thinking about the counselors: “*I knew she cared about me and I never forgot she cared about me no matter what happened*” (p. XX). Women reported that counselors helped them get past feeling guilty or embarrassed about urges or relapses by continuing to reach out (calling the woman if the woman didn’t call the counselor, leaving messages, etc.) and by reiterating that they cared, would not judge or turn women in, and wanted to help. Participants unanimously agreed that counselors should reach out when women miss calls because women may be in trouble and be embarrassed to ask for help. Results (Johnson, Williams, & Zlotnick, under review) suggested that Sober Network IPT and maintaining post-release contact with prison counselors via cell phone were feasible and acceptable, and provided additional insight into winning and keeping the trust of a population that does not grant trust easily (Johnson, Schonbrun et al., under review).

2.2. Incarcerated women and therapeutic relationship

Other studies also illustrated the importance of personal relationships for justice-involved women. During the Sober Network IPT open trial (Johnson, Williams, & Zlotnick, under review), we had worked to help women leaving prison become engaged in 12-step programs (e.g., Alcoholics Anonymous, AA) in the community as a method to increase their network support for sobriety. Resources programmed into study “sober phones” included a local

chapter of a national volunteer organization that would pick women up and take them to their first post-release AA meeting. Every woman in the study called her familiar study counselor and none called the volunteer organization, despite our encouragement. In fact, the head of the volunteer organization told us that he had never received a call from a woman he did not already know.

Because pretrial jail detention typically lasts only a few days, linkage to care after jail is even more challenging than it is for prison. After colleagues found that frequent AA attendance was associated with women's reductions in drinking following pretrial jail detention (Schonbrun et al., 2011), they wondered why women don't take more advantage of free and widely available 12-step services, including the volunteer organization, after release. Sober phone findings suggested why the standard practice of leaving pamphlets at the jail and requiring women to initiate a call to strangers after release to access the organization's services was not working well. We decided to see whether a single face-to-face contact during jail detention (which was all that was possible given short jail stays) would increase linkage.

We conducted a small study (Johnson, Schonbrun, & Stein, in press) testing the feasibility of having the organization's female AA volunteers come into jail to meet with women individually once before release, and then having *the same* volunteer accompany each woman to at least one meeting after release. Of the 14 women who met with AA volunteers in jail, 8 were in contact with their AA volunteer after release from jail an average of 4 times, and most attended post-release AA meetings. Although this was not perfect linkage, it was a vast improvement from the 0 of 22 women who initiated calls to the same group of volunteers in the sober phone study, despite being provided with cell phones programmed with the volunteer organization's number. Participants were satisfied with the program overall, and drinking and drug use outcomes improved significantly from baseline (in jail) to one-month post-release (Johnson, Schonbrun, & Stein, in press). We are beginning a fully-powered randomized trial ($n = 400$) testing the effectiveness of this linkage intervention relative to standard practice (pamphlets) for improving post-jail AA attendance and substance use outcomes. The study will also examine alliance between women and volunteers as a predictor of outcomes.

Colleagues and I have studied the application of the therapeutic alliance to other helping relationships, such as those between parolees and parole officers (POs; Johnson, Friedman, Green, Harrington, & Taxman, 2011; Green et al., 2011). For example, Green et al. examined a sample of 374 parolees and found that among women (but not men), parolees who reported a better alliance with their PO reported fewer HIV risk behaviors (multiple partners, unprotected sex with a risky partner) 3 months after prison release. This did not appear to be a result of POs liking low-risk women better: women reporting better alliances with POs were actually at slightly *higher* risk before incarceration (e.g., more likely to have multiple partners). The association between a good alliance with one's PO and reduced risky sex was interesting because POs did not discuss sex risk with participants; their role was to help parolees settle into stable, substance-free lives after prison release. Bloom et al. (2003) found that women on parole are more likely than men to believe POs when they say they are there to help, and to share real concerns with and become attached to POs. Given the paucity of sober social support for many formerly incarcerated women, a PO who is perceived as trustworthy and helpful and who believes in women's ability to succeed may serve an important role.

Our qualitative findings also reiterated the importance of the continuity of helping relationships across transitions from prison or jail to the community (Johnson, Schonbrun et al., under review; Johnson, Schonbrun, Nargiso et al., in press). Providers emphasized: "*The*

key element would be the relationship—number one—a trusting relationship between the caseworker and the ex-offender, soon-to-be ex-offender, and then to go from there,” “Before release you develop a rapport with that person. You pick them up at the gate” (p. XX; Johnson, Schonbrun et al., under review). One of the key elements to building this relationship is having a reputation for keeping one's word and providing promised help: “Because you know what? Soon as you don't, they don't call you anymore” (p. XX).

2.3. Studies applying relational principles to other vulnerable populations

Work on IPT for MDD among substance-using women prisoners led to several other intervention studies, all of which involve groups and apply interpersonal or relational approaches to public health needs. In one NIDA-funded study, we are adapting and testing the group Sober Network IPT treatment (without cell phones) for outpatient perinatal women with comorbid substance use disorder and MDD. MDD is common among perinatal substance users, and both disorders have negative consequences for mother and infant. Formative qualitative work (Kuo et al., 2013) indicated that, like justice-involved women, perinatal substance users have many interpersonal treatment needs, such as negotiating relationships with partners, building a sober support system, and feeling safe. Similar to women leaving prison, perinatal women identified conflictual or substance-involved romantic relationships, disrespect or lack of consistency or responsiveness from child protective services, and challenges related to poverty (lack of transportation, lack of child care) as barriers to dual recovery.

In a study funded by the National Institute of Mental Health (NIMH), my team and I also adapted group IPT to the needs of women experiencing major depression after a perinatal loss (miscarriage, stillbirth, or early neonatal death), another vulnerable population for whom efficacious treatments have not been identified and who face many interpersonal challenges. MDD is common after perinatal loss (Neugebauer, Kline, Shrout, & Skodol, 1997), with elevated levels of distress persisting up to 30 months after the loss (Vance, Boyle, Najman, & Thearle, 1995). Perinatal loss can also precipitate couple distress, including greater interpersonal and sexual distance (Swanson, 2003; Swanson, Conner, & Jolley, 2007). Because there are few established social norms about how to grieve the death of a new infant or the loss of a pregnancy, women may not know how to react or how to respond to others' reactions. For example, what does a woman say when a well-meaning acquaintance asks about the baby or when someone tells her she can have another child so she should not be sad? Others' discomfort in responding to such an unexpected and sad event may further women's sense of isolation. IPT can help women request appropriate support and manage situations without clear social mores. The randomized trial comparing the adapted group IPT to standard depression treatment is nearing completion.

My colleague, Caron Zlotnick, and I have also recently begun another study funded by NIMH. The goal of this study is to design and test a group intervention to help women prisoners with a history of interpersonal violence (e.g., sexual or physical assault or abuse) improve social support and emotion regulation in order to make safer sexual decisions as they re-enter the community and ultimately to prevent HIV and other sexually transmitted infections. Qualitative work with women in prison who had experienced interpersonal violence and unsafe sex illustrated several relevant interpersonal issues, including: (1) how experiences of violence undermine women's sense that they are worth protecting and increase fears about losing partners if women open discussions about safe sex; (2) how experiences of violence can lead to difficulties with emotion regulation in sexual situations (including anger, dissociation, or the need for substances to “*get through*” sex), making safe sex less likely (Kuo et al., under review a); (3) how the experience of incarceration changes the way women think about sex and their safety in relationships; and (4) women's strategies

for making safe sex “sexy” to preserve relationships and to prevent arguments about condom use (Kuo et al., under review b).

Other projects have examined interpersonal processes, interpersonal predictors, and interpersonal outcomes of group treatments for other substance-dependent populations, including substance dependent veterans (Johnson, Finney, & Moos, 2005, 2006), individuals with cocaine (Crits-Christoph, Johnson, Connolly Gibbons, & Gallop, 2013; Crits-Christoph et al., 2011; Johnson, Connolly Gibbons, & Crits-Christoph, 2011) or alcohol (Zwiyak et al., 2009) dependence, and women prisoners with co-occurring PTSD (Zlotnick, Johnson, & Najavits, 2009), illustrating how interpersonal principles can be applied to public health issues.

2.4. Research addressing service delivery challenges

Qualitative interviews with prison providers and administrators (Johnson, Schonbrun et al., under review) were intended to gather information about the most helpful treatment techniques, but providers' responses overwhelmingly focused on the perception that they lacked the resources to provide even the most basic mental health and substance abuse treatment. As one stated, *“My problem in mental health is I don't have enough resources to provide 'em counseling and psychoeducation in addition to medication management. I could use a lot more. Oftentimes we're just treating crises”* (p. XX). Another explained, *“You are in for domestic [assault] and your biggest need is to learn how to manage your anger and the only thing I can offer you is why don't you see [the social worker] once a month? And work on that. Okay well, I'm here for three months. Okay so you'll see [the social worker] three times. It's better than nothing. But how is that gonna impact her at all? It's not”* (p. XX). Similarly, providers and women also described the importance of comprehensive, seamless, centralized pre-release planning and post-release services, but said that quality discharge planning was not taking place due to lack of time and personnel. With few resources and multiple needs, women had difficulty navigating the fragmented service system as they left prison and quickly became overwhelmed, often triggering mental health and substance use relapse and eventual re-incarceration (Johnson, Schonbrun et al., under review; Johnson, Schonbrun, Nargiso et al., in press). After seeing the in-prison and post-release consequences of scarce treatment resources in prisons and jails, I began to look for ways to (1) use bachelor's level counselors (as described below), technology (as in the sober phone study; Johnson, Williams, & Zlotnick, under review), or community volunteers (e.g., the AA linkage study; Johnson, Schonbrun, & Stein, in press) as service extenders, or to (2) conduct research that could demonstrate the usefulness and cost-effectiveness of mental health treatment in these settings that could potentially be used to influence policy or to advocate for more services.

Because prison master's level mental health counselors were scarce and doctoral-level counselors were non-existent, the Sober Network IPT prison cell phone study (Johnson, Williams, & Zlotnick, under review) used bachelor's level prison substance use counselors with little or no mental health training as study interventionists, with the idea that if the treatment could be provided by bachelor's level counselors, it would be much easier and less expensive to implement in a criminal justice setting. In consultation with the bachelor's level providers working on my prison studies, I created a more detailed treatment manual and training procedures that explained the essential elements of group IPT in simple way that avoided jargon for the Sober Network IPT open trial. In addition to testing the feasibility of the sober phone idea, that trial also tested whether bachelor's level prison counselors could conduct group IPT adherently, competently, and effectively using the training manual. Participants showed significant pre-post decreases in depressive symptoms and sessions

randomly chosen from the beginning, middle, and end of these groups were found to be delivered adherently and competently (Johnson, Williams, & Zlotnick, under review).

Based on these promising pilot findings, my team and I received funding from NIMH to conduct a fully powered randomized trial testing the effectiveness, cost-effectiveness, and implementability of group IPT for MDD among female and male prisoners. The study tests whether the intervention can be effectively delivered by bachelor's level counselors on a larger scale and characterizes the amount of training needed for bachelor's and master's level prison clinicians to become competent in IPT. It also measures the costs (clinician time, training time) and cost-savings (in terms of less suicidality, fewer fights, less victimization by other inmates, more completion of prison-based programs, and more prison "good time" resulting in earlier prison releases) associated with provision of psychotherapy for MDD in prisons. This study's implementation aim examines which features of the treatment are easily transported into prison settings and which are more difficult, and describes adaptations that need to be made for successful implementation. I am thrilled to be conducting this study in a setting where mental health needs are so urgent and in which so little mental health treatment research of any kind has been conducted. I hope that cost-effectiveness results can be used to inform criminal justice mental health policy and budgeting decisions.

2.5. Research with a public policy goal

As my line of intervention-related research increasingly revealed service delivery challenges, I became more aware of the importance of designing studies with an eye toward informing public policy, such as the cost-effectiveness study or studies highlighting a need for treatment services that are not currently being provided. For example, one article (Johnson, O'Leary et al., 2011) found that, accounting for current crack use, current major depression, but not past major depression, at baseline predicted increased risk of crack use at 4-month follow-up among 261 women in drug court. Findings implied that the increased risk of using crack conferred by a past 30-day MDE might be lessened by psychotherapy or medication treatment leading to improved mood, and that providing such services might improve drug court outcomes. Another study of 720 poor, substance-using South African women (Johnson, Carney, Kline, Browne, & Wechsberg, 2012) found that women who had ever been incarcerated had higher symptoms of depression, anxiety, PTSD, and higher rates of substance use, physical assault, and sexual assault than women who had never been incarcerated. Results indicate that passing through the criminal justice system may be a marker for a variety of mental health service needs, suggesting that screening, prevention, and referral efforts at the time of intersection with the criminal justice system may reduce mental health burden for these vulnerable South African women. I hope that research like this will provide information that can be used to advocate for mental health services within U.S. and South African criminal justice systems.

As I have seen the dire service needs in prisons and jails, I have also become more directly involved in advocacy, dissemination/implementation, and policy efforts in my role as a psychotherapy researcher. I am affiliated with the Center for Prisoner Health and Human Rights, a research and advocacy organization, and participate in activities designed to raise public and academic awareness of prison health policy issues and to disseminate prison health research findings to relevant stakeholders. I have become increasingly invested in these policy-related activities, because if the purpose of research isn't to inform policy and practice, why do we do it? And, if researchers don't participate in influencing public policy, how can we complain when public policy doesn't take research evidence into account?

I hope to begin two other policy-related research projects soon. The first is a study that will (1) characterize current mental health and substance use practices in a nationally

representative sample of U.S. prisons, jails, probation, and parole offices, (2) characterize the organizational and systems-level processes that resulted in these practices, and (3) investigate ways to speed the transition of effective mental health and substance use practices into these settings and to influence criminal justice mental health policies (including budgets, resources, and legislation) to improve services. The second project will examine the effects of community re-entry-related distress (e.g., about having nowhere to live, being unable to care for children) on cognitive processing. Our work (Johnson, Schonbrun et al., under review; Johnson, Schonbrun, Nargiso et al., in press) and others' (Kellett & Willging, 2011; Richie, 2001; van Olphen, Eliason, Freudenberg, & Barnes, 2009) has described how re-entering the community can be terrifying, especially for individuals who fear unsafe post-release living conditions or who stand to lose not only their freedom, but their families and their futures if they relapse again. Evidence from behavioral economics suggests that under threat, people are less able to generate options and default to habitual, familiar decisions. If this holds true for women leaving prison, the implication would be that the failure to devote adequate resources to discharge planning and reentry services may contribute to some women having not only practical challenges, but being cognitively impaired and unable to do little besides what is familiar. This may be part of the reason that women and their providers describe supportive re-entry services as so essential, and why without them, women “*get defeated so quickly*” (Johnson, Schonbrun, et al., under review).

3. Conclusions on Integrating Psychotherapy Research and a Public Health Perspective

Group psychotherapy research training provided familiarity with relational and interpersonal principles which have been extremely useful in my research with incarcerated women and other vulnerable populations. An increasing awareness of public health issues has led me to expand the boundaries of psychotherapy research to include prisons, parole officers, training of service extenders such as bachelor's level counselors to provide psychotherapy, behaviors like violence and risky sex, and research with an eye toward informing policy and asking questions relevant to mental health advocacy. This transition has been underscored by experiences like I had in the qualitative studies when I set out to ask one a set of questions (e.g., What happens after release? What treatment techniques could best prevent these problems?) and received answers on a topic I was not expecting (e.g., Discharge planning is so under-resourced and community service delivery systems so fragmented that women are fortunate if they get any treatment before they get “*sucked back into the vortex*”; Johnson, Schonbrun, et al., under review). The more research I do, the more I realize that our careers are short relative to the enormity of the problems the disenfranchised among us face, and I feel an urgency to ask the research questions whose answers will provide the most useful information for changing care and access to care as widely and as quickly as possible. Asking, “How will my findings improve health and health services for those most in need as soon as possible?” helps to frame research projects to address real-world challenges and to have maximal real-world impact. The public health perspective provides both context and rationale for conducting sound psychotherapy research, and the combination of public health and psychotherapy-specific perspectives can lead to novel research questions and novel findings.

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References

- AGPA Core-R Task Force CORE. Battery-Revised: An assessment tool kit for promoting optimal group selection, process, and outcome. New York: American Group Psychotherapy Association; 2006.
- Bakali J, Baldwin S, Lorentzen S. Modeling group process constructs at three stages in group psychotherapy. *Psychotherapy Research*. 2009; 19:332–343. [PubMed: 20183394]
- Berge JM, Law DD, Johnson J, Wells MG. Effectiveness of a psychoeducational parenting group on child, parent and family behavior: A pilot study in a family practice clinic with an underserved population. *Families, Systems and Health*. 2010; 28(3):224–235.
- Bloom, B.; Owen, B.; Covington, S. Gender-responsive strategies: Research, practice, and guiding principles for women offenders. National Institutes of Corrections accession number 018017; 2003.
- Bormann B, Burlingame G, Strauss B. Der Gruppenfragebogen (GQ-D). Instrument zur Messung von therapeutischen Beziehungen in der Gruppenpsychotherapie. *Psychotherapeut*. 2011; 56:297–309.
- Bormann B, Strauss B. Gruppenklima, Kohäsion, Allianz und Empathie als Komponenten der therapeutischen Beziehung in Gruppenpsychotherapien - Überprüfung eines Mehrebenen-Modells. *Gruppenpsychotherapie und Gruppendynamik*. 2007; 43:1–20.
- Browne A, Miller B, Maguin E. Prevalence and severity of lifetime physical and sexual victimization among incarcerated women. *International Journal of Law and Psychiatry*. 1999; 22(3-4):301–322. [PubMed: 10457926]
- Burlingame GM, Fuhrman A, Johnson JE. Cohesion in group psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*. 2001; 38:373–379.
- Burlingame, GM.; Fuhrman, A.; Johnson, JE. Cohesion in group psychotherapy. In: Norcross, JC., editor. *A guide to psychotherapy relationships that work: Therapist contributions and responsiveness to patients*. Oxford: Oxford University Press; 2002. p. 71–88.
- Burlingame, GM.; Krogel, J.; Johnson, J. *The Group Questionnaire*. Copyright: OQ Measures LLC; 2008.
- Burlingame G, Strauss B, Johnson J. Gibt es allgemeine veränderungsmechanismen in gruppenpsychotherapien? Eine einföhrung in ein konzeptuelles modell (Are there general change mechanisms in group treatments? An introduction to a conceptual model). *Gruppenpsychotherapie und Gruppendynamik*. 2008; 44:177–214.
- Crits-Christoph P, Johnson JE, Connolly Gibbons MB, Gallop R. Process predictors of the outcome of group drug counseling. *Journal of Consulting and Clinical Psychology*. 2013; 81(1):23–34. [PubMed: 23106760]
- Crits-Christoph P, Johnson JE, Gallop R, Connolly Gibbons MB, Ring-Kurtz S, Tu X. A generalizability theory analysis of group process ratings in the treatment of cocaine dependence. *Psychotherapy Research*. 2011; 21(3):252–266. [PubMed: 21409739]
- Fazel S, Baillargeon J. The health of prisoners. *Lancet*. 2011; 377(9769):956–965. [PubMed: 21093904]
- Glaze, LE.; Parks, E. *Correctional populations in the United States*. Washington, DC: Bureau of Justice Statistics; 2012.

- Green TC, Johnson JE, Harrington M, Pouget ER, Rhodes A, Taxman FS, O'Connell DJ, Martin SS, Prendergast M, Friedmann PD. Parole officer – parolee relationships and HIV risk behaviors during community supervision. *AIDS and Behavior*. 2011 Epub.
- James DJ, Glaze LE. Mental health problems of prison and jail inmates. Bureau of Justice Statistics Special Report (NCJ 213600). 2006
- Johnson JE. Using research supported group treatments. *Journal of Clinical Psychology: In Session*. 2008; 64:1206–1224.
- Johnson JE. Die Behandlung von persönlichkeitsstörungen in psychotherapeutischen gruppen (Efficacy of group treatments for personality disorder). *Gruppenpsychotherapie und Gruppendynamik*. 2009a; 45:32–61.
- Johnson JE. Wirksamkeit von gruppenbehandlungen bei majorer depression (Efficacy of group treatments for major depressive disorder). *Gruppenpsychotherapie und Gruppendynamik*. 2009b; 45:181–207.
- Johnson JE, Burlingame GM, Olsen J, Davies DR, Gleave RL. Group climate, cohesion, alliance, and empathy in group psychotherapy: Multilevel structural equation models. *Journal of Counseling Psychology*. 2005; 52(3):310–321.
- Johnson JE, Burlingame GM, Strauss B, Bormann B. Die therapeutischen beziehungen in der gruppenpsychotherapie (The therapeutic relationship in group psychotherapy). *Gruppenpsychotherapie und Gruppendynamik*. 2008; 44:52–89.
- Johnson JE, Carney T, Kline T, Browne F, Wechsberg WM. Incarceration history relative to health, substance use, and violence in a sample of vulnerable South African women: Implications for health services in criminal justice settings. *Substance Abuse and Rehabilitation*. 2012; 3(Suppl 1): 59–69. [PubMed: 24474876]
- Johnson JE, Connolly Gibbons MB, Crits-Christoph P. Gender, race, and group behavior in group drug treatment. *Drug and Alcohol Dependence*. 2011; 119:e39–e45. [PubMed: 21689897]
- Johnson JE, Esposito-Smythers C, Miranda R, Justus AN, Rizzo C, Clum G. Gender, social support, and distress in criminal justice involved adolescents. *International Journal of Offender Therapy and Comparative Criminology*. 2011; 55(7):1096–1109. [PubMed: 20937728]
- Johnson JE, Finney J, Moos R. Predictors of 5-year mortality following inpatient/residential group treatment for substance use disorders. *Addictive Behaviors*. 2005; 30(7):1300–1316. [PubMed: 16022928]
- Johnson JE, Finney J, Moos R. End-of-treatment outcomes in cognitive-behavioral and 12-step substance use treatment programs: Do they differ and do they predict 1- year outcomes? *Journal of Substance Abuse Treatment*. 2006; 31:41–50. [PubMed: 16814009]
- Johnson JE, Friedmann PD, Green TC, Harrington M, Taxman F. Gender and treatment response in substance-use treatment mandated parolees. *Journal of Substance Abuse Treatment*. 2011; 40:313–321. [PubMed: 21266302]
- Johnson JE, O'Leary CC, Striley CW, Ben Abdallah A, Bradford S, Cottler LB. Effects of major depression on crack use and arrests among women in drug court. *Addiction*. 2011; 106(7):1279–1286. [PubMed: 21306595]
- Johnson JE, Pulsipher D, Ferrin SL, Burlingame GM, Davies DR, Gleave R. Measuring group processes: A comparison of the GCQ and CCI. *Group Dynamics*. 2006; 10:136–145.
- Johnson JE, Schonbrun YC, Nargiso JE, Kuo CC, Shefner RT, Williams CA, Zlotnick C. “I know if I drink I won't feel anything”: Substance use relapse among depressed women leaving prison. *International Journal of Prisoner Health*. in press.
- Johnson, JE.; Schonbrun, YC.; Peabody, ME.; Shefner, RT.; Fernandes, KM.; Rosen, RK.; Zlotnick, C. Provider experiences with prison care and aftercare for women with co-occurring mental health and substance use disorders. under review
- Johnson JE, Schonbrun YC, Stein MD. Pilot test of twelve-step linkage for alcohol abusing women leaving jail. *Substance Abuse*. in press.
- Johnson, JE.; Williams, C.; Zlotnick, C. Development and pilot testing of a cell phone-based transitional intervention for women prisoners with comorbid substance use and depression. under review

- Johnson JE, Zlotnick C. A pilot study of group interpersonal psychotherapy for depression in substance abusing female prisoners. *Journal of Substance Abuse Treatment*. 2008; 34:371–377. [PubMed: 17629441]
- Johnson JE, Zlotnick C. Pilot study of treatment for major depression among women prisoners with substance use disorder. *Journal of Psychiatric Research*. 2012; 46(9):1174–1183. [PubMed: 22694906]
- Jordan BK, Schlenger WE, Fairbank JA, Caddell JM. Prevalence of psychiatric disorder among incarcerated women: Convicted felons entering prison. *Archives of General Psychiatry*. 1996; 53(6):513–519. [PubMed: 8639034]
- Kellett NC, Willging CE. Pedagogy of individual choice and female inmate reentry in the U.S. Southwest. *International Journal of Law and Psychiatry*. 2011; 34:256–263. [PubMed: 21864909]
- Kroegel J, Burlingame G, Chapman C, Renshaw T, Gleave R, Beecher M, Macnair-Semands R. The Group Questionnaire: A clinical and empirically derived measure of group relationship. *Psychotherapy Research*. 2013
- Kuo C, Schonbrun Y, Zlotnick C, Bates N, Todorova R, Kao JC, Johnson JE. Treatment needs among perinatal women with substance use and depression. *Substance Use and Misuse*. 2013:1–11. Early Online. [PubMed: 23153043]
- Kuo, C.; Johnson, JE.; Rosen, R.; Wechsberg, W.; Gobin, R.; Reddy, MK.; Peabody, M.; Zlotnick, C. Emotional dysregulation and risky sex among incarcerated women with a history of interpersonal violence. under review a
- Kuo, C.; Rosen, R.; Zlotnick, C.; Wechsberg, WM.; Peabody, M.; Johnson, JE. Eroticizing safe sex behaviors: Strategies for safe sexual pleasure among women at risk for HIV. under review b
- Litt M, Kadden RM, Kabela-Cormier E, Petry NM. Changing network support for drinking: Initial findings from the network support project. *Journal of Consulting and Clinical Psychology*. 2007; 75(4):542–555. [PubMed: 17663609]
- Litt M, Kadden RM, Kabela-Cormier E, Petry NM. Changing network support for drinking: Network support project 2-year follow-up. *Journal of Consulting and Clinical Psychology*. 2009; 77(2): 229–242. [PubMed: 19309183]
- Neugebauer R, Kline J, Shrout P, Skodol A. Major depressive disorder in the 6 months after miscarriage. *Journal of the American Medical Association*. 1997; 277(5):383–388. [PubMed: 9010170]
- Orchowski LM, Johnson JE. Efficacy of group treatments for alcohol use disorders: A review. *Substance Abuse Reviews*. 2012; 5:148–157.
- Richie BE. Challenges incarcerated women face as they return to their communities: Findings from life history interviews. *Crime and Delinquency*. 2001; 47:368–389.
- Sabol, W.; Minton, TD. Jail inmates and midyear 2007. Washington, D.C: Bureau of Justice Statistics; 2008.
- Schonbrun YC, Strong DR, Anderson BJ, Caviness CM, Brown RA, Stein MD. Alcoholics Anonymous and hazardously drinking women returning to the community after incarceration: Predictors of attendance and outcome. *Alcoholism: Clinical and Experimental Research*. 2011; 35(3):532–539.
- Swanson KM. Miscarriage effects on couples' interpersonal and sexual relationship during the first year after loss: Women's perceptions. *Psychosomatic Medicine*. 2003; 65:902–910. [PubMed: 14508039]
- Swanson KM, Connor S, Jolley SN. Contexts and evolution of women's responses to miscarriage during the first year after loss. *Research in Nursing & Health*. 2007; 30(1):2–16. [PubMed: 17243104]
- Teplin LA, Abram KM, McClelland GM. Prevalence of psychiatric disorders among incarcerated women, I: Pretrial jail detainees. *Archives of General Psychiatry*. 1996; 53(6):505–512. [PubMed: 8639033]
- Thayer, S. The validity of the Group Questionnaire: Construct clarity or construct drift. Brigham Young University; 2012. Unpublished dissertation

- van Olphen J, Eliason MJ, Freudenberg N, Barnes M. Nowhere to go: How stigma limits the options of female drug users after release from jail. *Substance Abuse Treatment, Prevention, and Policy*. 2009; 4:10.
- Vance JC, Boyle FM, Najman JM, Thearle MJ. Gender differences in parental psychological distress following perinatal death or sudden infant death syndrome. *British Journal of Psychiatry*. 1995; 167(6):806–811. [PubMed: 8829751]
- Walmsley, R. World female imprisonment list. London: King's College London, International Centre for Prison Studies; 2006.
- Walmsley, R. World prison population list. 9th. London: King's College London, International Centre for Prison Studies; 2012.
- Weinberger A, McKee SA, Mazure CM. Inclusion of women and gender-specific analyses in randomized clinical trials of treatments for depression. *Journal of Women's Health*. 2010; 19:1727–1732.
- Wells, MG.; Law, D.; Johnson, JE. Love, limits, and latitude: A thousand small moments of parenting. Provo, UT: Brigham Young University Press; 2001.
- Zwiyak WH, Neighbors CJ, Martin RA, Johnson JE, Eaton CA, Rohsenow DJ. The Important People Drug and Alcohol Interview: Psychometric properties, predictive validity, and implications for treatment. *Journal of Substance Abuse Treatment*. 2009; 36:321–330. [PubMed: 18835677]
- Zlotnick C, Johnson J, Najavits L. Randomized controlled pilot study of incarcerated women with substance use disorder and PTSD. *Behavior Therapy*. 2009; 40(4):325–336. [PubMed: 19892078]