




# Trauma-Informed Parenting Education Support Groups for Mothers in Substance Abuse Recovery

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## Abstract

**Purpose:** A trauma-informed educational support group pilot addressed traumatic stress, substance use disorders (SUDs), and child-rearing for clients who were pregnant and/or parenting young children. **Methods:** Seeking Safety was adapted with parenting content and delivered at two intensive residential rehabilitation facilities. An explanatory sequential mixed methods approach was used to evaluate the pilot. Forty-eight participants completed starting assessments (intention-to-treat) and 31 graduates completed postgroup surveys (per protocol). Focus group sessions were completed with 19 graduates. **Results:** Paired samples *t* tests of intention-to-treat data showed a statistically significant decrease in self-reported symptoms of stress and substance cravings and increases in positive behaviors and parenting self-efficacy. There were no statistically significant differences on lifestyle behaviors, parenting skill, and parenting confidence. Most participants found the intervention acceptable and felt supported to improve their parenting. **Discussion:** Trauma-informed parenting education support in inpatient rehabilitation settings may offer an important complement to existing SUD and parenting programming.

## Keywords

trauma, substance use disorders, pregnancy, parenting, support group

Substance use issues and treatment challenges affect many women of reproductive age in the United States. Approximately 20 million women used illicit substances and 8.4 million improperly used prescription drugs in 2016 (Substance Abuse and Mental Health Services Administration [SAMHSA], 2017a). The 2019 National Survey on Drug Use and Health reported that 20.4 million adolescents and adults had a past year substance use disorder (SUD) to alcohol and/or illicit drugs, yet only 4.2 million people obtained treatment (SAMHSA, 2020b). Among the 7.2 million adult women with SUDs, problems with alcohol use are most prevalent, followed by illicit drugs and alcohol and drugs together (SAMHSA, 2020a). Women with SUDs differ from men in several key ways that may not be adequately addressed by policies and programming, for instance, they may be more vulnerable to substance cravings and relapse, have a greater likelihood of adverse childhood experiences and co-occurring mental health issues that can complicate recovery, experience more precarious psychosocial and environmental conditions (e.g., poverty, intimate partner violence), and shoulder greater social disapproval for their SUDs (Leppard et al., 2018; Mazure & Fiellin, 2018; National Institute on Drug Abuse, 2020; Terplan, 2017).

Polysubstance use in the perinatal stage is widespread (Forray & Foster, 2015), and approximately 5% of pregnant women have used one or more illicit substances (SAMHSA,

2020a). Tobacco, alcohol, and marijuana are the most common substances used by pregnant women (Chang, 2020; SAMHSA, 2020a). Additionally, opioid use among women in labor and delivery settings has trended upward from 1.5 to 6.5 per 1,000 hospitalizations, over four times higher in 2014 than it was in 1999 (Haight et al., 2018). Prescription opioid use during pregnancy is estimated to be 6.6%, with over one fifth of those women reporting improper use of opioids and more than one fourth expressing a desire to curtail or halt use (Ko et al., 2020). A review of the research points to a downward slide in pregnancy-related abstinence efforts among mothers with substance use histories following the births of their children, colliding with a critical period for maternal–infant attachment and care (Forray & Foster, 2015).

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Prenatal use of drugs and alcohol is associated with a host of negative developmental, physiological, behavioral, and socio-emotional difficulties for children (Behnke et al., 2013). However, polysubstance use can make the individual effects of certain drugs difficult to distinguish (Forray & Foster, 2015). More clearly supported by the literature is that parental substance use is often associated with chaotic, abusive, and neglectful home environments that are highly detrimental to children's well-being (Dube et al., 2001; Raitasalo & Holmila, 2017; Smith et al., 2007; Walsh et al., 2003).

Evidence suggests that residential SUD treatment has been effective to some degree in improving behavioral health and social outcomes and that integrated treatment for these conditions also yields positive results (de Andrade et al., 2019). Nationwide, women comprise about one third of admissions to all forms of substance abuse treatment (SAMHSA, 2009). This is similar to recent trends reported in New York State, the location of the current study, where 27.5% of admissions to treatment programs involved women (SAMHSA, 2017b). Despite the substantial presence of women in treatment settings, gender-responsive integrated treatment programs are less common (Mazure & Fiellin, 2018), and others have argued that the typical approach to SUD programming "neglects the specificity of women's needs in relation to past childhood sexual and other abuse, mental illness, and parenting" (Salter & Breckenridge, 2014, p. 165). Only 19 states (including New York) offer specialized drug treatment programs for prenatal women, and fewer states prioritize pregnant women's access to substance abuse treatment programs overall (Guttmacher Institute, 2021). Clearly, treatment gaps for expectant and postpartum mothers persist despite their urgent need for care.

Complicating recovery for women, trauma and addiction issues are often closely intertwined (SAMHSA, 2009). Many women with substance abuse histories are the survivors of early childhood physical and sexual abuse, and interpersonal victimization often continues into adulthood (SAMHSA, 2009). In some cases, a feedback loop forms with substance use leading to new traumatic exposures, deepening women's distress, shame, and reliance on drugs and/or alcohol (Kilpatrick et al., 1997; Najavits, 2002). Young mothers and mothers-to-be with SUDs face many barriers to treatment and experience increased traumatic stress due to domestic violence, stigma, incarceration, and lack of resources (Gopman, 2014). Post-traumatic stress disorder (PTSD), anxiety, and depression are pervasive during the perinatal period and are linked with substance use (Gopman, 2014). Disproportionately, higher rates of PTSD are found among expectant African American women, which could be attributed to their greater number of traumatic exposures and/or lack of mental health treatment to address traumatic sequelae prior to pregnancy (Seng et al., 2011). Integrated treatment for substance use, mental health, and traumatic exposure that includes elements such as psychoeducation, mindfulness, coping skills and other skill development, cognitive behavioral approaches, and social support may be especially important for trauma

survivors in recovery, but more rigorous study on integrated interventions is needed (Sabri et al., 2019).

Motherhood can be a motivating or inhibiting force for engagement in SUD treatment; striving to improve parenting may be one catalyst for continued recovery; however, systemic and personal barriers to treatment success and sobriety can illuminate profound shame and feelings of parenting inadequacy (Seay et al., 2017). Additionally, pregnancy could be an especially salient period for women to address SUDs when they are more motivated to change their behaviors to benefit their children, but it can be difficult for women to sustain these changes postnatally without support (Hall & van Teijlingen, 2006). Recovery may be an opportune time to reassess parenting practices (Coyer, 2003). The model of mother-child residential programs is perceived as recovery facilitators for women and may be beneficial to their children (Hughes et al., 1995; Killeen & Brady, 2000; Metsch et al., 2001; Seay et al., 2017). Effective interventions that harness women's motivation to improve parenting, concurrently address how trauma and substances can undermine growth as a parent, and are delivered within a socially supportive setting may be especially important for pregnant and parenting women in recovery.

Points of intervention that capitalize on recovering mothers' motivation may be improving their parenting knowledge and parenting self-efficacy. In general, women in treatment for SUDs have low levels of parenting knowledge, but that knowledge can be improved with skills training (Velez et al., 2004). Parenting confidence or parenting self-efficacy are similar concepts that reflect internal perception about one's parenting abilities (Vance & Brandon, 2017). Parenting self-efficacy has been linked with positive parenting practices, parental functioning (Coleman & Karraker, 1998), and child well-being (Raynor, 2013).

Research indicates that elevated social support and parental empowerment were related to an increased sense of parenting competency for prenatal women with SUDs; increased parent empowerment served as the stronger influence for predicting parenting self-efficacy (Chou et al., 2018). Among a sample of low-income mothers with co-occurring SUDs and mental health issues, the majority of whom were African American having a greater belief in their parenting capacity was associated with a lower chance of their children being placed in foster care or experiencing loss of child custody (S. Brown et al., 2016). Raynor (2013) writes that "providing parenting education regarding age appropriate child development and care may improve [parenting self-efficacy] and parenting capability" (p. 98), yet much more research is needed on parenting self-efficacy for pregnant and parenting mothers in recovery from SUDs.

Breaking cycles of substance use and trauma may require interventions that explore synergies between SUDs, traumatic stress, and parenting. Women in traditional treatment programs are often receiving siloed education on parenting and substance abuse treatment, with separate, if any, attention to their past trauma.

## Current Study

### *Purpose and Setting*

The purpose of the current study was to design and evaluate client-centered educational support groups for young mothers and mothers-to-be who experienced traumatic stress and were attending intensive residential rehabilitation (IRR) inpatient programs for women with SUDs. Treatment goals included increasing pregnant and parenting mothers' confidence in parenting, enhancing their parenting skills, promoting healthy behaviors, and reducing traumatic stress and substance use cravings.

The Institute on Trauma and Trauma-Informed Care (ITTIC) within the Buffalo Center for Social Research at the University at Buffalo developed and piloted the trauma-informed parenting education support (TIPS) group curriculum for expectant mothers and/or mothers of young children in substance use recovery treatment. Project team members were three faculties, three staff, and two doctoral students, with combined expertise in trauma-informed care, psychosocial interventions, substance use, and perinatal mental health. The research team collaborated with two community IRR partners in the Buffalo, NY, metropolitan region to promote the sustainability of the intervention at the sites through facilitator training and technical assistance. The two IRR programs were chosen because they were located in and/or were serving women who resided in maternal-child health "hot spots" zip codes, indicating that women and young children in those areas were at increased risk of traumatic stress and were likely in need of supports that address trauma.

### *Intervention*

The intervention adapted Seeking Safety, an evidence-based treatment for PTSD and SUDs (Najavits, 2002), and topics were also informed by an outpatient support group curriculum for pregnant and parenting women receiving medication-assisted treatment (Kahn et al., 2017).

Seeking Safety is a 25-module treatment protocol that addresses SUDs and PTSD simultaneously and is designed to be completed in individual or group settings. The goals of treatment are to establish safety, eliminate substance use, and support the development of positive coping skills (Najavits, 2002). Seeking Safety is present-oriented, trauma-sensitive, and combines cognitive, behavioral, interpersonal, and case management elements together (Najavits, 2002).

Seeking Safety has been studied with a variety of populations struggling with PTSD and SUDs. Evaluations have been largely positive; evidence from a meta-analysis, randomized controlled trials, and other research designs generally supports its effectiveness in reducing PTSD and other mental health symptoms (e.g., depression, general symptoms of distress) with more mixed evidence as to reduction of SUD symptoms and substance use (Desai et al., 2008; Empson et al., 2017; Lenz et al., 2016; Lynch et al., 2012; Najavits et al., 2018; Schäfer et al., 2019; Tripodi et al., 2019). More recently,

Seeking Safety has been studied with pregnant and postpartum women with some promising, if mixed, results. Among pregnant and postpartum women in residential treatment, there was a significant inverse relationship between the number of Seeking Safety sessions and their PTSD and depressive symptoms; however, this result was no longer significant when controlling for demographic and clinical profiles (Salvador et al., 2020). Another study investigated outcomes among pregnant women with PTSD who received Seeking Safety compared to a control group receiving prenatal treatment-as-usual (Weinreb et al., 2018). Women who received the intervention had significantly reduced PTSD symptoms and trend significance for enhanced social support, but postpartum depression, stress management, and gestational outcomes were not significantly improved (Weinreb et al., 2018). Upshur and colleagues (2016) found that Seeking Safety recipients engaged in significantly more prenatal care appointments and more comprehensive prenatal care. Intervention women also reduced negative coping skills, though this was no longer significant when controlling for baseline demographics (Upshur et al., 2016). Evidence suggests that 12 sessions of Seeking Safety had positive effects for women in treatment for alcohol and cocaine use; intervention women reported greater reductions in PTSD symptom frequency and severity when compared with a control group, and the more sessions completed, the greater the reduction in substance use (Morgan-Lopez et al., 2014).

Because gender-responsive and trauma-informed programming supports women and mothers in recovery (Grella, 2008; Salter & Breckenridge, 2014; SAMHSA, 2009), the ITTIC research team determined that Seeking Safety was a promising option for delivering sensitive, integrated treatment to this population. However, although Seeking Safety simultaneously addresses SUDs and PTSD (Najavits, 2002), it does not focus on strengthening parenting as a critical aspect of recovery. The TIPS pilot intervention is the first to integrate Seeking Safety with parenting and child development content across the perinatal period.

### *Curriculum*

Pilot curriculum consisted of eight modules covering topics such as safety; trauma symptoms; overcoming stigma, guilt, and shame; parenting skills; attachment; and child development. In each module, the Seeking Safety structure and/or materials were paired closely with parenting materials, and thus, Seeking Safety remains an integral part of the curriculum. The research team developed curriculum outlines, facilitator guides, and identified existing handouts, adapted materials, or developed new handouts to supplement the topics. The curriculum also drew upon some of the topics outlined and resources used by Kahn et al. (2017). The curriculum developers incorporated a variety of research evidence and psychoeducational material on trauma, SUDs, and parenting. Undergirding the development of the curriculum was an emphasis on applying and honoring trauma-informed principles of safety, trustworthiness, choice, collaboration, and

empowerment (Harris & Fallot, 2001); for example, the curriculum materials were organized in a way that allowed for facilitator flexibility to respond to many different client presentations and client choice about what they took away to build on their personal recovery process. The curriculum contained a primary component on providing women with skills to identify traumatic stress and trauma triggers and what to do once the stress is identified using coping skills, self-care, and social support. The details about each curriculum module are presented in Table 1.

### *Study Hypotheses and Objectives*

*Quantitative hypotheses.* Following the clinical group intervention, we hypothesized that participants would experience increased levels of parenting skills, parenting self-efficacy, and parenting confidence and reduced levels of stress and substance use cravings. In order to test these hypotheses, the research team collected and analyzed quantitative data in the form of a pre- and postgroup survey evaluation.

*Qualitative objectives.* The research team facilitated focus groups with the participants following their completion of the group intervention. The objectives were twofold (1) to glean participants' firsthand impressions of the intervention and any perceived benefits and (2) to identify areas of improvement for future research and clinical application of the support group. The qualitative element of mixed methods research has the potential to elevate the voices and perspectives of marginalized populations, such as women with SUDs and trauma histories, and is consonant with the trauma-informed principle of empowerment.

*Mixed methods objectives.* A descriptive mixed methods design was employed, utilizing an explanatory sequential design (Cresswell & Clark, 2017). This included an initial phase of quantitative data collection involving collection and analysis of pre- to posttest survey results, followed by a phase of collection and analysis of focus group qualitative data. The objective of this mixed methods approach was to utilize the findings from the qualitative findings to describe and extend interpretation of the quantitative findings.

## **Method**

### *Research Design Overview*

The current study is the first to our knowledge to combine a trauma-specific group intervention for those in substance use treatment with parenting and child development across the perinatal period. Given that our hypotheses extended across several domains, and that this was a preliminary evaluation of our effort, an explanatory sequential mixed methods approach was chosen for the affordances it offers related to explaining and corroborating the quantitative findings in more detail and expanding and illustrating our understanding of the

lived experiences of the study participants (Schoonenboom & Burke Johnson, 2017).

### *Participant Characteristics and Eligibility*

The study was comprised of a convenience sample of 48 women eligible and interested in the clinical intervention who were living in IRR facilities at the time the groups were being offered. Inclusion criteria were women who had an SUD and a history of traumatic exposure, were pregnant and/or parenting young children, age 18 and older, were English speaking, voluntarily elected to participate in the group, provided evidence of having an existing social support network, and were willing to allow the group facilitators and their designated counselors or IRR program administrator to exchange information if clinically necessary. Participants could be excluded from the educational support group based on obvious clinical distress at any point in the study. The support group co-facilitators used the screening protocol and their clinical judgment to screen and monitor potential participants. In addition to consulting with one another on potential participants, the support group facilitators presented complex situations on a case-by-case basis to faculty research team members providing regular clinical supervision.

Limited demographic information was collected from participants to protect their anonymity. The participants were predominately European American and under the age of 35 (see Table 2).

### *Procedure*

The research team collaborated with two community partners to offer TIPS groups to young mothers and mothers-to-be in their IRR programs. Researchers shared the outline of the group curriculum and a flyer about the group with the program administrator and staff. The program manager and counselors at each site notified residents they felt would be eligible for the group, provided some basic information about the group to their clients, and encouraged those who were interested to participate in the screenings. Additionally, brief TIPS information sessions held separately for staff and residents were conducted by research team members/group facilitators at several points between 2018 and 2020.

In-person screening interviews took place approximately 5–10 days before the start of the support groups. Individual screening appointments between the support group facilitators (from our research team) and a potential participant were held in a private space at the IRR location (e.g., private office, confidential interview in designated group room). The support group facilitators explained the purpose of the group, used a screening protocol, gave an overview of the content that would be covered, and discussed confidentiality and release of information. The screening conversations lasted between 15 and 45 min each and were an opportunity to assess whether the women were clinically appropriate for the group and to answer their questions. At the end of the screening interview, an

**Table 1.** Overview of Trauma-Informed Parenting Education Support Group Curriculum.

Module Title (Number of Sessions; SS Companion Module/s)	SS Material Used	Trauma or Parenting Material Added
Module 1: Getting to know each other (2; safety)	Quotation for “safety” Quotation for “community resources” Safety is the most important priority right now! <sup>a</sup> Safe coping skills <sup>a</sup>	Overview of parenting basics Trauma-informed values and principles
Module 2: Trauma and trauma symptoms (2; safety; PTSD: Taking back your power; detaching from emotional pain)	Signs of recovery/What is safety to you? <sup>a</sup> Safe coping skills <sup>a</sup> (continued) Quotation for “PTSD: Taking back your power” Quotation for “red and green flags” The link between PTSD and substance abuse <sup>a</sup> Script for a 10-min in-session grounding demonstration <sup>a</sup>	Definition and examples of trauma Julie’s story: Trauma symptoms Link between trauma and early communication: How babies and children communicate needs Brief grounding exercise
Module 3: Substance use disorders (1; PTSD: Taking back your power; when substances control you)	Using compassion to take back your power <sup>a</sup> Quotation for “when substances control you” How substance abuse prevents healing from PTSD <sup>a</sup>	Understanding addiction as a disease Addiction to substances/opioids and the brain
Module 4: Compassionate parenting (1; compassion)	Quotation for “compassion” Ways to increase compassion <sup>a</sup>	Compassion with yourself and your parenting Julie’s story—Trauma symptoms and parenting issues Explaining four parenting styles How to develop trust and build a relationship with your child
Module 5: Parenting skills and child development (3; none)	Quotation for “honesty” Quotation for “healthy relationships” Quotation for “detaching from emotional pain (grounding)”	Consistency in boundaries, discipline, and routines Co-parenting Expressing love, attention, and affection “Amanda’s story” (Sperlich & Seng, 2008, p. 182) Modeling Positive discipline Reflecting on your childhood Self-care Child development and positive parenting practices
Module 6: Overcoming stigma, guilt, and shame (2; creating meaning)	Quotation for “creating meaning” Quotation for “asking for help” Creating meaning <sup>a</sup>	Difference between guilt, shame, and stigma Stigma and substance use disorders “Recovery stories—Tonier” (The Anti-Stigma Project, 2013) Recognizing shame and cultivating shame resilience (B. Brown, 2007) “Brené Brown: Three things you can do to stop a shame spiral” (Oprah Winfrey Network, 2013) “Wholehearted parenting manifesto” (B. Brown, 2012)
Module 7: Good enough parenting and setting boundaries in relationships (2; setting boundaries in relationships)	Quotation for “setting boundaries in relationships” Quotation for “introduction to treatment” Too much closeness: Learning to say “no” in relationships <sup>a</sup> Getting out of abusive relationships <sup>a</sup>	“Good enough” parenting <sup>a</sup> (Choate & Engstrom, 2014) Quotes from moms in recovery Protecting children from toxic people/relationships What are you looking for in a relationship? Children and domestic violence
Module 8: Responding to children with sensitivity and graduation (1; none)	None	Sharing favorite quotes Enhancing bonding and supporting secure attachment with infants/children Certificate of achievement

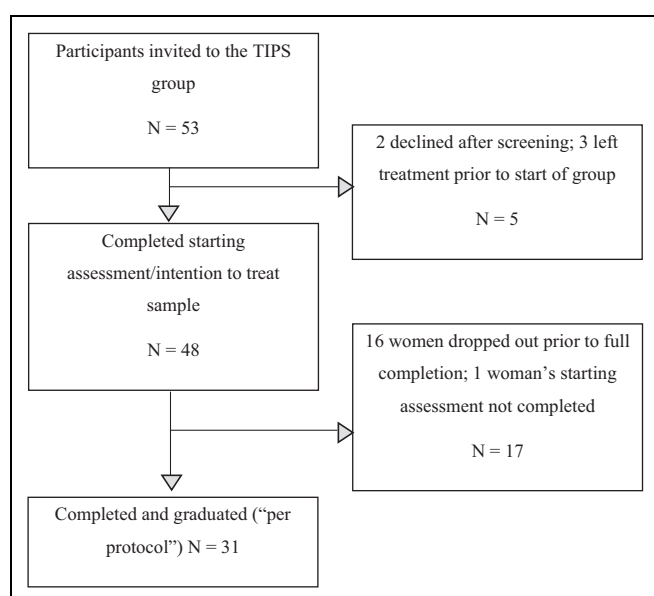
Note. Check-in/check-out and commitment to recovery exercises from SS were used in every session. SS = Seeking Safety; PTSD = post-traumatic stress disorder.

<sup>a</sup>Material adapted during curriculum development.

**Table 2.** Sociodemographic Characteristics of TIPS Group Participants.

Characteristic	<i>n</i>	%
Age		
18–24	21	43.75
25–34	20	41.67
35+	7	14.58
Race/ethnicity		
European American	43	89.58
African American	3	6.25
Latinx American	2	4.17
Number of children, including this pregnancy		
First pregnancy	2	4.17
First baby	20	41.67
Second baby	13	27.08
Third baby or more	13	27.08

Note. *n* = 48. TIPS = trauma-informed parenting education support.

**Figure 1.** Flowchart of recruitment and engagement.

informed consent process was utilized to explain details of participation and potential risks and benefits and to complete written documentation of consent. It was explained to the women that they could exit the group at any time without adverse impact on their programmatic requirements. The women were not compensated for their participation. The study was approved by the University at Buffalo Institutional Review Board.

At the start of the first session, the group facilitators administered a paper pretest to participants assessing healthy behaviors, parenting skills, parenting self-efficacy, and parenting confidence, stress, and substance cravings. At the final session prior to the graduation ceremony, a posttest assessing identical measures to the pretest was administered by the group facilitators. Participants were prompted to provide a unique, nonidentifying code on the pre- and postsurveys to pair responses and track differences across time.

Eight 10–14 session TIPS groups were delivered over 6- to 7-week intervals between February 2018 and June 2020. Groups averaged 1½ hr in length, and groups were comprised of two to eight participants, with an average group size of six participants. The first two groups used a 10-session model over the course of 6 weeks to deliver the eight-module content. The third group was extended from 10 to 12 sessions over a 6-week period to be responsive to feedback from the site counselors and participant focus groups regarding pacing (although the material covered remained consistent). Groups 4–8 used the 14-session model over 7 weeks. A one-on-one session was conducted in lieu of a support group between June and July 2020. A total of 48 women attended at least one session of the group; for analytic purposes, we are considering this our “intention to treat” sample. Of these 48 women who attended at least one session, 31 (65%) completed the group. Due to a variety of circumstances, typically that participants left the IRR placement altogether, 17 of the 48 (35%) were not able to complete the group (see Figure 1).

Following the group, all participants who completed the groups were invited to participate in a 30- to 60-min focus group on-site at the IRRs with a different member of the research team than the group facilitator. This conversation provided participants with an unfiltered opportunity to share their experiences and to gain a sense of the overall acceptability and global impact that membership in the support groups provided. Focus groups were recorded using a handheld recorder and later transcribed for qualitative analysis; these were reviewed regularly for any practical changes to the delivery of the curriculum and support group that might be needed. Throughout the intervention, the research team coordinated with the IRR sites, and the sites were provided with ongoing sustainability training and technical support.

### Instruments

**Pre–post measure.** A pre- to postgroup measure was administered to evaluate the preliminary effectiveness of the clinical intervention on lifestyle behaviors, stress, substance cravings, parenting skills, parenting self-efficacy, and parenting confidence. The pretest was administered prior to beginning the intervention at the first group, while the posttest was administered prior to the graduation ceremony at the end of the final group.

The pre- to posttest measure consisted of one survey that combined items across several different measures. Questions about lifestyle behaviors (adapted from the Healthy Lifestyle Behaviors Scale; Walker et al., 1987), stress, and positive behaviors (adapted from Freudenberger, 1974) were taken from a Seeking Safety evaluation instrument developed by ITTIC. Questions about substance cravings (adapted from GAIN; Dennis et al., 2003), parenting skills (Alabama Parenting Questionnaire; Frick, 1991), parenting confidence (Karitane Parenting Confidence Scale; Črnčec et al., 2008), and parenting self-efficacy (Parenting Sense of Competence Scale; Gibaud-Wallston & Wandersman, 1978; Johnston & Mash, 1989) were

used. The evaluation measure contained a total of 30 items, all based on various Likert responses, with the exception of the dichotomous substance craving items (yes/no). All items were drawn from scales with demonstrated reliability and validity; however, for the current study, these combined scales were designed to be used for preliminary evaluation purposes. Items from the Healthy Lifestyle Behaviors Scale (Walker et al., 1987), Freudenberg's (1974) Stress Scale, and the GAIN instrument (Dennis et al., 2003) were adapted to be used with this population. The items from the Alabama Parenting Questionnaire (Frick, 1991), Karitane Parenting Confidence Scale (Črnčec et al., 2008), and Parenting Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978; Johnston & Mash, 1989) were not adapted, but not all items per each scale were utilized, as the intention was to keep these evaluation measures brief, yet encompassing of the domains, the intervention was hypothesized to influence. We assessed internal reliability for the pretest measure items utilized; these ranged from a low Cronbach's  $\alpha$  of .20 for parenting skill (interitem correlation mean score = .11), .41 for parenting sense of competence (interitem correlation mean score = .25), to .50 for lifestyle behaviors (interitem correlation mean score = .2), .51 for positive behaviors (interitem correlation mean score = .18), .56 for cravings (interitem correlation mean score = .28), .74 for stress, and a high of .84 for parenting self-efficacy. Note that all the measures each contained fewer than 10 items, which has the effect of reducing apparent internal reliability; thus, we have provided the interitem correlations (optimal range = .2–.4) as well for those measures with less than .70 (Briggs & Cheek, 1986; Pallant, 2020).

**Focus group interview.** An interview guide was used to structure the focus group sessions. The questions centered on overall satisfaction with the group, unique contributions the group may have made to participants' recovery, and participants' perceptions of the quality of the group facilitation. Additionally, participants were asked to provide their reflections on the helpfulness of included curricular content and the structure of the support group, and questions were posed related to whether the participant felt any increased confidence in parenting, hopefulness about their recovery, and ability to cope with stress and manage any cravings for substances.

**Interviews with program administrators.** Following the analysis of participant data, open-ended individual interviews were conducted with the program directors at each of the two participating IRRs in July 2020 to obtain their feedback on the functioning of the groups, plans for sustainability, and to address their thoughts retrospectively on participant selection and uptake.

## Data Analysis

**Quantitative analyses.** Prior to onset of the study, we calculated that a sample size of 31 subjects would be needed to conduct a paired sample  $t$  test with an  $\alpha = .05$ ,  $\beta = .20$ , and a moderate

effect size .50 for the variables of interest. Although the current study was an uncontrolled pre–post-test design, we used the more conservative approach of analyzing the data per intention-to-treat for the sample of the 48 women who completed the pretest (with multiple imputation of missing values) versus exclusive examination of the per-protocol sample of 31 completers. We conducted paired samples  $t$  tests to assess mean differences between pre- and posttest scores for symptoms of stress, positive behaviors, cravings, lifestyle behaviors, parenting skill, parenting confidence, and parenting self-efficacy. Data from paper surveys were analyzed utilizing SPSS (Version 26). Effect sizes were calculated using an online program (<https://www.socscistatistics.com/effectsize/default3.aspx>).

**Qualitative analysis.** For qualitative data analysis, inductive thematic content analysis (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005) was used to identify themes in participant experiences following their participation in the support group, predominately in relation to overall acceptability and learning outcomes, and concordance with themes raised in the quantitative results related to stress, positive behaviors, cravings, lifestyle behaviors, parenting skill, parenting confidence, and parenting self-efficacy. Focus group content was organized into discreet thematic codes separately by one of the team faculty members experienced in qualitative data analysis and one of the doctoral students on the team; these thematic codes emerged from the data and were not determined a priori. Once consensus was reached regarding initial code consistency, subcategories of this initial code set were then collapsed into a set of meaningful clusters (generic categories) that were relevant to describing TIPS participants' feedback regarding their experience receiving the support group intervention. Next, the data were checked for adequacy in describing the breadth of reported experiences of the group members as previously shared by group facilitators in supervisory sessions. It was then determined that saturation had been achieved related to participant feedback about their participation in the groups. For presentation of results, the two researchers separately chose quoted material to serve as "anchor samples" (Mayring, 2014) of the generic categories presented and then came to consensus as to which anchor quotes were the most appropriate to represent each category. For anchor quotes, all participants' names were changed to protect anonymity.

**Mixed methods analysis.** We employed an explanatory sequential mixed methods approach involving quantitative analysis of the pre- to posttest surveys, followed by qualitative analysis of the focus group transcripts. In the ensuing Discussion and Applications to Practice, we compare and contrast the quantitative findings with the qualitative findings to provide a more fully fleshed-out understanding of the quantitative results as well as the participants' experiences with the intervention as a whole.

## Results

### Preliminary Analyses

Because 35% (17 of 48) of the intention-to-treat sample dropped out of the support groups prior to full completion, we utilized one-way analysis of variance tests to ascertain whether clients' scores on the pretest differed as a result of treatment engagement. There were no significant differences in pretest scores on any of the measures related to treatment engagement. There were no adverse events reported for any participants.

### Quantitative Findings

Following the intervention, pre- to posttest intention-to-treat analyses were conducted for the sample of 48 women who completed at least one group session. Paired samples *t* tests were conducted for participant-reported symptoms of stress, cravings, positive behaviors, overall lifestyle behaviors, parenting skill, parenting confidence, and parenting self-efficacy. Consistent with modern recommendations (e.g., van Ginkel et al., 2020) for handling missing data, the "not missing at random" scores on the posttests were simulated using multiple imputation methodology for those 17 women who did not complete the posttest; subsequent analyses were conducted on the pooled estimates of the simulated data.

First, there was a decrease in overall reported symptoms of stress from pretest ( $M = 2.42$ ,  $SD = 0.09$ ) to posttest ( $M = 2.09$ ,  $SD = 0.85$ );  $t(48) = 2.58$ ,  $p = .01$ ;  $MD = .34$ ,  $CI [0.08, 0.58]$ ;  $d = 0.45$ . Reported cravings also reduced from pretest ( $M = 1.17$ ,  $SD = 1.15$ ) to posttest ( $M = 0.27$ ,  $SD = 0.43$ );  $t(48) = 4.78$ ,  $p < .001$ ;  $MD = .90$ ,  $CI [0.52, 1.28]$ ;  $d = 1.03$ . There was an increase in positive behaviors from pretest ( $M = 2.79$ ,  $SD = 0.47$ ) to posttest ( $M = 3.13$ ,  $SD = 0.49$ );  $t(48) = 3.27$ ,  $p = .001$ ;  $MD = .34$ ,  $CI [0.14, 0.56]$ ;  $d = 0.73$ . Scores for parenting self-efficacy also improved from pretest ( $M = 5.78$ ,  $SD = 1.36$ ) to posttest ( $M = 6.54$ ,  $SD = 0.61$ );  $t(45) = 3.85$ ,  $p < .001$ ;  $MD = .76$ ,  $CI [0.37, 1.15]$ ;  $d = 0.72$ . The effect size for cravings was large (1.03), and the effect sizes for positive behaviors (0.73) and parenting self-efficacy (0.72) were medium, while the effect size for stress was small (0.45) per Cohen's convention (Cohen, 1988).

Although there were mean score improvements in overall lifestyle behaviors, parenting skill, and parenting confidence from pretest to posttest, these were not statistically significant.

### Qualitative Findings

Nineteen of the support group participants took part in eight 30- to 60-min focus groups conducted in person with two to three participants each; these were conducted on-site at the IRR facilities with a different member of the research team other than the group facilitator. Three participants who were unable to attend the focus groups provided their feedback in three individual interviews, and one participant declined to interview but provided written feedback. Although the individual

interviews and written feedback were analyzed for general concordance or discrepancy from the focus group content, because these were few in number, a discursive analysis of these was not undertaken. Therefore, the eight transcripts from the focus groups represented the units of analysis for qualitative data analysis. Pseudonyms are assigned to quotes to protect the identity of participants.

**Overall satisfaction.** Participants expressed much satisfaction with the group. They appreciated the curriculum, which they felt helped them connect past traumatic exposures to current recovery efforts and examine parenting in the context of trauma and recovery. Participants also appreciated the structure of the support group, the ability to express themselves and to exercise choice within the structure of the group, and the way in which the group was distinct from other groups they may have experienced in the past. Several participants expressed a desire for more opportunities for trauma processing within the group structure. Participants expressed deep appreciation for the way in which the group was facilitated, including a sense that the groups were led with compassionate responsiveness, that the facilitators applied good listening skills, and that they were able to help foster participant coping skills.

**Appreciation for the curriculum.** Participants expressed an appreciation overall for the materials, topics, and discussion of inspirational quotes. They also appreciated the consistency of the curricular structure. Several expressed that they found the group to be uplifting and facilitative to their recovery. They especially liked the coping skills that were covered in the groups and shared how they were continuing to use these skills in daily life.

**Connecting past trauma to current recovery.** For the majority of participants, there was expressed appreciation for finally having a chance to talk about the impact of past trauma in their lives and to feel heard and seen. One participant, Charlotte, found that she was not alone in having had such experiences:

I think it just reminds me that I'm human, you know what I mean? I'm not the only one who's gone through things like this. Trauma affects my life on a daily basis and I just have to remember to stay on top of my coping, and remember in the back of my head that it might come up and I have to be able to be open about it and talk to people about it, and be able to be honest with myself.

Another participant, Emily, shared similar thoughts when she expressed that "I was comfortable enough to speak openly and honestly about my situations and past situations. I think it was really good that it was a trauma-parenting group." For some, like Selena, this was the first time that they were able to feel safe expressing their vulnerability:

I talked more about how I felt about my trauma, about not being with my daughter, more openly in this group than I have in any other group here at the house. I felt the most comfortable in this group.



*The role of stigma, guilt, and shame.* Participants expressed their appreciation for learning more about how stigma, guilt, and shame are attendant features of substance use. One participant, Brooklyn, shared that “I like learning about the stigma thing and the addiction, like how it’s not just a choice but also a physical choice. But the body wants it and how that affects us.” Another participant, Hayden, expressed similar views:

I feel like, our trauma is not an excuse for our addiction. But our trauma, I don’t want to say it made us, because we have overcome that, but it also affected our lives. It affected how we turned out and the bad choices we made to drink or use drugs. So, to be able to go to that aspect while we are in recovery instead of just being like “well, you used drugs and like well you got to quit and this what you do after”—they don’t really . . . they didn’t try to dig into before, and why. Which I kind of knew, but this group has like helped it . . . help me feel better about the stigma and now to be honest, when I go home, the root of all I am the way I am today.

Addressing stigma and guilt and shame through compassionate self-talk is a main feature of Seeking Safety and was retained in the TIPS adaptation as well. While most appreciated this focus, some, like Taylor, found it might have been overemphasized and that it might have taken up too much time:

I feel like we spent a lot of time on—is it just me or—I felt like for 2 weeks we did compassionate talks. We spent a lot of time on that, where I think we didn’t really get to get to parenting and postpartum . . . all those packets that they gave us at the end were really interesting things . . .

*Learning about parenting in the context of trauma and recovery.* Despite the aforementioned description of one participant’s thoughts that the parenting and postpartum materials were not adequately covered, the majority of participants appeared to have very much appreciated the focus on parenting. They expressed being able to make connections between their past trauma and how that affected their parenting. Selena expressed wanting the negative cycle of trauma to stop with her:

I’ve never seen a group like this, and I think it was really important to see the trauma in my life, from my family to what I don’t want to do and what I do want to do with how to teach my daughter. And how to interact with her. It shows the cycle and how I want it to stop with me—you know? That’s really important.

Another participant, Olivia, was able to cultivate an enhanced view of what establishing safety might mean in the context of parenting:

Once you’re labeled as a bad mom, it’s hard to come back from that. Once they see you as that, that’s what it is. Like right now I’m sure a lot of people are calling me a bad mom because of the choices I’ve made, but I’m not a bad mom. I’m just . . . I need help. I made a mistake. I’m always really cautious and trying to be safe, but there’s certain things I never knew could be harmful. And not just in the aspect of [electrical] sockets and stuff like that, but the

way you talk around your children, and what your children see. I never thought about safety when it came to arguing and things like that. But when you think about it, it’s like, “Oh wow, I could have damaged my baby.” I didn’t know that either until I learned that in here—how much damage that actually does. I mean you could see it, when you’re screaming and yelling and they’re telling you to stop, but you don’t really realize the damage.

For several women, learning about the developmental stages of their child was helpful in terms of assessing how their child was doing and alleviating fears they had about how their substance using might have compromised their child’s development. One participant, Jasmine, shared that:

My son is 8 months so it was nice to get the milestones to know that he is hitting all of them because I was using when I was pregnant. And, that was always my biggest thing to make sure that he will be okay because those are things that you don’t really acknowledge or know until further down the road, so to know that he is hitting every milestone perfectly and to know he is okay is kind of a big deal. (. . .) I know what it is like to grow up with a disability and I just did not want that for any of my children and I felt very guilty. So, it’s nice to be able to erase some of that guilt as I am watching him grow. Cause he is perfect.

Participants also shared that they were using the skills learned in the TIPS groups during their parenting interactions. One woman, Morgan, used the skills at a scheduled visitation with her daughter:

And this may sound corny, but my 4-year-old daughter is coming today, and I reread a lot of the handouts from trauma-informed and I tried to remember some of the advice that’s been given to me from other people, because I want to try new discipline. I want to try new things.

Another participant, Violet, also used the information and skills during visitations with her son:

I have learned a lot in the last 10 weeks. And I’ve been using it—when I go see my son, or when he comes here. So using it and seeing the difference from when I was in active addiction is huge. To see his reaction, to see temper tantrums not being done, or me being able to cope and getting down to eye level and learning all these ways to do it—are amazing. That I wouldn’t even have thought of.

Several participants shared how the content regarding positive discipline with children was particularly helpful. Hayden shared:

I grew up in a negative household. I don’t want my child thinking he is bad because of his actions. Because you are not bad, you are a good kid. You just made a bad decision. If I break it now and do positive reinforcement, like I am getting so much better at that . . . Like I will give him praise for everything he does. Like I try not to tell him no anymore unless I have to. Everything else, I let him explore.

*Appreciation for the support group structure.* Participants expressed deep appreciation for the supportive structure of the group and the peer-to-peer sharing. They appreciated the ability to express their thoughts freely and to exercise choice within the group structure. They felt that the tripartite focus on trauma, recovery, and parenting made the TIPS group unique from other programming.

*Voice and choice.* Most participants expressed gratitude for being able to share their experiences regarding the impact of past trauma to their current context. Participants were given choice regarding the direction of the conversations and the foci of the sessions, which was foreign and uncomfortable for some. Meredith articulated this well:

I was uncomfortable how every day, or how every time we would come in, like I'm just so used to having things laid out for me here. So, we would come in and we would have to choose like one, and you know certain people would want this and certain people would want that. And so [facilitator] had opened my eyes up a little bit to the fact that the reason why she was doing that is because we have a choice. And she wanted to kind of gauge the group. And so at first it was uncomfortable to me. Like why are you asking us to make a choice like this? Like it's your group and you have hold of it. But she made it our group. And so at first it was hard for all of us, like we would . . . we were almost annoyed by it. And then we kind of okay, we started understanding why she was doing that. But for us, for me, I wasn't used to having a voice like that. I wasn't used to people asking me.

*Distinction from other programs.* Participants noted that although they may have been participating in other support or educational groups as part of their recovery, that this group was the only one in which trauma and its relationship with substance using and parenting were specifically addressed. Brooklyn said about this, "it's all of the topics in one. Like in one group—instead of having to go take different classes. You get it all in one class." They also saw TIPS as different from other groups because the level of sharing seemed to be "deeper." One participant, Nia, expressed:

I think just being able to touch on the trauma in general because that isn't something that we get to do in other groups. Trauma is very . . . if you are not ready, it will destroy you. It was nice to have the option to tackle that and feel more prepared . . . I feel more prepared in I guess going towards the future because I know I was ready to tackle that. It was something that I held onto. So, I feel like I opened up a lot of hurt and pain that I let go of throughout this group which is really helpful.

This ability to "touch on the trauma" may have been facilitated by the generally smaller and more intimate nature of the TIPS as compared to other groups; a few participants expressed liking that the groups were small, felt that this helped them form strong bonds with the other group members, and made it easier to trust one another and keep each other's confidences.

*Expressed desire for more contact and trauma processing.* Although the feedback was very positive, some participants expressed frustration with the length of the group, expressing that they wished the groups had gone on longer. A few participants also expressed frustration with not being able to process their traumatic experiences in an in-depth way within the context of the group. For safety reasons, participants were encouraged to speak in broad strokes about their trauma and not go into minute detail ("skipping the stone vs. sinking the stone"); however, this was frustrating for a few participants for whom this group represented the first opportunity to truly speak about their past trauma. In follow-up questioning with these few participants who desired more trauma processing, it was revealed that they did seek additional help from their individual therapists, however, and that they were continuing to do their own personal trauma recovery work in those contexts. Participants appeared to generally understand the boundaries set around trauma disclosure, but nonetheless expressed a desire for more trauma processing. Jenna expressed it this way:

And another thing I think was good is there were boundaries on things we were allowed to talk about—we weren't allowed to go into detail about past trauma experiences we've been in, because of what it can turn into. I think with that, I don't know how this would be done, but maybe if we could go a little deeper into that stuff . . .

*Impressions of group facilitation.* Participants expressed appreciation for the compassionate responsiveness on the part of the facilitators, their application of good listening skill, and the ways in which they fostered coping skills. Some participants also expressed appreciating the co-facilitation of the groups by members of the IRR staff and appreciated the broader perspective that the staff co-facilitators were able to share based on their day-to-day connection with the participants and witnessing their individual recovery in that context. Some expressed a little frustration with a lack of coordination at times between the facilitator and co-facilitator, feeling that staff were not as prepared for the sessions as they would have hoped.

*Compassionate responsiveness.* Overwhelmingly, participants expressed positive impressions of the group facilitation and found the facilitators to be responsive, compassionate, understanding, and empathetic. They also found that they could express freely without feeling judged by the facilitators. One participant, Trista, shared that this sense of nonjudgment came through despite their speculation that the facilitators did not struggle themselves with substance using:

I think [the facilitators] were very understanding about that. They weren't addicts, and they weren't in that situation, and they were open to us explaining it to them and dealing with it in the best way they can, not being condescending in any way, or saying this is what it is, or this is how we're going to teach it to you or tell it to you.

**Application of listening skills.** Many participants commented about the use of good listening skill on part of the facilitators. In the words of Morgan, “She listened to everything everyone said. Her memory is definitely on-point . . . and that’s a good thing because it lets us know that she’s actually listening to what we’re saying.”

**Fostering coping skills.** Participants commented on the facilitator’s ability to promote coping skills, both in the curriculum and in the moment. Regarding real-time use of coping skills, one participant, Audrey, shared, “And anytime I felt a little uneasy, she’d have me take big breaths. So, she kind of helped me use coping skills.” Hayden shared how using the coping skills was affecting her life on a daily basis:

The coping skills help me on an everyday basis because I have . . . I have a tough time with this new learning a way to live. Because I have been using since I was 8. ( . . . ) And with each trauma I got worse and worse. With my traumas, drugs are . . . they go together. So, learning discipline and learning a new way to live and the coping skills are what really help me because I did it on a daily basis. ( . . . ) So that is the main two things I took . . . were the coping skills and the grounding techniques because I am using them since I learned them, every day.

**Overall recovery.** Overall, the enthusiasm for these groups appeared to be very high. The participants shared that the group helped increase confidence in parenting, ability to cope with stress, and reduced their cravings for substances. They also spoke to the overall impact of the group to their recovery.

**Increased confidence in parenting.** Several participants shared that the experience of being in the TIPS group was helpful to increasing their confidence in their parenting. Meredith shared:

Oh my god, are you kidding me? I can’t even explain to you like some of the packets and some of the papers—I have them on my fridge. I look them over. ( . . . ) Like certain things that were so helpful like positive discipline—I didn’t understand, like I wanted to do positive discipline but I couldn’t do it and I asked [the facilitator] if she could like help break it down a little bit for us, and she got me information . . . And my child, my three children, my baby even he is 6 months old, but they had all been through domestic violence trauma before we got here. And so, I was able to really forgive myself for allowing that to go on and hit it head on, and so I am in a more trusting relationship with my daughter and my son and the baby and just different things but yeah, I can’t even tell you how . . . I mean just so different. I’m so different.

Another participant, Angela, shared that:

I learned that everybody does make mistakes and nobody is perfect and especially with me not—it helped me understand that giving custody of my son to his dad for a while was the best situation—that was me caring and being a good mom. Letting him live the way I was living and um, and especially in the confidence of how

I’m parenting now, especially the certain things that I do have given me a lot of confidence with him.

**Ability to cope with stress.** Participants were able to make the connections between past trauma and current coping. Angela shared that:

I never talked about stuff like that and I was just kind of like a “don’t think about it, it’s not there” type—but me talking about it, it makes me . . . like I don’t want to hide it anymore. I don’t want to mask it anymore. Learning ways to deal with it and to cope with it . . . it will help me in my recovery.

Jasmine shared how expressing her feelings about past trauma is critical to the process of recovery:

I know how to express the trauma now. It is a big deal. I feel like all of us have something letting us down, and will be a part of our lives. If I didn’t have this class to approach the trauma and to know how to approach the trauma . . . I would be . . . I was very concerned about my recovery. There is a lot of things that could instantly cause a relapse. So, now that I was able to express some of the trauma and to know that I am ready to know that when I do leave here, I would like to continue to work with somebody on my trauma. Because I know it could be an instant cause to a relapse . . . I have faith in my recovery throughout this class, that is for sure.

**Reduction in cravings.** Participants articulated ways in which the TIPS group was helpful toward reducing cravings for substances. Meredith shared that, “I’m not ‘catastrophizing’ things and holding guilt and shame like I was. And so that all leads to cravings going down.” Angela shared that:

( . . . ) when I’m stressed out I think about the cravings. So, again, it’s all about how you cope with it I feel like. Now, when I first got here, I had an extreme amount of cravings. But now, after the groups and working through, it’s definitely decreased a lot . . . because I don’t . . . It’s all about how you cope with it. The positive . . . how much better I feel now, the positive . . . I have very rare cravings. Not much at all anymore. But I never forget where I come from [laughs], because I don’t want to forget what that’s like, you know?

**Overall impact of TIPS on recovery.** Many participants expressed the overall importance of the TIPS group for their broader recovery. They described the group as “uplifting” and “empowering.” Meredith described the group as life-changing:

Before I took these types of programs, I couldn’t figure out what was missing from my recovery. So, I kept asking, why I kept relapsing? And when I took this TIPS group it’s the first time I was opened up to the fact of trauma, and looked at the trauma, all of the trauma I’ve been through. And how it is not only the starting piece for my using but also not healing from it, not knowing about it, not knowing how it affected my parenting and my

children and all that stuff was the biggest reason why I relapsed. Was the biggest reason. This group totally, it like changed my life. I was completely, um . . . I just had no idea. I was literally like life or death thankful for this group.

## Discussion and Applications to Practice

The delivery of the TIPS intervention resulted in statistically significant improvements in participants' symptoms of stress, reported cravings, initiating positive behaviors, and parenting self-efficacy. In addition to these changes on the pre–posttest measures, participant feedback gathered at focus groups following the administration of the intervention at both the IRR sites was largely positive in nature. Participants expressed deep appreciation for the content, form, and level of sharing they were able to do. They especially appreciated the warm and nonjudgmental facilitation of the groups and articulated several ways in which the intervention was helpful in increasing their sense of confidence as parents and feeling not alone in their struggles.

A similar program has been conducted with young mothers and mothers-to-be who were experiencing opioid use disorders (see Kahn et al., 2017). The participants from the Kahn et al. (2017) study found the educational content helpful, liked that the content was tailored specifically to their needs, and instilled a sense of hope that they could be good parents. The participants especially liked the feeling of support they received from the group, and it helped them to overcome their feelings of isolation and guilt as young mothers overcoming SUDs. The current TIPS intervention has resulted in similar overall findings in relation to acceptability.

There was a statistically significant improvement in parenting self-efficacy but not in parenting skill and competence. Lack of significant findings could have been due to a number of factors. First, although generally curricular topics, including parenting, were well covered and appreciated by participants, at times, the more detailed content related to parenting did not get covered in the sessions. This was for several reasons, including time constraints and not wanting to disrupt the flow of the sessions, or due to the constituency of the group. For example, if only one participant was pregnant, then less time was spent on pregnancy material in the overall session and participants were referred to handouts instead—which they did value; however, this might have lessened the impact of the group overall for parenting knowledge and confidence at posttest. Additionally, many of the women participating in our study did not have full custody of their children in residential settings. It is possible that with more regular contact with their children and more opportunities to practice, their knowledge and belief in their skills and abilities as parents would have improved. A longitudinal design that follows women for months after completion of the group would be needed to chart their growth in this area.

TIPS participants' qualitative feedback seems to suggest increased confidence and sense of hopefulness as parents and for their continued recovery. Many gave specific examples of

how their coping skills and parenting have shifted and improved since participation in this pilot intervention. Their positive qualitative reflections seem to contrast with the lack of quantitative findings on parenting knowledge and parenting competency changes, which is why using a mixed methods design to evaluate a pilot is so critical.

This pilot intervention has several strengths. The intervention was acceptable to participants and feasible to deliver. It can be delivered in group or one-on-one sessions; however, participant outcomes from the individual format would need to be evaluated. Improvements from pre- to posttest related to stress symptom reduction, reduction in substance cravings, and increases in parenting self-efficacy and initiating positive behaviors are likely important contributions to the overall recovery of the parenting participants. Including IRR staff as co-facilitators provides a mechanism for sustainability at the study sites. Whereas facilitators of the curriculum need a solid foundation in Seeking Safety and coaching on how to deliver TIPS, they do not need a specialized degree or license to be able to facilitate these groups. This provides an opportunity for diversity within the facilitator role (e.g., mentors, peers, advocates). Finally, it is likely that this curriculum and format could translate well to a variety of other treatment venues and situations which provide help to women who are mothers, who are survivors of trauma, and who struggle with substance use and parenting challenges. This could include women in outpatient SUD recovery programs, domestic violence shelters, women in poverty, and women experiencing mental health disorders.

There are limitations to this study, as well. First, this was a pilot study with no comparison group; future research should include the use of a comparison group that would allow for more robust statistical analysis and inference. Second, we had no access to data regarding other treatment offerings in the facilities and cannot rule out the contributory effects of these. Third, due to the small sample size and the fact that women were in residential treatment, we collected a very limited number of demographic variables regarding participants. This limited our ability to conduct robust analytic comparisons across demographic groups. Finally, we took a really pared-down approach to data collection in this pilot so as to reduce participant burden; given that the reliabilities for the reduced scales included in our measure were not strong, our results suggest that the use of full scales of the included measures would be preferable going forward and would enable enhanced psychometric evaluation. Additionally, the use of the reduced measures greatly limited our approach to analyses regarding any mental health diagnostic data, types of substances used or SUDs, treatment duration, intimate partner violence history, and so on.

A final limitation is the relative lack of diversity in the sample; the vast majority of the TIPS participants (nearly 90%) were European American. In interviews with the IRR directors, we discovered that this was generally reflective of the constituency of the IRR facilities. We suspect that this was reflective of pervasive systemic racism and a disparity of

access to IRR programs for women of color. Reacting to that, one of the IRR directors shared that:

Two women are going to go out and use drugs and steal from the mall, but the White woman is going to go to rehab and the Black woman is going to go to prison. So, there is that stigma as well . . . I have a White woman, and not the Black woman. And I have a house full of White women and not the Black women. So thus, . . . you never have the Black woman in your class because . . . it is not realistic. Because, we don't have them in the rehab.

The director of the other IRR agreed with this general sentiment, both in terms of the constituency of the IRR population and the disparity in who does/does not get mandated to treatment versus incarceration:

I think it's just the population we have here at [IRR]. It's not a matter of like them not being invited to the group or being in the group, but it's just that we primarily have, you know, White clients. And we, we have typically, like when we're full, we have, you know, 20 White clients to two Black women.

The dearth of Latinx and African Americans entering and/or successfully graduating from substance use treatment has been noted by other researchers (e.g., Daley, 2005; Jacobson et al., 2007; Lundgren et al., 2001; Marsh et al., 2009). Personal and cultural perceptions that downplay the need for and efficacy of treatment, as well as stigma related to SUDs, may be particularly strong barriers to treatment engagement for Latinas and Black women (Pinedo et al., 2020). Culturally sensitive practice at the organizational level is associated with reduction in entry time and increased retention for Latinx and African American clients seeking substance use treatment (Guerrero & Andrews, 2011).

Implications for future research on TIPS include conducting a trial with a larger sample size and a comparison group and expanding on data collection to include more in the way of demographic information, mental health diagnostic data, substance use-specific data, overall treatment duration, and trauma exposure measurement. Adding measures for social support and coping might also enhance our understanding of the relative impact of the intervention. Expanding data collection to a 3- or 6-month follow-up would provide information regarding the maintenance of gains from group participation. Additionally, employing measures that track young children's psychosocial well-being would enable us to see whether improvement among mothers is having an influence on their children. An additional implication for future research is the need for outreach to women of color, both for inclusion in IRR settings in the first place, as well as inclusion in the TIPS intervention.

Clinical implications also emerge from this pilot project. In order to enhance the parenting component of the support group, a co-facilitation model with at least one parent and/or parenting educator would be ideal. Facilitators should have a strong

foundation in Seeking Safety before using the adapted curriculum. Regular clinical supervision and support for group facilitators were highly influential to the overall success of the program and should be a constituent part of the intervention in the future. Given the camaraderie established in the TIPS groups, group membership might be used as a launching pad for a more informal peer-led support group for mothers and could be especially valuable for those wanting a continuation of recovery parenting support in the community.

Participation in the TIPS pilot intervention at two IRR sites resulted in statistically significant and meaningful decreases in self-reported symptoms of stress and substance cravings and increases in positive behaviors and parenting self-efficacy. Despite a lack of statistically significant changes on measures of parenting skill and confidence, qualitative data showed that many participants did experience gains in these areas. This pilot provides preliminary data that TIPS in IRR settings may offer an important complement to existing SUD and parenting programming and provides an opportunity for potential wholeness in recovery by integrating substance use, trauma, and parenting information and support into a single curriculum.



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