



Barriers to Implementing a Group Treatment for Maternal Depression in Head Start: Comparing Staff Perspectives

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Abstract

Although providing depression treatment for Head Start mothers may improve child wellbeing, interventions have not been widely used for this purpose. This failure may be due to the characteristics of clients, interventions, or the systems of care in which services are delivered. This study explored barriers to implementing Interpersonal Psychotherapy-Group with ethnic minority Head Start mothers, including differences in the level of staff consensus regarding barriers, which may predict implementation success. Barriers included resource challenges, cultural and linguistic differences, and participant concerns, and staff demonstrated low to moderate consensus. Results emphasize the importance of engaging diverse stakeholders in implementation.

Keywords Barriers · Implementation · Depression · Mothers · Head Start

Introduction

Depression poses a severe threat to the wellbeing of low-income, ethnic minority mothers and their young children (Administration for Children and Families 2006; McDaniel and Lowenstein 2013), which can lead to poor child outcomes in a variety of domains including parent–child relationship quality (Martins and Gaffan 2000), child behavior problems (Goodman et al. 2011), and school readiness skills (Pan et al. 2005; Quevedo et al. 2012). In order to improve the health and wellbeing of young children, child development experts have called for innovative two-generation

programs that seek to strengthen parental mental health for families experiencing significant adversities, particularly in nontraditional mental health service settings (Shonkoff and Fisher 2013; Teti et al. 2017). Early childhood education programs like Head Start provide a unique opportunity to reach low-income parents who may have difficulty accessing and utilizing traditional mental health services (Ammerman 2017; Beardslee et al. 2010). However, researchers must understand possible barriers to implementing parent-focused mental health services in this setting. This paper seeks to examine the views of different frontline staff members regarding perceived barriers to implementing a group maternal depression treatment in Head Start.

The field of implementation science provides several useful frameworks for exploring potential barriers and facilitators to implementation. Two of the most commonly used frameworks are the “Exploration, Preparation, Implementation and Sustainment” (EPIS) model (Aarons et al. 2011) and the Consolidated Framework for Implementation Research (CFIR) model (Damschroder et al. 2009). Together, these two frameworks identify several factors related to the inner setting, the outer setting, the intervention itself, the individuals involved, and the process of implementation that may operate as barriers or facilitators to implementation (Aarons et al. 2011; Damschroder et al. 2009). Several empirical studies identified similar barriers to implementation in each of these domains. For example, studies show that

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individual-level factors like provider knowledge, attitudes, values, and readiness for change impact adoption of new practices (Greenhalgh et al. 2004). In Head Start, individual-level factors may include staff attitudes towards adopting evidence-based mental health interventions and prior mental health knowledge, since paraprofessional Head Start staff typically have little training in mental health. In addition, research shows that inner setting factors like staff turnover (Edmondson et al. 2001), formal and informal communication networks (Palinkas et al. 2011; Plsek and Wilson 2002), and organizational culture and climate (Hemmelgarn et al. 2006; Jones et al. 2005) can impact implementation. Staff turnover is a significant concern in Head Start (Wells 2015), and studies show that organizational climate impacts Head Start teachers' ability to function in their role (Zinsser and Curby 2014). Lastly, factors related to the intervention, like the structure of evidence-based treatments (Ringle et al. 2015), can facilitate or hinder implementation as well.

The EPIS framework also proposes specific factors that are likely to have the greatest impact on program implementation at different points in the process, which include the (1) exploration, (2) adoption/preparation, (3) implementation, and (4) sustainment phases (Aarons et al. 2011). For example, in the adoption/preparation phase, the EPIS framework posits that important factors include outer setting factors like funding and interorganizational networks, as well as inner setting factors like staff knowledge, skills, expertise, values, role specialization, and organizational leadership (Aarons et al. 2011). The factors of role specialization and funding may be particularly important in Head Start since frontline staff are tasked with specific mandates, like obtaining child developmental and health screenings and providing referrals for parents (US Department for Health and Human Services 2018). However, few studies have systematically examined views of frontline staff in social service settings to comprehensively assess inner setting barriers to implementation, particularly in the adoption and preparation phase. Examining the differences in staff views during this phase could illuminate specific inner setting factors that may impact implementation success, allowing organizations to preemptively address potential barriers before program implementation begins.

Existing studies of stakeholder perspectives on implementation of evidence-based practices (EBPs) have examined differences among a broader range of stakeholders, including administrators, policy makers, clinicians, and consumers, finding that stakeholders often have unique perspectives regarding potential barriers (Aarons et al. 2009; Beidas et al. 2016; Green and Aarons 2011; Palinkas et al. 2015; Stadnick et al. 2017). For example, Green and Aarons (2011) found that stakeholders involved in direct practice, like clinicians, rated clinical factors as more important than those in policy positions, like county mental health directors,

agency directors, and program managers. Existing studies on differences in stakeholder perspectives suggest the need for increased communication and collaboration among stakeholder groups in order to facilitate implementation success (Aarons et al. 2009; Beidas et al. 2016; Green and Aarons 2011). This is also an important emerging topic since stakeholder consensus has been associated with adoption of innovative practices (Palinkas et al. 2015). For example, Palinkas et al. (2015) found that intra-agency consensus between agency directors and program directors predicted the pace of the EBP adoption. However, all prior studies of stakeholder consensus have compared views of stakeholders from different levels of the organization or funding body, rather than exploring differences within groups of frontline or direct service staff. Since differences in stakeholder views may highlight divergent, yet complementary barriers, or indicate the need for increased communication and collaboration, additional research is needed to examine differences in the perspectives of frontline staff.

Background

Although researchers have called for the strengthening of mental health services within Head Start since the mid-1990s (Piotrkowski et al. 1994), historically efforts have focused primarily on targeting child mental health (Yoshikawa and Zigler 2000) rather than parental mental health, despite Head Start's explicit two-generation focus (Dropkin and Jauregui 2015). However, in the mid 2000s the Office of Head Start funded a systems-wide prevention approach to equip paraprofessional staff to address mental health problems within families, including parental depression (Beardslee et al. 2010). This approach consisted of staff trainings and mental health consultation, but did not directly focus on providing services for parental depression within Head Start (Beardslee et al. 2010). More recently, in 2013 the Administration of Children and Families funded a study examining the feasibility and effectiveness of providing Interpersonal Psychotherapy-Group (IPT-G) for mothers with depression (ACF 2013). IPT was chosen due to its substantial evidence base (Cuijpers et al. 2011), and its effectiveness with low-income and ethnic minority populations (Bass et al. 2006; Kao et al. 2015; Krupnick et al. 2008). In addition, the group format of IPT was chosen because of its utility in increasing experiences of social support among group members (Petersen et al. 2012), as well as its cost effectiveness, which would facilitate its implementation in Head Start and other community settings. The task of implementing IPT-G within Head Start is complex since providing parental mental health services represents a departure from two aspects of early education services; first, it requires collaboration between the Head Start and mental health systems, and secondly, it

broadens the focus to providing services for parents in what remains to be a child-centered service delivery system.

To promote the adoption of parental mental health services like IPT-G within Head Start, this study examined key stakeholders' views of potential barriers to implementation. Although implementation science identifies several important barriers to consider during the adoption and preparation phase, this study gathered qualitative data to uncover additional barriers unique to implementing parental mental health services with this population in this setting, as well as to understand differences in perspectives among front-line staff involved in implementation, building on existing research that looks at differences among stakeholders in administrative and leadership positions. As such, this study sought to answer the following research questions:

1. What are the perspectives of frontline staff regarding potential barriers to implementing a two-generation depression treatment with ethnic minority mothers in Head Start?
2. To what extent are there differences in the level of consensus among frontline staff workers regarding perceived barriers?

Methods

Participants

Study participants were recruited as part of the initial phase of a larger intervention study, which was a collaboration between a university school of social work and child mental health and early education services agency in Los Angeles. This agency was founded in 1906 and provides direct services to 26,000 children and families each year. At the time of the study, the agency had doubled its number of Head Start sites, and its reach extended to additional communities in Los Angeles. Frontline Head Start staff were interviewed to explore potential barriers to implementation before the intervention study began in order to adapt the intervention or implementation process as needed. A separate study of the perceptions of Head Start mothers regarding the proposed program has been published (Palmer Molina et al. 2019). For this analysis, three groups of agency staff members were recruited, including mental health therapists, early education teachers, and family service workers (FSWs), who were involved in the implementation. Staff were chosen and comparably trained according to their role in the project. FSWs were chosen because they were tasked with screening mothers for depression and recruiting mothers into therapy groups, and all FSWs received comprehensive training about depression screening before being interviewed. All FSWs employed by the partner agency were invited for interviews,

and none declined. Mental health therapists were chosen because they were responsible for facilitating the IPT groups, and all therapists who had completed IPT-G training were interviewed. Lastly, early education teachers were also interviewed because of their close contact with mothers. Early education teachers were randomly sampled based on site to ensure that the viewpoints of all sites were considered. In total, semi-structured interviews were conducted with 27 FSWs, 10 early education teachers, and 10 mental health therapists.

Data Collection

This study was approved by the university Institutional Review Board and informed consent was obtained from all participants. Semi-structured interview guides for frontline staff were guided by the CFIR framework (Damschroder et al. 2009), which identifies several factors that may influence implementation effectiveness, including (1) characteristics of the individuals involved (i.e. staff), (2) aspects of the intervention, (3) inner setting factors, (4) outer setting factors, and (5) the process of implementation. To assess the CFIR construct of characteristics of individuals, we asked about staff members' attitudes towards EBPs generally, and the strengths and weaknesses of EBPs in clinical settings. To assess intervention characteristics, we asked staff about their perceptions of IPT-G and its effectiveness in addressing maternal depression. To assess inner setting factors, we asked staff to what extent the proposed program would be compatible with their current roles and system demands. To assess outer setting factors, we asked staff to provide insight about clients' needs and resources. Lastly, to assess the process of implementation we asked staff to identify potential barriers.

Interviewers for the semi-structured staff interviews were trained in qualitative interviewing techniques, including the use of follow-up probes to clarify participants' statements and gather more information. For example, interviewers were trained to follow up regarding potential barriers to ensure that participants had sufficient time to think about the question at length. Interviews lasted approximately 20–25 min. During the interviews, staff were provided with additional information regarding IPT-G (e.g., mothers would meet one-on-one with a therapist before the group began, groups would meet once a week for 12 weeks, two therapists would co-facilitate group sessions, food would be provided, etc.).

Data Analysis

Interviews were recorded, transcribed, and coded by four independent coders using the qualitative software program Dedoose (Dedoose 8.0.35, Los Angeles, CA, USA). The data were coded by either co-investigators or research assistants (3 males, 1 female), and the educational background of coders ranged from the bachelor to doctoral level. Coders were supervised by a senior social science researcher with expertise in qualitative methods and implementation science, and coders participated in a training session prior to coding to ensure reliability and consistency. First, descriptors were added to each interview in Dedoose to denote whether the interview was with a Head Start teacher, FSW, or mental health therapist. Interview transcripts were then analyzed using a methodology based in grounded theory that is called “Coding Consensus, Co-occurrence, and Comparison” outlined by Willms et al. (1990). In line with this methodology, two researchers began by independently assigning codes based on questions in the interview guide or emergent concepts. If the researchers disagreed about codes, they discussed their perspectives with a third member of the research team in order to come to consensus. Then a third coder read all transcripts and identified remaining codes and conducted axial coding to examine how codes were related to one another. Through the process of developing and refining categories, the third coder developed broader themes regarding perceived barriers to implementation.

During this process, the third coder consulted with the rest of the research team regularly regarding the construction of themes (e.g. structural/resource barriers and linguistic/cultural differences) as well as categories within themes (e.g. therapist burden and scheduling challenges within the theme of structural/resource barriers). After finalizing the list of themes and categories, the third coder reviewed all transcripts again to ensure that each endorsement of a particular perceived barrier was coded. The third coder then examined co-occurrences of themes and categories between transcripts from different staff groups using Dedoose. Specifically, the third coder used a mixed method feature in Dedoose to calculate the total number of staff members who endorsed each perceived barrier by descriptor (i.e. staff role), which demonstrated the divergence among staff regarding perceived barriers.

Second, degree of consensus among frontline staff regarding perceived barriers was statistically assessed using criteria based on those outlined by Romney et al. (1986). Issues raised by frontline staff workers were placed in three categories: (1) low consensus consisted of needs cited in $\leq 33\%$ of interviews, (2) moderate consensus 34–66%, and (3) high consensus $\geq 67\%$ of interviews. Differences in perspectives among the three groups of staff

members were assessed by using Fisher’s exact and chi-square tests. During this process, each staff group was compared to the other two groups.

Results

The barriers identified by frontline staff workers fell into four broad themes: (1) structural/resource barriers, (2) intervention format, (3) linguistic and cultural differences, and (4) participant factors. Specific examples of each theme are included in Table 1, as well as the percentage of staff endorsing each perceived barrier.

Structural and Resource Barriers

There was moderate consensus among frontline staff about structural or resource barriers that could limit the participation of Head Start mothers in the group intervention. Perceived barriers included childcare needs, transportation difficulties, lack of appropriate space, physical safety concerns, scheduling difficulties, therapist burden, and lack of organizational support. The most frequently endorsed structural and resource barriers included transportation and childcare needs, which were directly related to the participant’s ability to attend the group. As one mental health therapist explained:

“I think the transportation is a really, really big one because without the transportation of the parents, to get them here, then [there won’t be] people coming and then that will equal no group. So I think that’s probably the biggest thing that we would have to like look in terms of making sure that they’re effective [because] I know that there have been other services that have been offered here for parents, like ESL classes and parenting classes, but because parents wouldn’t show up because they didn’t have rides and things would be canceled.”

However, frontline staff also identified several structural barriers related to the organization itself, including whether the right type of space was available, how involvement would burden therapists, and whether there was financial support for the program. For example, one therapist explained the costs associated with participating in the intervention trial:

“Another barrier that is really important to address is that we therapists have to have...productivity requirements (number of hours that can be billed to 3rd party payors) and so that’s a...big, important one for us... that our hours running the groups and traveling and preparing and debriefing and pre-group and after-group. If those hours count towards our productivity

Table 1 Percent of interviews citing a barrier to program implementation and consensus by stakeholder group for specific barriers

Category	Percent cited in interviews (N=47)	Stakeholder group consensus (%)		
		Therapists	FSWs	Teachers
Structural/resource barriers	57.4	80.0	48.1	60.0
Childcare needs	27.7	30.0	29.6	20.0
Transportation difficulties	36.2	60.0	40.7	0.0 ^a
Lack of appropriate space	10.6	20.0	0.0 ^a	30.0
Physical safety concerns	2.1	10.0	0.0	0.0
Scheduling challenges	17.0	40.0 ^b	7.4	20.0
Therapist burden	4.3	20.0 ^b	0.0	0.0
Lack of organizational support	2.1	0.0	0.0	10.0
Intervention Format	27.7	30.0	37.0	0.0
Group dynamics	23.4	20.0	33.3	0.0
Pace of model	2.1	10.0	0.0	0.0
Facilitator characteristics	2.1	0.0	3.7	0.0
Linguistic/cultural differences	34.0	20.0	33.3	50.0
Cultural beliefs about mental health	12.8	0.0	18.5	10.0
Linguistic accessibility	21.3	20.0	18.5	30.0
Therapist-participant ethnic match	4.3	0.0	3.7	10.0
Participant factors	85.1	40.0 ^a	100.0	90.0
Skepticism about intervention	23.4	10.0	33.3	10.0
Attrition	10.6	0.0	18.5	0.0
Discomfort disclosing depression	68.1	30.0 ^a	74.1	90.0
Fear of CPS reprisal	8.5	0.0	14.8	0.0
Stigma	48.9	20.0 ^b	55.6	60.0
Pride	6.4	0.0	0.0	30.0 ^a
Unsupportive partners	2.1	0.0	0.0	10.0
Lack of availability	23.4	20.0	33.3	0.0

p-values are a comparison to the other two stakeholder groups, based on χ^2 and Fisher's exact tests

^ap < 0.01

^bp < 0.05

requirements, it would be... not only helpful, I think that for me it would be essential.”

Intervention Format

There was low consensus among frontline staff regarding the intervention format as potential barrier. About one-fourth of frontline staff voiced concerns about group dynamics, the pace of the model, and facilitator characteristics. However, overall most staff endorsed concerns about the group format, stating that mothers would be less likely to participate in a group compared to individual therapy because they would not want to be judged by others. For example, one FSW explained:

“Well, I would probably say maybe the only negative that you probably have to look at is depending on the dynamics of the group themselves. Because people can easily see you in a different light than you want to portray, so if you have people that are not confidential and

are not willing to open themselves. Let's say if I am within that group and I am the one that is expressing my thought and people are looking at me and judging me, then it can shut me down to be open.”

A minority of staff raised concerns about the pacing of the model and facilitator characteristics. In terms of pacing, one therapist noted:

“I see clients very individual, you know. And going at their own pace and processing and dealing with things is kind of their own journey, so because it's manualized it might be a little faster paced than some people need.”

Linguistic and Cultural Differences

There was also low consensus regarding linguistic and cultural differences as barriers, with one-third of frontline staff identifying barriers related to cultural beliefs about mental health, linguistic accessibility, and therapist-participant

ethnic match. Overall, staff shared that it would be important have facilitators who were bilingual and bicultural, and that aspects of the intervention may need to be changed to meet the needs of the diverse community, particularly for Hispanic families. In terms of cultural beliefs, one FSW explained:

“I think a lot of our parents don’t want it...I guess because I’m Hispanic I can understand it a little bit more. A lot of the parents, they don’t like sharing that type of information. I guess it could be from shame. It could be from embarrassment...a lot of that comes from the male perspective of the home. The females are usually the ones that are like, okay, give it to me. You know, but the guys are like, no, we don’t need that. They feel probably like they’re going to lose some type of credibility as man of the house.”

Participant Factors

There was moderate consensus among frontline staff that participant factors were an important potential barrier to implementation. Staff voiced concerns that mothers may be skeptical about the intervention, may be unwilling to disclose their depression, may not want to attend group due to an unsupportive partner, or may drop out during the course of the group. The most frequently mentioned participant barrier was mothers’ perceived unwillingness to disclose their feelings of depression. Frontline staff stated that mothers may not disclose their depression or join the group intervention due to stigma, pride, or fear of child protective services involvement. Staff explained that there is still significant stigma around seeking mental health services, that people who seek help are often labeled as “crazy,” and that mothers may therefore feel ashamed or embarrassed. Additionally, some staff mentioned that mothers would not want to come to the Head Start center for therapy because it wouldn’t be private. One Head Start teacher stated:

“They don’t want to be labeled. They don’t want to look like they’re weak even though they are. Or they need help, [but] they don’t want to say they need help. So it’s just hard to put it out there. I know my parents, and I look at the parents in the face when they come in like I look at the kids in the face, and if I really see something, then I ask. So sometimes they’ll say something, sometimes they won’t. Or they’ll come back a little while later and say, you know what? This is happening.”

In addition, staff explained that mothers may experience an added layer of stigma when seeking help because it would reflect negatively on them in their role as a mother. As one FSW explained:

“At first they might not want to express [it] because there’s some moms that it takes a long time for them to get comfortable, especially to express their feelings, because I feel like in this community it’s kind of looked [down] upon where... if you express your feelings, you’re kind of weak or...you’re not strong enough for your kids.”

Additionally, a few staff members mentioned that they believed mothers would not disclose their depression because of their fear of being referred to child protective services. For example, one FSW commented:

“The main weakness is that the families will not be a hundred percent open because they’re either scared, or a lot of them don’t want to be judged, and a lot of them are afraid of their children being taken because of their openness.”

Staff Consensus

There was generally low consensus among frontline staff groups regarding perceived barriers to participation in the group depression treatment (see Table 1), and staff views differed significantly in some cases by staff role. Mental health therapists and teachers, but not FSWs, cited the lack of appropriate space to hold groups as a potential resource barrier ($p=0.01$, Fisher’s exact test). In contrast, mental health therapists and FSWs, but not teachers, identified transportation difficulties as a resource barrier ($p<0.01$, Fisher’s exact test). Mental health therapists were more likely than FSWs or Head Start teachers to identify scheduling challenges ($\chi^2=4.75$, $df=1$, $p=0.03$) as potential structural barriers to implementation. Mental health therapists were also the only staff group to identify therapist burdens like productivity pressures and time constraints as potential structural barriers ($p=0.04$, Fisher’s exact test).

Head Start teachers and FSWs were more likely than mental health therapists to identify the overall category of participant factors as a potential barrier to implementation ($\chi^2=20.39$, $df=1$, $p<0.01$). Specifically, Head Start teachers and FSWs were more likely than therapists to cite an unwillingness to disclose depression ($\chi^2=8.48$, $df=1$, $p<0.01$), particularly due to stigma ($\chi^2=4.26$, $df=1$, $p=0.04$) as potential barriers to participation in the intervention. In addition, Head Start teachers—but not FSWs or therapists—cited an unwillingness to disclose depression due to pride ($p<0.01$, Fisher’s exact test) as a potential barrier to participation.

Discussion

In this study, we explored potential barriers to implementation of a maternal depression treatment in a Head Start setting, including differences in the views of three groups of frontline staff directly involved in the program—Head Start teachers, mental health therapists, and family service workers. Overall, frontline staff identified four broad themes representing potential barriers, including structural and resource barriers, the intervention format, linguistic and cultural differences, and a variety of participant factors including skepticism, attrition, and unwillingness to disclose depression due to stigma or other factors.

Some of the barriers identified by staff correspond with constructs identified by the “Exploration, Preparation, Implementation and Sustainment” (EPIS) and Consolidated Framework for Implementation Research (CFIR) models from implementation science (Aarons et al. 2011; Damschroder et al. 2009). For example, staff identified several barriers related to clients’ needs, including child-care needs, transportation difficulties, concerns about physical safety, and scheduling challenges. All of these needs map directly on to the construct “Patient Needs and Resources,” which is included in the CFIR as an outer setting factor that may influence implementation success (Damschroder et al. 2009). In addition, staff noted that lack of appropriate space and therapist burden might prove to negatively impact implementation, which reflects the inner setting CFIR construct of “Available Resources” (Damschroder et al. 2009).

Concerns about how therapists would bill for their time also reflect the larger issues of funding and contractual requirements identified by both the CFIR and EPIS frameworks (Aarons et al. 2011; Damschroder et al. 2009).

Lastly, some staff identified concerns about the intervention itself, including the format and pacing of the model. These concerns reflect the CFIR construct of “Adaptability,” which is defined as “the degree to which an intervention can be adapted, tailored, refined, or reinvented to meet local needs” (Damschroder et al. 2009, Additional File 1, p. 1). Several staff stated that Head Start mothers might be less willing to participate in group therapy because of fear of being judged by others in the group. This concern raises the possibility that ethnic minority Head Start mothers may experience unique challenges related to stigma and cultural expectations that impact their preferences about engaging in group therapy, as opposed to individual therapy, reflecting that the intervention might need to be adapted to meet local needs.

However, early childhood staff also identified several potential barriers that are not well described by either the CFIR or EPIS implementation science frameworks,

including linguistic and cultural differences, participant factors like unwillingness to disclose depression, and the fit of the intervention format for this population. Linguistic and cultural differences, including clients’ cultural beliefs about mental health, linguistic accessibility for non-English speakers, and therapist-client ethnic match have been well-documented in the literature (Betancourt et al. 2016). For example, research shows that significant racial and ethnic disparities exist in the utilization of health care services, even for those who have access (Nelson 2002), and reasons for this include differences in minority clients’ beliefs, behaviors, values, and preferences (Betancourt et al. 2016). In light of these widespread disparities, interventions must explicitly address cultural factors to improve their effectiveness with minority populations (Bernal et al. 2009; Cabassa and Baumann 2013). However, the fields of implementation science and cultural adaptation have historically been siloed, and researchers have called for enhanced integration between the two, particularly since insights from cultural adaptation can inform the ways that cultural factors may influence a broad range of implementation outcomes (Cabassa and Baumann 2013).

Similarly, participant factors, which was the most widely endorsed category of barriers by all three groups of staff, represent another construct that has not been well-captured by either the CFIR or EPIS frameworks. Frontline staff identified participants’ potential unwillingness to disclose depression as the single most important barrier to implementation, particularly due to stigma. Several studies show that stigma is an important barrier to accessing mental health services (Corrigan 2004; Knaak et al. 2017). For example, stigma is multi-faceted, and individuals may avoid seeking mental health services due to “public stigma,” which refers to fear of the judgment of others, or “self-stigma” which refers to internalizing public stigma and experiencing a decrease in one’s self-esteem (Corrigan 2004). In addition, stigma is particularly important to consider when intervening with ethnic minority groups, since ethnic minority individuals can experience “double stigma” based on their minority group membership and mental health needs (Gary 2005). Implementation science frameworks should incorporate important participant factors that are likely to impact implementation, particularly fear of disclosing depression due to stigma.

This study also examined differences in the perspectives of frontline staff members regarding barriers to implementation. Overall, there was low consensus among frontline staff and staff expressed distinct, yet complementary, views of potential barriers. Some of the differences clearly related to the different job responsibilities of each group. For example, therapists were more likely to identify concerns related to therapist time and billing. Therapists and FSWs were more likely than teachers to identify transportation difficulties

as a challenge, reflecting the possibility that teachers focus less on families' transportation needs as part of their role. In other cases, staff perspectives seemed to differ based on perceptions of families' concerns, and it is unclear whether this is due to staff members' lived experiences or to their position at the agency. For example, surprisingly therapists were significantly less likely to identify unwillingness to disclose depression as a barrier, even though therapists often learn about stigma in mental health training programs. This difference may reveal that although therapists are aware of stigma, they are likely to underestimate its potential impact on help-seeking. Conversely, this difference could reflect therapists' role in a child mental health organization, since they traditionally focus on issues related to children, rather than their parents. These divergent perspectives highlight the importance of gathering information from all frontline staff before implementation begins in order to understand their perspectives and facilitate the implementation process.

It is unclear whether the low consensus among staff poses a potential barrier, or instead simply suggests that different staff perspectives should be shared with agency leadership tasked with implementation. For example, the implementation of the program represented a significant departure from the typical roles of all frontline staff involved. First, Head Start teachers and FSWs were asked to consider implementing a mental health intervention in their setting, even though they had never been involved with mental health screening or treatment. Similarly, child mental health therapists were asked to provide evidence-based mental health interventions for parents, rather than children, and to provide those services within Head Start. In addition, therapists were asked to actively participate in client outreach, which differed from their traditional role at the agency. Therefore, it is important to address the perspectives of different frontline stakeholders when implementing parent-focused mental health services in this setting. In addition, future research should explore whether higher consensus predicts a more successful implementation process.

There are several limitations of the current study. First, it did not include other staff characteristics that could inform differences in stakeholder perspectives (e.g. age, race/ethnicity, socioeconomic status, etc.). In addition, this study did not include interviews with administrative staff and executive leadership, which could have provided more insight into potential barriers, particularly those related to additional outer setting factors and coordination among departments. However, due to the high turnover at the time, the team was unable to access administrative leadership for interviews. Another limitation is the focus on anticipated barriers, rather than observed barriers. Future work should examine observed barriers and implementation outcomes at the conclusion of the intervention study. Furthermore, this sample of mental health therapists may not be representative

of therapists who work with adults. Lastly, quantitative differences should be interpreted cautiously since this study used multiple comparisons of staff viewpoints and utilized an open-ended interview format rather than a standardized questionnaire.

Overall, this study showed that frontline staff identified several potential barriers to implementing a parental mental health intervention in a Head Start setting. Although several barriers are consistent with existing implementation science models, staff also voiced concerns related to participant factors and linguistic and cultural differences, which are not well-captured by implementation science models (Cabassa and Baumann 2013). Although frontline staff demonstrated significant differences in the level of consensus regarding several barriers, notably all three groups endorsed participant concerns as the biggest barrier to implementation. Efforts aimed at providing mental health services for ethnic minority families in Head Start should further examine how to improve the cultural and linguistic fit of the intervention and address the impact of stigma on help-seeking for mental health services. Future studies should also explore factors associated with the divergent views among frontline staff and examine whether lack of consensus is associated with implementation outcomes.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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

References

- Aarons, G. A., Wells, R. S., Zagursky, K., Fettes, D. L., & Palinkas, L. A. (2009). Implementing evidence-based practice in community mental health agencies: A multiple stakeholder analysis. *American Journal of Public Health, 99*(11), 2087–2095. <https://doi.org/10.2105/AJPH.2009.161711>.
- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research, 38*(1), 4–23. <https://doi.org/10.1007/s10488-010-0327-7>.

- Administration for Children and Families. (2006). *Depression in the Lives of Early Head Start Families: Research to Practice Brief, April 2006*. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/research_brief_depression.pdf.
- Administration for Children and Families. (2013). *Head Start University Partnership Grants: Dual-Generation Approaches, 2013 Grantees, September 2013*. Retrieved from <https://www.acf.hhs.gov/opre/research/project/head-start-university-partnership-grant-s-dual-generation-approaches>.
- Ammerman, R. T. (2017). Opportunities and challenges in addressing maternal depression in community settings. *JAMA Psychiatry*, 74(8), 775. <https://doi.org/10.1001/jamapsychiatry.2017.1173>.
- Bass, J., Neugebauer, R., & Y, K. F. C., Verdelli, H., Wickramaratne, P., Atne, W., ... Bolton, P. (2006). Group interpersonal psychotherapy for depression in rural Uganda : 6-month outcomes. *British Journal of Psychiatry*, 188(6), 567–573. <https://doi.org/10.1192/bjp.188.6.567>.
- Beardslee, W. R., Ayoub, C., Avery, M. W., Watts, C. L., & O'Carroll, K. L. (2010). Family connections: An approach for strengthening early care systems in facing depression and adversity. *American Journal of Orthopsychiatry*, 80(4), 482–495. <https://doi.org/10.1111/j.1939-0025.2010.01051.x>.
- Beidas, R. S., Stewart, R. E., Adams, D. R., Fernandez, T., Lustbader, S., Powell, B. J., ... Barg, F. K. (2016). A multi-level examination of stakeholder perspectives of implementation of evidence-based practices in a large urban publicly-funded mental health system. *Administration and Policy in Mental Health and Mental Health Services Research*, 43(6), 893–908. <https://doi.org/10.1007/s10488-015-0705-2>.
- Bernal, G., Jiménez-Chafey, M. I., & Domenech Rodríguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology: Research and Practice*, 40(4), 361–368. <https://doi.org/10.1037/a0016401>.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2016). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, 118, 293–302.
- Cabassa, L. J., & Baumann, A. A. (2013). A two-way street: Bridging implementation science and cultural adaptations of mental health treatments. *Implementation Science*, 8(1), 1. <https://doi.org/10.1186/1748-5908-8-90>.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614–625. <https://doi.org/10.1037/0003-066X.59.7.614>.
- Cuijpers, P., Geraedts, A. S., van Oppen, P., Andersson, G., Markowitz, J. C., & van Straten, A. (2011). Interpersonal Psychotherapy for depression: A meta-analysis. *American Journal Of Psychiatry*, 168(6), 581–592. <https://doi.org/10.1176/appi.ajp.2010.10101411>.
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 1–16. <https://doi.org/10.1186/1748-5908-4-50>.
- Dropkin, E., & Jauregui, S. (2015). *Two Generations Together: Case Studies from Head Start*. Retrieved from <https://www.nhsa.org/files/resources/twogenerationstogetherreport.pdf>
- Edmondson, A. C., Bohmer, R. M., & Pisano, G. P. (2001). Disrupted routines: Team learning and new technology implementation in hospitals. *Administrative Science Quarterly*, 46(4), 685–716. <https://doi.org/10.2307/3094828>.
- Gary, F. A. (2005). Stigma: Barrier to mental health care among ethnic minorities. *Issues in Mental Health Nursing*, 26(10), 979–999. <https://doi.org/10.1080/01612840500280638>.
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review*, 14(1), 1–27. <https://doi.org/10.1007/s10567-010-0080-1>.
- Green, A. E., & Aarons, G. A. (2011). A comparison of policy and direct practice stakeholder perceptions of factors affecting evidence-based practice implementation using concept mapping. *Implementation Science*, 6(1), 1–12. <https://doi.org/10.1186/1748-5908-6-104>.
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly*, 82(4), 581–629. <https://doi.org/10.1111/j.0887-378X.2004.00325.x>.
- Hemmelgarn, A. L., Glisson, C., & James, L. R. (2006). Organizational culture and climate: Implications for services and interventions research. *Clinical Psychology: Science and Practice*, 13(1), 73–89. Retrieved from <https://doi.org/10.1111/j.1468-2850.2006.00008.x>
- Jones, R. A., Jimmieson, N. L., & Griffiths, A. (2005). The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change. *Journal of Management Studies*, 42(2). <https://doi.org/10.1111/j.1467-6486.2005.00500.x>
- Kao, J. C., Johnson, J. E., Todorova, R., & Zlotnick, C. (2015). The positive effect of a group intervention to reduce postpartum depression on breastfeeding outcomes in low-income women. *International Journal of Group Psychotherapy*, 65(3), 445–458.
- Knaak, S., Mantler, E., & Szeto, A. (2017). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. *Healthcare Management Forum*, 30(2), 111–116. <https://doi.org/10.1177/0840470416679413>.
- Krupnick, J. L., Green, B. L., Stockton, P., Miranda, J., Krause, E., & Mete, M. (2008). Group interpersonal psychotherapy for low-income women with posttraumatic stress disorder. *Psychotherapy Research*, 18(5), 497–507. <https://doi.org/10.1080/10503300802183678>.
- Martins, C., & Gaffan, E. A. (2000). Effects of early maternal depression on patterns of infant-mother attachment: A meta-analytic investigation. *Journal of Child Psychology and Psychiatry*, 41(6), 737–746. <https://doi.org/10.1111/1469-7610.00661>.
- McDaniel, M., & Lowenstein, C. (2013). *Depression in low-income mothers of young children: Are they getting the treatment they need?* Retrieved from <https://www.urban.org/sites/default/files/publication/23546/412804-Depression-in-Low-Income-Mothers-of-Young-Children-Are-They-Getting-the-Treatment-They-Need-.PDF>
- Nelson, A. (2002). Unequal treatment: Confronting racial and ethnic disparities in health care. *Journal of the National Medical Association*, 94(8), 666–668. <https://doi.org/10.1001/jama.290.18.2487-b>.
- Palinkas, L. A., Holloway, I. W., Rice, E., Fuentes, D., Wu, Q., & Chamberlain, P. (2011). Social networks and implementation of evidence-based practices in public youth-serving systems: A mixed-methods study. *Implementation Science*, 6(1), 1–11. <https://doi.org/10.1186/1748-5908-6-113>.
- Palinkas, L. A., Olin, S., Chor, B., Um, M. Y., Jeong, C. H., O'Connor, B., ... Hoagwood, K. (2015). Influence of organizational role, consensus and innovation status on perceived facilitators and barriers to adoption of innovative and evidence-based practices in state-supported mental health clinics. *Implementation Science*, 10(S1), 1–2. <https://doi.org/10.1186/1748-5908-10-s1-a41>.
- Palmer Molina, A., Palinkas, L., Monroe, W., & Mennen, F. E. (2019). Mothers' perceptions of help-seeking for depression in Head Start: A thematic, discourse analysis by language group. *Community Mental Health Journal*. <https://doi.org/10.1007/s10597-019-00504-7>.

- Pan, B. A., Rowe, M. L., Singer, J. D., & Snow, C. E. (2005). Maternal correlates of growth in toddler vocabulary production in low-income families. *Child Development, 76*(4), 763–782. <https://doi.org/10.1111/j.1467-8624.2005.00876.x>.
- Petersen, I., Bhana, A., & Baillie, K. (2012). The feasibility of adapted group-based interpersonal therapy (IPT) for the treatment of depression by community health workers within the context of task shifting in South Africa. *Community Mental Health Journal, 48*(3), 336–341. <https://doi.org/10.1007/s10597-011-9429-2>.
- Piotrkowski, C. S., Collins, R. C., Knitzer, J., & Robinson, R. (1994). Strengthening mental health services in Head Start: A challenge for the 1990's. *American Psychologist, 49*(2), 133–139.
- Plsek, P. E., & Wilson, T. (2002). Complexity science: Complexity, leadership, and management in healthcare organisations. *British Medical Journal, 323*(7315), 746–749. <https://doi.org/10.1136/bmj.323.7315.746>.
- Quevedo, L. A., Silva, R. A., Godoy, R., Jansen, K., Matos, M. B., Tavares Pinheiro, K. A., & Pinheiro, R. T. (2012). The impact of maternal post-partum depression on the language development of children at 12 months. *Child: Care, Health and Development, 38*(3), 420–424. <https://doi.org/10.1111/j.1365-2214.2011.01251.x>
- Ringle, V. A., Read, K. L., Edmunds, J. M., Brodman, D. M., Kendall, P. C., Barg, F., et al. (2015). Barriers to and facilitators in the implementation of cognitive-behavioral therapy for youth anxiety in the community. *Psychiatric Services, 66*(9), 938–945. <https://doi.org/10.1176/appi.ps.201400134>.
- Romney, A. K., Weller, S. C., & Batchelder, W. H. (1986). Culture as consensus: A theory of culture and informant accuracy. *American Anthropologist, 88*(2), 313–338. <https://doi.org/10.1525/aa.1986.88.2.02a00020>.
- Shonkoff, J. P., & Fisher, P. A. (2013). Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. *Development and Psychopathology, 25*, 1635–1653. <https://doi.org/10.1017/S0954579413000813>.
- Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: SocioCultural Research Consultants, LLC. www.dedoose.com.
- Stadnick, N. A., Lau, A. S., Barnett, M., Regan, J., Aarons, G. A., & Brookman-Frazee, L. (2017). Comparing agency leader and therapist perspectives on evidence-based practices: Associations with individual and organizational factors in a mental health system-driven implementation effort. *Administration and Policy in Mental Health and Mental Health Services Research, 45*(3), 1–15. <https://doi.org/10.1007/s10488-017-0835-9>.
- Teti, D. M., Cole, P. M., Cabrera, N., Goodman, S. H., & McLoyd, V. C. (2017). Supporting parents: How six decades of parenting research can inform policy and best practice. *Research-Practice Partnerships: Building Two-Ways Streets of Engagement, 30*(5), 33. Retrieved from https://www.srca.org/sites/default/files/documents/spr_30_5.pdf?utm_source=SRCD+Membership&utm_campaign=6fe4a54b2e-Social_Policy_Report_V30_5_11-2-17&utm_medium=email&utm_term=0_a2f8196caa-6fe4a54b2e-293733829
- US Department for Health and Human Services. (2018). *Head Start Program Performance Standards: 45 CFR Chapter XIII RIN 0970-AC63*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/hspss-final.pdf>
- Wells, M. B. (2015). Predicting preschool teacher retention and turnover in newly hired Head Start teachers across the first half of the school year. *Early Childhood Research Quarterly, 30*, 152–159. <https://doi.org/10.1016/j.ecresq.2014.10.003>.
- Willms, D., Best, J., Taylor, D., Gilbert, J., Wilson, D. M. C., Lindsay, E., et al. (1990). A systematic approach for using qualitative methods in primary prevention research. *Medical Anthropology Quarterly, 4*(4), 391–409.
- Yoshikawa, H., & Zigler, E. (2000). Mental health in Head Start: New directions for the twenty-first century. *Early Education & Development, 11*(3), 247–264. <https://doi.org/10.1207/s15566935eed1103>.
- Zinsser, K. M., & Curby, T. W. (2014). Understanding preschool teachers' emotional support as a function of center climate. *SAGE Open, 4*(4). <https://doi.org/10.1177/2158244014560728>

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