

Maine MOMS PartnershipSM Pilot Evaluation Report



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Executive Summary

Overview

The Maine MOMS PartnershipSM (Maine MOMS) Pilot assessed the feasibility, acceptability, and promise of effectiveness of delivering the *MOMS Stress Management Course* within the BangorHousing community. BangorHousing provides high quality and affordable housing to low to moderate-income households in the City of Bangor, Maine and surrounding towns. The *MOMS Stress Management Course* is a group-based, cognitive-behavioral intervention designed to improve maternal mental health and reduce depressive symptoms. For this pilot, the program was delivered in the Capehart community of BangorHousing.

Between 2022 and 2025, Elevate Policy Lab (Elevate) collaborated with the John T. Gorman Foundation, Maine Department of Health and Human Services (DHHS), BangorHousing, and Community Health and Counseling Services (CHCS) to plan, implement, and evaluate the pilot. Elevate provided technical assistance and evaluation expertise, while a CHCS clinician co-delivered the course with a Community Mental Health Ambassador (CMHA) from the Capeheart community.

The pilot focused on mothers and female caregivers of children under age 18 who screened above the clinical threshold for depressive symptoms. Participants were assessed at three timepoints—Baseline (prior to the first class), Endpoint (after the final class), and Follow-Up (three months after the final class)—to examine changes in mental health and psychosocial outcomes. In total, 53 participants completed the Baseline assessment, 37 completed both Baseline and Endpoint, and 24 completed all three assessments.

The pilot aimed not only to assess pre-to-post changes in maternal mental health and psychosocial functioning, but also to evaluate the feasibility and acceptability of delivering *MOMS Stress Management* in a public housing context using a co-delivery model. As is integral to the MOMS model, program delivery included a range of strategies to support accessibility and engagement, including but not limited to a community health worker role, in-person engagement sessions, small-group class format, and monetary incentives for class attendance and assessments.

Key Findings

Feasibility and Acceptability

- Eligibility and enrollment rates were high: 97% of screened individuals met eligibility criteria, and 91% of eligible individuals enrolled.
- Participants were highly engaged in the program once classes began: median class attendance was 7 out of 8 classes, median homework completion was 5 out of 7 assignments, and participants reported regularly using the skills in their daily lives.

- Overall satisfaction with the MOMS program and satisfaction was high, with 92% of participants reporting feeling *Very Satisfied* or *Satisfied* at program conclusion.
- Central features of the MOMS program—learning stress management skills and connecting with other mothers in a group environment—were the biggest draws, according to participants.
- Participating mothers experienced a high degree of social connection and belonging within the group.

Promise of Effectiveness

- By the end of the program (at the Endpoint assessment), participants reported experiencing statistically significant improvements in perceived stress (PSS-4) and social support (MOS-SSS). Improvements in social support were also sustained at the Follow-Up assessment.
- Participants reported increased use of emotional and instrumental support as coping strategies from program start to program end; these adaptive changes were sustained three months later.
- There were no statistically significant pre-to-post changes in depressive symptoms, anxiety symptoms, or parental stress.

Summary

The Maine MOMS Pilot evaluation demonstrated strong feasibility and acceptability in the delivery of *MOMS Stress Management Course* in the Capehart community of BangorHousing. Outreach/recruitment efforts by the Maine MOMS team were successful in drawing mothers into the program. High levels of class attendance, program satisfaction, and engagement in the skills taught were evident in this evaluation, showing that the program was well received overall. While no significant pre-post changes in depression/anxiety symptoms or parental stress were found in this evaluation, increases in social support were robust across two measures, and these improvements were sustained at 3-Month Follow-Up. Perceived stress decreased by the end of the program, but these gains were not sustained at 3-Month Follow-Up. Low rates of assessment completion may have limited power to detect changes in some measures over time. Overall, results from the Maine MOMS Pilot suggest that the program can be successfully implemented in BangorHousing, with positive reception by mothers in the community, and with associated improvements in the experience of and use of social support to manage stress.



Introduction

Purpose and Objectives

This pilot study was designed to assess whether the *MOMS Stress Management Course* could be effectively implemented, acceptable, and beneficial for mothers living in the Capehart community of BangorHousing.

Primary Objectives

1. To assess the feasibility and acceptability of delivering *MOMS Stress Management* in the Capehart community of BangorHousing.
2. To assess pre-to-post improvements in depressive symptoms (primary outcome), associated with delivery of *MOMS Stress Management* in the Capehart community of BangorHousing.

Secondary Objectives

1. To assess pre-to-post improvements in secondary outcomes including anxiety, perceived stress, social support, parental stress, and coping/emotion regulation.
2. To use qualitative data to derive insights into participants' experiences in the program.
3. To assess participants' needs for various support services, such as employment and childcare.

The MOMS Partnership®

Launched in New Haven in 2011, the Mental Health Outreach for MotherS (MOMS) Partnership® is a recognized program model that aims to support maternal mental health among under-resourced, over-burdened mothers and women raising children from infancy through age 17. The focus of MOMS programming is on directly strengthening maternal mental health as a critical component in the pathway to social and economic mobility. The MOMS model encompasses several interventions for mothers, including the *MOMS Stress Management Course*, which are delivered to groups of mothers in a range of communities and contexts. Along with the MOMS interventions, MOMS implementation strategies are designed to engage mothers and to promote program impact.

Elevate

Elevate Policy Lab in the Yale School of Medicine (Elevate) is the steward for the MOMS Partnership, a program model that encompasses evidence-based interventions designed to support maternal mental health and parenting, as well as strategies and approaches to reach and engage underserved mothers. Elevate partners with a range of community and government organizations and entities to bring the MOMS model to new communities, tailoring program implementation to the local context and, where necessary, adapting the MOMS interventions to fit the target audience of mothers.

Study Collaborators

This pilot was a collaboration between Elevate, BangorHousing, and the Maine Department of Health and Human Services (DHHS). Community Health and Counseling Services (CHCS), a trusted behavioral health provider in Maine, served as the clinical partner throughout the planning, implementation, and delivery of the MOMS program. Each organization contributed essential expertise to ensure the program was responsive to community needs and successfully delivered within the BangorHousing setting.

Unique Features of Maine MOMS

Staffing

In an approach that is common among MOMS programs, the roles of the Maine MOMS team were fulfilled through a cross-agency collaboration. The roles of MOMS Program Manager and Community Mental Health Ambassador (CMHA) were staffed by BangorHousing and the roles of MOMS Clinician and Clinical Supervisor were staffed by CHCS. CHCS provides a wide range of community-based behavioral health services for children, adolescents and adults, including Crisis Mobile and Stabilization; staff from the Crisis Mobile team were assigned to Maine MOMS.

Site Context

Maine MOMS was “nested” within the broader framework of programming that exists at BangorHousing. The Resident Services Department at BangorHousing is dedicated to ensuring that families receive services that will “enable them to achieve self-sufficiency.” Notably, this includes the Family Self Sufficiency Program which is designed to offer participants opportunities to build financial assets while working toward their educational, professional, and personal goals. The program provides life-skills guidance, assistance overcoming barriers to self-sufficiency such as transportation and childcare, and opportunities to increase financial stability and pursue personal goals, which may include: reducing debt/improving credit; earning a post-secondary degree; starting a new career; obtaining a new job; starting a business; and/or becoming a homeowner.

Program Funding

The Maine Department of Health and Human Services established a contractual agreement with BangorHousing to support MOMS programming for the pilot period. BangorHousing established a subcontract with CHCS to secure the services of the MOMS Clinician and Clinical Supervisor. The John T. Gorman Foundation provided funding for participant incentives and supported Elevate to provide training, technical assistance, and evaluation services.



Methods

Timeline

The Maine MOMS Partnership Pilot consisted of three main phases: (1) planning and evaluation design, (2) program setup and partner coordination, and (3) *MOMS Stress Management Course* delivery and data collection. Planning and program setup for the pilot began in 2023; initially, the idea of a community Goals and Needs Assessment was explored as a preliminary phase of work. Ultimately, it was determined the project could instead draw upon a comprehensive community health needs assessment that had been recently conducted in Penobscot County in 2022. Service delivery launched in 2024 and extended into 2025.

The Intervention

The *MOMS Stress Management Course* is the cornerstone intervention of the MOMS Partnership model. *MOMS Stress Management* is a manualized, cognitive behavioral therapy (CBT)-based group course consisting of eight group classes. It was originally adapted from the *Mothers and Babies Course*¹ for the population of mothers and women raising children served by the MOMS Partnership, which includes those parenting children in a broad age range from infancy to age 17. *MOMS Stress Management* teaches concepts and skills that are rooted in CBT and builds skills for changing mood and behavior. The course involves active participation and skills-based learning; through interactive exercises, discussion, and practice, participants learn practical skills for mood management.

MOMS Stress Management is co-delivered by a mental health clinician and a Community Mental Health Ambassador (CMHA). The CMHA is a community health worker role in the MOMS model, and an individual who brings shared lived experience and knowledge of the community served. The intervention, as with all MOMS programming, may be offered in person in accessible community locations or virtually through synchronous classes. A range of engagement strategies are used by local MOMS teams, which are defined by the MOMS model but can be fitted to the local context.

Participants

Eligibility criteria for the Maine MOMS Pilot included:

- Identifying as a woman,
- Being at least 18 years old,
- Residing in Bangor Housing,
- Being pregnant and/or the primary caregiver to a child under 18,

¹ Le, H.N. Le & Muñoz, R.F. (2011). *The Mothers and Babies Course: Instructor's Manual* (8-Session Course Adaptation) and Muñoz, R. F., Ghosh Ippen, C., Le, H. N., Lieberman, A. F., Diaz, M.A., & La Plante, L. (2001). *The Mothers and Babies Course: A reality management approach* (Participant manual).

- Meeting income criteria of at/below 200% of the Federal Poverty Level,
- Scoring 16 or higher on the CES-D, indicating risk for clinical depression, and
- Not presenting with active psychosis or suicidality.

Recruitment, Screening, and Consent

The target enrollment was 75 women. Recruitment was conducted through referrals and outreach efforts in the Capehart community of BangorHousing. This included flyering door-to-door and at local schools and organizations, tabling at events, presentations during staff meetings and local partner organization meetings, and social media outreach. Additionally, the Maine MOMS team engaged other residence staff, informing those staff about programming and engaging staff in identifying mothers who might benefit from programming.

Interested individuals were screened for eligibility over the phone by the MOMS Clinician; income criteria was verified by a separate staff person at BangorHousing. Individuals who met eligibility criteria were invited to participate. Informed consent was conducted in-person by the CMHA and a signed consent was obtained in hard copy.

Intervention Delivery

Before beginning the *MOMS Stress Management Course*, participants attended an Engagement Session to learn more about the program (e.g., topics, style of the course, logistics) and about expectations for participation, and to discuss fit and possible barriers to participation. Typically, the Engagement Sessions were conducted 1:1 with the CMHA and, for individuals who chose to enroll, and informed consent took place at the same meeting.

Following the Engagement Session, the eight intervention classes commenced. All classes were co-delivered by the MOMS Clinician and MOMS CMHA, in person at BangorHousing. Both daytime and evening classes were offered to increase accessibility. The MOMS program was delivered to four cohorts, each consisting of two intervention groups running concurrently (eight intervention groups total).

Incentives

Participants received incentives in the form of physical gift cards (e.g., Walmart).

- \$15 gift cards were offered for completing each assessment (Baseline, Endpoint, and Follow-Up).
- \$20 gift cards were offered for attending each class.

Data Collection

Participants were asked to complete self-report assessments via electronic surveys at three timepoints: Baseline, Endpoint, and Follow-Up. See Box 1 for further details.

All assessments were administered through REDCap (Research Electronic Data Capture)², which is a secure online platform for managing and collecting data. Participants completed the assessments using a unique survey link that was emailed to them by Maine MOMS staff. No identifiable information was collected in the assessments.

In addition, staff used REDCap to provide data on enrollment, class attendance, and withdrawals; these data were collected throughout the implementation period.

Box 1. Self-Report Assessment Timepoints

Baseline:

After completing consent and before attending their first *MOMS Stress Management* class.

Endpoint:

After attending Class 8, participants had three weeks to complete this assessment.

Follow-Up:

Three months after attending Class 8, participants had three weeks to complete this assessment.

Measures

Table 1 lists the measures/indicators collected from participants and staff.

Table 1. Measures/Indicators

Category	Variable(s)	Measure/Indicator
Participant Characteristics	Demographic, Family and Child Variables, Employment, SES and Basic Needs	MOMS Participant Assessment (Baseline)
Feasibility	Implementation Metrics	Eligibility Rates; Recruitment Rates; Initial Engagement Rates; Retention Rates
Acceptability	Program Satisfaction	Overall Program Satisfaction; Helpfulness of Key <i>MOMS Stress Management</i> Skills
	Program Engagement	Use of Key <i>MOMS Stress Management</i> Skills; Class Attendance; Homework Completion
	Program Appeal	MOMS Participant Assessment (Baseline, Endpoint)

² Harris, P.A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J.G. (2009). Research electronic data capture (REDCap) – a metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of biomedical informatics*, 42(2), 377-381.

	Social Connection	Curative Climate Instrument - Cohesion Scale
Short-Term Program Outcomes	Depressive Symptoms	Center for Epidemiologic Studies Depression Scale (CES-D)
	Anxiety Symptoms	General Anxiety Disorder – 7 (GAD-7)
	Perceived Stress	Perceived Stress Scale 4 (PSS-4)
	Parenting Stress	Parental Stress Scale (PSS)
	Social Support	Medical Outcomes Study Social Support Survey (MOS-SSS)
	Emotion Regulation / Coping	Brief COPE
	Attitudes Towards Help Seeking	Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS)
Participant-Focused Needs Assessment	Participant's Self-Reported Needs for Supportive Services	Self-Sufficiency Matrix ³

Analytic Strategy

Descriptive analyses and statistical tests for pre-post comparisons were conducted to address study objectives.

Means and standard deviations (*SD*) are presented for normally distributed data. Paired *t*-tests were used to examine differences in timepoints to account for repeated measures. Data that was not normally distributed is described using quartiles: first quartile (*Q1*), second or median quartile (Median), third quartile (*Q3*), and differences in timepoints were examined with the Wilcoxon signed-rank test. Box 2 summarizes these details.

Box 2. Statistics by Variable Type

- **For continuous, normally distributed variables:**
Descriptive statistics include mean and standard deviation. Pre-post comparisons were conducted using paired *t*-tests.
- **For continuous, non-normally distributed variables:**
Descriptive statistics include median, *Q1* (first quartile), and *Q3* (third quartile). Pre-post comparisons were conducted using the Wilcoxon signed-rank test.

Statistical significance (SIG.) was considered at $p < .05$ and is denoted in tables using the notation: * $p < .05$, ** $p < .01$, *** $p < .001$. When something is noted as statistically significant, it indicates that the difference seen in the data is unlikely due to chance.

The Baseline sample is composed of individuals who attended at least one of the first two classes and completed a Baseline assessment ($n=53$). The analytic sample is composed of individuals who additionally completed an Endpoint assessment ($n=37$), and 3-Month Follow-Up assessment ($n = 24$). Participants were excluded from specific analyses if they had missing data for the variables relevant to analyses.

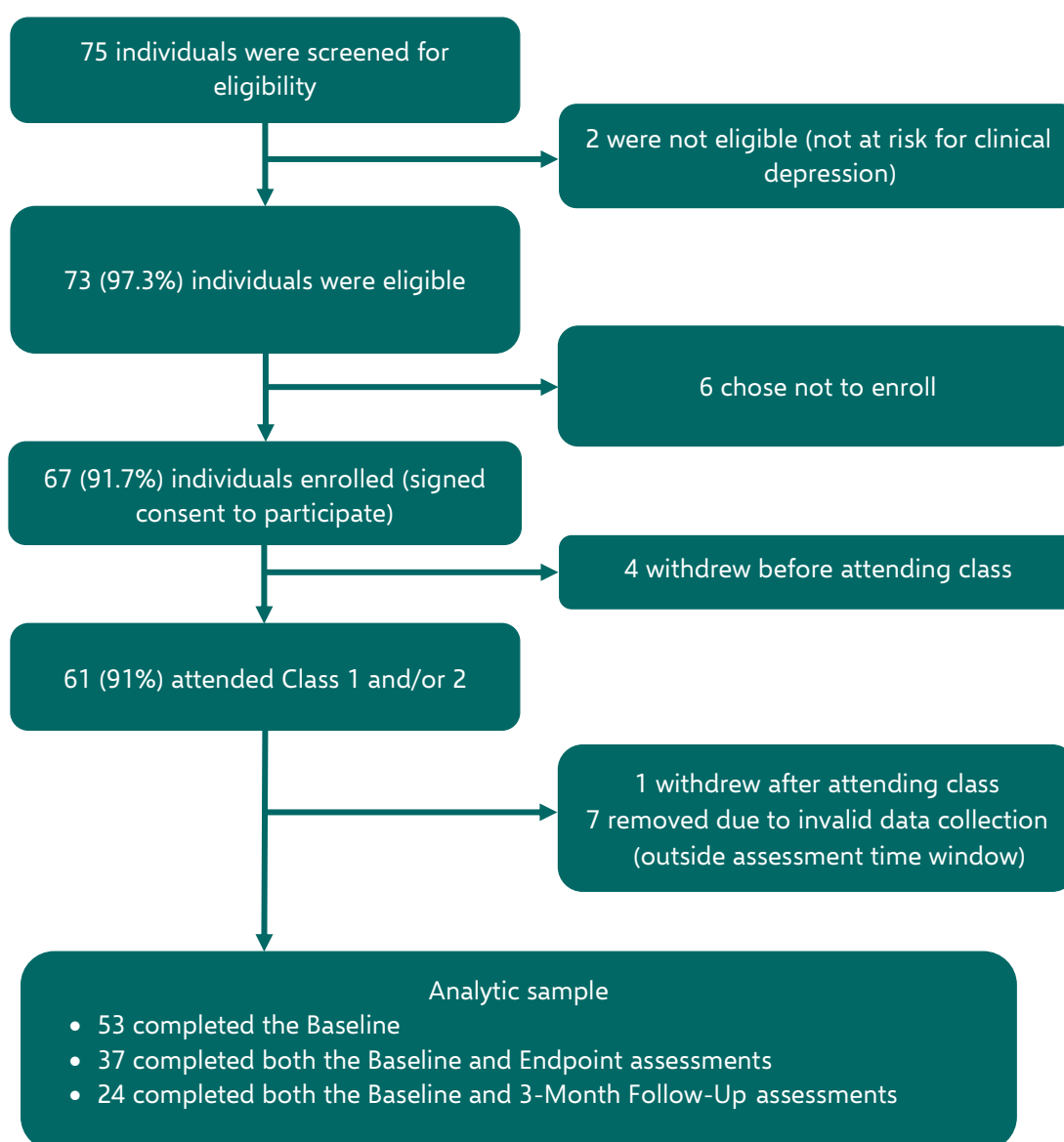
³ Self-Sufficiency Matrix is a tool used by BangorHousing as a standard part of their programming with residents.

Results

Participant Flow

Figure 1 shows the flow from screening to participation. Of the 75 individuals screened, 97% were eligible and 92% of those who were eligible then consented to participate (i.e., enrolled). Of those who consented, 91% attended at least one class—an indicator of initial engagement. Of those who enrolled and attended class, eight were excluded from analysis due to early withdrawal or data validation issues.

Figure 1. Participant Flow into MOMS



Participant Characteristics

Key Points

- In terms of highest level of education, about 40% of the sample had completed high school or GED and about 40% had attended some college or vocational school.
- Over 65% of the sample was employed, and most (61%) were working part time.
- The experience of financial strain was common: 71.7% of participants reporting *A Fair Amount* or *A Lot* of stress related to personal finances; 75% of participants said they had gone without things they needed in the past two months.

Table 2. Demographics and Other Participant Characteristics at Baseline (n=53)

Variable	Mean (<i>SD</i>) or <i>n</i> (%)
Age, Mean (<i>SD</i>)	
Participant's Age	32.7 (6.7)
Race / Ethnicity (Not Exclusive), <i>n</i> (%)	
White	52 (94.5%)
American Indian or Alaska Native	1 (1.8%)
Asian	1 (1.8%)
Hispanic or Latino	1 (1.8%)
Marital Status, <i>n</i> (%)	
Never Married	23 (43.4%)
Living with a Partner	11 (20.8%)
Married	10 (18.9%)
Divorced	6 (11.3%)
Separated	2 (3.8%)
Windowed	1 (1.9%)
Education (Highest Level of Education), <i>n</i> (%)	
Less Than High School	1 (1.9%)
Some High School or Some GED Classes	6 (11.3%)
High School Graduate or GED Completed	21 (39.6%)
Some College or Vocational School	21 (39.6%)
College Graduate	4 (7.5%)
Currently Employed, <i>n</i> (%), (n=52)	
Yes	34 (65.4%)
No	18 (34.6%)
Employment Type, <i>n</i> (%), (n=18)	
Full-Time	7 (38.9%)
Part-Time	11 (61.1%)
If Part-Time: Weekly Hours, Mean (<i>SD</i>), (n=11)	
Average Number of Hours Worked in a Week	21 (8.3)

Enrolled in School or Training Program, <i>n</i> (%)	
Yes	14 (26.4%)
No	39 (73.6%)
Children, Mean (<i>SD</i>), (<i>n</i>=50)	
Number of Children (Under Age 18) for Whom Participant is Primary Caregiver	2.2 (1.1)

Table 3. Support in Child Caregiving Responsibilities⁴ at Baseline (*n*=52)

Category	<i>n</i> (%)
A Lot	2 (3.8%)
A Fair Amount	6 (11.5%)
Some	15 (28.8%)
Very Little	16 (30.8%)
None	13 (25%)

Table 4. Participant Variables Pertaining to SES and Basic Needs at Baseline (*n*=53)

Variable	Mean (<i>SD</i>) or <i>n</i> (%)
Insurance (Not Exclusive)	
Public (MaineCare (Medicaid), Medicare)	52 (92.4%)
Private (Private Insurance, Health Insurance Marketplace)	3 (5.7%)
None	1 (1.9%)
Stress or Worry About Personal Finances, (<i>n</i>=53)	
None	1 (1.9%)
Very Little	1 (1.9%)
Some	13 (24.5%)
A Fair Amount	21 (39.6%)
A Lot	17 (32.1%)
How Much Trouble Do You Have Paying for the Following [diapers, formula, cleaning/hygiene supplies, food, clothes, shoes], Mean (<i>SD</i>)	
3-Point Scale: 1 (No Trouble); 2 (Some Trouble); 3 (Lots of Trouble)	2.3 (0.6)
Gone Without Things Needed in the Past 2 Months Due to Being Short of Money (<i>n</i>=52), <i>n</i> (%)	
Yes, Often	11 (21.2%)
Yes, Sometimes	28 (53.8%)
No	13 (25%)

Table 5 presents frequencies for areas where participants expressed needing support, based on the Self-Sufficiency Matrix. Family relationships, parenting, and meeting basic needs were the three most commonly named areas, followed by finding education opportunities, employment, and accessing food.

⁴ Full question wording: "How much support do you get from other adults in the day-to-day child caregiving responsibilities? (This question is not asking about financial support)."

Table 5. Self-Sufficiency Matrix⁵ at Baseline (n=53)

Areas Where Participants Reported Needing Support (Not Exclusive)	n (%)
Family Relationships	27 (50.9%)
Parenting Skills	26 (49.1%)
Meeting Basic Needs	23 (43.4%)
Finding Educational Opportunities for Yourself	21 (39.6%)
Employment	19 (35.8%)
Accessing Food	19 (35.8%)
Getting Involved in the Community	14 (26.4%)
Finding Childcare	13 (24.5%)
Accessing Transportation	12 (22.6%)
Disability Management	8 (15.1%)
Accessing Healthcare	7 (13.2%)
Feeling Safe at Home	4 (7.5%)
Legal Assistance	3 (5.7%)
Enrolling Children in School	2 (3.8%)
Quitting or Cutting Down on Use of Drugs or Alcohol	1 (1.9%)

Feasibility

Key Points

- Most (97%) individuals screened for programming were eligible to participate.
- Maine MOMS staff instituted highly effective recruitment strategies and the program appealed to mothers in the Capehart community: 92% of eligible individuals chose to enroll and 91% of those who enrolled then attended at least one class.

Eligibility Rates

As depicted in Figure 1, a large majority of individuals (97.3%) who completed a screening were determined to be eligible to participate. The eligibility criteria were thus feasible for the program to reach a large proportion of mothers in the Capehart community of Bangor Housing.

Recruitment, Initial Engagement, and Enrollment Rates

Indicators of recruitment and enrollment into the *MOMS Stress Management Course* were strong. Of the 73 eligible individuals, 67 (92%) signed consent (i.e., enrolled), and 61 (91%) attended at least one *MOMS Stress Management* class, reflecting strong initial engagement in programming.

⁵ Participants were asked to indicate areas in which they needed or wanted support, with the goal of identifying opportunities for program staff to provide resources or referrals.

Again, the pilot was implemented across four cohorts, each consisting of two intervention groups running concurrently (or eight total groups). To further understand the success of recruitment efforts, the percent of “open seats” that were filled across all intervention groups was examined. With 10 open seats per group, the program essentially had 80 total available seats. Maine MOMS successfully enrolled 67 participants into 84% of the available seats. These rates highlight the success of the outreach/recruitment strategies used by the Maine MOMS team, as well as the appeal of the MOMS program to mothers in the Capehart community.

Retention Rates

Using assessment completion as a measure of retention, retention was moderate at Endpoint (62%) and low (40%) at the 3-Month Follow-Up assessment. Having a smaller sample size generally leads to lower statistical power, making it harder to find statistically significant results, even if real effects exist.

Table 6. Endpoint and Follow-Up Assessment Completion Rates

Assessment Completion	Completed	# Eligible ⁶	%
Endpoint	37	60	61.7%
Follow-Up	24	60	40%

Note: Those who withdrew and/or completed the assessment outside of the analytic window are excluded.

Acceptability

Key Points

- Participants expressed high satisfaction with *MOMS Stress Management* overall, with 92% reporting being *Very Satisfied* or *Satisfied*.
- Participants engaged in the course at a high level, with median class attendance at 7 out of 8 classes and median homework completion at 5 out of 7 assignments.
- Participants indicated that they found *MOMS Stress Management* skills to be helpful and they used them regularly outside of class.
- Participants were primarily drawn to enroll/continue in the MOMS program to learn skills for managing stress and to connect with other mothers.
- Participants strongly experienced a feeling of belonging and social connection within the group.

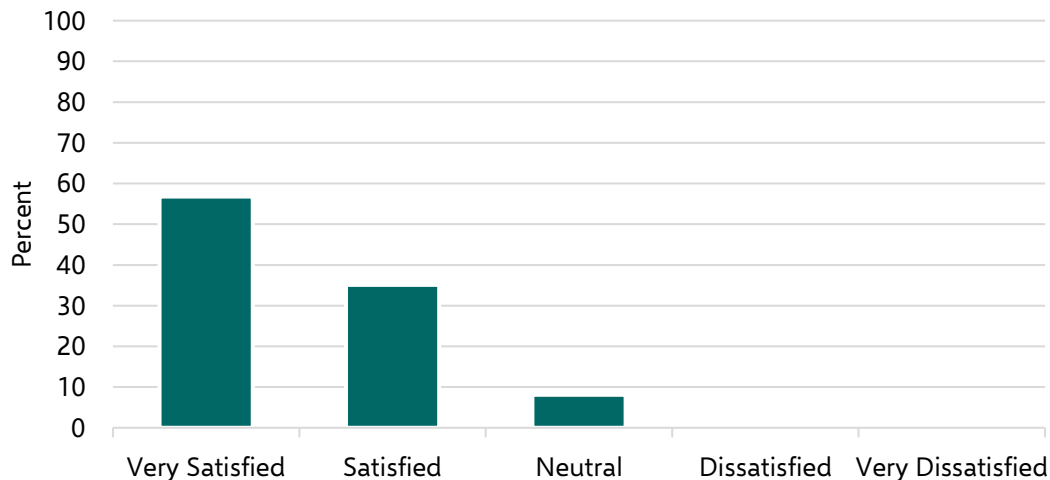
Acceptability measures included participant ratings of overall satisfaction with the MOMS program, and helpfulness of specific skills learned in the program. Acceptability measures also included behavioral indicators of participant engagement in the MOMS program, such as class attendance, homework completion, and skills usage. Information about program appeal (i.e., reasons for enrolling and continuing in the MOMS program) and the experience of social connection in the group were also collected.

⁶ “Eligible” refers to participants who enrolled in the program and did not withdraw prior to the Endpoint assessment window.

Overall Program Satisfaction

Overall, a large majority (92%) of participants were satisfied (i.e., *Very Satisfied* or *Satisfied*) with MOMS program, as assessed at Endpoint.

Figure 2. Participants' Overall Satisfaction with the MOMS Program (n=37)



Program Satisfaction: Open-Text Responses

Secondary objectives in this pilot included examination of qualitative, open-text responses, intended to illuminate participant experiences. After providing an overall rating of program satisfaction, participants had the option to explain their response in writing. A sampling of participants' open-text responses is provided here:

- *"This group was a highlight of my week, it was supportive and very helpful."*
- *"It was a push I need to get out and socialize and learn new things on managing stress."*
- *"I was very satisfied to be able to get together with other moms going through similar things and being able to learn techniques to help manage stress."*
- *"It felt like family, was great to get away and talk with other moms and know you are not alone. Learned great ways to cope with everyday stressors."*
- *"I really liked the course. I learned new things. I got to relearn some helpful things as well. It was great to have a binder with all of the information to follow along. I liked the smaller class to really be able to get some different discussions from everyone."*

Class Attendance

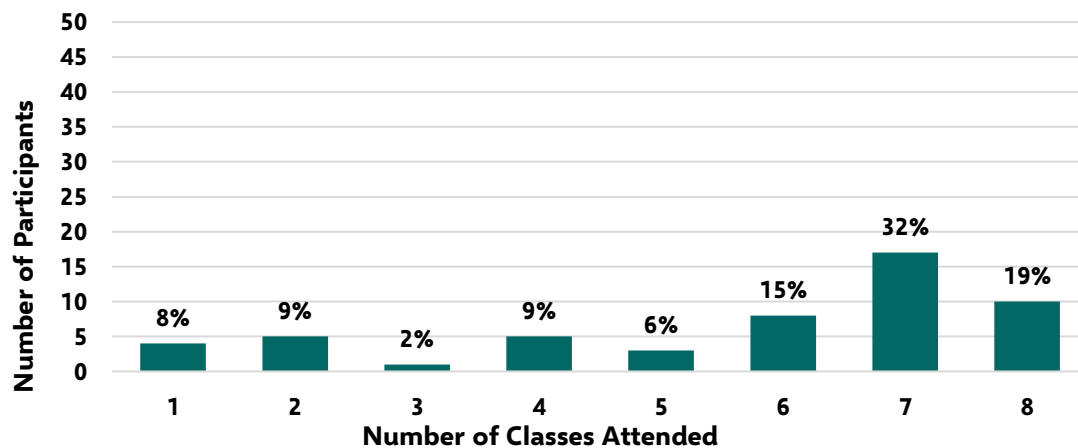
There are eight classes in the *MOMS Stress Management Course*. A participant must attend either Class 1 or Class 2 to remain in the group. As shown in Table 7, the average number of classes attended was high, with a mean of 5.6 out of 8⁷ classes, and a median of 7 out of 8 classes.

⁷ For context and comparison, based on the 2025 cross-site analysis with a large sample of $n=510$, the average (mean) number of *MOMS Stress Management* classes attended across sites was 6.2.

Table 7. Average Class Attendance ($n=53$)

	Mean (<i>SD</i>)	Median (<i>Q1, Q3</i>)
Number of Classes Attended, Out of 8	5.6 (2.2)	7 (4, 7)

Figure 3 shows the spread and shape of the class attendance data, providing more nuanced information beyond summary statistics like mean/median. Class attendance was fairly distributed across the range (1-8 classes attended), but with the majority of participants (72%) attending between 5-8 classes.

Figure 3. Frequencies for Number of Classes Attended ($n=53$)

Note: Percentages may not total 100% due to rounding.

Homework Completion Rates

As is typical in CBT-based programs, participants in *MOMS Stress Management* received homework assignments to practice and apply skills learned in class. The median number of homework assignments that participants reported completing was high at 5 out of 7.

Table 8. Self-Reported Homework Completion ($n=37$)

	Mean (<i>SD</i>)	Median (<i>Q1, Q3</i>)
Number of Completed Assignments, Out of 7	5.2 (1.7)	5 (4, 7)

Skills Usage and Helpfulness

At Endpoint and Follow-Up, participants reported how often they used the key skills taught in the program (in the past month) (see Box 3). At Endpoint only, participants also reported how helpful they found the skills (Box 4). Averages (mean and median) were calculated across ratings for 10 skills.

Box 3. Frequency Scale for Use of Key Skills

- 1 – Never Used
- 2 – Used Once or Twice
- 3 – Used Several Times
- 4 – Used Often
- 5 – Use Every Day

As shown in Table 9, participants reported using stress management skills regularly, with average usage ratings at Endpoint and Follow-Up falling between *Several Times* and *Often*.

Helpfulness of stress management skills was assessed at Endpoint only and was rated highly, with participants on average finding the skills *Very Helpful*. Together, these data suggest that the stress management skills were integrated into participants' routines and were perceived as beneficial at program completion.

Box 4. Helpfulness Scale for Rating Key Skills

- 1 – Not at All Helpful
- 2 – Slightly Helpful
- 3 – Somewhat Helpful
- 4 – Very Helpful
- 5 – Extremely Helpful

Table 9. Self-Reported Skills Usage and Helpfulness at Endpoint and Follow-Up

	Mean (<i>SD</i>)	Median (<i>Q1, Q3</i>)
Frequency of Using Key Skills in the Past Month		
Endpoint (<i>n</i> =37)	3.6 (0.8)	3.6 (3.3, 4.1)
Follow-Up (<i>n</i> =24)	3.3 (0.7)	3.5 (2.7, 3.7)
Helpfulness of Key Skills		
Endpoint (<i>n</i> =37)	4.1 (0.7)	4.1 (3.7, 4.6)

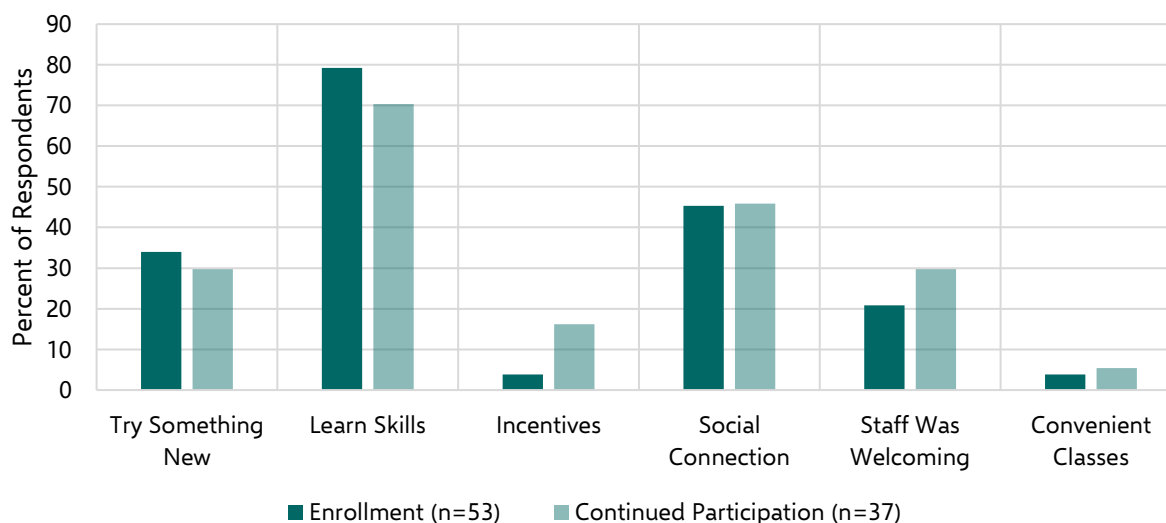
Program Appeal

Participants were asked to identify the two most important reasons why they enrolled in and continued participating in *MOMS Stress Management*. These responses provided valuable insight into what aspects of the program participants found most appealing and motivating. Preset response choices are presented in Box 5.

Box 5: Reasons for Enrollment and Continued Participation

Category	Reasons You Decided to Enroll	Reasons You Continued to Participate
Try Something New	To Try Something New	To Keep Trying Something New
Learn Skills	To Learn Skills for Managing Stress	To Keeping Learning Skills for Managing Stress
Incentives	To Receive Incentives (\$)	To Keep Receiving Incentives (\$)
Social Connection	To Meet/Connect with Other Mothers	Because I Liked / Felt Connected to the Other Mothers (Participants)
Staff Was Welcoming	Because the Program Staff Made Me Feel Welcome and Comfortable	Because I Liked the Program Staff (Instructors)
Convenient Classes	Because the Online Classes Seemed Convenient	Because the Online Classes Were Convenient

Figure 4. Self-Reported Reasons for Enrollment and Continued Participation in the Program



Skill-building was the most frequently reported reason for both enrolling and continuing in the program, with 79.2% and 70.3% of participants indicating this response, respectively. Social connection was also frequently reported as a draw for participants to enroll and continue (45.3% and 45.9%, respectively). The opportunity to try something new (34.0% and 29.7%, respectively) and the welcoming nature of MOMS program staff (20.8% and 29.7%, respectively) were indicated by about 20–30% of participants.

Social Connection

The Cohesion Scale of the Curative Climate Instrument (CCI) is a 5-item measure assessing the extent to which participants felt a sense of social connection and belonging with the *MOMS Stress Management* group they were part of (see Box 6 for items on the CCI Cohesion Scale).

Box 6. Items on the CCI Cohesion Scale

1. Belonging to and being valued by a group.
2. Feeling less alone and more included in a group.
3. Belonging to a group I liked.
4. Belonging to a group of people who understood and accepted me.
5. Continued close contact with other people.

Frequency of experiencing each item is rated on a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Almost Always*). A composite mean score of the Cohesion Scale is calculated, with higher scores indicating stronger perceived group cohesion/connection. The possible range for the composite score was 5-25.

Participants reported experiencing very high social connection within the group, with a median score near the top of the scale (22 out of 25). These results suggest that a sense of cohesion and belonging was felt among participants, which was an intentional target of *MOMS Stress Management*.

Table 10. CCI Cohesion Scores at Endpoint (*n*=37)

	Mean (<i>SD</i>)	Median (<i>Q1, Q3</i>)
CCI Cohesion Score, Reflecting Social Connection Within the Group	20.5 (3.7)	22 (18, 23)

Primary Outcome Measure

Key Points

- In the pilot sample for Maine MOMS, there were no significant changes in depressive symptoms (CES-D) over time.
- 85% participants showed no reliable change (using RCI) in depressive symptoms by Endpoint or Follow-Up.

Depressive Symptoms (CES-D)

The primary outcome measure in this evaluation is the Center for Epidemiological Studies Depression Scale (CES-D)⁸. The CES-D is a 20-question instrument designed to measure depressive symptomology that asks respondents to identify ways they may have felt in the past week. Responses range from 1 (*Rarely or None of the Time (Less Than 1 Day)*) to 3 (*Most or All of the Time (5-7 Days)*). Scores range from 0-60, with higher scores indicating greater depressive symptoms. A score of 16 or higher on the CES-D is a commonly used threshold to identify individuals at risk for clinical depression.

Eligibility for Maine MOMS included a CES-D score of 16 or higher at screening. The CES-D was completed at three additional timepoints: Baseline, Endpoint and Follow-Up. Prior research and evaluations of the MOMS Partnership have shown consistent pre-post improvements in depressive symptoms. In this pilot, change in depressive symptoms was examined in two ways: (a) linear change in CES-D scores; (b) Reliable Change Index.

Change in Depressive Symptoms: Linear Change in CES-D

Linear change in depressive symptoms was examined from Baseline to Endpoint and Baseline to Follow-Up (Figure 5, Table 11). Median CES-D scores decreased from Baseline to Endpoint and from Baseline to Follow-Up; however, these changes were not statistically significant, suggesting that any improvements in depressive symptoms were not detectable with the current sample size.

⁸ Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, 1(3), 385–401. <https://doi.org/10.1177/014662167700100306>

Figure 5. Average CES-D Scores from Baseline to Follow-Up

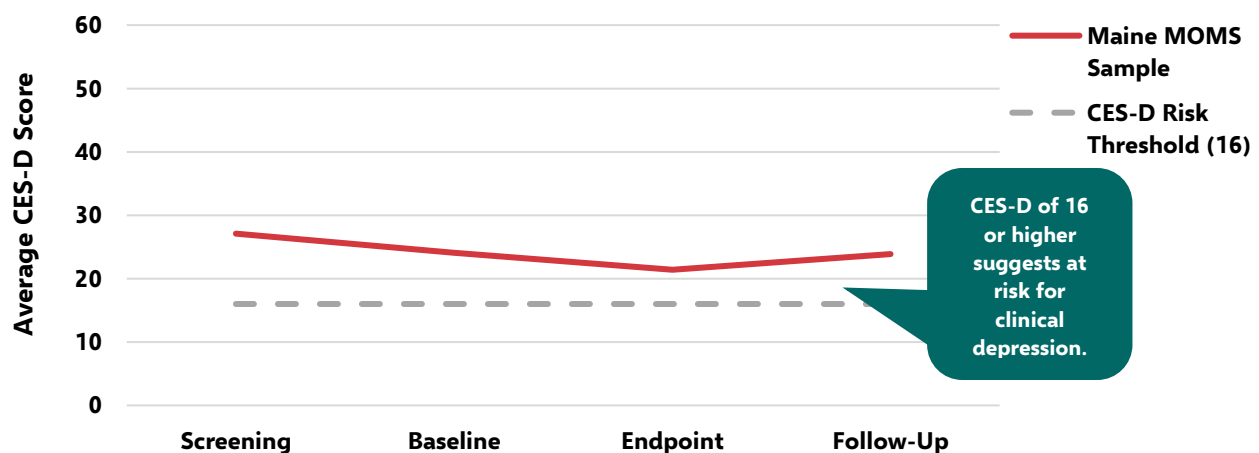


Table 11. CES-D Scores from Baseline to Endpoint and Follow-Up

	Baseline	Endpoint	Follow-Up	SIG.
	Median (<i>Q1, Q3</i>)	Median (<i>Q1, Q3</i>)	Median (<i>Q1, Q3</i>)	
CES-D (<i>n</i>=34)	24 (16.5, 31.5)	19.5 (12, 26.8)	—	ns
CES-D (<i>n</i>=22)	24.5 (20, 33)	—	21.5 (18.2, 30)	ns

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

Although median CES-D scores were lower at Endpoint and Follow-Up than at Baseline, these changes were not statistically significant. Possible improvements in depressive symptoms should be explored in the future with a larger sample. It is possible that the small sample size made it harder to detect smaller improvements, if present.

Change in Depressive Symptoms: Reliable Change Index

Change in CES-D using the Reliable Change Index (RCI)⁹ was also examined. The RCI determines a threshold of change that is deemed a “reliable change” due to natural variability of responses to an instrument, meaning the change is likely not due to measure error¹⁰. The RCI used in this study was 14.78 and was used to define four categories of change:

- Recovered and reliable change: CES-D score <16 and change in CES-D score was >RCI
- Improved and reliable change: CES-D score decreased from Baseline but remained above 16; the change in CES-D score was >RCI
- Unchanged: CES-D score increased or decreased, and the change was <RCI
- Deteriorated and reliable change: CES-D score increased, and the change was >RCI

⁹ Jacobson NS, Truax P. Clinical significance: a statistical approach to defining meaningful change in psychotherapy research. *J Consult Clin Psychol*. 1991 Feb;59(1):12-9. doi: 10.1037//0022-006x.59.1.12. PMID: 2002127.

¹⁰ The RCI calculated for this study used Cronbach’s alpha and standard deviations calculated from 1843 CES-D responses collected in New Haven during 2012-2018. The standardized Cronbach’s alpha was 0.91 and the standard deviation was 12.26.

Table 12. CES-D Scores at Endpoint and Follow-Up as Reliable Change Index Categories

	Endpoint	Follow-Up
	<i>n</i> (%)	<i>n</i> (%)
Recovered and Reliable Change	2 (5.9%)	1 (4.5%)
Improved and Reliable Change	1 (2.9%)	1 (4.5%)
Unchanged	29 (85.3%)	19 (86.4%)
CES-D <16	8 (27.8%)	4 (21.1%)
CES-D ≥16	21 (72.4%)	15 (78.9%)
Deteriorated and Reliable Change	2 (5.9%)	1 (4.5%)

As shown in Table 12, most participants (over 85%) showed no reliable change in depressive symptoms by Endpoint or Follow-Up. Figures 6 and 7 provide visual representation of the RCI from Baseline to Endpoint (Figure 6) and Baseline to Follow-Up (Figure 7).

Figure 6. Visual of Reliable Change Index from Baseline to Endpoint

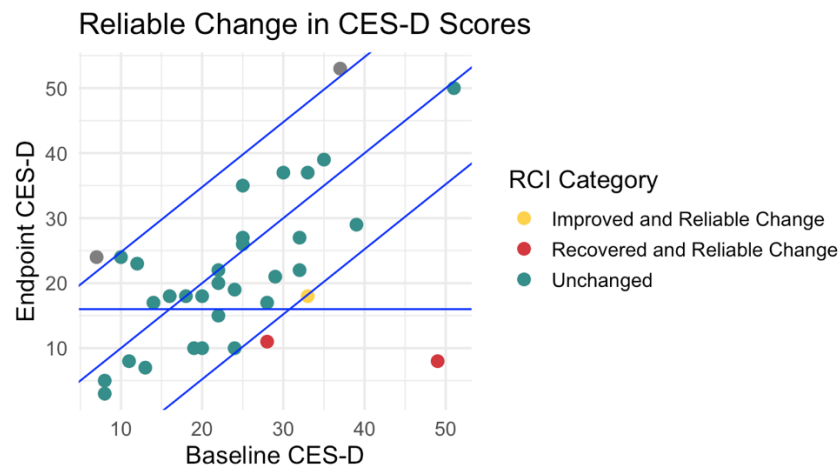
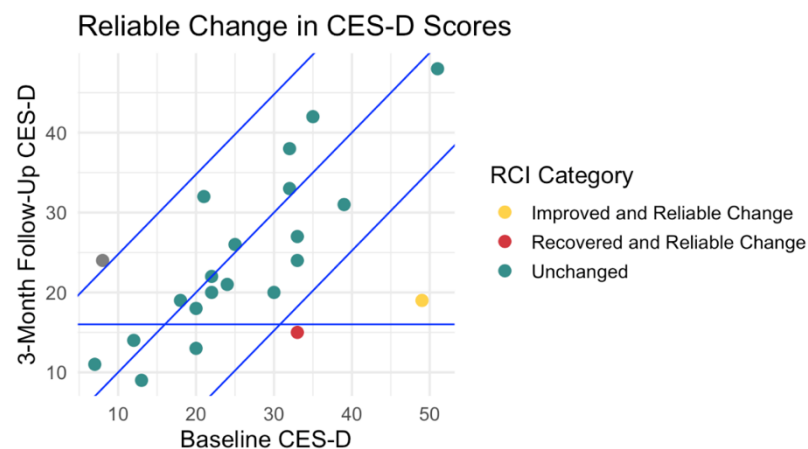


Figure 7. Visual of Reliable Change Index from Baseline to Follow-Up



Secondary Outcome Measures

Key Points

- Significant pre-to-post improvements were found for some but not all of the secondary measures.
- Participants experienced significant improvements in perceived stress at Endpoint, but these gains were not sustained at Follow-Up.
- Social support increased by the end of programming, and these gains were retained at Follow-Up.
- By the end of the program, participants increased their use of two positive coping strategies—Use of Emotional Support and Use of Instrumental Support, and these gains were sustained at Follow-Up.
- Pre-to-post improvements were not found for anxiety or parental stress.

Generalized Anxiety (GAD-7)

The Generalized Anxiety Disorder 7-Item Scale (GAD-7) assesses severity of generalized anxiety symptoms¹¹. Respondents are asked how often they have been bothered in the last two weeks by a symptom; responses range from 0 (*Not at All*) to 3 (*Nearly Every Day*). GAD severity score is obtained by summing the first seven responses to the questionnaire; scores range from 0-21, with higher scores indicating greater severity. The GAD-7 was included at Baseline, Endpoint and Follow-Up.

Table 13. GAD-7 Scores from Baseline to Endpoint and Baseline to Follow-Up

	Baseline	Endpoint	Follow-Up	SIG.
	Median (Q1, Q3)	Median (Q1, Q3)	Median (Q1, Q3)	
GAD-7 (n=36)	7 (6, 14.2)	9 (4.8, 13)	—	ns
GAD-7 (n=23)	7 (6, 14)	—	7 (4, 10.5)	ns

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

There were no statistically significant changes in GAD-7 from Baseline to Endpoint, or from Baseline to Follow-Up. This suggests that symptoms of anxiety did not significantly improve or worsen over time for most participants.

Perceived Stress (PSS-4)

The Perceived Stress Scale 4 (PSS-4) is a 4-item questionnaire that measures “the degree to which situations in one’s life are appraised as stressful” (Cohen, 1988)¹². Responses range from 0 (*Never*) to 4 (*Very Often*) to describe how often the respondent felt or thought a certain way during the past month. The PSS-4 total score is calculated by summing all responses to the questions; total scores range from 0-

¹¹ Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder. *Arch Intern Med*. 2006; 166:1092-1097.

¹² Cohen, S., & Williamson, G. (1988). Perceived Stress in a Probability Sample of the United States. In S. Spacapan, & S. Oskamp (Eds.), *The Social Psychology of Health: Claremont Symposium on Applied Social Psychology* (pp. 31-67). Newbury Park, CA: Sage.

16, where a higher score indicates more perceived stress. The PSS-4 was administered at Baseline, Endpoint and Follow-Up.

Table 14. PSS-4 Scores from Baseline to Endpoint and Baseline to Follow-Up

	Baseline	Endpoint	Follow-Up	SIG.
	Median (Q1, Q3)	Median (Q1, Q3)	Median (Q1, Q3)	
PSS-4 (n=37)	9 (8, 10)	8 (7, 9)	—	**
PSS-4 (n=24)	9 (8, 10.2)	—	8 (6.8, 9)	ns

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

A statistically significant decrease in total PSS-4 scores (perceived stress) was observed from Baseline to Endpoint, but not from Baseline to Follow-Up; thus, initial improvements were not sustained, based on statistical testing. Additional data, with a larger sample, would help to interpret these results.

Parental Stress (PSS)

The Parental Stress Scale (PSS)¹³ is an 18-item measure that taps both negative and positive experiences in the parenting role, such as parenting demands and feelings of overwhelm on the one side, and feelings of enjoyment and fulfillment on the other side. Respondents rate how strongly they agree or disagree with each statement on a 5-point scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Some items are reverse coded so that higher scores indicate higher parental stress. Total scores range from 18-90. The PSS was administered at Baseline, Endpoint, and Follow-Up.

Table 15. PSS Scores from Baseline to Endpoint and Baseline to Follow-Up

	Baseline	Endpoint	Follow-Up	SIG.
	Mean (SD)	Mean (SD)	Mean (SD)	
PSS (n=35)	64.5 (7.2)	65.6 (7.9)	—	ns
PSS (n=23)	63.9 (7.5)	—	62.4 (7)	ns

* $p < .05$, ** $p < .01$, *** $p < .001$; paired t -test.

Overall parental stress level based on PSS total scores did not show significant change from Baseline to Endpoint or Baseline to Follow-Up. That is, on average, parents' total PSS scores remained unchanged across the study period, based on statistical testing.

¹³ Berry, J. O., & Jones, W. H. (1995). The parental stress scale: Initial psychometric evidence. *Journal of Social and Personal Relationships*, 12, 463–472.

Social Support (MOS-SSS)

Social support was measured using the Medical Outcomes Study Social Support Survey (MOS-SSS), a 19-item questionnaire that measures overall social support and four subscales: Emotional/Informational Support, Tangible Support, Affectionate Support, and Positive Social Interaction¹⁴.

Responses indicate how often support is available, ranging from 1 (*None of the*

Time) to 5 (*All of the Time*). Scores for this measure were calculated using guidance from the publisher¹⁵ and range from 0-100, with higher scores indicating more social support. The MOS-SSS was administered at Baseline, Endpoint and Follow-Up. Example subscale questions are provided in Box 7.

Box 7. MOS-SSS Subscale Example Questions

Emotional/Informational Support:

Someone you can count on to listen to you when you need to talk.

Tangible Support:

Someone to help you if you were confined to bed.

Affectionate Support:

Someone who shows you love and affection.

Positive Social Interaction:

Someone to have a good time with.

Table 16. MOS-SSS Scores from Baseline to Endpoint (n=37)

	Baseline	Endpoint	
	Median (Q1, Q3)	Median (Q1, Q3)	SIG.
Overall Social Support	36.8 (25, 51.3)	60.5 (46.1, 77.6)	***
Emotional/Informational Support	40.6 (28.1, 59.4)	75 (50, 81.2)	***
Tangible Support	18.8 (6.2, 43.8)	50 (18.8, 75)	***
Affectionate Support	50 (33.3, 58.3)	75 (41.7, 83.3)	**
Positive Social Interaction	41.7 (16.7, 50)	58.3 (25, 83.3)	***

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

Table 17. MOS-SSS Scores from Baseline to Follow-Up (n=24)

	Baseline	Follow-Up	
	Median (Q1, Q3)	Median (Q1, Q3)	SIG.
Overall Social Support	35.5 (23, 50)	50 (35.2, 68.8)	*
Emotional/Informational Support (n=25)	40.6 (28.1, 50)	62.5 (50, 75)	**
Tangible Support	18.8 (6.2, 45.3)	28.1 (6.2, 65.6)	*
Affectionate Support	37.5 (16.7, 52.1)	54.2 (31.2, 100)	**
Positive Social Interaction	45.8 (16.7, 50)	50 (31.2, 93.8)	**

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

¹⁴ Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine*, 32(6), 705-714. doi:10.1016/0277-9536(91)90150-b

¹⁵ MOS-SSS scores presented were calculated based on guidance from the publisher. The scores are calculated by calculating an average of the items in each scale and then transforming the values to a 0-100 scale using a formula provided by the publisher. This creates scores that can be compared to other studies if desired.

Social support based on MOS-SSS significantly increased from Baseline to both Endpoint and Follow-Up for Overall Social Support and all four subscales. These results indicate participants experienced improvements in multiple types of social support from before to after participation in the MOMS program.

Coping Strategies (Brief COPE)

The Brief COPE¹⁶ is a 28-item questionnaire designed to assess common coping strategies individuals use in response to stress. The measure includes 14 subscales, each comprising two items, capturing distinct coping approaches such as Active Coping, Self-Distraction, Use of Emotional Support, Denial, and Substance Use. Respondents rate how frequently they use each strategy on a 4-point scale: 0 (*I Usually Don't Do This At All*), 1 (*I Usually Do This a Little Bit*), 2 (*I Usually Do This a Medium Amount*), 3 (*I've Been Doing This a Lot*). In this evaluation, the dispositional format of the Brief COPE was administered to assess participants' typical responses to stress. Subscale scores were calculated by averaging the two items for each subscale. No overall total score is produced.

According to the regulatory flexibility framework¹⁷, resilience and healthy functioning are reflected by a flexible use of coping strategies to fit a given situation. Thus, having a broader repertoire of coping techniques to draw from is most helpful. Taking this perspective, change in coping is interpreted by examining directional shifts in specific strategies. To further aid interpretation, strategies on the Brief COPE are loosely examined in terms of categories (problem-focused, emotion-focused, avoidant strategies), which have been suggested by prior research¹⁸.

Table 18. Brief COPE Scores from Baseline to Endpoint (n=37)

	Baseline	Endpoint	SIG.
	Median (Q1, Q3)	Median (Q1, Q3)	
Active Coping^a (n=36)	2 (1.5, 2.5)	2 (1.5, 2.5)	ns
Use of Instrumental Support^a	1 (1, 2)	2 (1.5, 2)	**
Positive Reframing^a	2 (1, 2.5)	2 (1.5, 2.5)	ns
Planning^a	2 (1.5, 2.5)	2 (1.5, 2.5)	ns
Use of Emotional Support^b	1 (1, 2)	1.5 (1, 2)	*
Venting^b	1 (0.5, 2)	1.5 (1, 1.5)	ns
Humor^b	1.5 (0.5, 2)	1.5 (0.5, 2)	ns
Acceptance^b	2.5 (1.5, 3)	2 (1.5, 2.5)	ns
Self-Blame^b	2.5 (1, 3)	2 (1.5, 3)	ns

¹⁶ Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.

¹⁷ Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on psychological science*, 8(6), 591-612.

¹⁸ Poulus, D., Coulter, T. J., Trotter, M. G., & Polman, R. (2020). Stress and coping in esports and the influence of mental toughness. *Frontiers in psychology*, 11, 628.

Religion^b	0.5 (0, 1.5)	1 (0, 2)	ns
Self-Distractio^c	2 (1.5, 2.5)	2 (1.5, 2)	ns
Denial^c	0 (0, 0.5)	0.5 (0, 1)	*
Substance Use^c (n=36)	0 (0, 0)	0 (0, 0.3)	ns
Behavioral Disengagement^c (n=36)	1 (0.5, 1)	0.5 (0, 1.5)	ns

^a Problem-focused strategies, as categorized in Poulus et al (2020)

^b Emotion-focused strategies, as categorized in Poulus et al (2020)

^c Avoidance strategies, as categorized in Poulus et al (2020)

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

Table 19. Brief COPE Scores from Baseline to Follow-Up (n=24)

	Baseline	Endpoint	SIG.
	Median (Q1, Q3)	Median (Q1, Q3)	
Active Coping^a	2 (1.5, 2.5)	2 (1.5, 2.5)	ns
Use of Instrumental Support^a	1 (0.9, 2)	1.5 (1, 2.5)	*
Positive Reframing^a	2 (1, 2.5)	2 (1, 2.6)	ns
Planning^a	2 (1.5, 2.5)	2 (1.5, 2.6)	ns
Use of Emotional Support^b	1 (0.5, 2)	1.5 (1, 2.1)	*
Venting^b	1 (0.9, 1.5)	1.3 (1, 1.6)	ns
Humor^b	1.5 (0.4, 2)	1.5 (0.5, 2)	ns
Acceptance^b	2.5 (1.5, 3)	2 (1.5, 2.5)	ns
Self-Blame^b	2.5 (1.4, 2.6)	1.5 (1, 2.5)	ns
Religion^b	0.8 (0, 2)	0.8 (0, 2.3)	ns
Self-Distractio^c	2 (1.5, 2.5)	2 (1.4, 2.1)	ns
Denial^c	0.3 (0, 1)	0.5 (0, 1)	ns
Substance Use^c	0 (0, 0)	0 (0, 0)	ns
Behavioral Disengagement^c (n=23)	1 (0.5, 1)	0.5 (0, 1)	*

^a Problem-focused strategies, as categorized in Poulus et al (2020)

^b Emotion-focused strategies, as categorized in Poulus et al (2020)

^c Avoidance strategies, as categorized in Poulus et al (2020)

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

Results revealed some changes in the use of individual coping strategies over time. From Baseline to Endpoint and from Baseline to Follow-Up, participants reported increased both Use of Instrumental Support and Use of Emotional Support. These data suggest that participants expanded their coping repertoire somewhat, at least in terms of using social support.

From Baseline to Endpoint only, there was a significant increase in Denial, which is considered an avoidant strategy¹⁹ and may be less adaptive depending on context. From Baseline to Follow-Up only, there was a significant decrease in another avoidant coping strategy—Behavioral Disengagement. All other coping strategies remained stable over the three assessment timepoints based on statistical testing.

Taken together, these results suggest that coping strategies may have broadened somewhat over time. It is important to note that the concept of regulatory flexibility emphasizes that effective coping is not about using more strategies at uniformly high levels, but about flexibly applying the right strategies in the right context. The results for the Brief COPE highlight the importance of examining not only the presence of coping strategies but also their contextual use over time.

Attitudes Towards Seeking Help (IATSMHS: 3-Item Scale)

Three items from a longer instrument—the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS)—were administered to explore participants' general openness to seeking help²⁰. Items assess preferences for handling problems independently, comfort with seeking professional support, and perceived stigma around help-seeking. Participants rate their agreement with each statement on a 5-point scale from 0 (*Disagree*) to 4 (*Agree*), and negatively worded items are recoded so that higher scores represent more positive attitudes towards help-seeking. The 3-Item Scale was adapted for use by MOMS Partnership in an exploratory fashion to assess changes in help-seeking attitudes.

Table 20. IATSMHS Scores from Baseline to Endpoint and Baseline to Follow-Up

	Baseline	Endpoint	Follow-Up	SIG.
	Median (Q1, Q3)	Median (Q1, Q3)	Median (Q1, Q3)	
IATSMHS (n=37)	10 (7, 12)	12 (9, 12)	—	ns
IATSMHS (n=24)	10 (7, 11.2)	—	11 (7, 12)	ns

* $p < .05$, ** $p < .01$, *** $p < .001$; Wilcoxon signed-rank test.

Scores on the adapted 3-Item Scale from the IATSMHS were examined from Baseline to Endpoint and from Baseline to Follow-Up. For this measure, higher scores indicate more positive attitudes toward seeking help; negatively worded items (items 1 and 3) were reverse coded so that all items are scored in the same direction. Median scores were slightly higher at Endpoint and at Follow-Up compared to Baseline, indicating somewhat more positive attitudes, but these changes were not statistically significant. It should also be noted that this adapted 3-Item Scale is exploratory and has not been fully validated.

¹⁹ Poulus, D., Coulter, T. J., Trotter, M. G., & Polman, R. (2020). Stress and coping in esports and the influence of mental toughness. *Frontiers in psychology*, 11, 628.

²⁰ Mackenzie, C.S., Knox, V.J., Gekoski, W.L., & Macaulay, H. (2004). An adaptation and extension of the attitudes toward seeking professional psychological help scale. *Journal of Applied Social Psychology*, 34, 2410-2433.



Limitations

There are several limitations that should be considered while interpreting the results.

- Participant assessments were voluntary, and results presented in this evaluation may be influenced by participants' likelihood of completing assessments.
- The evaluation includes data provided by participants and staff. Self-reported data by participants may be subject to response bias, such as social desirability bias or response-shift bias. In response-shift bias, a participant's frame of reference may change with repeated administrations of the same measure.
- This evaluation was conducted without a control group, limiting the ability to attribute changes in outcome measures solely to participation in MOMS Partnership programming. However, the consistency between results found in this evaluation and those found in many other MOMS evaluations provides some indication of program effectiveness.
- Statistical significance does not always equate to meaningful clinical change. Similarly, the absence of a statistically significant finding does not necessarily indicate the absence of change, as small but meaningful shifts may not reach statistical thresholds.
- The relatively small sample size at Endpoint and Follow-Up may have limited the ability to detect statistically significant pre-post changes. Non-parametric methods were used to account for this and reduce assumptions about the data, but smaller changes may still have gone undetected due to limited power.



Conclusion

The Maine MOMS Partnership Pilot demonstrates that delivering the MOMS Partnership model and *MOMS Stress Management Course* is both feasible and acceptable in BangorHousing. High levels of enrollment, class attendance, usage of skills, and program satisfaction suggest that the program appealed to mothers in the Capehart community, met their needs, and was successfully implemented by the Maine MOMS team.

While not all pre-to-post changes in outcome measures reached statistical significance, improvements were observed across multiple areas of psychosocial functioning and well-being. Most notably, statistically significant increases in social support were observed in two measures from start to end of the program, and these gains were sustained at the 3-Month Follow-Up. Importantly, participants' use of emotional and instrumental support as a coping strategy increased over time; that is, participants reported changing their behaviors in positive/adaptive ways. Bolstering these results, participants reported experiencing a strong sense of belonging and connection within their intervention groups. The MOMS model is explicitly designed for group delivery in alignment with well-established associations between social support and mental health. In the Maine MOMS Pilot evaluation, improvements in social support/connection were evident.

Changes in depression symptoms and attitudes towards help-seeking were in the expected direction but did not reach statistical significance. Perceived stress significantly decreased from pre- to post-program, but these gains were not sustained at Follow-Up. With additional data collection and a larger sample size, improvements in other outcomes measures may be detected through statistical testing. It is worth noting that assessment completion rates were only 62% at Endpoint and 40% at Follow-Up.

Altogether, these findings provide solid support for the continuation and potential expansion of MOMS Partnership programming in BangorHousing, as well in public housing settings.