ELEVATE
A POLICY LAB TO ELEVATE MENTAL HEALTH AND DISRUPT POVERTY

MOMS PARTNERSHIP
Every Mother Matters

Yale SCHOOL OF MEDICINE

Vermont MOMS Partnership℠

Pilot Evaluation Report

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Elevate: A Policy Lab to Elevate Mental Health and Disrupt Poverty

Yale School of Medicine

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Executive Summary

OVERVIEW

The Mental health Outreach for MotherS (MOMS) Partnership® is a program designed to reduce depressive symptoms and meet the mental health needs of low-income women who are primary caregivers and are experiencing mild to moderate depressive symptoms. The Vermont MOMS Partnership℠ (VT MOMS), a partnership between Vermont Department of Children and Families (DCF) Economic Services Division (ESD) and Howard Center, was established in late 2018 to bring MOMS Partnership services to families connected to DCF programs. VT MOMS aims to promote the social and economic mobility of Vermont's families by improving the mental health and wellbeing of mothers and caregivers.

Planning for VT MOMS began in late 2018 and services, providing MOMS Stress Management (SM) course to eligible women connected to Vermont's Reach Up, Reach Ahead, Reach First, or Post-Secondary Education programs, launched in February 2020. The MOMS SM course is a Cognitive Behavioral Therapy-based group course that targets mood management and meets for a 90-minute session each week for eight weeks. The MOMS SM course is co-delivered by a mental health clinician and a Community Mental Health Ambassador (CMHA), a paid staff member who is also a parent or caregiver from the local community and shares lived experience with program participants.

The pilot of VT MOMS included six cohorts of MOMS SM between February 2020 and June 2021. After the first two weeks of in-person classes, MOMS SM transitioned to virtual service delivery in response to the COVID-19 pandemic, and classes were held via Zoom for the remainder of the pilot. Over the course of six pilot cohorts, 96 women participated in MOMS SM classes.

EVALUATION

The evaluation of VT MOMS utilized self-report data collected from participants as well as data provided by staff on participant attendance. Participants completed assessment surveys at three time points ((Baseline, Endpoint (i.e., course completion) and a Follow-up (i.e., three months after course completion)). These assessments contained questions about participants' mental health and wellbeing, social support, basic needs, and parenting / child wellbeing.

KEY FINDINGS

Participants in VT MOMS

Most (n=96, 87.5%) individuals who were eligible to participate in MOMS SM after screening attended at least one MOMS SM class. Most participants were women born in the United States, identified as white and non-Hispanic, had never been married, and had at least a high school education or GED. More than 40% had received outpatient mental health care in the past year.

Participant Engagement and Satisfaction

- Participants attended most classes: the median attendance was 6 out of 8 classes.
- Most participants (94%) were satisfied or very satisfied with the MOMS SM course.
- Participants reported frequently utilizing skills or strategies from the MOMS SM course; 97% indicated using at least one of the course components often or every day at course completion.

Improvements in measures of mental health

- **Depressive symptoms, depressive severity** and **generalized anxiety** significantly decreased from Baseline to course completion; the decrease remained 3-months after course completion.
- After engagement in MOMS SM, almost 40% of participants had **depressive symptoms** that were below the threshold for at risk for clinical depression.
- **Perceived Stress** significantly decreased from Baseline to Endpoint (the two timepoints where perceived stress was measured), suggesting an overall decrease in perceived stress after the course.
- Participants reported a significant decrease in difficulties with emotion regulation over time, which indicates **improvement in emotional regulatory capacities** after the course.

Increased social support

Participants indicated more social support after the course: **overall functional social support** and **instrumental social support** (i.e., assistance provided to meet tangible needs) significantly increased from Baseline to Endpoint to 3-month Follow-up.

Summary

Evaluation findings suggest that VT MOMS was correlated with positive changes in participants' self-reported mental health and wellbeing indicators. The findings from the pilot evaluation suggest that, as intended, participants generally reported improvements in indicators of mental health and social support. These positive changes and improvements occurred even in the context of the global pandemic, which presented health and economic challenges for participants, as well as challenges to program implementation.

RECOMMENDATIONS

Drawing on the findings from this evaluation, the report offers the following recommendations to build on the momentum of current VT MOMS programming and deepen the value that future participants can derive:

1. Continue to include virtual services in the menu of service delivery options.
2. Pursue opportunities for social connectedness for participants.
3. Further align maternal mental health programming with economic mobility efforts.
4. Collaborate to address other maternal mental health stressors.
5. Partner to understand Two-Generational outcomes.

VT MOMS Program Overview

THE MOMS PARTNERSHIP®

The Mental Health Outreach for MotherS (MOMS) Partnership® is a program designed to reduce depressive symptoms and meet the mental health needs of low-income women who are primary caregivers and are experiencing mild to moderate depressive symptoms. Preliminary evidence suggests that those who participate in the MOMS Partnership can experience reduction in maternal depressive symptoms, an increase in perceived social support, an increase in maternal employment, and an increase in an ability to meet their family's basic needs. The MOMS Partnership was launched in New Haven in 2011. Since 2019[1], Elevate Policy Lab at Yale School of Medicine (Elevate) has been working with partners in several states to bring mental health within reach through the MOMS Partnership by meeting women caregivers where they are in their communities.

At the core of the MOMS Partnership model is the MOMS Stress Management (SM) course. MOMS SM is a manualized Cognitive Behavioral Therapy-based group course that meets for 90-minutes once per week for eight weeks. The course was originally adapted from the "Mothers and Babies Course" [2] for the population of mothers served by the MOMS Partnership. The MOMS SM course targets mood management.

MOMS SM is co-delivered by a mental health clinician and a Community Mental Health Ambassador (CMHA), a paid staff member who is also a parent or caregiver from the local community and shares lived experience with program participants.

The MOMS Clinician provides participants with light-touch clinical support during their journey to improved mental health and wellbeing and may support referrals to additional supports if participants express additional need. As a trained and experienced mental health professional, the MOMS Clinician takes the lead on participant eligibility screening and delivery of MOMS courses.

The CMHA, typically a mother from the local community who shares similar lived experiences to women enrolling in MOMS Partnership programming, accompanies participants from outreach through course delivery. Sharing aspects of identity with participants, the CMHA helps to ensure that service delivery is culturally relevant and sensitive and may assist with reducing barriers and stigmas associated with receiving mental health support. In VT MOMS, the CMHA was referred to as a MOMS Ambassador.

Unlike traditional mental health services in a clinical setting, MOMS Partnership programming places a high value on participant accessibility: services are offered both virtually and in community locations that prospective participants identify as convenient, accessible, and safe. The MOMS Partnership model includes incentives to compensate participants for their time — including class,

[1] Elevate was officially launched in 2019, however work on the MOMS Partnership began in 2018 under Center on Policy Innovation for Family Mental Health.

[2] Le, H.N. Le & Muñoz, R.F. (2011). *The Mothers and Babies Course: Instructor's Manual* (8-Session Course Adaptation); 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).

recruitment activities, and evaluation surveys — and to support them in meeting their family's basic needs.

VT MOMS

The Vermont MOMS Partnership℠ (VT MOMS) is a partnership between the Vermont Department of Children and Families (DCF) Economic Services Division (ESD) and Howard Center. DCF's mission is to foster the healthy development, safety, well-being, and self-sufficiency of Vermonters, providing benefits, services; the agency supports to some 200,000 Vermonters every year, including children, youth, families, older Vermonters, and people with disabilities. Within ESD, Reach Up administers the state's Temporary Aid to Needy Families (TANF) and other benefits, with the mission to join families on their journey to overcome obstacles, explore opportunities, improve their finances, and reach their goals. Within Vermont Agency of Human Services (AHS), the Department of Disabilities, Aging and Independent Living designates one Designated Agency in each geographic region of the state as responsible for ensuring needed services are available through local planning, service coordination, and monitoring outcomes within their region. Howard Center, a nonprofit provider of mental health, substance use, and developmental disability services, is the contracted Designated Agency for Chittenden County and was selected as the provider for MOMS services.

The pilot phase of VT MOMS ("the pilot") included six cohorts of MOMS SM participation, beginning with the launch of services in February 2020 and continuing through June 2021; data collection for the pilot continued through September 2021. VT MOMS offered MOMS SM classes to mothers and women caregivers connected with Reach Up or one of its sub-programs (Reach Ahead, Reach First and Post-Secondary Education) who lived in five counties during the pilot: Chittenden, Addison, Franklin, Grand Isle, and Rutland.[3] In addition to delivering MOM SM classes, VT MOMS staff drew on community resources to connect participants to needed services, including referrals to local Parent Child Centers, diaper banks, food shelves, training and educational opportunities and individual counseling opportunities.

Over the course of the pilot, 96 individuals attended at least one MOMS SM class. This report describes the pilot and findings from an evaluation of self-reported participant data before and after MOMS SM.

[3] At the beginning of the pilot, participation in VT MOMS was limited to residents of Chittenden County. Over the course of the pilot, the area of geographic eligibility was widened due in part to the COVID-19 pandemic which precipitated a change from in-person classes to virtual delivery.

VT MOMS Design

Planning for VT MOMS began in late 2018. Before implementation began, Elevate and ESD collaborated to conduct a Goals and Needs Assessment (GNA) in early summer 2019, to further understand the needs of participants in Reach Up, Reach Ahead, Reach First or Post-Secondary Education Programs in the Burlington area.[4] Many GNA respondents indicated low levels of social support, depressive symptoms, and difficulties accessing treatment for mental and emotional health; these findings suggested that the MOMS program services would be a good fit for Reach Up participants in Burlington, Vermont. GNA respondents also expressed that the grocery store was among the places where they felt welcome and comfortable. This information was utilized to select the local Shaw's grocery store in Burlington, Vermont as the site of in-person MOMS SM classes. Informed by the GNA findings, program setup and training took place in late summer and fall 2019.

In February 2020, after successful completion of program set-up, VT MOMS began delivery of MOMS SM at Shaw's grocery store in Burlington. After two weeks of class, in March 2020, in-person service delivery was disrupted by the COVID-19 pandemic. VT MOMS quickly transitioned to virtual services using the videoconference platform Zoom. This required VT MOMS staff to adapt their recruitment process and course delivery style. The recruitment and screening processes shifted from in-person, community-based strategies to phone and digital communication; participants shifted from completing the assessments in person to completing them at home. MOMS staff adjusted their approach for the virtual classroom, supported participants in accessing needed technology, and provided technical assistance to participants as they made the transition to the new instruction modality. MOMS SM was delivered virtually for the remainder of the pilot.

RECRUITMENT

Potential participants were recruited through several pathways. Reach Up Case Managers and Howard Center staff were trained to refer potential participants to VT MOMS and were provided with referral forms. Reach up Case Managers shared the opportunity to participate in VT MOMS with their Reach Up participants and Howard Center staff also referred potential participants. Recruitment materials were also sent or emailed to a pool of potential participants who had participated in Reach Up or its sub-programs. Additionally, GNA respondents who had indicated they were interested in finding out more about VT MOMS were contacted. Flyers were also hung in partner offices and provided to potential participants at community events and local organizations. With the shift to virtual course delivery with the onset of the COVID 19 pandemic, recruitment strategies had to be adapted and modified. Referral forms were adapted, and electronic forms were created. Flyers were adapted for use on social media platforms and PDF flyers were distributed via email to potential participants. Interested participants were connected with the MOMS CMHA who provided an informational overview of the program and began the screening process.

Screening

Eligibility screening was conducted in two parts. The first part of the screening, **inclusion screening**, contained questions around inclusion criteria and some basic need questions (i.e.,

[4] Elevate (2019). *Findings from Six MOMS Partnership® Goals & Needs Assessments. chrome-*
https://ysph.yale.edu/elevate/our-work/scaling/gna%20findings%20from%20six%20sites_413158_284_52073_v1.pdf

housing, food, and diapers needs). The inclusion screening was administered by a VT MOMS Clinician or CMHA. The second part of screening, **exclusion screening**, was administered by a VT MOMS Clinician and contained the exclusion elements for psychosis and suicidal ideation. Final clinical eligibility to participate in MOMS SM was determined by the VT MOMS Clinician.

Eligibility

Individuals were eligible to participate in VT MOMS if the following criteria were met at screening:

- identify as a woman
- are at least 18 years of age
- are pregnant and/or have custody of a child under 18 years of age
- score 16 or higher on the Center for Epidemiological Studies Depression Scale (CES-D) (indicating at risk for clinical depression)
- meet one of the following criteria:
    - are currently a Reach Up, Reach First, or Post-Secondary Education Program recipient, or have been a Reach Up recipient in the previous 24 months
    - receive Supplemental Security Income and have a child under 18 years of age in custody who is currently a Reach Up recipient
    - are currently enrolled in Reach Ahead program
- are able to use a computer or mobile phone
- speak English
- do not demonstrate acute psychosis or suicidal ideation

Consent

If an individual was eligible for participation in VT MOMS after screening, the VT MOMS Clinician consented the individual. During consenting, the VT MOMS Clinician reviewed the ESD data release form with the potential participant and answered questions they had about the form. Consenting for participation in VT MOMS was done in person before the onset of the COVID-19 pandemic. Due to the shift to virtual services during the COVID-19 pandemic, the consent procedure was modified. During virtual services, the clinician documented the individual's verbal consent and emailed the potential participant a copy of the ESD data release form (Howard Center allowed verbal permission on all paperwork during COVID-19). In addition to the ESD data release form, staff also documented consent for delivery of telehealth services.

Engagement Session

The shift to virtual delivery prompted the development of an engagement session as an additional component of the enrollment process. The goals of the engagement session were to increase investment in MOMS SM participation; communicate key virtual class guidelines; address individual barriers to participation that might include technological or other practical barriers like childcare, as well as psychological or cultural barriers to participation in mental health treatment; convey understanding of clients' individual and culturally embedded perspectives, help clients recognize how the potential benefits of treatment align with their own priorities and concerns; and ensure that the participant can meet the unique requirements of participation. The engagement session occurred

between a VT MOMS staff member and a potential participant after consenting and before attending the first MOMS SM class. Engagement sessions were typically conducted in a group format but were also presented one-on-one to accommodate participants' schedules.

INCENTIVES

The VT MOMS program offered incentives for participation to compensate mothers for their time and support them in meeting their families' basic needs. Incentives were provided as grocery store gift cards. At the start of the pilot, these were limited to Shaw's grocery store; after the shift to virtual classes, options were expanded to include gift cards for Hannaford, Walmart, and Price Chopper. The value of the gift card provided for each participant activity was as follows:

- $25 for completion of the screening
- $25 for assessment completion (Baseline, Endpoint, and 3-Month Follow-up)
- $50 for weekly class attendance (Classes 1 and 8)
- $20 for weekly class attendance (Classes 2 – 7)

REFERRAL PATHWAYS

The Baseline assessment questionnaire asked participants about their need for resources or assistance in the following areas:

- Eligibility or enrollment in benefit programs
- Childcare
- Healthcare
- Legal assistance
- Substance use treatment
- Domestic violence

After a participant completed the Baseline assessment, the VT MOMS Clinician and CMHA received a summary of the participant's responses about these needs. Informed by these responses, staff then followed up with participants to connect them with resources or referrals outside of VT MOMS to address their identified needs (see Table 2C). Additionally, VT MOMS staff encouraged participants to reach out to either the CMHA or MOMS Clinician for assistance with accessing support for unmet resource needs. Staff followed up with each participant who requested assistance.

Evaluation Methods

EVALUATION QUESTIONS

This report explores the following evaluation questions:

Did VT MOMS participants experience improvements in measures of mental health following participation in the MOMS SM course?

Did VT MOMS participants experience increased social support following participation in MOMS SM course?

Exploratory: Did VT MOMS participants experience improvements in their parenting experience 3-months following their participation in MOMS SM course?

MEASURES

Participants were asked to complete self-report assessments at three time points; the assessments contained questions about participants' mental health and wellbeing, social support, basic needs, and parenting / child wellbeing. The assessments used in this report are described in Table 1.

Assessment time points

ASSESSMENT	TIME
Baseline	Participants completed the baseline assessment within one week of attending their first MOMS SM class.
Endpoint	Participants completed the endpoint assessment within three weeks after attending Class 8.
3-Month Follow-up	Participants completed the 3-month follow-up assessment within three weeks following the 3-month anniversary of Class 8.

Assessments were administered through Qualtrics, a secure online survey platform. VT MOMS staff shared a survey link with each participant to complete the assessment. No identifiable information was collected in the assessments.

Table 1: Select VT MOMS self-report measures in participant assessments

DOMAIN	INDICATOR	INSTRUMENT
Program Satisfaction	SM Program Satisfaction	Client Satisfaction Scale
Mental Health	Depressive Symptoms	CES-D, PHQ-9
	Perceived Stress	Perceived Stress Scale 4 (PSS-4)
	Anxiety	General Anxiety Disorder – 7 (GAD-7)
	Emotional Regulation	Difficulties in Emotional Regulation Scale, Short Form (DERS-SF)
Social Support	Perceived Social Support	Medical Outcomes Study Social Support Survey (MOS-SSS)
	Availability of Instrumental Support	Jackson et al. 4-question social support measure
Parenting & Parental Relationship	Parent Skill and Satisfaction	Parent-Child Relationship Inventory (PCRI) modules

DATA SOURCES AND ANALYSIS

Data used in this report includes self-report data collected from participants (Table 1) and data collected from VT MOMS staff. Participants completed assessments through a Qualtrics questionnaire at Baseline, Endpoint and 3-month Follow-up. Site staff also completed assessments through Qualtrics after each class to indicate participant attendance and engagement. Characteristics and outcomes of participants are described for individuals who attended at least one class (n=96).[5]

Descriptive statistics and statistical tests

VARIABLE TYPE	DESCRIPTIVE STATISTICS	STATISTICAL TEST FOR PRE-POST COMPARISON

[5]All participants who attended at least one class and contributed self-report responses are included in this report to reflect recruitment and data collection in a real-world setting. Some data collection timelines were out of the proposed time range; detailed information on timing of assessments is available from the authors of this report.

Continuous, normally distributed	Mean, standard deviation (SD)	Paired t-test
Continuous, not normally distributed	Median, Q1 (first quartile), Q3 (third quartile)	Wilcoxon signed-rank test

Mean and standard deviation (SD) are presented for normally distributed data. The paired t-test was used to examine differences in time points 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 time points were examined with the Wilcoxon signed-rank test.

Statistical significance (SIG) was considered at $p<0.05$ and is denoted in tables under the significance column using the notation: * $p<.05$, ** $p< .01$, *** $p<.001$. When something is noted as statistically significant, it is indicating that the difference seen in the data is unlikely due to chance.

LIMITATIONS

There are several limitations that should be considered while interpreting the evaluation results. Due to the COVID-19 pandemic and other contextual factors, some modifications had to be made to the original evaluation plans. Some original evaluation questions were dropped from the evaluation. Additional self-report outcomes were not included due to small sample size; this information is available upon request from the authors of this report. Additional factors to consider when interpreting the results of this evaluation include the following:

- Participation in the program, including completion of the assessments, was voluntary and incentivized.
- Outcomes are representative of change in self-report measures which are subject to bias.
- Assessments may have been completed outside of the ideal timeframe (see Assessment time points table).
- The Baseline assessment does not represent a true baseline; the Baseline assessment was completed after several interactions with VT MOMS staff.
- Assessment data was only collected on program participants (i.e., those who attended at least one class).
- Only association can be shown, not causation.
- Statistical change is shown; this does not always translate to meaningful change.

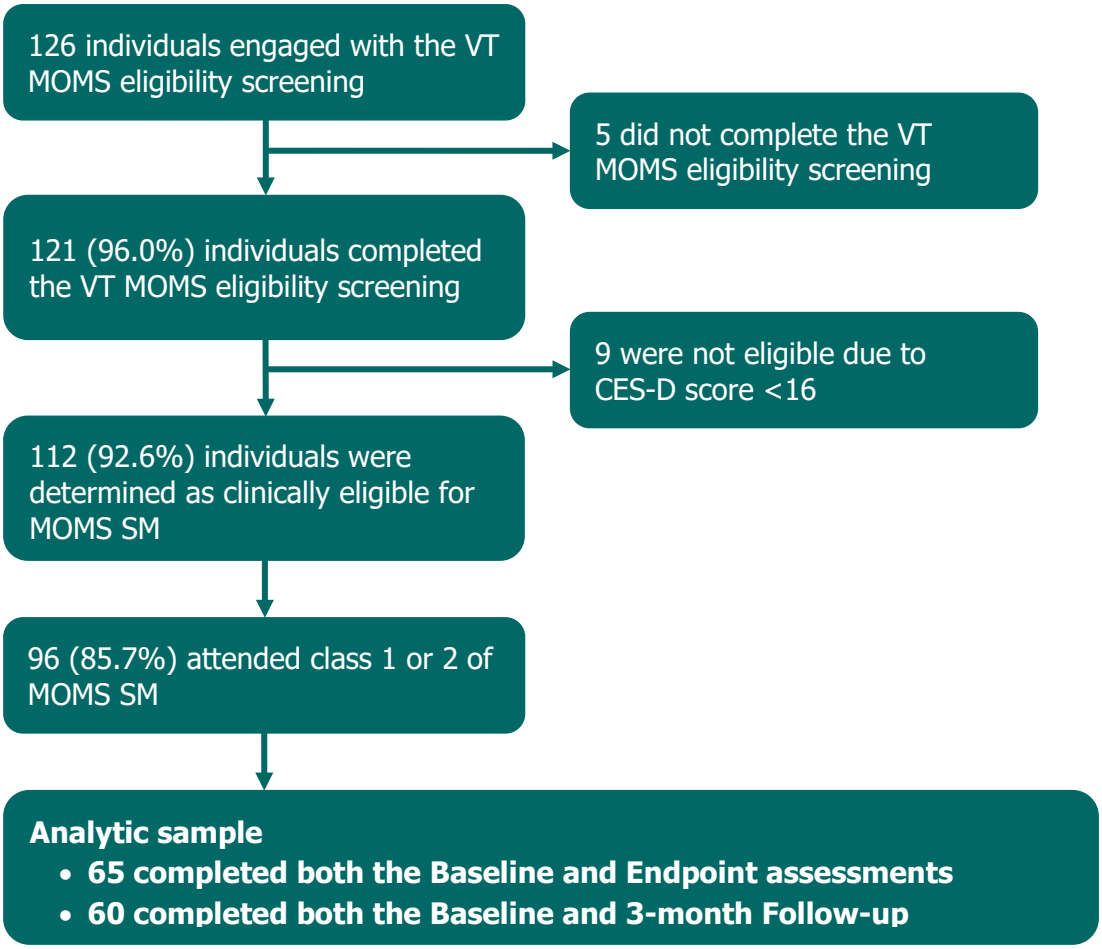
VT MOMS Participants: Recruitment Flow

KEY POINTS

Most individuals screened for VT MOMS were eligible and participated.

Individuals interested in participating in VT MOMS were first engaged with an eligibility screener. If they completed the screener and were eligible, they were then invited to attend a MOMS SM group. Since MOMS SM groups are closed, an individual must attend either class 1 or 2 to continue attending classes. A description of the flow of individuals from screening to participation in MOMS SM is described in Figure 1.

Figure 1: VT MOMS Pilot Flow of Individuals from Screening Through Participation



Note: Figure 1 is modeled after the STROBE Reporting guidelines. There were five participants who completed a part of the screening twice.

Participation in VT MOMS

PARTICIPANT CHARACTERISTICS

KEY POINTS

Most participants were women born in the U.S., identified as "White, Non-Hispanic," had never been married and had at least a high school education or GED.

Most participants had experienced financial or material hardship in the past year.

Over 40% of participants had received outpatient treatment for mental health in the past year.

Demographics

There were 96 individuals who attended class 1 or class 2 of MOMS SM and, therefore, were considered enrolled in the VT MOMS pilot. In order to better understand the needs and experiences of MOMS participants a series of questions were included in the Baseline assessment to assess demographics, basic needs and connection with available resources, and prior clinical and treatment experiences. Some of this information was utilized by the program staff to connect participants with additional resources to address basic needs and to further explore potential barriers to program access (e.g., transportation access). Demographics and participant characteristics are summarized in the next few tables; more detailed tables are available from the authors of this report.

Table 2A: Baseline characteristics of participants (n=96)

CHARACTERISTIC	n (%)
Where were you born?	
In the U.S.	93 (96.9%)
Not in the U.S.	3 (3.1%)
In which of these groups would you place yourself?	
White, Non-Hispanic	82 (85.4%)
Black or African-American or Other	14 (14.6%)
Which best describes your marital status?	

CHARACTERISTIC	n (%)
Married or Living with a partner	7 (7.3%)
Separated or Divorced	21 (21.9%)
Never Married	68 (70.8%)
What is the highest level of education you have completed?	
Less than high school graduate / GED classes	15 (15.6%)
High school graduate / GED completed	41 (42.7%)
Some college / vocational school / College graduate	40 (41.6%)
What type of health insurance do you have? (Check all that apply)	
Medicaid / Dr. Dynasaur	92 (95.8%)
Medicare, Qualified Health Plan – Vermont Health Connect	3 (3.1%)
None, I have no insurance	2 (2.1%)
CHARACTERISTIC	MEDIAN (Q1, Q3)
Including you, how many adults (18 or older) live in your household? (n=95)	1 (1, 1)
How many children (under 18) live in your household?	2 (1, 2)
How many times have you been pregnant? Please include all previous births, stillbirths, abortions, miscarriages, and ectopic pregnancies.	3 (2, 5)

Table 2B: Baseline basic needs characteristics of participants (n=86)

CHARACTERISTIC	n (%)
What is your current housing situation? (n=85)	
Rent your own apartment, house or condo	64 (75.3%)
Live with family or friends or live in group shelter	9 (10.7%)
Other	12 (14.1%)
Have you or your family gone without things you really needed in the past year because you were short of money?	
No	19 (22.1%)
Yes, sometimes or often	67 (77.9%)
In the past year, has your family (check all that apply):	
Been unable to heat your home or pay for your utilities because you were short of money	23 (26.7%)
Run out of food before the end of the month	45 (52.3%)
Borrowed food or money from family or friends	52 (60.5%)
Used a food bank	54 (62.8%)
Gone to a soup kitchen	9 (10.5%)
Gone without food sometimes	21 (24.4%)
Pawned or sold something	21 (24.4%)
Are you currently receiving the following service? (Check all that apply)	
Reach Up	80 (93.0%)
3Squares VT (Food stamps)	77 (89.5%)
Free or reduced school lunch	42 (48.8%)
WIC	47 (54.7%)
Fuel assistance	26 (30.2%)

CHARACTERISTIC	n (%)
Disability benefits (SSDI / SSI)	9 (10.5%)
Other governmental assistance	8 (9.3%)
How much trouble do you have paying for diapers for your child (n=57)	
Lots of Trouble or Some Trouble	27 (47.4%)
No trouble	30 (52.5%)
If you have children in diapers, do you feel that you do not have enough diapers to change them as often as you would like? (n=52)	
Yes	18 (34.6%)
No	34 (65.4%)
How much trouble do you have paying for food or formula (n=71)	
Lots of Trouble or Some Trouble	39 (54.9%)
No trouble	32 (45.1%)
How much trouble do you have paying for clothes and shoes (n=85)	
Lots of Trouble or Some Trouble	60 (70.6%)
No trouble	25 (29.4%)
How much trouble do you have paying for other cleaning / hygiene supplies like shampoo, toothpaste, pads, tampons, toilet paper (n=85)	
Lots of Trouble or Some Trouble	53 (62.4%)
No trouble	32 (37.7%)

Table 2C: Resource connection needs of participants at Baseline (n=85)

CHARACTERISTIC	n (%)
Do you need help determining if you are eligible for or enrolling in 3SquaresVT (food stamps), childcare assistance, WIC, or Medicaid/Dr. Dynasaur?	
Yes	2 (2.4%)
No	83 (97.7%)
Does your child need child care but is not enrolled?	
Yes	18 (34.6%)
No	34 (65.4%)
Not sure	2 (2.4%)
Do you currently need help getting healthcare you feel you or your children may need?	
Yes	3 (3.5%)
No	82 (96.5%)
Do you currently want help quitting or cutting down on your use of drugs or alcohol?	
Yes	5 (5.9%)
No	80 (94.1%)
Do you need legal assistance (for example, for family court, expunging a criminal record, issues with debt collection, or something else) but do not have access to a lawyer?	
Yes	19 (22.6%)
No	65 (77.4%)
Would you like help accessing services because you have been or are being emotionally or physically abused by your partner or someone important to you?	
Yes	6 (7.1%)
No	79 (92.9%)

Table 2D: Baseline vehicle ownership characteristics of participants (n=85)

CHARACTERISTIC	n (%)
How many vehicles (cars, trucks, or motorcycles) are owned, leased, or available for regular use by the people who live in your household?	
0	36 (42.4%)
1	43 (50.6%)
2	5 (5.9%)
3 or more	1 (1.2%)
Which answer best describes your vehicle ownership? (n=49)	
I have my own vehicle	39 (79.6%)
I share ownership of a vehicle with someone else	3 (6.1%)
I don't have my own vehicle	7 (14.3%)
Which of the following vehicles do you own or share? (n=42)	
Car	35 (83.3%)
Truck	1 (2.4%)
Motorcycle	1 (2.4%)
Other	6 (14.3%)

Table 2E: Baseline clinical and treatment characteristics of participants

CHARACTERISTIC	MEAN (SD)
CES-D Score at Screening (n=96)	34.8 (9.0)
CHARACTERISTIC	**n (%)**
Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic. Have you ever experienced this kind of event? (n=85)	
Yes	72 (84.7%)
No	13 (15.3%)
During the past 12 months, have you stayed overnight or longer in a hospital or other facility to receive treatment or counseling for any problem you were having with your emotions, nerves, or mental health? Please do not include treatment for alcohol or drug use. (n=85)	
Yes	6 (7.1%)
No	79 (92.9%)
During the past 12 months, did you receive any outpatient treatment or counseling for any problem you were having with your emotions, nerves, or mental health at any of the places listed below? Please do not include treatment for alcohol or drug use. (n=85)	
Yes	37 (43.5%)
No	48 (56.5%)
During the past 12 months, did you take any prescription medication that was prescribed for you to treat a mental or emotional condition? (n=85)	
Yes	56 (65.9%)
No	29 (34.1%)
During the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it? (n=85)	
Yes	21 (24.7%)
No	64 (75.3%)
Why did you not receive treatment? (n=21)	

Did not schedule appointment	10 (47.6%)
Other	11 (52.4%)

ENGAGEMENT IN STRESS MANAGEMENT

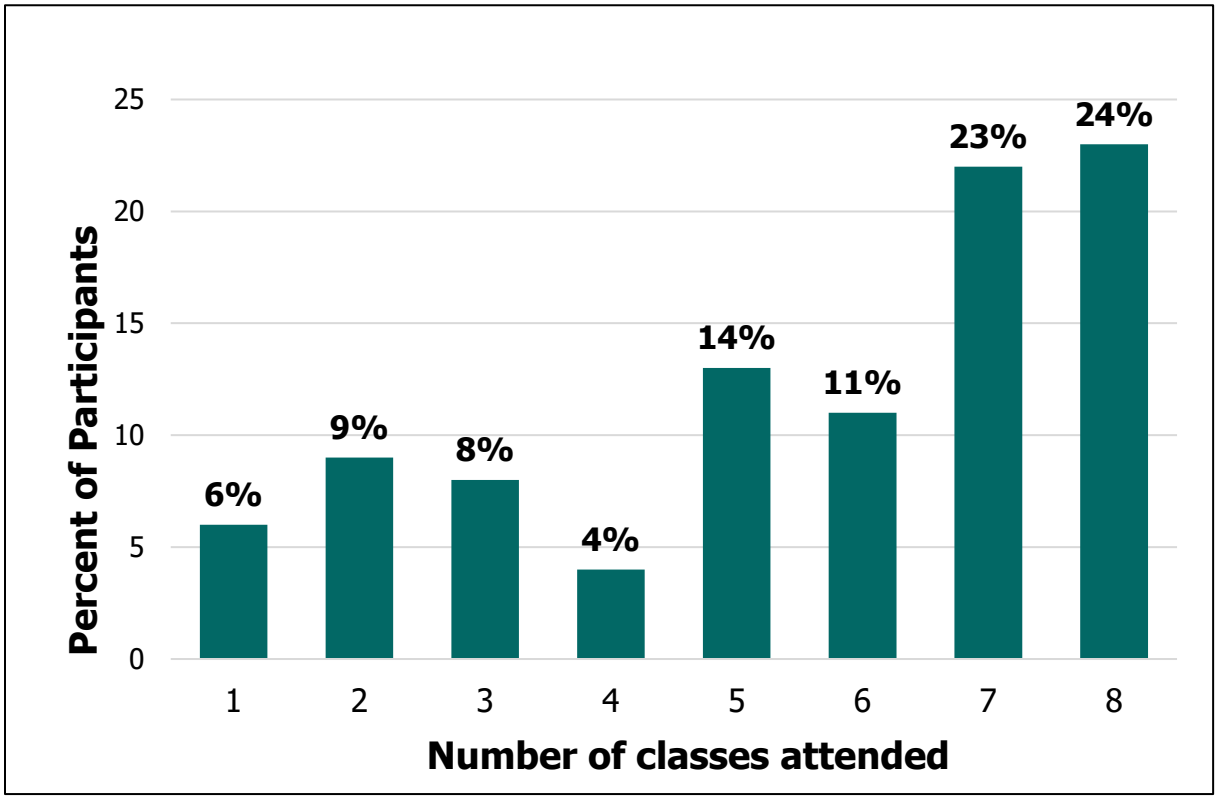
KEY POINTS

Participants attended most classes (6 out of 8).

Attendance

The MOMS SM course was delivered as eight weekly 90-minute classes. A participant must attend either class 1 or class 2 to attend the remaining classes. In the MOMS SM course, as with other cognitive therapy-based courses, participants receive homework assignments to practice and apply skills learned in class. Homework was assigned after each class and homework was discussed in the following class; there was no penalty for not completing homework. The median number of MOMS SM classes attended was 6 out of 8.

Figure 2: SM class attendance for participants in VT MOMS (n=96)



Virtual SM Class Participation

The two most common ways that participants indicated they engaged with virtual class was with Smartphone (29 (46.0%)) or a computer (26 (41.3%)).

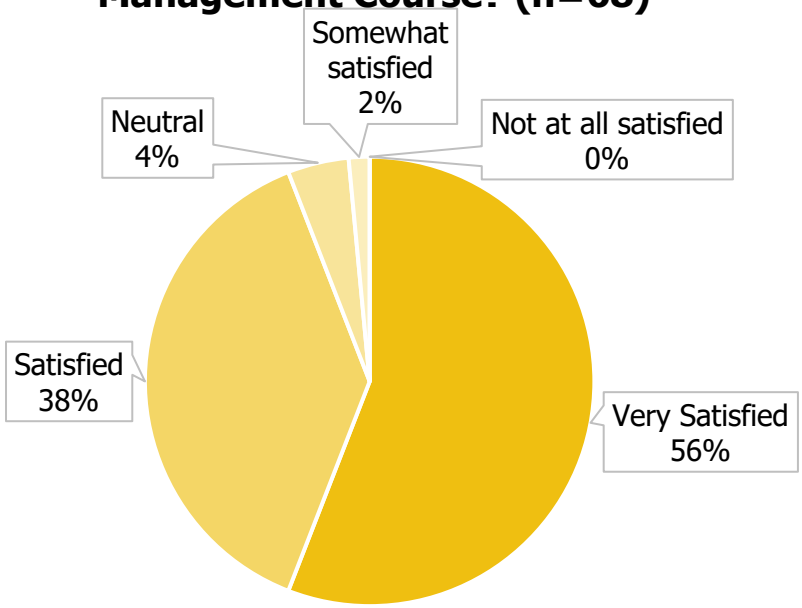
PARTICIPANT SATISFACTION

KEY POINTS

Most participants were satisfied with the MOMS SM class and were using components taught in the class often.

Participants who attended at least one MOMS SM class were able to complete a client satisfaction questionnaire at the Endpoint assessment. Overall, participants were satisfied with the MOMS SM course (94.1%). In response to the question "please explain why you gave this [satisfaction] rating", most participants explained that the class was helpful and that they learned new skills. Some responses suggested areas for improvement including a desire to go more in depth into the material, longer classes or a longer course, in-person classes, more engaging classes, and smaller class size.

At Endpoint, how satisfied are you with the Stress Management Course? (n=68)



At endpoint, 97% of participants were using at least one of 11 components of the MOMS SM course often or every day.

IN PARTICIPANTS' OWN WORDS

"A lot of the info given has helped me manage my stress level and I love the breathing exercises. Doing the homework has made assessments of my moods almost routine which helps control what mood I'm in."

IN PARTICIPANTS' OWN WORDS

"Because I got way more out of it than I had honestly originally thought I would. At first I was pretty skeptical, but I became more and more pleasantly surprised each class. This was a great class!!!"

"Each week the course gave useful skills for stress management that I find myself utilizing daily."

"I have learned a lot about managing with my stress and have seen a lot of improvement with no just managing my stress but managing with my anxiety as well."

"It was a very fulfilling experience to connect with other moms who are going through similar things"

"The course has helped me be more self aware, make connections with other women, learn strategies to help me not go from 0 to 100."

Program Outputs and Outcomes

MENTAL HEALTH

KEY POINTS

Overall, participants reported improvements in mental health indicators.

Depressive Symptoms

The MOMS Partnership aims to support women in addressing their depressive symptoms, better equipping them to pursue and reach their goals related to social and economic mobility. One main goal for participants who engage with the MOMS SM course is to gain mood management skills which can lead to a decrease in depressive symptoms.

We measured depressive symptoms using the Center for Epidemiological Studies Depression Scale (CES-D)[6]. 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 "Rarely or none of the time (Less than 1 day)" to "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 VT MOMS was determined at screening using the CES-D threshold of 16 or higher. The CES-D was completed at three additional timepoints as part of the Baseline, Endpoint and 3-month Follow-up assessments.

Change in depressive symptoms can be described in several ways. In this report, we have included both an examination of linear change in CES-D scores and an analysis of dichotomous change in CES-D scores as described below.

Change in Depressive Symptoms: Linear Change

Linear change in depressive symptoms was examined from Baseline to Endpoint and 3-month Follow-up (Figure 3, Table 3). There was a significant decrease in CES-D scores from Baseline to Endpoint and 3-month Follow-up, suggesting an overall decrease in depressive symptoms after the MOMS SM course.

[6] 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 3: Average CES-D scores from Baseline to 3-month Follow-up

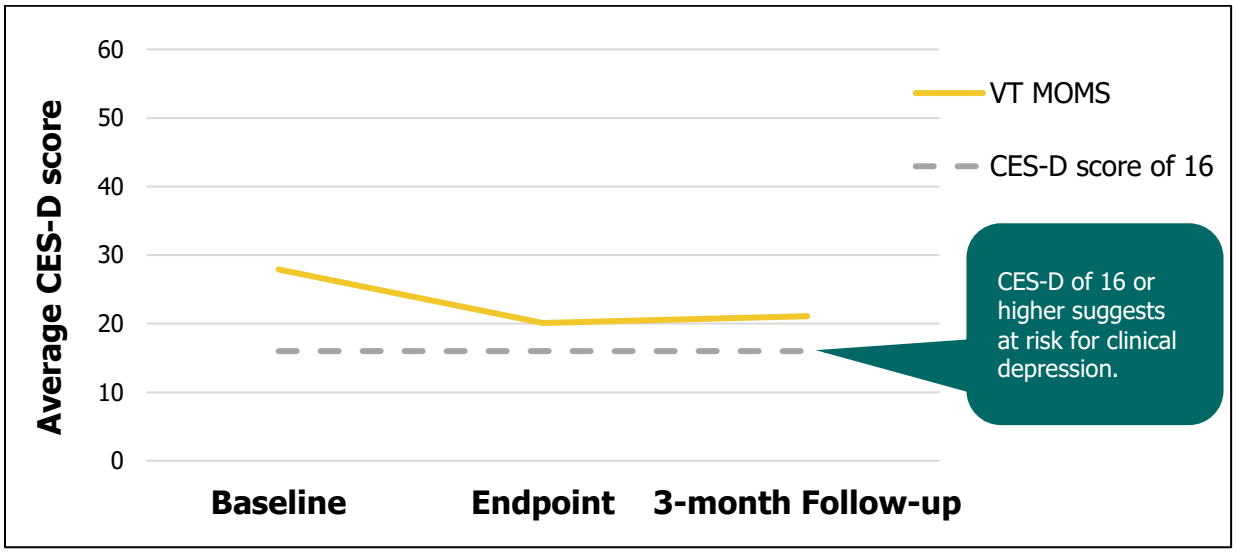


Table 3: CES-D scores from Baseline to Endpoint and 3-month Follow-up

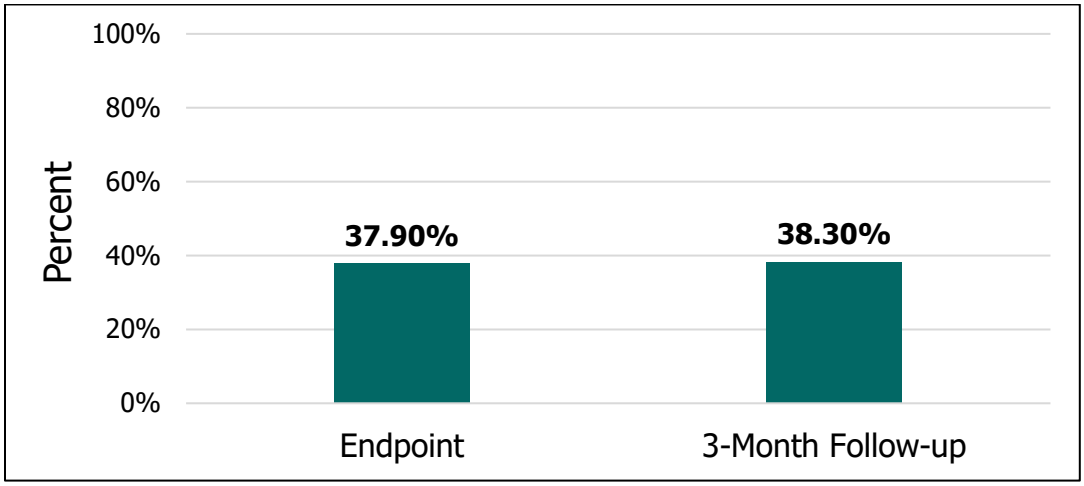
	BASELINE **Mean (SD)**	ENDPOINT **Mean (SD)**	FOLLOW-UP **Mean (SD)**	**SIG**
CES-D (n = 62)	27.9 (10.5)	20.0 (10.3)	—	***
CES-D (n = 56)	28.4 (10.9)	—	21.4 (12.4)	***

*** *p*<.05, ** *p*<.01, *** *p*<.001; paired t-test used for statistical significance (SIG)**

Change in Depressive Symptoms: Dichotomous Change

An additional way to analyze change in depression symptoms is to dichotomize or create two categories of depression symptoms. We examined two categories using the commonly used threshold of 16 (at risk for clinical depression); one category includes CES-D scores below 16 and the other category includes CES-D scores of 16 or higher. By dichotomizing the CES-D score at the threshold of 16 we can get an estimate of how many participants reduced their depressive symptoms below the threshold of at risk for clinical depression. Examination of the proportion of participants in this category is another way to understand a decrease in depressive symptoms; we examined the proportion of participants in the category of CES-D score <16 at Endpoint and 3-month Follow-up.

Figure 4: Percent of participants with CES-D score <16 at Endpoint and 3-month Follow-up



At both Endpoint and 3-month Follow-up about 40% of participants had CES-D scores that were below the threshold for at risk for clinical depression.

Depressive Severity

We also used the Patient Health Questionnaire-9 (PHQ-9) to measure depressive severity. The PHQ-9 is a 10-question instrument designed to measure depressive severity that asks respondents to identify how often they have been bothered by problems in the last 2 weeks[7]. Responses range from "Not at all" to "Nearly every day". A total score is calculated by summing 9 questions; scores range from 0-27 with higher scores indicating greater depressive severity. The PHQ-9 was administered at Baseline, Endpoint and 3-month Follow-up.

Table 4: PHQ-9 scores from Baseline to Endpoint and Baseline to 3-month Follow-up

	BASELINE Mean (SD)	ENDPOINT Mean (SD)	FOLLOW-UP Mean (SD)	SIG
PHQ-9 (n=44)	12.9 (5.4)	9.0 (4.6)	—	***
PHQ-9 (n=38)	12.3 (5.5)	—	8.1 (5.0)	***

*** *p*<.05, ** *p*<.01, *** *p*<.001; paired t-test used for statistical significance (SIG)**

There was a significant decrease in PHQ-9 scores from Baseline to Endpoint and 3-month follow-up suggesting an overall decrease in depression severity. The mean PHQ-9 score at Baseline was

[7] Kroenke, K; Spitzer, R.L.; Williams, J.B.W. (2001). "The PHQ-9: Validity of a Brief Depression Severity Measure". Journal of General Internal Medicine. 16 (9): 606–613

consistent with moderate depression severity. At Endpoint and 3-month Follow-up the mean score was consistent with mild depression severity.

Perceived Stress

We used the Perceived Stress Scale 4 (PSS-4) to measure perceived stress. The PSS-4 is a 4-item questionnaire that measures "the degree to which situations in one's life are appraised as stressful" (Cohen, 1988)[8]. Responses range from "Never" to "Very Often" in response to 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; scores range from 0-16 where a higher score is correlated with more stress. The PSS-4 was asked at Baseline and Endpoint.

Table 5: PSS-4 scores from Baseline to Endpoint

	BASELINE Mean (SD)	ENDPOINT Mean (SD)	SIG
PSS-4 (n=62)	8.8 (2.6)	7.1 (2.6)	***

*** p<.05, ** p<.01, *** p<.001; paired t-test used for statistical significance (SIG)**

There was a significant decrease in PSS-4 scores from Baseline to Endpoint, suggesting an overall decrease in perceived stress after the course.

Generalized Anxiety

We used the Generalized Anxiety Disorder 7-Item Scale (GAD-7) to assess generalized anxiety symptoms.[9] The GAD-7 is an 8-item questionnaire assesses severity of generalized anxiety symptoms. Respondents are asked how often they have been bothered in the last 2 weeks by a symptom; responses range from "Not at all (0)" to "Nearly every day (3)." GAD severity score is obtained by summing the first 7 responses to the questionnaire, scores range from 0-21 with higher scores indicating greater severity. The GAD-7 was asked at Baseline, Endpoint and 3-month Follow-up.

Table 6: GAD-7 scores from Baseline to Endpoint and Baseline to 3-month Follow-up

	BASELINE Mean (SD)	ENDPOINT Mean (SD)	FOLLOW-UP Mean (SD)	SIG
GAD-7 (n=58)	9.9 (5.2)	7.8 (4.7)	—	***

[8] 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.

[9] Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder. Arch Inern Med. 2006; 166:1092-1097.

GAD-7 (n=53)	9.7 (5.4)	—	6.6 (5.1)	***

*** p<.05, ** p<.01, *** p<.001; paired t-test used for statistical significance (SIG)**

There was a significant decrease in GAD-7 scores from Baseline to Endpoint and 3-month follow-up, suggesting an overall decrease in generalized anxiety symptoms after the course. While the GAD-7 score decreased from Baseline to Endpoint and Follow-up, the mean score remained in the "mild anxiety severity" level at all 3 timepoints.

Emotion Regulation

We used the Difficulties in Emotion Regulation Scale – Short Form (DERS-SF) to assess emotion regulation[10]. Emotion regulation pertains to the ability to identify, understand, and accept emotional experience, and to modulate emotional responses based on the situation. The DERS-SF is an 18-item questionnaire that assesses 6 types (subscales) of emotional regulation and produces a total score. The respondent is asked how often statements apply; responses range from "Almost never (0-10%)" to "Almost always (91-100%). The total score is calculated as an average and ranges from 1-5 with higher scores indicating greater difficulties with emotion regulation. The DERS-SF was administered at Baseline, Endpoint and 3-month Follow-up.

Table 7: DERS-SF total scores from Baseline to Endpoint and Baseline to 3-month Follow-up

	BASELINE **Median (Q1, Q3)**	ENDPOINT **Median (Q1, Q3)**	FOLLOW-UP **Median (Q1, Q3)**	**SIG**
DERS-SF (n=62)	2.3 (1.9, 2.8)	2.1 (1.8, 2.4)	—	*
DERS-SF (n=56)	2.3 (1.9, 2.8)	—	1.9 (1.6, 2.4)	**

*** p<.05, ** p<.01, *** p<.001; Wilcoxon signed-rank test used for statistical significance (SIG)**

We examined changes in emotion regulation across the three assessment timepoints. As expected, there was a significant decrease in difficulties with emotion regulation over time, which indicates improvement in emotional regulatory capacities.

[10] Kaufman, E. A., Xia, M., Fosco, G., Yaptangco, M., Skidmore, C. R., & Crowell, S. E. (2015). The difficulties in emotion regulation scale short form (DERS-SF): Validation and replication in adolescent and adult samples. *Journal of Psychopathology and Behavioral Assessment*, doi:10.1007/s10862-015-9529-3

SOCIAL SUPPORT

KEY POINTS

Overall, participants reported improvements in perception of social support.

Social Support

We measured social support using the Medical Outcomes Study Social Support Survey (MOS-SSS), a 19-item questionnaire that measures overall functional social support and 4 social support subscales that measure emotional / informational support, tangible support, affectionate support and positive social interaction.[11] Responses indicate participant report of how often the support is available and range from "None of the time (1)" to "All of the time (5)". Scores for this scale and subscales were calculated using guidance from the publisher[12] and range from 0-100, higher scores indicate more support. The MOS-SSS was asked at Baseline, Endpoint and 3-month Follow-up. Example questions from each subscale are given below.

MOS-SSS SUBSCALES	EXAMPLE QUESTION
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 8: Social Support scores from Baseline to Endpoint (n=63)

	BASELINE **Median (Q1, Q3)**	ENDPOINT **Median (Q1, Q3)**	**SIG**
Emotional / Informational Support	50. 0 (37.5, 75.0)	65.6 (53.1, 81.3)	***

[11] 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

[12] 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.

	BASELINE **Median (Q1, Q3)**	ENDPOINT **Median (Q1, Q3)**	**SIG**
Tangible Support	43.8 (18.8, 68.8)	56.3 (31.3, 75.0)	***
Affectionate support	66.7 (41.7, 83.3)	75.0 (50.0, 100.0)	**
Positive Social Interaction	50.9 (25.0, 58.3)	58.3 (41.7, 83.3)	***
Overall Social Support	48.7 (34.2, 67.1)	63.2 (50.0, 76.3)	***

*** p<.05, ** p<.01, *** p<.001; Wilcoxon signed-rank test used for statistical significance (SIG)**

Table 9: Social Support scores from Baseline to 3-month Follow-up (n=59)

	BASELINE **Median (Q1, Q3)**	FOLLOW-UP **Median (Q1, Q3)**	**SIG**
Emotional / Informational Support	50.0 (37.5, 75.0)	68.7 (50.0, 81.3)	**
Tangible Support (n=58)	43.8 (18.8, 68.8)	59.4 (25.0, 75.0)	**
Affectionate support (n=58)	66.7 (41.7, 83.3)	75.0 (50.0, 100.0)	—
Positive Social Interaction	50.0 (25.0, 58.3)	66.7 (33.3, 83.3)	***
Overall Social Support (n=58)	49.3 (34.2, 67.1)	64.5 (46.1, 73.7)	**

*** p<.05, ** p<.01, *** p<.001; Wilcoxon signed-rank test used for statistical significance (SIG)**

There was a significant increase in all social support subscales and overall score from Baseline to Endpoint and 3-month follow-up except for affectionate support subscale from Baseline to 3-month follow-up. The increase in most social support scales suggests that overall participants indicated more social support after the course.

Instrumental Social Support

We used four questions from an article published by Aurora Jackson and colleagues to measure availability of instrumental support (i.e., assistance provided to meet tangible needs).[13] These questions asked respondents to "indicate the level of help they could acquire from others if such support was needed". Responses range from "Never true (0)" to "True all of the time (2)". An overall score of instrumental support is obtained by averaging the questions; higher scores indicate more support. These questions were asked at Baseline, Endpoint and 3-month Follow-up.

Table 10: Instrumental social support score from Baseline to Endpoint and Baseline to 3-month Follow-up

	BASELINE **Median (Q1, Q3)**	ENDPOINT **Median (Q1, Q3)**	FOLLOW-UP **Median (Q1, Q3)**	**SIG**
Instrumental Social Support Score (n=63)	0.81 (0.44)	1.04 (0.45)	—	***
Instrumental Social Support Score (n=58)	0.82 (0.45)	—	0.95 (0.50)	*

*** p<.05, ** p<.01, *** p<.001; paired t-test used for statistical significance (SIG)**

There was a significant increase instrumental support scores from Baseline to Endpoint and 3-month follow-up, suggesting an overall increase in instrumental support.

[13] Jackson, Aurora P., et al. "Single Mothers in Low-Wage Jobs: Financial Strain, Parenting, and Preschoolers' Outcomes." Child Development, vol. 71, no. 5, 2000, pp. 1409–1423. JSTOR, www.jstor.org/stable/1131982. Accessed 8 Dec. 2020.

PARENTING SKILL AND SATISFACTION

KEY POINTS

Overall, participants reported an increase in their perception of how effectively they communicate with their child.

The Parent-Child Relationship Inventory (PCRI) was used to explore the parent-child relationship.[14] The PCRI presents statements regarding attitudes around parenting and the respondent's relationship with their child. The respondent indicates their level of agreement/disagreement with each statement (4-point scale). We administered four of seven scales of the PCRI: Satisfaction (the degree of enjoyment received from being a parent), Involvement (the degree of engagement and familiarity with the child) Communication (the degree to which the parent communicates with their child in various situations), and Limit Setting (the degree of effectiveness of the parent's discipline practices). Scores for each scale were calculated using standard guidance from the instrument manual.[15] If a question in the scale was not answered, no score for the scale was calculated. The PCRI scales were administered at Baseline and 3-month Follow-up.

Table 11: PCRI scores from Baseline to 3-month Follow-up

	BASELINE Mean (SD)	ENDPOINT Mean (SD)	SIG
PCRI Score, satisfaction (n=57)	51.3 (10.4)	52.3 (10.2)	—
PCRI Score, involvement (n=39)	51.7 (12.7)	54.0 (12.6)	—
PCRI Score, communication (n=31)	45.8 (8.9)	49.5 (9.2)	*
PCRI Score, limit setting (n=57)	46.6 (11.4)	48.1 (10.0)	—

*** p<.05, ** p<.01, *** p<.001; paired t-test used for statistical significance (SIG)**

There was a significant increase in the communication subscale from Baseline to 3-month follow-up, suggesting that over time, the parent participants perceived more comfortable communication with their child and perceived themselves as more skilled in this respect. No significant differences in the other subscales were detected.

The PCRI was used to explore the potential relationship between MOMS SM implemented within the MOMS Partnership framework and parenting experience among participants.

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[14] Gerard, Anthony B. (1994). Parent-child relationship inventory (PCRI) : manual. Los Angeles, Calif. :Western Psychological Services

[15] PCRI scores presented were calculated based on guidance from the publisher. The scores are calculated by summing the items in each scale and then transforming the values to a T-scale. This creates scores that are normally distributed and can be compared to other studies if desired.

Discussion

OVERALL FINDINGS

The VT MOMS Partnership was formed with the goal of changing the lives of low-income women and their families. Led by Vermont DCF-ESD, Vermont MOMS has been implemented in the context of Vermont's TANF program, known as Reach Up. TANF provides states and territories with flexibility in operating programs designed to help low-income families with children achieve economic self-sufficiency. States use TANF to fund monthly cash assistance payments to low-income families with children, as well as a wide range of services. In Vermont, ESD and Reach Up leadership envisioned the expansion of services to include maternal mental health programming using TANF funds and partnered with Elevate to accomplish this vision.

VT MOMS was implemented through a collaboration established between DCF – ESD and Howard Center. Partners were able to successfully implement and deliver VT MOMS services despite the disruption of the COVID-19 pandemic. After careful planning for in person delivery in the Shaw's grocery store hub, the team pivoted to virtual delivery of MOMS SM shortly after the launch and has continued virtual delivery to the present. Demonstrating flexibility, creativity, teamwork and dedication, the VT MOMS Partnership quickly developed and implemented process and procedure modifications and continued providing services without interruption. This is of note, given the great need and relative lack of availability of mental health services during this time. Despite implementation challenges presented by the pandemic, the VT MOMS pilot succeeded in implementing SM classes and collecting pilot data through a shift to completely virtual SM delivery and data collection.

Some aspects of the original VT MOMS Partnership implementation plan, however, were not realized within the pandemic context and, therefore, were not part of VT MOMS implementation. Plans for in-person delivery of SM classes at a Shaw's grocery store with on-site childcare provided were not fully realized due to pandemic restrictions and were never reinstated. The pandemic also strained and impacted local resources for providing basic needs (e.g., housing support, etc.) to families. However, VT MOMS still relayed knowledge and information on how to access local resources and services available to assist families in meeting their basic needs during the pandemic. Regarding mental health services, the MOMS team continued to provide participants with information about how to access local resources; however, the MOMS team observed that accessibility to mental health treatment (i.e., individual therapy) became more limited, likely due to higher acuity of cases and longer waitlists.

Despite occurring mostly during the pandemic, the pilot study reported that most individuals who were screened for VT MOMS were eligible and participated in the MOMS SM program. Ninety-six participants attended at least one MOMS Stress Management class. Attendance in the program was high compared to other Howard Center outpatient services and participants were satisfied with the course. The implementation of VT MOMS programming in a TANF setting was successful with relatively high rates of engagement and retention in programming, as well as high program satisfaction.

The impact of VT MOMS was evaluated in part by assessing change over time in different self-reported outcome measures. In alignment with the goals of VT MOMS, participants experienced improvement in mental health indicators examined. Depressive symptoms, perceived stress, and anxiety symptoms, decreased from Baseline to end of class (Endpoint) and remained lower 3-

months after program completion (3-month Follow-up). This indicates that participants reported fewer depressive and anxiety symptoms and less perceived stress after completion of VT MOMS and these changes remained three months after completion of VT MOMS. An improvement in the ability to regulate emotion was also evident from Baseline to 3-month Follow-up. Similarly, VT MOMS Participants experienced increases in social support.

Taken together, these findings suggest that VT MOMS contributed to positive changes in participants' self-reported mental health and well-being indicators. In addition to VT MOMS, there may also be other explanations for the changes identified such as impact from Reach Up, societal changes, natural change, spontaneous remission, etc.

RECOMMENDATIONS

The VT MOMS Partnership was formed with the goal of changing the lives of low-income women and their families. By addressing maternal depression, stress and anxiety and offering opportunities for social support, the MOMS Partnership supports women to become better equipped to pursue goals they have for themselves and their families. As evidenced in this report, despite the challenges presented by the pandemic, VT MOMS demonstrated significant successes: mothers and their families in VT were the beneficiaries. The following recommendations are intended to build on the momentum of current programming and deepen the value that participants can derive.

1. **Continue to include virtual services in the menu of service delivery options.** After nearly three years, potential participants have become accustomed to the flexibility afforded by virtual services. Moreover, as participants have become more practiced with telehealth and telelearning across multiple domains of their lives, their ability to engage in MOMS services readily and easily has increased. As evidenced in this report, virtual services supported key mental health outcomes to be achieved. Additionally, in a largely rural state such as Vermont, virtual service delivery expands access, allowing participation by caregivers who might have difficulty traveling to attend in-person services with regularity. Virtual delivery may also ease hiring burdens for providers. As recruiting and retaining qualified staff in the midst of a nationwide provide shortage continues to present near-insurmountable challenges to consistent programming, allowing services to be offered from a centralized location where providers have been retained can offer a high-quality and cost-effective solution.
2. **Pursue opportunities for social connectedness for participants.** Social support is a key protective factor against depression[16] and building social support is a goal of the MOMS Partnership. The need for, and value of, social connection has become even more apparent as social isolation has grown during the years of the pandemic. While virtual services have had strong results, it is not clear whether social connection can be fully realized through virtual service delivery. Program stakeholders should continue to innovate the virtual delivery model to augment the ways in which social connections can be formed, strengthened, and maintained. This should be done in collaboration with Elevate or local academic partners and should continue to be evaluated. Additionally, in-person service delivery should be included as an option when possible.

[16] Turner, R., & Brown, R. (2009). Social Support and Mental Health. In T. Scheid & T. Brown (Eds.), A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems (pp. 200-212). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511984945.014

3. **Further align maternal mental health programming with economic mobility efforts.** The mission of Reach Up is to join families on their journey to overcome obstacles, explore opportunities, improve their finances, and reach their goals. Reach Up does this by helping individuals to set and reach short and long-term goals that will enable them to financially support minor, dependent children. MOMS is uniquely designed to assist caregivers in building skills to address depression and stress, which all too frequently get in the way of achieving these goals. The ESD has recently made significant investments in revising goal-setting approaches, and these can be aligned with MOMS programming, including specifically with the MOMS SM Course. This alignment will provide a seamless experience of support for caregivers to address mental health needs and pursue economic mobility goals and will support ESD to achieve the two generational outcomes it is striving towards.
4. **Collaborate to address other maternal mental health stressors.** In addition to financial hardship, mothers in poverty are more likely to experience other stressors that damage mental health such as food insecurity, unstable or poor-quality housing and diaper need.[17] Place-based stressors directly affect maternal mental health and can directly and indirectly affect economic mobility. In addition to MOMS SM classes, the MOMS Partnership is intended to offer a "one stop shopping" approach, meaning comprehensive connections to resources and benefits that mothers need to address and reduce stressors. This requires careful assessment of participant needs, current knowledge of community resources and strong collaboration with partners to ensure that warm referrals can be made. Continued assessment of how to further support and incorporate such an approach could be a focus in the future given the potential impact of the pandemic on the needs and resource landscape of mothers in Vermont since VT MOMS program set-up occurred. Vermont is interested in finding additional ways to support their participants such as: providing cell and internet services at low cost, offering memberships to child-oriented organizations and museums, and creating a virtual space where parents can connect and build their community.
5. **Partner to understand Two-Generational outcomes.** When mothers are supported to address their mental health needs through the MOMS Partnership, children and families may experience multiple direct and indirect benefits. It was beyond the scope of the current evaluation to examine the impact of the MOMS Partnership on children of participants; it is recommended that VT MOMS continue to collaborate with Elevate and/or local academic partners to evaluate the long term two-generational impact of VT MOMS programming.

[17] Huang Y, Heflin CM, Validova A. Material hardship, perceived stress, and health in early adulthood. Ann Epidemiol. 2021 Jan;53:69-75.e3. doi: 10.1016/j.annepidem.2020.08.017. Epub 2020 Sep 17. PMID: 32949721; PMCID: PMC7494502.