AWARD NUMBER: W81XWH-16-1-0407

**TITLE:** SMART Optimization of a Parenting Program for

**Active Duty Families** 

**PRINCIPAL INVESTIGATOR:** Abigail Gewirtz, Ph.D.

**RECIPIENT:** Regents of the University of Minnesota

Minneapolis, MN

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PREPARED FOR: U.S. Army Medical Research and Materiel Command

Fort Detrick, Maryland 21702-5012

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### 14. ABSTRACT

The objective of this study is to provide ways to meet the needs of military families experiencing deployments by testing a program to strengthen parenting and family resilience (i.e. children's wellbeing, parents' adjustment, and marital relationships). After Deployment, Adaptive Parenting Tools (ADAPT) is a family resilience program which helps parents to be their children's best teachers by providing them with effective positive parenting tools. Prior rigorous research on ADAPT has shown that it benefits service members, their partners, and their children. The program appears to improve parents' sense of control, or feelings of confidence in their parenting, and these improvements lead to better observed parenting, children's better adjustment, and less distress among and between parents. Families' needs differ – some parents need or want less intensive or online programs, whereas others may need more intensive or inperson programs; some parents may do better in a group program whereas others may need individual support. This study examines multiple formats, 'doses,' and sequences of the ADAPT program in a sequential, multiple assignment, randomized trial (SMART) study design. This is a 2-stage study, whereby families are first randomized to one of two 'small dose' ADAPT interventions (i.e. workshop or online programs), and if they need further support (i.e. are not helped by the program, as indicated by their responses on a measure of parenting sense of control) they are subsequently randomized again, either to have access to a booster group program or a booster individual family ADAPT format. The various formats and sequences are evaluated against each other to determine what works best for whom. This is an innovative study that will advance the field of personalization or tailoring; it is the first military family personalization SMART that we know of. Based on earlier research, we expect the program to benefit families (improving adult, child, and couple adjustment, as well as parenting) but we also expect it to benefit military family providers, giving options for alternative sequences, doses, and components. Another contribution of this study is that it is one of the few studies that will examine how high operational tempo conditions affect family resilience, and how a parenting program might buffer those conditions, strengthening resilience.

#### 15. SUBJECT TERMS

Parenting, children, family resilience, military, SMART design, prevention

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### 1. INTRODUCTION:

The objective of this study is to provide ways to meet the needs of military families experiencing deployments by testing a program to strengthen parenting and family resilience (i.e. children's wellbeing, parents' adjustment, and marital relationships). After Deployment, Adaptive Parenting Tools (ADAPT) is a family resilience program which helps parents to be their children's best teachers by providing them with effective positive parenting tools. Prior rigorous research on ADAPT has shown that it benefits service members, their partners, and their children. The program appears to improve parents' sense of control, or feelings of confidence in their parenting, and these improvements lead to better observed parenting, children's better adjustment, and less distress among and between parents. Families' needs differ – some parents need or want less intensive or online programs, whereas others may need more intensive or in-person programs; some parents may do better in a group program whereas others may need individual support. This study examines multiple formats, 'doses,' and sequences of the ADAPT program in a sequential, multiple assignment, randomized trial (SMART) study design. This is a 2-stage study, whereby families are first randomized to one of two 'small dose' ADAPT interventions (i.e. workshop or online programs), and if they need further support (i.e. are not helped by the program, as indicated by their responses on a measure of parenting sense of control) they are subsequently randomized again, either to have access to a booster group program or a booster individual family ADAPT format. The various formats and sequences are evaluated against each other to determine what works best for whom. This is an innovative study that will advance the field of personalization or tailoring; it is the first military family personalization SMART that we know of. Based on earlier research, we expect the program to benefit families (improving adult, child, and couple adjustment, as well as parenting) but we also expect it to benefit military family providers, giving options for alternative sequences, doses, and components. Another contribution of this study is that it is one of the few studies that will examine how high operational tempo conditions affect family resilience, and how a parenting program might buffer those conditions, strengthening resilience.

### 2. KEYWORDS:

Parenting, children, family resilience, military, SMART design, prevention

**3. ACCOMPLISHMENTS:** The PI is reminded that the recipient organization is required to obtain prior written approval from the awarding agency Grants Officer whenever there are significant changes in the project or its direction.

## What were the major goals of the project?

**NOTE:** A revised SOW was submitted and approved. Major changes: addition of Forts Belvoir/Myer as a third study site, inclusion of all active duty branches for Forts Belvoir/Myer, new N of 525 since no SOF recruitment at Forts Belvoir/Myer.

### **Specific aims** are as follows:

- 1. Compress existing ADAPT group and individual programs for active-duty SO and RA deployed military families.
- 2. Conduct a SMART with 525 active-duty families to examine the impact of ADAPT on *multiple outcomes* (i.e., (i) coercive family interactions, positive parenting, couple adjustment and co-parenting, (ii) adult PTSD symptoms, depression symptoms, substance use, and (iii) child behavior and emotional problems, and positive adjustment. Specific *optimization* questions are as follows:

**Research Question 2a:** Is starting with condensed group modality more effective in improving multiple outcomes than starting with online self-directed?

**Research Question 2b:** Among non-responders to ADAPT condensed group or ADAPT online is subsequent individual or group based programming more effective for improving multiple outcomes?

**Research Question 2c:** Which of the four embedded sequences of adaptive interventions has the greatest impact (i.e., effect size/ES) on multiple outcomes?

- 3. Address the following *exploratory optimization* research questions to examine the ability of putative secondary tailoring variables (OPTEMPO, gender) to predict differential response to the 4 embedded AIS sequences
  - a) Will high OPTEMPO (SO) families benefit most from AIS beginning with condensed groups when compared with AIS beginning with a flexible online self-directed format?
  - b) Will fathers benefit most from AIS that include group-based, second-stage interventions when compared to AIS with individually-based, second-stage interventions?
- 4. Describe and document key process variables: parents' participation and satisfaction with the programs, and fidelity of implementation by providers delivering the in-person programs.

### Major Task 1: Pre-award tasks

Subtask 1: Prepare regulatory documents and research protocol

Subtask 2: Coordinator study staff for SMART

### Major Task 2: Adapt existing ADAPT curricula for active-duty contexts

**Note:** Curriculum adjustments will be initially made based on installation staff feedback during two weeks of facilitator training, as well as feedback obtained from non-study participants (military parents) during mock-workshops and groups led by newly trained facilitators. A focus group will be convened after the first workshop is delivered. Findings will be shared as noted below and further modifications of the curriculum will be made, if deemed appropriate.

- Subtask 1: Compress ADAPT group and individual curriculum for retreat-style and 5-session formats
- Subtask 2: Collect informal feedback from participants attending mock-workshops and groups at FC and FB
- Subtask 3: Convene 1 focus group of RA and SO military families at FB after completion of first workshop
- Subtask 4: Share focus group findings and discuss further curriculum modifications with Expert Panel for feedback

# Major Task 3: Conduct 2-stage SMART to assess effectiveness and satisfaction of ADAPT in 315 RA and 210 SO active duty military families

- Subtask 1: Recruit 315 RA and 210 SO active duty military families
- Subtask 2: Randomly assign families to intervention condition
- Subtask 3: Detail responsiveness to ADAPT
- Subtask 4: Based on responsiveness, re-randomize non-responders to second intervention condition (booster group or booster individual ADAPT)
- Subtask 5: Assess effectiveness of ADAPT interventions

### Major Task 4: Data analysis

Subtask 1: Coordinate with sites and data team for monitoring data collection rates and data quality

## What was accomplished under these goals?

**Major Task 3 update** – Despite COVID-19 restrictions, all sites have been successful with outreach and recruitment efforts and our consented numbers have continued to rise. Recruitment is scheduled to end October 31, 2020.

**Note**: There have been at least 3 instances during recent outreach and recruitment where USASOC soldiers and/or USASOC service providers have expressed concern and disappointment with USASOC's restriction on soldier participation to a needed resource. We continue to encourage USASOC families (i.e. spouses/partners) to participate if possible.

**Major Task 4 update** – We are in the process of converting our in-person data collection to virtual methods so that we can maintain the study timeline and retention of families.

### What opportunities for training and professional development has the project provided?

- -Site coordinators receive weekly mentoring from the project manager at the University of Minnesota.
- -As supervisors, site coordinators also have access to all of the University of Minnesota's online supervisory development resources/courses and are encouraged to participate.
- -Volunteer coders are provided initial and ongoing training for coding our observational data.
- -Graduate students are provided training on data cleaning and analysis.

What was the impact on other disciplines?

Nothing to report

- -Assessment technicians are provided initial and ongoing training on data collection with families.
- -Facilitators who deliver our intervention are provided initial training and on-going coaching on the ADAPT curriculum and program fidelity.

	Nothing to report
	What do you plan to do during the next reporting period to accomplish the goals?
	Primary objectives for the next reporting period are, (1) complete study recruitment to the extent possible (it appears we will reach 80% of our target goal by Oct 31, 2020 our recruitment deadline) (2) convert our in-person data collection to virtual, (3) identify options for in-person intervention delivery (workshops) if COVID restrictions continue, and (4) develop and implement a comprehensive retention plan across all study sites.
	IMPACT:
	What was the impact on the development of the principal discipline(s) of the project?
١	Nothing to report

	Nothing to report
	What was the impact on society beyond science and technology?
	Nothing to report
5.	CHANGES/PROBLEMS:
	Changes in approach and reasons for change
_	
	Nothing to report
	Changes that had a significant impact on expenditures
	Nothing to report
	Nothing to report  Significant changes in use or care of human subjects

### 6. PRODUCTS:

•	Publications, conference papers, and presentations
	Journal publications.

Nothing to report

### Books or other non-periodical, one-time publications.

Book Chapter regarding SMART Trial:

DeGarmo, D.S., & Gewirtz, A. H. (2018). Fixed allocation and dynamic adaptive intervention designs for family psychology. In, *APA Handbook of Contemporary Family Psychology* 

https://www.apa.org/pubs/books/4311537.aspx?tab=2

### Other publications, conference papers, and presentations.

Nothing to report

### • Website(s) or other Internet site(s)

www.adapt.umn.edu hosts our series of ADAPT studies, including articles with outcomes from our first ADAPT study.

https://adapt4u.talentlms.com/ hosts our online curriculum.

### Technologies or techniques

Nothing to report

### • Inventions, patent applications, and/or licenses

Nothing to report

### • Other Products

Compressed ADAPT curriculum (workshop, group and individual formats) have been created for this study.

### 7. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

### What individuals have worked on the project?

NOTE: Funding Support for all personnel listed is this award and is for the past quarter rounded to the nearest month.

Other staff have been involved in the study as assessment technicians and facilitators delivering the intervention, but none of those staff have individually contributed 1.0 month or more.

Name: Gewirtz, Abigail

Role: PI

Person months: 1.0 month

Contribution: Responsible for preparing, conducting, and administering the project in compliance with applicable regulations and institutional policies. Responsible for staff management, curriculum writing, facilitator training and coaching, fidelity and implementation of intervention.

Name: Majerle, Amy

Role: Staff: Project Manager

Person months: 1.0 month

Contribution: Study oversight and compliance tasks, assist with study implementation

Name: Tiede, Shauna

Role: Staff: Assistant Project Manager/Assessment Coordinator (half-time)

Person months: 1.0 month

Contribution: Assessment oversight: develop and ensure adherence of assessment protocols,

train assessment technicians, assist in the development of data flow management

Name: Willer, Molly

Role: Staff: Intervention Coordinator (half-time)

Person months: 1.0 month

Contribution: Curriculum writing, facilitator training and coaching, fidelity and

implementation of intervention

Name: Martin, Amberlee

Role: Staff: Site Coordinator, Fort Campbell

Person months: 3.0 months

Contribution: Day-to-day oversight and implementation at the Fort Campbell site

Name: Dangell (Heinecke), Cheryle

Role: Staff: Site Coordinator, Fort Bragg

Person months: 3.0 months

Contribution: Day-to-day oversight and implementation at the Fort Bragg site

Name: McKissick, Meagan

Role: Staff: Site Coordinator, Forts Belvoir/Myer

Person months: 3.0 months

Contribution: Day-to-day oversight and implementation at the Forts Belvoir/Myer site

Name: Phelps, Marin

Role: Staff: Community Program Assistant

Person months: 3.0 months

Contribution: Data quality control, data cleaning, family timelines

Name: Ausherbauer, Kadie

Role: Staff: Coding Manager (half-time)

Person months: 1.0 month

Contribution: Oversee team coding FITS (Family Interaction Tasks)

Name: Lee, Susanne

Role: Staff: Data Manager

Person months: 1.0 month

Contribution: Oversees data cleaning team, ensures data quality control

Name: Clark, Misty

Role: Staff: Site Coordinator Assistant, Fort Bragg (75% time)

Person months: 2.0 months

Contribution: Assist site coordinator with implementation at the Fort Bragg site

Name: Anderson-Ion, Arianne

Role: Staff: Site Coordinator Assistant, Forts Belvoir/Myer

Person months: 3.0 months

Contribution: Assist site coordinator with implementation at the Forts Belvoir/Myer site

Name: Forgatch, Marion Role: Co-Investigator Person months: 2.0 months

Contribution: Curriculum writing, training and coaching

Name: DeGarmo, David Role: Co-Investigator Person months: 2.0 months

Contribution: Analyze data and monitor data management

Name: Bloomstrom, Glen Role: Co-Investigator Person months: 1.0 month

Contribution: Advise key personnel on recruiting regular Amy and Special Operations personnel, establish connections with key military and community personnel to market the program

Name: Piehler, Tim
Role: Co-Investigator
Person months: 1.0 month

Contribution: Advise on SMART research design and data analysis

# Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

### **GEWIRTZ**, Abigail

Title: Comparing Web, Group and Telehealth Formats of a Military Parenting Program

(PI: A Gewirtz)

*ID#*: W81XWH-14-1-0143 *Period*: 6/1/2014 - 8/31/2020

Effort: 13.5% Funding: /year

Role: PI

Supporting agency & contact: US Department of Defense

Ray Santullo, Program Official, orazio.f.santullo.civ@mail.mil

Goals/Specific Aims: This study will compare the effectiveness of three different delivery formats (online, group, and telehealth) of the After Deployment Adaptive Parenting Tools (ADAPT) preventive intervention, an empirically supported parenting program for military families, through the following specific aims:

Aim 1: Evaluate the usability and acceptability of the individualized web-facilitated ADAPT condition.

Aim 2: Conduct a three-group, two-site randomized trial to test the comparative effectiveness of three ADAPT delivery approaches for 360 reintegrating National Guard and Reserves (NGR) families randomly assigned to: (i) ADAPT group-based; (ii) ADAPT individualized web-facilitated; or (iii) ADAPT self-directed online. Families complete pre-intervention baseline assessment (pre-test) and three post-test assessments at 6, 12- and 24 months. Aim 3: Evaluate generalizability of ADAPT effectiveness across three intervention delivery approaches using intent to treat (ITT) analyses, specifying a non-equivalence hypothesis for

group-based and web-facilitated relative to self-directed only.

If results are positive, ADAPT could be widely deployed so that many more military, and especially NG/R families can benefit from improvements to parenting, child, couple, and parental adjustment. *Overlap:* This project examines the same parenting program (ADAPT) but with different

delivery formats, randomization, and participant pools.

Change: Grant ended 8/31/2020

**Title:** The Center for Resilient Families (PI: A Gewirtz)

*ID#*: U79 SM080009 *Period*: 9/30/2016 – 9/29/2021

Effort: 20% Funding: /year

Role: PI

Supporting agency & contact: DHHS SAMHSA

Cicely Burrows-McElwain, Program Official, cicely.burrows-mcelwain@samhsa.hss.gov

Goals/Specific Aims: The Center for Resilient Families aims to raise awareness of and increase access to family interventions to promote resilience in traumatized children. The Center will reduce disparities in service access, use, and training by targeting trauma-informed family interventions to isolated families in transition: those with a parent deployed to war, Native American families on reservations, immigrant and refugee families, families involved in the juvenile justice and child welfare systems, and families in which a parent has been killed.

### **GEWIRTZ**, Abigail

Title: SMART Optimization of a Parenting Program for Active Duty Families

(PI: A Gewirtz)

*ID#*: W81XWH-16-1-0407 *Period*: 09/30/16 – 09/29/20

Effort: 2.7 calendar months

Role: PI

Supporting agency & contact: US Department of Defense

Ray Santullo, Program Official, orazio.f.santullo.civ@mail.mil

Goals/Specific Aims: The objective of this study is to yield the optimal dosage, components, and sequence of a parenting program for active duty military families (ADAPT) in diverse operational tempo contexts (i.e., regular Army families and Special Operations families).

Overlap: This project examines the same parenting program (ADAPT) but with different delivery formats, randomization, and participant pools.

Change: 1-year grant extension to 9/29/2021

# Title: Large scale implementation of the ADAPT program in a primary care system at FT Bragg, NC

(PI A. Gewirtz)

*ID# Period*: 05/01/19 – 05/31/23

Effort: 1.20 calendar months Funding:

Role: PI

Supporting agency & contact: Bristol-Myers Squibb Foundation

Katherine Masuch, Program Manager,

Katherine.Masuch@bms.com

Goals/Specific Aims: The goal of this project is the large-scale implementation of the ADAPT parenting suite of services via screening through primary care and pediatric clinics at Womack Army Medical Center, which serves the population of approximately 250,000 service members and their dependents associated with FT Bragg.

Overlap: This project includes the same parenting program (ADAPT) but is an implementation effort.

Change: This is a new grant

# Title: Examining the Utility and Feasibility of Mobile Technology in Prevention Interventions to Promote Child and Family Mental Health: A Demonstration and Feasibility Project

(PI A. Gewirtz)

ID# Period: 07/16/19 - 06/30/22

Effort: 0.60 calendar months Funding:

Role: PI

Supporting agency & contact: Lynne & Andrew Redleaf Foundation

Goals/Specific Aims: The goal of this study is to examine the potential for stress wearables (Fitbit watches) to monitor parental stress in order to offer "just in time" stress management and parenting strategies.

Overlap: None

Change: This is a new grant

## FORGATCH, Marion

Title: Comparing Web, Group and Telehealth Formats of a Military Parenting Program

(PI: A Gewirtz)

*ID#*: W81XWH-14-1-0143 *Period*: 6/1/2014 – 5/31/2019 *Effort*: 5% *Funding*: *Role*: Co-I /year (subaward)

Supporting agency & contact: Subaward from University of Minnesota

Amy Rollinger, Grants Administrator, <a href="mailto:amyg@umn.edu">amyg@umn.edu</a>
Prime source of funding: US Department of Defense
Ray Santullo, Program Official, <a href="mailto:orazio.f.santullo.civ@mail.mil">orazio.f.santullo.civ@mail.mil</a>

Goals/Specific Aims: This study will compare the effectiveness of three different delivery formats (online, group, and telehealth) of the After Deployment Adaptive Parenting Tools (ADAPT) preventive intervention, an empirically supported parenting program for military families, through the following specific aims:

Aim 1: Evaluate the usability and acceptability of the individualized web-facilitated ADAPT condition.

Aim 2: Conduct a three-group, two-site randomized trial to test the comparative effectiveness of three ADAPT delivery approaches for 360 reintegrating National Guard and Reserves (NGR) families randomly assigned to: (i) ADAPT group-based; (ii) ADAPT individualized web-facilitated; or (iii) ADAPT self-directed online. Families complete pre-intervention baseline assessment (pre-test) and three post-test assessments at 6, 12- and 24 months. Aim 3: Evaluate generalizability of ADAPT effectiveness across three intervention delivery approaches using intent to treat (ITT) analyses, specifying a non-equivalence hypothesis for group-based and web-facilitated relative to self-directed only.

If results are positive, ADAPT could be widely deployed so that many more military, and especially NG/R families can benefit from improvements to parenting, child, couple, and parental adjustment. *Overlap:* This project examines the same parenting program (ADAPT) but with different

delivery formats, randomization, and participant pools.

Change: None

**Title:** The Center for Resilient Families (PI: A Gewirtz)

*ID#*: U79 SM080009 *Period*: 9/30/2016 – 9/29/2021 /

Effort: 5% Funding: year (subaward)

Role: Co-I

Supporting agency & contact: Subaward from University of Minnesota

Amy Rollinger, Grants Administrator, <a href="mailto:amyg@umn.edu">amyg@umn.edu</a>

Prime source of funding: DHHS SAMHSA Cicely Burrows-McElwain, Program Official, cicely.burrows-mcelwain@samhsa.hss.gov

Goals/Specific Aims: The Center for Resilient Families aims to raise awareness of and increase access to family interventions to promote resilience in traumatized children. The Center will reduce disparities in service access, use, and training by targeting trauma-informed family interventions to isolated families in transition: those with a parent deployed to war, Native American families on reservations, immigrant and refugee families, families involved in the juvenile justice and child welfare systems, and families in which a parent has been killed.

### DeGARMO, David

**Title:** Comparing Web, Group and Telehealth Formats of a Military Parenting Program (PI: A Gewirtz)

*ID#*: W81XWH-14-1-0143 *Period*: 6/1/2014 - 5/31/2019

Effort: 15% Funding: Role: Co-I (subaward)

Supporting agency & contact: Subaward from University of Minnesota

Kevin McKoskey, SPA Associate Director, <u>kevin@umn.edu</u> Prime source of funding: US Department of Defense Ray Santullo Program Official, <u>orazio.f.santullo.civ@mail.mil</u>

Goals/Specific Aims: This study will compare the effectiveness of three different delivery formats (online, group, and telehealth) of the After Deployment Adaptive Parenting Tools (ADAPT) preventive intervention, an empirically supported parenting program for military families, through the following specific aims:

Aim 1: Evaluate the usability and acceptability of the individualized web-facilitated ADAPT condition.

Aim 2: Conduct a three-group, two-site randomized trial to test the comparative effectiveness of three ADAPT delivery approaches for 360 reintegrating National Guard and Reserves (NGR) families randomly assigned to: (i) ADAPT group-based; (ii) ADAPT individualized web-facilitated; or (iii) ADAPT self-directed online. Families complete pre-intervention baseline assessment (pre-test) and three post-test assessments at 6, 12- and 24 months. Aim 3: Evaluate generalizability of ADAPT effectiveness across three intervention delivery

approaches using intent to treat (ITT) analyses, specifying a non-equivalence hypothesis for group-based and web-facilitated relative to self-directed only.

Overlap: This current project is examining the same parenting program (ADAPT) but with different delivery formats, randomization, and participant pools that the proposed project.

Change: Grant ended 8/31/2020

**Title: SMART Optimization of a Parenting Program for Active-Duty Families (PI: Gewirtz)** 

*ID#*: W81XWH-16-1-0407 *Period*: 09/30/16–09/29/21 *Annual Effort*: 3.6 calendar months *Funding*: (sub only)

Role: Co-Investigator

Supporting agency & contact: DOD/US Army Medical Research

Jennifer Hayden, jennifer.e.hayden.civ@mail.mil

Goals/Specific Aims: The objective of this study is to provide ways to meet the needs of military families experiencing deployments by testing various programs to strengthen parenting and family resilience (i.e., children's well-being, parents' adjustment, and marital relationships). The Sequential Multiple Assignment Randomized Trial will involve an adaptive research design strategy for over 500 families and will monitor their responsiveness and compliance. Using double randomization, we will better understand the roles of tailoring interventions and optimal sequencing of condensed group delivery versus regular ADAPT with and without boosters.

### DeGARMO, David

# *Title:* Prevention Research Center: Parenting Among Women Who Are Opioid Users (PIs: Leve and Fisher)

ID#: P50 DA048756-02 Period: 08/15/19 - 06/30/24 Annual Effort: 1.2 calendar months Funding: (annual direct costs)

Role: PI Data Science Core

Supporting agency & contact: NIH/ NIDA, Dr. Belinda Sims, Program Officer, bsims@nida.nih.gov Goals/Specific Aims: The overall aim of the Prevention Research Center is to improve the well-being of individuals, families, and communities affected by the opioid crisis through a focus on behavioral and neurocognitive systems that underlie mechanisms common to both addiction issues and parenting challenges. A funded supplement (01S1) will adapt and test a telehealth intervention in rural areas of Oregon (Stormshak, Leve).

Overlap: None Change: None

## Title: The Early Growth and Development Study Pediatric Cohort (PI: Leve)

ID#: UH3 OD023389 Period: 09/01/16–08/31/23
Annual Effort: 1.2 calendar months Funding: (annual direct costs)

*Role:* Co-Investigator

Supporting agency & contact: NIH/ Office of the Director, Dr. Sonia S. Arteaga, Program Officer, arteagass@mail.nih.gov

Goals/Specific Aims: The major goals for this project are to leverage and build upon a unique existing "dual-family" adoption design to isolate early environmental exposures from heritable influences on familial clustering of health problems to contribute to ECHO's overall goal of investigating the role of early life exposures and underlying biological mechanisms in childhood health and disease. We will use our well- established prospective adoption sample to (a) help clarify causal inferences about environmental influences on neurodevelopment and obesity, and (b) explore the unfolding interplay between inherited child characteristics and environmental influences from birth to adolescence.

Overlap: None Change: None

# *Title:* Family-centered intervention in schools to reduce social and behavior problems from early elementary school to adolescence (PI: Stormshak)

*ID#*: R324A180037 *Period*: 07/01/18-06/30/23

Annual Effort: 1.8 calendar months Funding:

Role: Co-Investigator

Supporting agency & contact: US Dept of ED/ IES Jacquelyn Buckley, jacquelyn.buckley@ed.gov Goals/Specific Aims: The purpose of this grant is to follow a sample of children who were recruited in kindergarten as part of a randomized trial into the middle school years. The goal is to reduce behavior problems and enhance academic achievement, and to test the effects of early vs. late intervention on risk behavior.

### DeGARMO, David

Title: Testing the Efficacy of Mindfulness-Based Stress Reduction Combined with Behavioral Parent Training in Families with Preschoolers with Developmental Delay (PI: McIntyre)

ID#: R01HD093667 Period: 09/10/18 – 05/31/23 Annual Effort: 0.6 calendar months Funding: (annual direct costs)

Role: Co-Investigator

Supporting agency & contact: NIH/NICHD Alice S. Kau, kaua@mail.nih.gov

Goals/Specific Aims: The proposed study will test the benefit of addressing parental stress prior to delivering behavioral parent training (BPT) in order to more effectively reduce child behavior problems once the intervention is delivered, as well as investigate the mechanisms through which intervention outcomes occur.

Overlap: None Change: None

### What other organizations were involved as partners?

Organization: University of Oregon

Location: Eugene, OR

Contribution: Collaboration (subaward)

Organization: Implementation Sciences International, Inc.

Location: Eugene, OR

Contribution: Collaboration (subaward)

Organization: Fort Campbell, Army Community Services

Location: Tennessee/Kentucky

Contribution: Collaboration and networking, facilities, marketing consultation and product

Organization: Fort Bragg, Family Advocacy Program and USASOC Family Programs

Location: North Carolina

Contribution: Collaboration and networking, facilities, marketing consultation and product

Organization: Fort Belvoir, Army Community Services, MWR and Family Advocacy Program

Location: Virginia

Contribution: Collaboration and networking, facilities, marketing consultation and product

Organization: Joint Base Myer-Henderson Hall, Family Advocacy Program

Location: Virginia

Contribution: Collaboration and networking, facilities, marketing consultation and product

# 8. SPECIAL REPORTING REQUIREMENTS

QUAD CHART: Attached

## 9. APPENDICES:

Recruitment Graphs Consort Diagrams

# SMART optimization of a parenting program for active duty families

eBRAP Log Number: PT150093

Award Number: 16-1-0407

PI: Gewirtz, Abigail Org: University of Minnesota, Twin Cities

**Award Amount:** \$4,304,180 total (\$3,000,000 direct)



### Objective

The **objective** of this study is to yield the optimal dosage, components, and sequence of a parenting program for active duty military families in diverse OPTEMPO contexts (i.e., regular Army (RA) families and Special Operations (SO) families). We will examine the effects of first and second stage interventions (condensed group, online, booster group, booster individual) on family resilience (i.e. observed parenting, parent and couple adjustment, and child adjustment), among program responders and non-responders, and explore whether certain program sequences or formats are more effective for high OPTEMPO (i.e. SO vs. RA) and male gender.

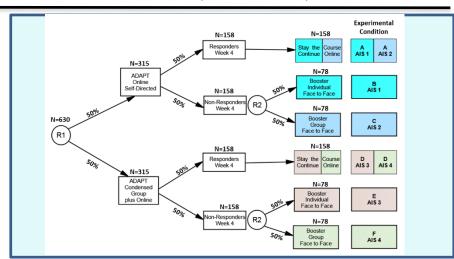
#### Approach

Phase III clinical trial with 525 Special Operations/SO and Regular Army/RA families in 3 installations; randomization occurs within each base and by SO/RA. Families are randomly assigned to either ADAPT online or condensed group ADAPT. At 4 weeks post baseline, responder status is assessed. Responders (I.e., parents scoring above the cut threshold on parenting locus of control) stay the course. Non-responders are again randomized to 5-session booster individual ADAPT or 5-session booster group ADAPT. Multi-method, multi-informant assessments are conducted at baseline,6 (parents only) 12, and 24 months with parents, children, and teachers.

## **Timeline and Cost**

Activities FY	17	18	19	20
Aim 1: Compress ADAPT program				
Aim 2: Examine optimization effects in a SMART trial				
Aim 3: Examine exploratory optimization questions				
Aim 4:Describe participation, satisfaction, & fidelity				
Estimated Budget (total)	\$709,466	\$1,795,438	\$929,513	\$869,763

**Updated:** October 29<sup>th</sup>, 2020



Accomplishment: ADAPT is an evidence-based parent training intervention demonstrating effectiveness in improving parent and child outcomes. The proposed study will optimize ADAPT to enhance efficiency, scalability, and sustainability.

#### Goals/Milestones

**FY17 Goal** – Condense group ADAPT program and begin recruitment

☑Listening sessions and focus groups (see explanation under goals accomplished)

☑Begin recruitment of Cohort 1

FY18 Goals - Program delivery/assessments begin

- ☑ Continue recruitment of Cohorts 2 and 3
- ☑ Complete program delivery for Cohort 1
- ☑ Begin assessment of Cohort 1

FY19 Goal - Completion of program delivery

- ☑ Program delivery for Cohorts 2 and 3
- ☑ Begin assessments for Cohorts 2 and 3

FY20 Goal - Completion of assessments and data analysis

- ☐ Complete assessments for Cohorts 2 & 3
- □Analyze Data

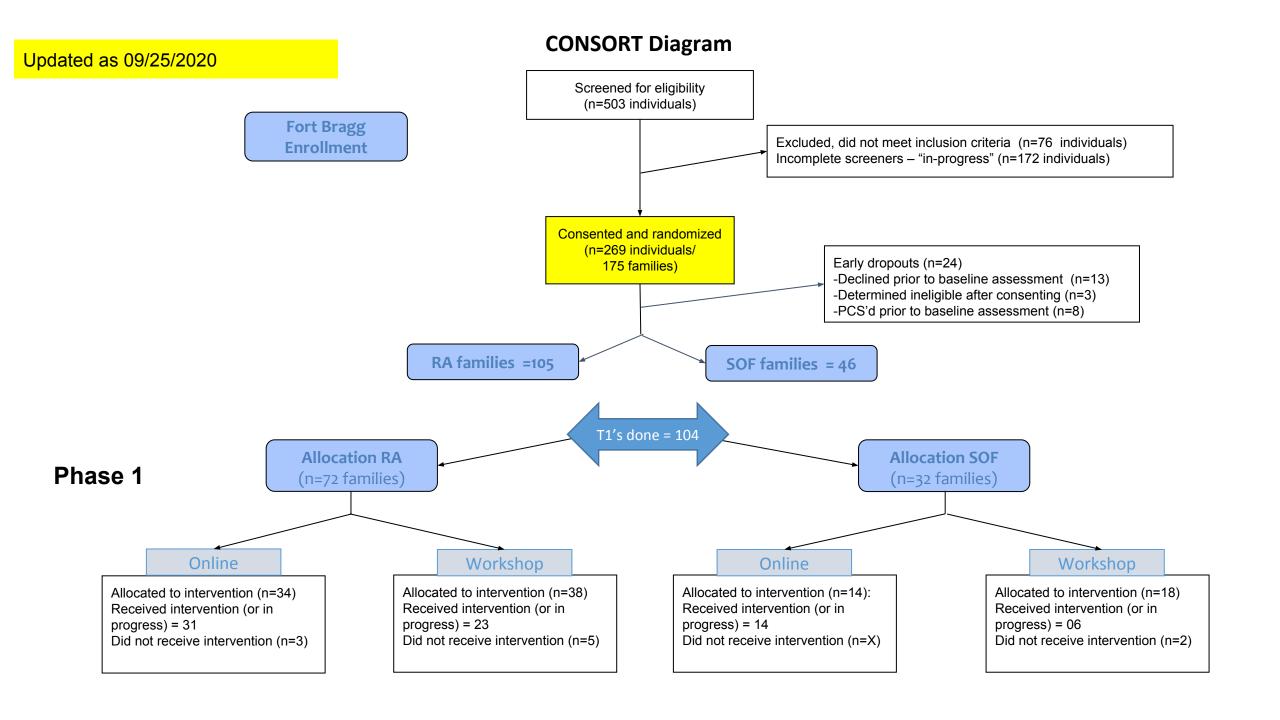
#### Comments/Challenges/Issues/Concerns

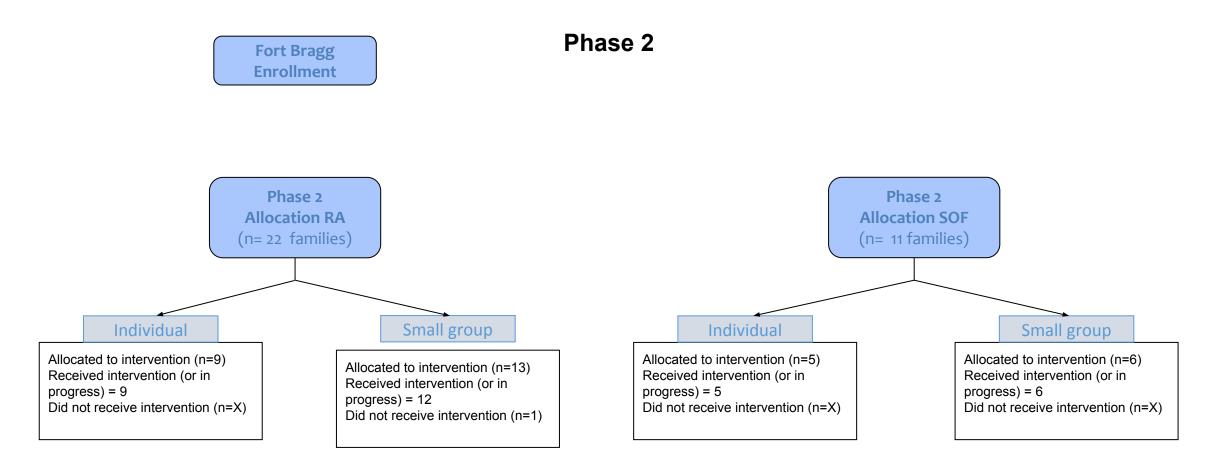
Results of the RAC placed restrictions on our ability to successfully recruit from USASOC. See additional information under accomplishments. In addition, the past 6 months of COVID restrictions has limited our in-person work with respect to outreach/recruitment, data collection and program delivery forcing us to make modifications to our protocols.

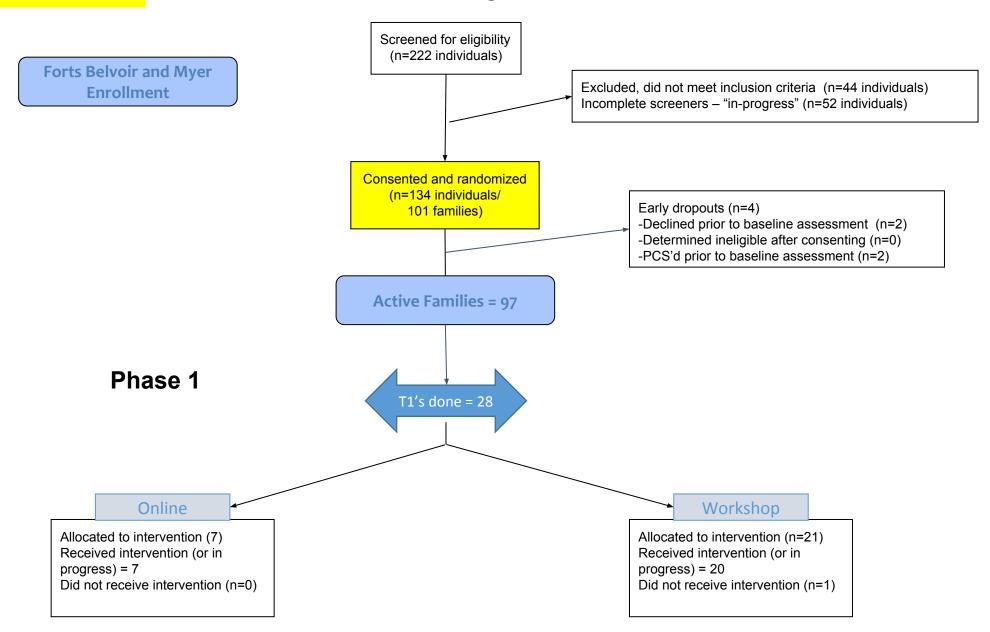
#### **Budget Expenditure to Date**

Y4 Q4 (7/1/20 - 9/29/20): \$302,131.19

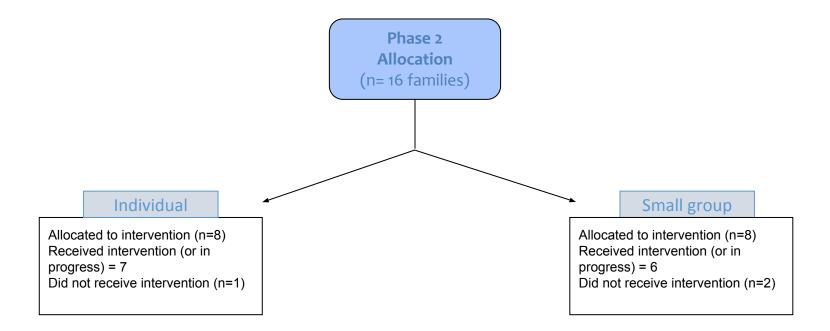
To date (09/30/16 - 9/29/2020): \$3,536,650.81

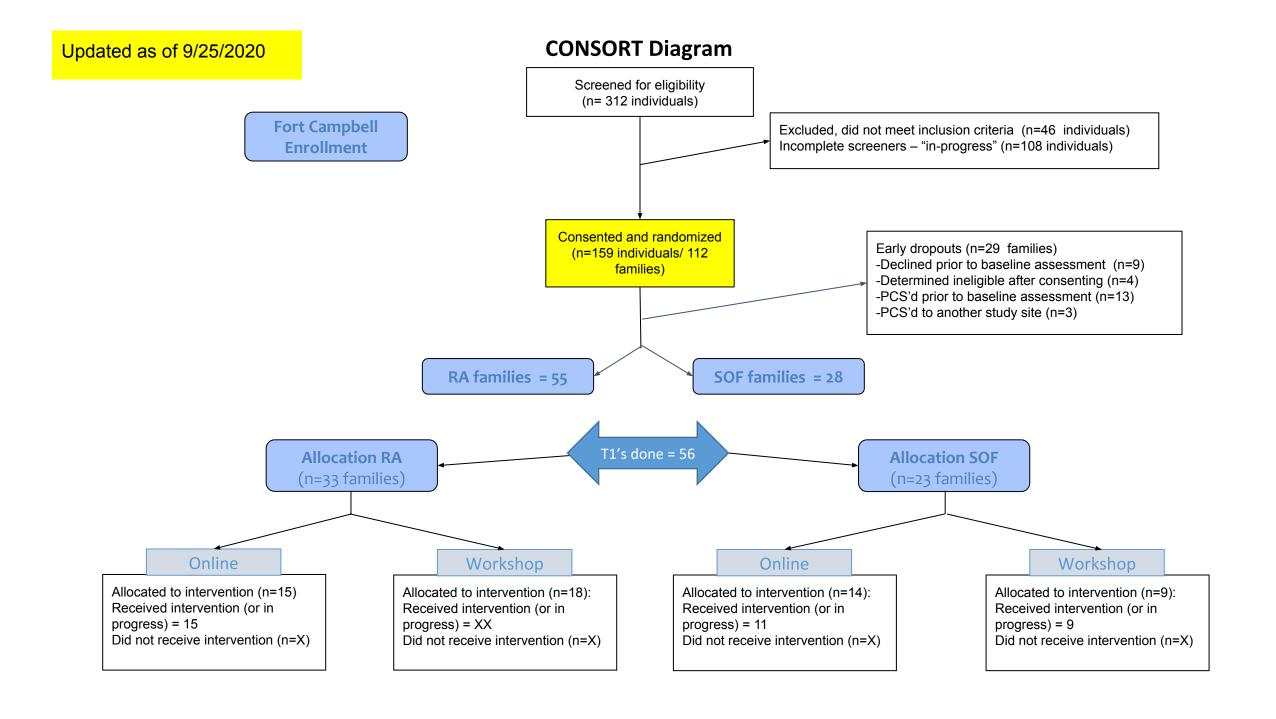


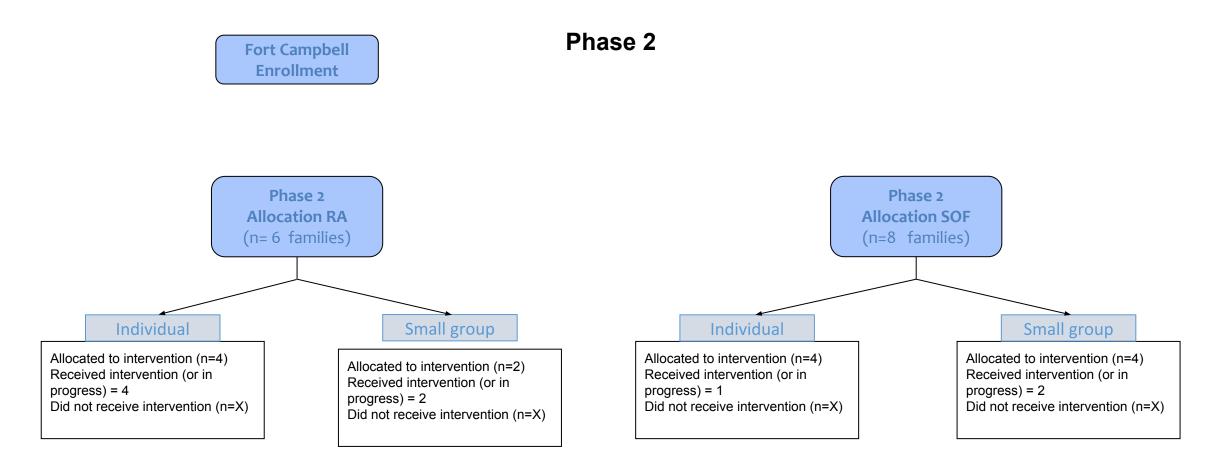




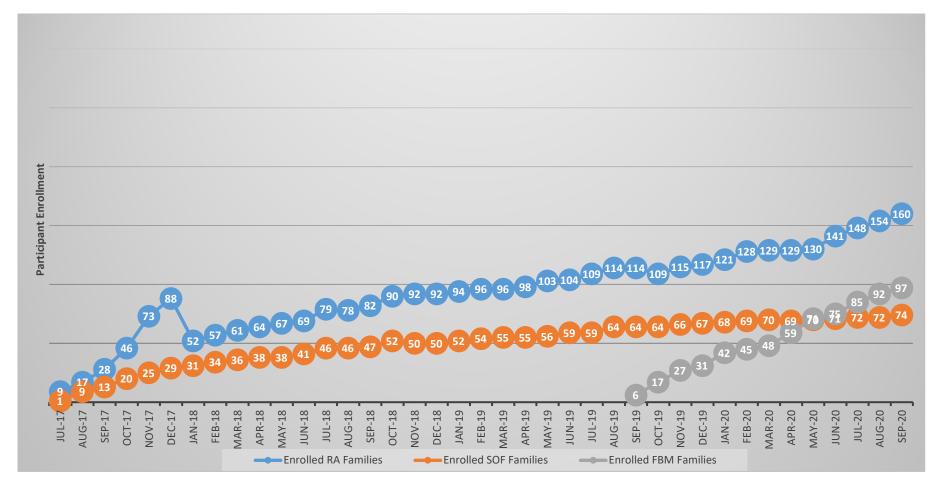
Forts Belvoir and Myer Enrollment Phase 2







## All Installations – by Segment (numbers will fluctuate based on families who were early dropouts after consenting)

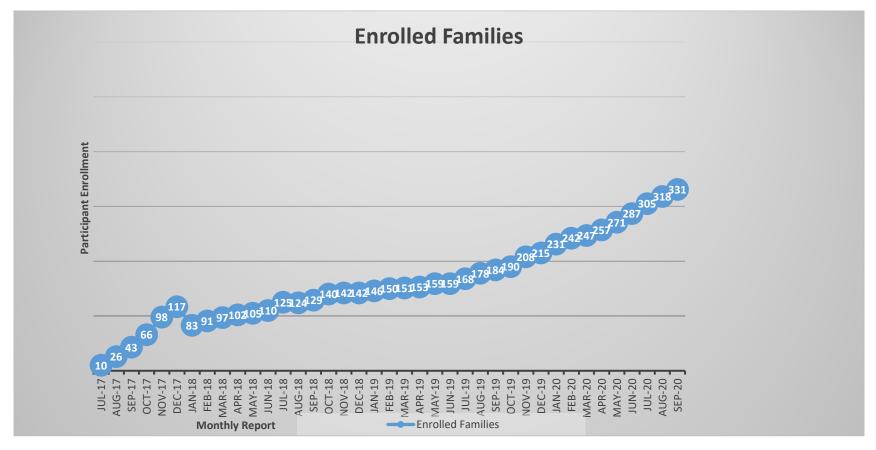


<sup>\*\*\*</sup>JBLM involvement was suspended 12/29/17, which accounts for the reduction of participants in January 2018\*\*\*

<sup>\*\*\*</sup>Adjusted statement of work, N= 525 between all three sites\*\*\*

<sup>\*\*\*</sup>New site (Belvoir/Myer) will not recruit SOF, and will recruit all active duty branches.\*\*\*

## All Installations - Total Enrolled (numbers will fluctuate based on families who were early drop outs after consenting)



<sup>\*\*\*</sup>JBLM involvement was suspended 12/29/17, which accounts for the reduction of participants in January 2018\*\*\*

<sup>\*\*\*</sup>Adjusted statement of work, N= 525\*\*\*

<sup>\*\*\*</sup>Forts Belvoir/Myer begin recruitment in September 2019\*\*\*