

AWARD NUMBER: W81XWH-14-2-0123

TITLE: Supporting Military Families with Young Children throughout the Deployment Lifecycle

PRINCIPAL INVESTIGATOR: Ellen R. DeVoe, PhD

CONTRACTING ORGANIZATION:  
TRUSTEES OF BOSTON UNIVERSITY

BOSTON, MA 02215

REPORT DATE: October 2017

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command  
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;  
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| REPORT DOCUMENTATION PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                        |                            | Form Approved<br>OMB No. 0704-0188            |                                           |
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| 1. REPORT DATE October 2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             | 2. REPORT TYPE: ANNUAL |                            | 3. DATES COVERED<br>29 Sep 2016 - 28 Sep 2017 |                                           |
| 4. TITLE AND SUBTITLE:<br><br>Supporting Military Families with Young Children throughout the Deployment Lifecycle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                        |                            | 5a. CONTRACT NUMBER                           |                                           |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |                        |                            | 5c. PROGRAM ELEMENT NUMBER                    |                                           |
| 6. AUTHOR(S)<br>Ellen R. DeVoe, Ph.D.<br><br>email: edevoe@bu.edu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                        |                            | 5d. PROJECT NUMBER                            |                                           |
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| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br><br>Trustees of Boston University<br>1 Sherborn St.<br>Boston, MA 02215                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                        |                            | 8. PERFORMING ORGANIZATION REPORT NUMBER      |                                           |
| 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)<br>U.S. Army Medical Research and Materiel Command<br>Fort Detrick, MD 21702-5012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |                        |                            | 10. SPONSOR/MONITOR'S ACRONYM(S)              |                                           |
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| 12. DISTRIBUTION / AVAILABILITY STATEMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                        |                            |                                               |                                           |
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| <p>14. ABSTRACT U.S. military service since the September 11<sup>th</sup>, 2001 terrorist attacks has placed tremendous demands on families. Approximately 43% of the Total Forces are parents and two million children have experienced parental deployment. Of these children, 42% were younger than five years during the deployment-separation period(s). In order to build and maintain strong family relationships that support family resilience and child well-being, Soldier and non-deploying parents must successfully meet the challenges of caregiving throughout the deployment cycle. The primary aim of this research is to adapt and test the efficacy of a preventive intervention program that was originally developed as a reintegration program to reduce parenting stress and promote family resilience in Active Duty military families through all phases of the deployment cycle. The study will be conducted in three phases. In phase 1, qualitative interviews will be administered a sample of 40 with Soldiers (20) and Non-Deploying Parents (20) of young children, and 10 key informants to identify parenting needs in the context of deployment. In phases 2 and 3, we conduct a randomized clinical trial with a sample of 150 Active Duty families who are within 6 months of deployment. Families will be randomized to receive the Strong Families parenting program or the Strong Parents self-care program. Primary outcomes include parenting stress, family resilience, and dimensions of family resilience. Secondary goals of this research are to conduct a prospective examination of coparenting through deployment and cost-effective analysis.</p> |             |                        |                            |                                               |                                           |
| 15. SUBJECT TERMS<br>Military Families, Young Children, Resilience, Deployment Cycle, Coparenting, Parenting Intervention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                        |                            |                                               |                                           |
| 16. SECURITY CLASSIFICATION OF:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |                        | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES<br><br>17                 | 19a. NAME OF RESPONSIBLE PERSON USAMRMC   |
| a. REPORT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | b. ABSTRACT | c. THIS PAGE           |                            |                                               | 19b. TELEPHONE NUMBER (include area code) |

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## **1. INTRODUCTION: STRONG FAMILIES STRONG FORCES**

Very young children are disproportionately represented among US military families who have served in the post-September 11<sup>th</sup> wars. Children ages birth to 5 years have unique developmentally-related vulnerabilities in the wake of parental separation, including parental deployment. The length of these wars and reliance upon a voluntary force have required many families to serve in multiple and lengthy deployments. Prolonged separation can constitute a developmental crisis for babies, toddlers and preschool-aged children, although the homefront parent, through sensitive and consistent parenting, may buffer potentially adverse effects. We also know that the non-deployed parent can be overwhelmed with the additional responsibilities during deployment, and may experience chronic worry about the deployed parent's safety. Formal supports that address the full ecology of the military family, specifically parental roles, parenting/coparenting and parent-child relationships, can build resilience in military families as they navigate the complex stresses inherent in the deployment cycle and unique to the parental role. The primary aim of this multi-year intervention study is to adapt and test the efficacy of a family-based parenting intervention to support Active Duty parents and their families with young children (birth to 5 years inclusive) through the full deployment cycle. Secondary goals include examination of coparenting processes across the deployment cycle, and cost-effective analysis.

## 2. KEY WORDS

Military families, coparenting, young children, family resilience, deployment cycle, parenting intervention, military spouses, cost effectiveness

## 3. RESEARCH ACCOMPLISHMENTS ASSOCIATED WITH STATEMENT OF WORK: YEAR 3

### 3.1. What were the major goals of the project?

Phase 1: Conduct Needs Assessment of Military Parents throughout the Deployment Cycle

Qualitative interviews, transcription complete.

Analysis in progress.

Phase 2: Adapt Strong Families Strong Forces Prevention for Active Duty and Full Deployment Cycle.  
Complete.

Phase 3: Conduct a randomized clinical trial testing the efficacy of Strong Families to Strong Parents in a sample of military families with young children.

In progress: N=120 families (80% baseline and randomization complete)

We aim to recruit a sample of N=150 families to achieve a final sample of at least 124 family units.

Exploratory Aim: To conduct a prospective examination of co-parenting, including co-parenting alliance and coordination, among contemporary military families with young children across the cycle of deployment.  
Ongoing.

#### Cost-Effectiveness Analysis

To conduct a cost-effectiveness analysis to compare the costs of achieving benefit from *SFSF2* versus Strong Parents program on the primary outcomes of interest including parental reflective capacity, parent-child relationship quality, and parenting stress, as well as self-reported secondary outcomes of health and social service use.

Ongoing.

During Year 3, the primary tasks and accomplishments were to: (1) continue to build community outreach infrastructure; (2) recruit and randomize families into the clinical trial; (3) maintain fidelity and clinical oversight of all study cases; (4) maintain regulatory approvals for randomized clinical trial, (5) develop plan for cost study data capture; (6) initiate qualitative coding of coparenting videotaped protocol; (7) complete data core online data collection systems; (8) assess and adjust collaboration between sites and investigators, data core, clinical team and research-community partnership.

#### 3.1.1 Scope of Work Summary

|                                                                                                                                                                         | Timeline<br>(months) | Status                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------|
| Task 1: Adapt SF program for Active Duty Army families                                                                                                                  | 1-12                 | Completed                                                          |
| Task 2: Develop clinician fidelity protocols for Strong Families and Self-Care                                                                                          | 1-9                  | Completed                                                          |
| Task 3: Adapt research and clinical protocols for implementation at Ft. Hood site                                                                                       | 1-6                  | Completed                                                          |
| Task 4: Hire and train SFSF2 staff at BU and UTHSCSA (for Ft. Hood site)<br>4a) Provide intensive training on home-based intervention (Strong Families clinicians only) | 3-8                  | Phase 1 training completed (Y1)<br><br>RCT training completed (Y2) |

|                                                                                                                                                                                                               |      |                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------|
| 4b) Provide training on crisis intervention procedures for research/intervention visits for research and clinical staff (both SF & SC control)                                                                |      |                          |
| 4c) Provide training on the conduct of research assessment interviews, data management and clinical documentation protocols (SF and SC control)                                                               |      |                          |
| Task 5: Commence recruitment for Phase 1 qualitative interviews with key informants (10), service members (20), spouses (20)                                                                                  | 7-8  | Completed                |
| Task 6: Conduct qualitative interviews (N=20 Soldiers, N=20 at-home parents; key informants)                                                                                                                  | 8    | Completed                |
| Final sample: N=15 Soldiers, 20 home-front parents, and 9 key informants                                                                                                                                      |      |                          |
| Task 7: Submit Phase 3 protocols for HRPO pre-review. Submit protocol to UTHSCSA IRB. Seek Institutional Agreements for IRB Review (IAIRs) from BU & BAMC where they will defer their reviews to UTHSCSA IRB. | 9-10 | Completed<br>UTHSCSA IRB |

### Phases 2-3: Randomized clinical trial of Strong Families vs. Self-Care

|                                                                                                                            |       |                                |
|----------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------|
| Phase 2 Tasks 1-3: Open pilot of pre-deployment sessions<br><b><i>First 10 SF families for RCT will be pilot cases</i></b> | 8-12  | Ongoing                        |
| Task 4: Refine research protocol for RCT based on qualitative interviews; finalize assessment instruments for RCT          | 10-13 | Completed                      |
| Task 5: Obtain approvals for amendments to research protocol for RCT                                                       | 11-12 | Completed                      |
|                                                                                                                            |       |                                |
| <b>PHASE 3: Randomized Clinical Trial of Strong Families vs. Self-Care</b>                                                 |       |                                |
| Task 1: Screen families for participation in RCT                                                                           | 13-36 | Ongoing<br>Launched April 2016 |
| Task 2: Consent, conduct pretest, and randomize families                                                                   | 13-36 | Ongoing – see enrollment table |
| Task 3: Deliver Strong Families and Strong Parents intervention to families                                                | 13-39 | Ongoing                        |
| Task 4: Conduct posttest assessment interview (+3 months from pretest)                                                     | 16-42 | Ongoing                        |
| Task 5: Conduct follow up assessment interview (+6 months from pretest)                                                    | 19-45 | Ongoing                        |
| Task 6: Coordinate data transfer between Ft. Hood and BU sites                                                             | 12-40 | Ongoing                        |
| Task 7: Data entry, cleaning, and analysis                                                                                 | 12-40 | Ongoing                        |

### Utilization, Cost and Sustainability Aim

|                                                                                                                                                                                                                          |      |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|
| Task 1: Identify cost data to capture on SF and Self-Care Programs to be used to estimate program costs                                                                                                                  | 6-18 | Completed   |
| Task 2: Begin to identify additional outcomes to include in analysis or cost impacts related to healthcare and social services utilization, health promotion behaviors, post-partum issues, missed work activities, etc. | 6-18 | In progress |

## 3.2.What was accomplished under these goals?

### 3.2a.

#### Research Collaboration

The Boston University, UTHSCA-Ft. Hood, and RAND researchers continue to develop effective and efficient strategies for communication. BU/UTHSCSA-Ft Hood continue to utilize regular (weekly) team meetings via teleconference to discuss and address ongoing research issues and to invite relevant community members or experts to the call as needed.

The Strong Families Strong Forces manual was adapted and finalized for implementation in the clinical trial (launched in Year 2; April 2016). Similarly, the Strong Parents program, based on an existing self-care protocol used in another STRONG STAR study, was adapted for implementation with parents of young children in this study (Blankenship).

#### Outreach and Recruitment

The leadership team, including Drs. DeVoe, Dondanville, Blankenship, Jacoby, and Acker, meet regularly for planning purposes, and trouble-shooting. Dr. Blankenship has developed a recruitment and outreach infrastructure to increase enrollment in the clinical trial.

#### Recruitment Strategies for Randomized Clinical Trial (RCT)

We continue to utilize both a bottom up and top down recruitment strategy for the RCT. We have actively engaged the upper echelon of leadership at Fort Hood. We have been provided information about when brigades and battalions are mobilizing. We attend their steering committee meetings and work with the leadership in order to inform their soldiers about our program. These brigade and battalion commanders then allow us to conduct informational briefings at FRG Meetings and Deployment Townhalls which are held for active duty military families about to experience a deployment. In addition, to engaging with leadership we actively participate in Fort Hood community events, and regularly brief at places in the community where we know there will be a high concentration of military families or service members about to experience a deployment (e.g., SRP, Baby Expo, etc.)

#### Phase 1 Data Collection

Research Team received HRPO approval on June 6, 2015. At the end of Year 2, we have completed interviews with 90% of Key Informants, 100% (20) of spouses, and 75% (15) Soldiers. We have closed recruitment for this phase of the study. Qualitative Interview Coding and Analysis

Qualitative data analyses were conducted using NVivo Version 11. Qualitative coding was completed by a doctoral student (rater A) and two bachelor's level research assistants (raters B, C) under the supervision of the PI. We used an iterative process to develop the codebook and ensure good reliability. For the first five interviews, the three independent raters read all transcripts together and coded the material according to the themes of the interview questions. Following that process, all interviews were independently coded by rater A and either rater B or C. The two raters would then discuss any discrepancies in coding and come to an agreement on the final ratings. Open thematic coding, "the interpretive process by which data are broken down analytically" (Strauss & Corbin, 1990) was used. If new codes emerged as coders read through more transcripts, the codebook was appropriately modified and transcripts were recoded according to the new structure. Saturation was achieved when no new codes were identified (Strauss & Corbin, 1998).

Themes emerging from the interview protocol as well as unexpected themes were coded in the following domains: Service member role in the military, the impact of military role on the service member, spousal roles, developmental observations, partner and parent-child communication, and factors influencing each phase of the deployment cycle. See Table 1 for selected descriptions and examples.

Table 1. Selected Themes in Service Member Interviews

| Node (Code Family/Theme)                                                  | Description                                                            | Examples                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SM Role in home                                                           | SM description of roles and responsibilities at home                   | I'm the caretaker of the family.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| How military role has affected SM                                         | SM explains how their various roles in the military have affected them | In general, it has made me more resilient and a stronger role model as a parent                                                                                                                                                                                                                                                                                                                                                                    |
| How military role has affected spouse                                     | SM describes perceptions of how military service has affected spouse   | My wife struggles with this intense job<br>My ranking causes her a lot of concern                                                                                                                                                                                                                                                                                                                                                                  |
| Developmental factors affecting child's understanding of military service | Statements or descriptions about developmental status of child         | My son, being two, doesn't have much concept of... Well, I would say he probably understand I'm a soldier but I don't think he really knows what that means. That we all kind of dress the same is probably the extent of his perception.                                                                                                                                                                                                          |
| Communication about and during deployment                                 | SM and partner/spouse communication related to phase of deployment     | I love hearing about what's going on with my life's life while we're apart<br>I think she wanted it to be as easy to talk as it was before I left, but it wasn't. I struggled to find things I felt like talking about with her.                                                                                                                                                                                                                   |
|                                                                           | SM-child communication about deployment (any phase)                    | I like to talk to my kids as much as possible when I'm over there. It helps me still feel connected<br>When I came back, I think my son really wanted to jump back into talking to me about everything but it took me a while to catch up on everything going on in his life.                                                                                                                                                                      |
| Deployment Experiences                                                    | SM deployment experiences                                              | I kind of like being over there and feel like I'm doing my job – what I'm meant to do – and in the zone accomplishing that.                                                                                                                                                                                                                                                                                                                        |
|                                                                           | SM perception of spouse's experience of deployment                     | It gives her opportunity... if I'm away, for example, it gives her an opportunity to do things pretty much exclusively how she wants to do them and gives her a lot more... I won't say freedom, because I don't necessarily have restrictions for her, but ... there's one less person for her to worry about on a day-to-day basis and so I think that's good for her.<br><br>I mean she definitely worried about my safety, all day, every day. |
| Values<br>Example: Gratitude                                              | Expressions of values important to SM                                  | I think the biggest thing about this life overall is you have to appreciate the little things, no matter how stupid or silly. I remember a soldier walking around the city and eh was carrying his little tea cup with him. The other guys were giving him crap about it and he was like, you do it for your daughter. That's what you have to do. If they don't get it, that's their loss.                                                        |

### 3.2b. RANDOMIZED CLINICAL TRIAL PROGRESS AND STATUS

**Specific Aims for Randomized Control trial:** To conduct a randomized control trial to compare the outcomes of Strong Families Strong Forces (SFSF2) to Strong Parents (Parents only)(SPSC) comparison intervention in a sample of 150 deploying military families with young children.

**Objective 1:** The overall objective of this research is to compare the SFSF2 program to SPSC throughout the deployment cycle. The SFSF2 program includes children as a small part of the intervention. To standardize the intervention for the research, the youngest child who lives in the home will be identified as the target child and will be present for some SFSF2 sessions and all observational assessment sessions.

### Hypotheses:

- 1) At-home parents and deployed parents randomized to the SFSF2 condition will evidence stronger maintenance and/or reductions in parenting stress as assessed by the PSI, compared to their SPSC counterparts.
- 2) At-home and deployed parents randomized to the SFSF2 condition will evidence stronger maintenance and/or gains in parent-child relationship quality, as assessed by the CFRS compared to their SPSC counterparts.
- 3) At-home parents and deployed parents randomized to the SFSF2 condition will evidence stronger maintenance and/or gains in parent reflective capacity, as assessed by the PRFQ, compared to their SPSC counterparts.

**Table 1: Demographic Summary (randomized adult participants only) as of 10-2-2017:**

| Gender                   | Numbers | Race                             | Numbers |
|--------------------------|---------|----------------------------------|---------|
| Male                     | 115     | White                            | 168     |
| Female                   | 119     | Black or African American        | 29      |
| Unknown or Not Reporting | 0       | Asian                            | 2       |
| Ethnicity                | Numbers | American Indian/Alaska Native    | 2       |
| Hispanic or Latino       | 55      | Native Hawaiian/Pacific Islander | 5       |
| Not Hispanic or Latino   | 179     | Other/More Than One Race         | 28      |
| Unknown or Not Reporting | 0       | Unknown or Not Reporting         | 0       |

### Drop-Out

We are tracking drop-out from the study (see Consort Chart) and have identified multiple reasons for families to leave the study. The most common reason for drop-out is that the family became ineligible because the service member was no longer deployment. The next most frequent reason for dropout during the pre-deployment period is scheduling challenges in the lead up to departure. Other reasons include requests for other types of programs including child-focused program or family-focused program (when randomized to Self-Care condition).

Please refer to the Consort Chart (separate attachment).

### Description: Principal Outcome Measure

Parenting Stress Index- Short Form (PSI): This 36-item self-report measure assesses parenting stress in three domains: parental distress, parent-child dysfunctional interaction, and difficult child. The PSI-SF has demonstrated good reliability and external validity.

**Table 2: Principal Outcome Measure (for individual participants):**

| Intervention Group                                                                                                              |      | BL               | Pre  | Dep 1 | Dep 2 | Redep/Reint | Post-Tx | 6M FU |
|---------------------------------------------------------------------------------------------------------------------------------|------|------------------|------|-------|-------|-------------|---------|-------|
| # assessed                                                                                                                      |      | <sup>1</sup> PSI | PSI  | PSI   | PSI   | PSI         | PSI     | PSI   |
| <b>Group A</b><br>BL n = 114*<br>Pre n= 70<br>Dep 1 n =27<br>Dep 2 n = 12<br>Redep/Reint n = 14<br>Post-Tx n = 4<br>6M FU n = 0 | Mean | 66.91            | 64.5 | 60.0  | 68.1  | 62.1        | 57.0    | 0     |
|                                                                                                                                 | SD   | 19.73            | 16.9 | 18.2  | 20.1  | 19.7        | 13.4    | 0     |

|                                                                                                                                  |             |      |      |      |      |      |      |   |
|----------------------------------------------------------------------------------------------------------------------------------|-------------|------|------|------|------|------|------|---|
| <b>Group B</b><br>BL n = 110<br>Pre n = 66<br>Dep 1 n = 31<br>Dep 2 n = 13<br>Redep/Reint n = 10<br>Post-Tx n = 4<br>6M FU n = 0 | <b>Mean</b> | 65.0 | 63.2 | 65.5 | 64.2 | 66.8 | 63.0 | 0 |
|                                                                                                                                  | <b>SD</b>   | 17.2 | 17.6 | 17.0 | 16.6 | 22.3 | 18.8 | 0 |

<sup>1</sup>PSI range of scores = 36 – 180 with higher scores indicating lower levels of dysfunction/lower scores indicating higher levels of dysfunction.

For this study, eligibility is determined by phone screen prior to consent and there are no eligibility criteria that are determined by baseline assessment. Thus, participants who consent to the study are usually randomized at the time of consent prior to completion of the baseline assessment. Participants are also not withdrawn from the study due to missed or incomplete assessments at any given time point.

\*234 adult subjects have been randomized but only 226 have baseline data that includes the PSI. The remaining 10 participants are accounted for as follows:

- 1 family (2 participants) voluntarily dropped out of the study prior to completing the full baseline assessment.
- 4 families (4 participants) were pregnant at the time of the baseline assessment and the PSI was not administered because they didn't have children yet.

### **3.3. WHAT OPPORTUNITIES FOR TRAINING AND PROFESSIONAL DEVELOPMENT HAS THIS PROJECT PROVIDED?**

During the third year, BU continued to provide training and supervision on the Strong Families program through in-person workshops, reading assignments, and discussion. Similarly, Dr. Abby Blankenship, developer of the Strong Parents intervention, provided initial training on the model to the clinical team and continues to provide training and supervision on current cases.

Professional development is ongoing. Specifically, as we have previously described, because the STRONG STAR Consortium research studies typically focus on adult PTSD treatment and related interests, all Strong Families staff are exposed to new models of intervention (home-based; prevention) with a new population (families with young children). Necessarily, staff and clinicians are acquiring new expertise in child development, cycle of deployment, family-level analysis, and community-based approaches to research. All researchers on the team are encouraged to consider additional professional growth activities, including preparation of manuscripts for publication, submission and presentation of research at professional conferences, and participation at professional conferences.

#### **Clinical Training**

- Ongoing through weekly group and individual supervision; weekly team teleconference and local (Ft. Hood) in-person meetings

#### **Research Training: Qualitative Coding and Analysis**

- Primary Outcome for exploratory aim (coparenting): Two-day training with Dr. Jamie McHale, University of South Florida, @ USF-St. Petersburg. October 2017
- Qualitative coding and analysis: Analysis of qualitative interview data from Phase 1 is underway.

### **3.3. How were the results disseminated to communities of interest?**

- Multiple briefings about the research and Strong Families program by Ft. Hood staff throughout Year 3.

## 2) Professional Presentations/Trainings (see below)

### 3.4. What do you plan to do during the next reporting period?

- a) Recruitment, randomization and intervention for the randomized clinical trial (ongoing)
- b) Completion of analysis of qualitative interview data for spouses (service member data analysis complete); submission of manuscripts based upon qualitative findings
- c) Begin coding process for coparenting observational protocol  
Vanessa Jacoby, PhD, will lead observational coding of all coparenting video assessments.
- d) Begin planning baseline analysis
- e) Conference Presentations in the next reporting period:
  1. DeVoe, E.R., Williams, A., Blankenship, A., Jacoby, V., & Dondanville, K. (November, 2017). *A family-based preventive intervention for Active Duty military personnel and veterans: Supporting military and veteran families through transition*. Pre-Meeting Institute at the 33<sup>rd</sup> Annual International Society for Traumatic Stress Studies (ISTSS) Conference. Chicago, IL.
  2. Kritikos\*, T.K. & DeVoe, E.R. *Relationship quality of recently deployed military service members and their partners* (Nov 2017). Paper to be presented at the 33<sup>rd</sup> annual convention for the International Society for Traumatic Stress Studies in Chicago, Illinois.
  3. Williams, A., Blankenship, A., & DeVoe, E.R. (Nov 2017). *Addressing trauma within the framework of family and parenting*. Paper to be presented at the 33<sup>rd</sup> annual convention for the International Society for Traumatic Stress Studies in Chicago, Illinois.
  4. DeVoe, ER, Kritikos, TK, Bottera, A, Dondanville, K, Hummel, VM (Oct 2017). *Beyond the Service Member: Working with Families throughout the Deployment Cycle*. Paper presentation in Situating Service Members and Veterans within a Couple and Family Context: Implications for Assessment, Treatment, and Broader Family Well-Being Symposium (Chair: S. Fredman). San Antonio Combat PTSD Conference 2017. San Antonio, TX.
  5. Ojeda, A., Zolinski, S., Blankenship, A. E., Jacoby, V., Yarvis, J. S., Dondanville, K. A., McGeary, C. A., Blount, T., Young-McCaughan, S., Hancock, A., Peterson, A. L., & DeVoe, E.R.; for the STRONG STAR Consortium. (2017, October) *Common experiences among active duty military fathers during reintegration*. Poster presented at the 2<sup>nd</sup> Annual Combat PTSD Conference San Antonio, Texas.
  6. Blankenship, A., Dondanville, K., & Jacoby V. (2017, October). *Lessons learned: Recruiting military families for a primary prevention program*. Presented at the 17<sup>th</sup> Annual Partners in Prevention Conference, San Antonio, Texas.
  7. Jacoby, V., & Blankenship, A. (2017, October). *Strong Families Strong Forces: Reducing stress & preventing adverse reactions in military families*. Presented at the 17<sup>th</sup> Annual Partners in Prevention Conference, San Antonio, Texas.

## 4. IMPACT

### 4.1. What was the impact on the development of the principal disciplines of the project?

The PI was invited to participate in the Council of Social Work Education (CSWE; Social Work's accrediting body) Taskforces on Military Social Work and Trauma to update social work curricular guides in these areas.

### 4.2. What was the impact on other disciplines?

As noted in previous Annual Reports, this project is the first study focused specifically on Active Duty families with children to be affiliated with the STRONG STAR Consortium. In addition, this is the first

Social Work-led project at STRONG STAR and among few funded by the Department of Defense to Social Work Principal Investigators. STRONG STAR has been extremely supportive of this work and interested in the prevention and family orientation of the study. We continue to have impact on multiple disciplinary areas, including social work, psychology, and public health, through publication of peer-reviewed papers, conference presentations, invited book chapters on military families, and service related to expertise in military families.

#### **4.3. What was the impact on technology transfer?**

Nothing to Report

#### **4.4. What was the impact on society beyond science and technology?**

Nothing to Report

### **5. CHANGES/PROBLEMS**

#### **5.1. Changes in approach and reasons for change**

We note the following change in the inclusion criteria to allow families who are in their 3<sup>rd</sup> trimester of pregnancy to participate in the RCT.

**Change:** Expanding inclusion criteria to include pregnant women.

**Rationale:** Approximately 13% of our current sample is pregnant. In addition, we have families who do not have a child under the age of 6 years old, but are in the third trimester of their pregnancy who are expressing interest in participating in the Strong Families Strong Forces program. As such, we would like to expand our inclusion criteria to include having at least one child in the third trimester (28 weeks into the gestational period) to 5 years and 11 months old. The decision to expand eligibility criteria to 3<sup>rd</sup> trimester families was agreed to be responsive to community needs and consistent with our prevention aims.

#### **Impact on hypotheses testing:**

We will conduct exploratory analysis on the small subsample of families who are randomized during the 3<sup>rd</sup> trimester.

#### **5.2. Actual or anticipated problems or delays and actions or plans to resolve them**

Recruitment for the randomized clinical trial has increased substantially. We addressed earlier challenges by expanding our recruitment and outreach infrastructure – efforts we believe have paid off. In addition, as we have noted in previous reports, we have worked to target specific deployment rotations.

As previously noted, we have observed several patterns throughout the RCT. First, many families are contacting the project within a few days or a week prior to deployment or just after deployment. We are documenting when families reach us and will make adjustments to the pre-deployment intervention timeframe when possible, and incorporate needed flexibility into later dissemination efforts.

#### **5.3. Changes that had a significant impact on expenditures**

Nothing to report

#### **5.4. Significant changes in use or care of human subjects**

Nothing to report

## 6. PRODUCTS

### 6.1. Publications, conference papers, and presentations

#### PEER-REVIEWED PUBLICATIONS

1. DeVoe, E.R., Kritikos, T.M., Emmert-Aronson, B., Kaufman Kantor, G., & Paris, R. (accepted for publication). Young child well-being in military families: A snapshot. *Journal of Child & Family Studies*.
2. DeVoe, E.R., Dondanville, K., Blankenship, A., & Hummel, V. (Accepted). PTSD Intervention with Military Service Member Parents: A Call for Relational Approaches. *Best Practices in Mental Health: Special Issue on Military/Veteran-Connected Populations*.

#### BOOK CHAPTERS

1. DeVoe, E.R., Dondanville, K., & Blankenship, A., (In press). Military Families. In B. Fiese (Ed.), *APA Handbook of Contemporary Family Psychology*. American Psychological Association.
2. Cozza, S., DeVoe, E.R., Flake, E., Gewirtz, A., Gorman, L., Kees, M., Knobloch, L., Lerner, R., & Lester, P. (Forthcoming). Lessons learned and future recommendations for conducting research with military families and children. In S. M. Wadsworth & L. Kirchubel (Eds.), *A Battle Plan for Supporting Military Families in Times of War*. New York: Springer.

#### OTHER PUBLICATIONS

#### MANUSCRIPTS UNDER REVIEW

1. Dondanville, K., DeVoe, E.R., Blankenship, A., Wachen, J., Resick, P. & the Strong Star Consortium (revisions submitted). Integrating parenting into individual PTSD treatment. *Cognition & Behavioral Practice*.
2. Kritikos\*, T.K., DeVoe, E.R., & Emmert-Aronson\*, B. R. (revisions submitted). Relationship quality of recently deployed service members and their partners. *Journal of Marital and Family Therapy*.

#### PROFESSIONAL PRESENTATIONS

1. Mooney\*, T.K., DeVoe, E.R., Bottera, A., Cope, C.M., & Kaufman Kantor, G. (Apr 2017). *The effects of parental trauma, emotional distress, and parenting on very young children: A snapshot*. Poster presentation at the Society for Research on Child Development 2017 Biennial Meeting. Austin, TX.
2. Fina, B., Borah, E., DeVoe, E.R., Dondanville, K.A., & Yarvis, J.S. (Jan 2017). *Lessons learned from conducting clinical research within military settings*. Round Table presented at the 21<sup>st</sup> Annual Society for Social Work and Research Conference. New Orleans, LA.

#### WORKSHOPS

1. Jacoby, V.M., Blankenship, A.E. & DeVoe, E. (May 2017). *Trauma across the deployment cycle: Support and interventions for the whole family*. Workshop at the Cross-Discipline Trauma Conference of Central Texas, Austin, TX.

#### PROMOTIONS

Nothing to Report

#### 6.2-6.4: Nothing to Report

### 7.0 PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

| Personnel                                                                                                                            | Role                             | Percent Effort |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------|
| Boston University                                                                                                                    |                                  |                |
| Dr. Ellen DeVoe                                                                                                                      | PI                               | 1.0%           |
| Dr. Timothy Brown                                                                                                                    | Co-Investigator                  | 7.0%           |
| Dr. Renee Spencer                                                                                                                    | Co-Investigator                  | 0%             |
| Dr. Terrence Keane                                                                                                                   | Consultant                       | 0%             |
| Dr. Brett Litz                                                                                                                       | Consultant                       | 1%             |
| Dr. Michelle Acker                                                                                                                   | Training and Clinical Supervisor | 2%             |
| Tessa Kritikos                                                                                                                       | Research Assistant               | 100%           |
| UTHSCSA-STRONG STAR Consortium Key Personnel                                                                                         |                                  |                |
| The Consortium flexes personnel effort across multiple studies in order to maximize work-load and minimize unnecessary expenditures. |                                  |                |
| Dr. Alan Peterson                                                                                                                    | Co-PI                            | 2 %            |
| Dr. Stacey Young-McCaughan                                                                                                           | Co-Investigator                  | 2 %            |
| Dr. Katherine Dondanville                                                                                                            | Co-Investigator                  | 35.00%         |
| Dr. Abby Blankenship                                                                                                                 | Assistant Professor/Research     | 42.50%         |
| Venee Hummel                                                                                                                         | Therapist 2 (Fellow)             | 100.00%        |
| Heidi Rathbun-McVeigh                                                                                                                | Therapist 3 (Fellow)             | 100.00%        |
| Sophie Zolinski                                                                                                                      | Research Assistants              | 100.00%        |
| Antoinette Brundige                                                                                                                  | Manager, Research Operations     | 2%             |
| Allison Hancock                                                                                                                      | Deputy Director of Research      | 5%             |
| Vanessa Jacoby                                                                                                                       | Therapist                        | 20%            |
| Dana Larson                                                                                                                          | Independent Evaluator            | 34%            |
| RAND Key Personnel                                                                                                                   |                                  |                |
| Anita Chandra                                                                                                                        | PI                               | 0.18%          |
| Rebecca Kilburn                                                                                                                      | Senior Economist, Co-PI          | 0.11%          |

### 7. SPECIAL REPORTING REQUIREMENTS

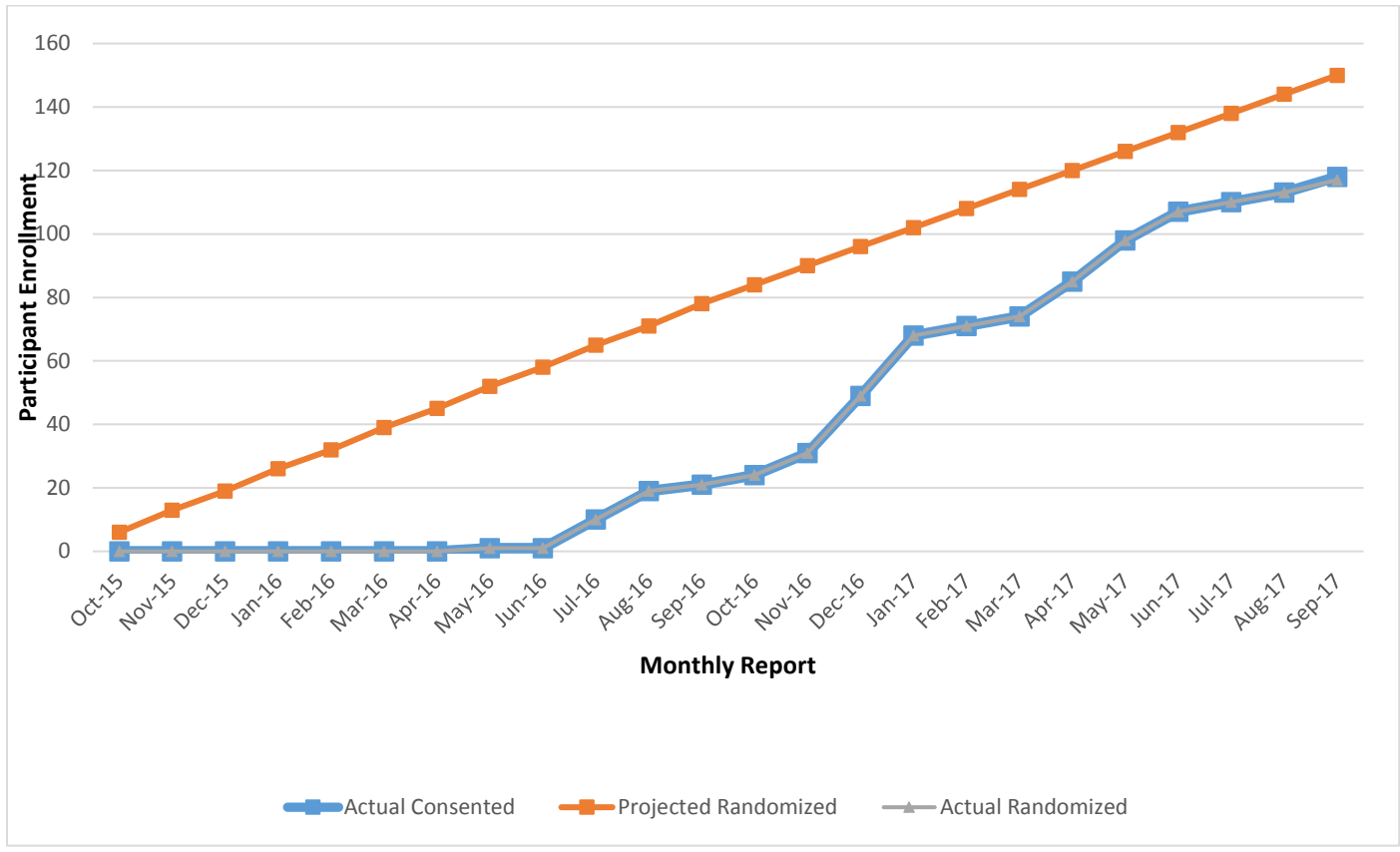
APPENDIX A: QUAD CHART (Separate Attachment)

### 8. APPENDICES

## Strong Families Strong Forces – Ft. Hood

**Graph 1:**

**Cumulative of Expected, Enrolled (Consented) & Randomized as of Sept 2017 (reflects family units)**



## Strong Families Strong Forces Scholarly and Training Presentation ABSTRACTS

- 1) Fina, B., Borah, E., DeVoe, E.R., Dondanville, K.A., & Yarvis, J.S. (Jan 2017). *Lessons learned from conducting clinical research within military settings*. Round Table presented at the 21<sup>st</sup> Annual Society for Social Work and Research Conference. New Orleans, LA.

### Speakers/Presenters:

*Brooke Fina, MSW, University of Texas Health Science Center at San Antonio, Elisa Borah, PhD, University of Texas at Austin, Ellen DeVoe, PhD, Boston University, Katherine A. Dondanville, PsyD, University of Texas Health Science Center at San Antonio and Jeffrey S. Yarvis, PhD, Carl R. Darnall Army Medical Center*

Obtaining funding is only half the battle when developing successful clinical intervention research. An essential next step is for researchers to embark on the challenging yet exciting work of collaborating with systems and clients to bring the research program or study to life. This is particularly salient in intervention research, where often health care organizations influence patient recruitment, retention, and provide treatment as usual comparison conditions, as well as practitioners' participation. The military health care system presents a unique set of challenges and strengths when implementing clinical research trials. Understanding the complexity of service systems within military sites is critical to the social work research agenda of developing effective and evidence-based interventions with military members and their families.

This roundtable discussion will share lessons learned from implementing clinical research programs with military personnel and their families within the largest center for clinical intervention trials in the Department of Defense (DoD) over the past seven years. You will hear from scholars that serve in leadership roles as Principal Investigators, Co-Investigators, Research Therapists, Risk Advisors, and Site Directors who are affiliated with The South Texas Research Organizational Network Guiding Studies on Trauma and Resilience (STRONG STAR) Research Consortium, and the Consortium to Alleviate PTSD (CAP) at the Fort Hood military installation in Killeen, Texas. The STRONG STAR Consortium involves some of the nation's leading experts conducting multiple clinical trials to determine the most effective treatments for PTSD, sleep disorders, suicidality, and related conditions in active duty military personnel and their families.

This session focuses on how to successfully implement clinical trials. Presenters will discuss strategies in developing capacity, specifically building relationships with military site stakeholders, standing up research clinics that add value to the greater military health system, and effective supervision and training models within the research site. Procedures for operationalizing risk assessment and management for large clinical trials that allow for the inclusion of moderate and high risk participants will be provided. Hurdles in conducting military-based intervention research will be described, such as combating stigma and obtaining leaderships support for service members to spend time away from duty to seek treatment. Presenters will discuss innovative recruitment strategies as well as engagement strategies for retaining and accommodating military families' unique needs. This roundtable will include presentation of materials and discussion among the presenters and audience with ample time for questions. This session will include a dialogue about the role of social work research within the larger context of scholarship addressing military service members. This session is relevant for researchers and clinicians who are implementing new programs or clinical practices working with military service members and their families.

- 2) Jacoby, V, & Blankenship A. E. (May 2017). Trauma across the deployment cycle: Support and interventions for the whole family. Presented at the Cross-Discipline Trauma Conference of Central Texas, Austin Texas.

### **Trauma across the Deployment Cycle: Support and Interventions for the Whole Family**

This workshop will teach participants about working with military families with stress and trauma throughout the wartime deployment cycle. Participants will learn culturally appropriate family-systems informed interventions for stress, trauma, and intergenerational trauma within families, with an emphasis at prevention and intervention for young children.

# Supporting Military Families with Young Children throughout the Deployment Lifecycle



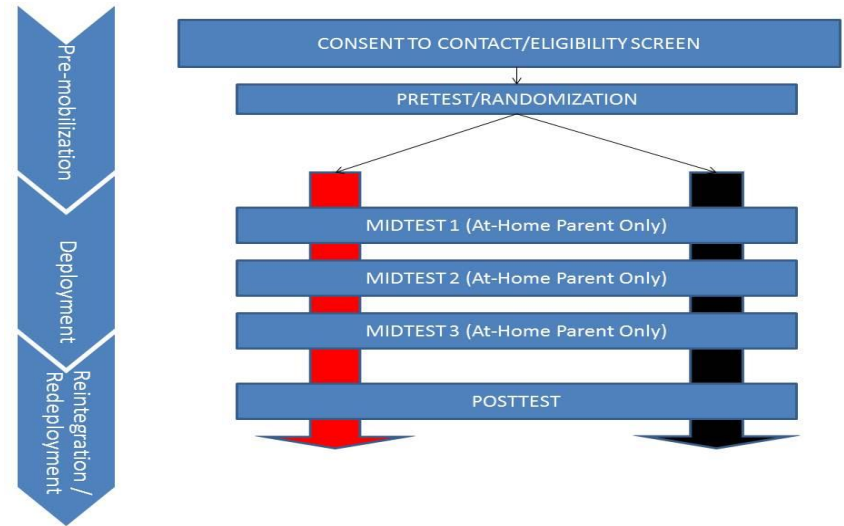
PI: DeVoe, Ellen

Org: Boston University School of Social Work

## Problem, Hypothesis and Military Relevance

- Problem:** Over 2 million children, 42% under 5, have been affected by parental deployment
- Parenting and coparenting stress, & adverse child outcomes associated with deployment separation and reintegration
- No evidence-based resilience-building programs available for military families with young children through deployment cycle
- Hypothesis:** Expansion of an existing family reintegration program (Strong Families; SF) to begin pre-deployment will prevent adverse outcomes, improve parenting stress, reflective capacities and parent-child relationships compared to self-care (Strong Parents; SP) condition
- Military Relevance:** Generation of critical knowledge about parenting and coparenting through all phases of deployment to inform programs and policy. If successful, SF will be among the first evidence-based programs targeting military families with very young children and can be disseminated widely in military and community settings.

## Research Design



## Proposed Solution: To adapt and test Strong Families Strong Forces (SF) to Strengthen and Support Family Relationships throughout the deployment cycle

**Aim #1:** To extend our understanding of the psychological and psychosocial needs of OEF/OIF families with very young children throughout the deployment lifecycle during the pre-deployment and deployment phases.

**Aim #2:** To adapt SFSF to support National Guard and Reserve families with very young children throughout the deployment cycle

**Aim #3:** To conduct a randomized clinical trial testing the efficacy of SF compared to a Self-Care (SP) comparison condition in a sample of Active Duty Army families with young children

**Aim #4:** To conduct a cost-effectiveness analysis to compare the costs of achieving benefit from SF versus SP

## Timeline and Total Cost (Direct and Indirect)

| Activities                                                                                                            | FY14                | FY15          | FY16                | FY17                |
|-----------------------------------------------------------------------------------------------------------------------|---------------------|---------------|---------------------|---------------------|
| Phase:                                                                                                                | DC(IDC)             | DC(IDC)       | DC(IDC)             | DC(IDC)             |
| <b>Phases 1: Months 1-8</b><br>- Purchase Equipment<br>- Qualitative Interviews (N=50)<br>- Qualitative Analysis      | 73.6K<br>(46.88K)   | 0             | 0                   | 0                   |
| <b>Phase 2: Months 9-12</b><br>- Adapt SFSF<br>- Conduct pilot test (N=10)                                            | 175.18K<br>(57.51K) |               |                     |                     |
| <b>Phase 3: Months 13-48</b><br>- Conduct RCT (n=150)<br>- Analyze Data<br>- Disseminate research & clinical findings |                     | K<br>(99.34K) | 813.93K<br>(99.34K) | 609.97K<br>(110.4K) |
| <b>Est. Total Budget (\$K)</b>                                                                                        | 353.17K             | 913.27K       | 913.27K             | 720.37K             |