SUPPORTING STATEMENT – PART B

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

If the collection of information employs statistical methods, it should be indicated in Item 17 of OMB Form 83-I, and the following information should be provided in this Supporting Statement:

1. Description of the Activity

The surveys will be conducted online. The study will occur at 6 Navy installations of three varying NPSP service sizes from separate geographical regions currently demarcated as Region A and Region B. Participants for the study will include NPSP home visitors and new NPSP clients. For the purposes of this study, a new client is being defined as an individual who is eligible to receive NPSP home visitation, based on the Navy's pre-established criteria, and who has not yet received any curriculum-based home visits. Further, for clients to be eligible for the study, they must be at least 18 years old and able to adequately comprehend English. Home visitors will be identified by their installation's FAP manager, and home visitors who consent to participate in the study will identify eligible clients. The table below displays the available sample size for the respondent universe as a whole across the 6 study sites and for each of the strata that will constitute the sample. A 75% response rate is expected due to: (a) the high response rate that was observed in a similar study with Army NPSP, and (b) the fact that the study is taking place within an established service system within the Navy. The 75% response rate equates to a total sample size of 315 (15 home visitors and 300 clients).

Respondent Universe	
Home Visitors and Clients	420
Respondent Strata	
Home Visitors Region A, NPSP Service Size 1	1
Home Visitors Region A, NPSP Service Size 2	2
Home Visitors Region A, NPSP Service Size 3	5
Home Visitors Region B, NPSP Service Size 1	1
Home Visitors Region B, NPSP Service Size 2	2
Home Visitors Region B, NPSP Service Size 3	9
Clients Region A, NPSP Service Size 1	20
Clients Region A, NPSP Service Size 2	40
Clients Region A, NPSP Service Size 3	105
Clients Region B, NPSP Service Size 1	15
Clients Region B, NPSP Service Size 2	40
Clients Region B, NPSP Service Size 3	180

2. Procedures for the Collection of Information

Describe any of the following if they are used in the collection of information:

a. Statistical methodologies for stratification and sample selection;

The target population includes: (a) Navy NPSP home visitors, and (b) Service members and dependents, 18 or older, who are eligible for and choose to receive NPSP home visitation services. The proposed study is using a clusterrandomized controlled design to assign participating installations to one of two conditions: Take Root Home Visitation curriculum implementation or services as usual implementation. Installations are being stratified based on geographical region and NPSP service size.

The collected data will be analyzed with statistical models that involve regression-based estimation methods. Such methods will allow for examination of within- and between-group effects across time (e.g., multilevel modeling, structural equation modeling). All results will be presented in a way that ensures respondents cannot be personally identified.

b. Estimation procedures;

It is anticipated that during the course of the study, some respondents will not answer all questions or may not respond at specific waves. Non-response adjustment techniques will be used to help minimize any bias that may be introduced into the statistical models as a result of non-response.

c. Degree of accuracy needed for the Purpose discussed in the justification;

Does not apply.

d. Unusual problems requiring specialized sampling procedures; and

Does not apply.

e. Use of periodic or cyclical data collections to reduce respondent burden.

Data collection will occur at four major assessment periods: baseline (during clients' intake process), 3-months post-baseline, 6-months post-baseline, and NPSP case closure or study end, whichever occurs first. NPSP case closure can occur at any point during the study, as this represents either the client ending services or the home visitor determining services are no longer needed. Study end will occur 12-months post-baseline. Not all study outcomes will be collected at every assessment point to help reduce respondent burden.

3. Maximization of Response Rates, Non-response, and Reliability

Several methods will be used to help maximize response rates.

- First, the assessment instruments used for this evaluation were selected, in part, because they were the briefest measures of the constructs of interest, which reduces respondent time burden. The assessment instruments that will be used in this study are standardized measures that have demonstrated adequate psychometric properties in previous research. The use of such measures should help to ensure the accuracy and reliability of the responses collected.
- Second, assessment instruments have been staggered across the four main collection periods so that respondents are not completing all measures at every timepoint. This should also reduce their time burden.
- Third, the assessments will be administered online, which helps to streamline the process for respondents by removing logistical challenges associated with mailing surveys or administering surveys over the phone.
- Fourth, the Penn State research team will send four, weekly reminder messages to respondents at each data collection wave to help encourage assessment completion. These reminder messages will only be sent to respondents who have not yet completed the assessments.
- Finally, based on the larger survey research literature that has demonstrated receiving compensation for completing assessments is associated with a higher response rate, NPSP clients will receive Amazon e-gift cards for completing measures. Home visitors will not receive compensation for completing measures.

As this study is voluntary, non-response is expected. Reminder messages and compensation for survey completion are anticipated to help reduce the rate of nonresponse. As mentioned in Section 1, the collected data will be examined for nonresponse patterns and non-response adjustment techniques will be employed. Also, other robust methods of handling missing data will be utilized when conducting the statistical analyses, such as multiple imputation or full information maximum likelihood.

4. Tests of Procedures

The procedures and methods that will be used in this study were informed by those employed in a similar evaluation of Army's NPSP home visitation curriculum. The Army evaluation project included 100 home visitors and 1,753 NPSP clients and was conducted over a period of three years.

5. <u>Statistical Consultation and Information Analysis</u>

a. Provide names and telephone number of individual(s) consulted on statistical aspects of the design.

Ryan P. Chesnut, PhD, rpc5108@psu.eud, 814-865-9637

b. Provide name and organization of person(s) who will actually collect and analyze the collected information.

Ryan P. Chesnut, PhD – Clearinghouse for Military Family Readiness at Penn State, rpc5108@psu.edu

Grejika Abram-Erby, MS, MPH – Clearinghouse for Military Family Readiness at Penn State, gea123@psu.edu

Brett Weldon – Clearinghouse for Military Family Readiness at Penn State, buw89@psu.edu

Brittny Mathies, PhD – Clearinghouse for Military Family Readiness at Penn State, bxm63@psu.edu

Terri Rudy, MPA – Clearinghouse for Military Family Readiness at Penn State, tlr141@psu.ed