

# NFS

**Navy Family Study**  
Families Helping Families

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## **Men and Women Referred to the Navy Family Advocacy Program: Violence, Mental Health and Assessment of Services Received**

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**Linda M. Williams, Ph.D.<sup>1</sup>**  
**Benjamin E. Saunders, Ph.D.<sup>2</sup>**  
**Vera Mouradian, Ph.D.<sup>1</sup>**  
**Victoria L. Banyard, Ph.D.<sup>1</sup>**

<sup>1</sup>The Stone Center, Wellesley Centers for Women, Wellesley College, Wellesley, MA.

<sup>2</sup>National Crime Victims Research and Treatment Center, Medical University of South Carolina, Charleston, SC.

Additional direct contributors to this report were Meghan Finley, Mary Frederick, Veronica Herrera, Ann Polak and Kerry Seitz.

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# Navy Family Study

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The Navy Family Study (NFS) was conducted under contract #: N00140-01-C-N662 between Wellesley Centers for Women (Wellesley College) and the Department of the Navy and under a subcontract to the Medical University of South Carolina (MUSC). Some of this research was also completed under an earlier contract between the Department of the Navy and the University of New Hampshire.

The Navy Family Study (NFS) was a longitudinal, prospective study of a sample of 530 Navy families referred to the Navy's Family Advocacy Program (FAP) for at least one of three types of family violence, parent-child sexual abuse (CSA) (18.5%), parent-child physical abuse (CPA)(38.9%), or spousal/partner violence (PV)(42.6%). This study will be referred to as the "NFS" or "FAP study" throughout this report.

Families were recruited into the study two to six weeks after the report to FAP for Time 1 (T1) interviews. T1 interviews commenced in March, 1998, and continued through December, 2001. Three waves of follow up interviews and assessments were conducted at three follow-up assessment points: 9-12 months post report to FAP (T2); 18-24 months post report to FAP (T3) and 36-40 months post report to FAP (T4). Follow-up interviews were ended in May 2004.

## NFS Goals

The Navy Family Study had several important goals.

Goal 1. Gather descriptive information about Navy families reported to FAP

Using in-person interviews and standardized assessment instruments the NFS was designed to develop a descriptive profile of families reported to FAP. Information gathered includes victimization and other trauma history of all family members; history of familial and nonfamilial violence perpetration; marital and family history; personal history; history of previous FAP involvement; and Navy career history.

Goal 2. Gather descriptive data about FAP families over time

The NFS assessed the functioning of families for three years after a report to FAP for family violence. Information gathered over time included individual functioning of the family members (victims, offenders, nonoffending parents/ spouses); parent-child relationship functioning; marital/sexual functioning of parents; family life changes; recidivism for family violence; and functioning after FAP interventions.

Goal 3. Are the goals of the Navy Family Advocacy Program being achieved?

The NFS examined the type and level of services provided to families and any association between services received and outcomes. The NFS was designed to examine the extent to which the following FAP goals were achieved:

- \* Identify, assess, and intervene in cases of family violence, including spousal violence, child physical abuse, and child sexual abuse
- \* Provide information, referral, intervention and treatment in cases of family violence
- \* Prevent future incidents of family violence
- \* Promote appropriate marital and parent-child relationships
- \* Help maintain healthy, safe, functioning Navy families

Goal 4. Prepare assessment instruments for use with FAP clients

The NFS developed and refined assessment instruments to be used in FAP practice settings. These include testing measures for screening for prior abuse, victimization, and trauma, assessing personal history, and diagnostic assessment.

## **NFS Methods**

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Participant families for the NFS were recruited from 12 naval installations in four geographic areas, Norfolk, VA, Jacksonville, FL, San Diego, CA, and the Pacific Northwest (see figure 1). At each of these installations newly reported cases of parent-child sexual abuse (CSA), parent-child physical abuse (CPA), and spousal/partner violence (PV) were screened for meeting the inclusion criteria for the study using FAP intake information. Because of the volume of partner violence and child physical abuse cases, those cases were randomly sampled. All cases of parent-child sexual abuse were accepted for further screening. Family members in cases that appeared to meet the study's criteria were contacted by a NFS research assistant and screened to insure they indeed met study inclusion criteria. Family members of eligible families were then offered participation in the study through the informed consent process. Those family members that agreed to participate in the study were interviewed by a trained NFS research assistant.

## FAP Sample Participants

Families eligible for the NFS included Navy service members, their spouses or cohabitating partners, and their children who met the study's inclusion criteria. NFS inclusion criteria were:

1. A report was made to the FAP located at one of the participating Navy installations about a Navy family for a concern about partner violence, parent-child sexual abuse, or parent-child physical abuse.
2. The adult couple had been in a cohabitating, romantic relationship for at least six months prior to the report.
3. A child (person less than 18 years old) was residing in the home with the adults at the time of the report.
4. Both adults had functioned in a parental relationship to child for the six months prior to the FAP report

Reports to FAP of alleged family violence did not have to be substantiated for the family to be eligible. Only a referral to FAP for allegations of one of the three types of family violence was necessary for eligibility.

Data were collected from the alleged Offending Parent (OP), the Non-offending Parent (NOP) and the Index Child (IC). Each adult was approached individually and no information was shared on the approach to the spouse or partner or his or her willingness to participate. The exception to this was for families with allegations of partner violence (PV). Before we approached the alleged perpetrator, we followed strict safety protocols in contacting the victim. Once s/he was contacted, we discussed safety issues and asked if it was ok for us to contact the OP. Only after the victim told us he or she felt it was safe for us to do so, did we contact the OP.

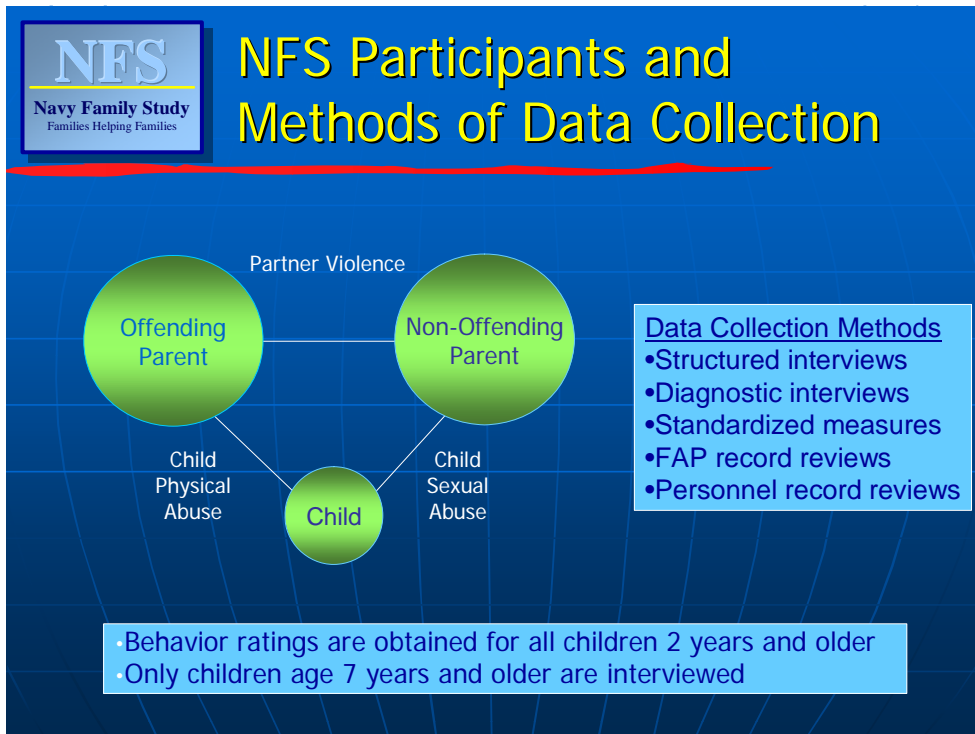
For CSA and CPA cases, the index child participant was the victim of the alleged incident that led to the report to FAP. In families where there were multiple child victims of physical or sexual abuse, the oldest child victim was selected as the index child. In cases of partner violence, the oldest child under the age of 18 living in the home was selected as the index child.

Behavioral ratings by parents were obtained for all index child participants age 2 to 17. However, only index children age 7 to 17 were directly interviewed and assessed by NFS staff.

Whenever possible, the NOP, OP, and IC from the family were each interviewed. In some cases, however, some family members could not be located or contacted. In other cases family members may have been unavailable for interview, unwilling to participate in the study, or unwilling to give consent for the child to participate. In some

cases the adult victim of PV asked that we not contact her or his partner. Only children age 7 and older were eligible for interview.

Interviewed participants enrolled in the NFS and completing an interview include 1,064 respondents representing 530 families. We interviewed 384 alleged perpetrators, referred to as "offending parents" (OPs), and 478 non-offending parents (NOPs) from

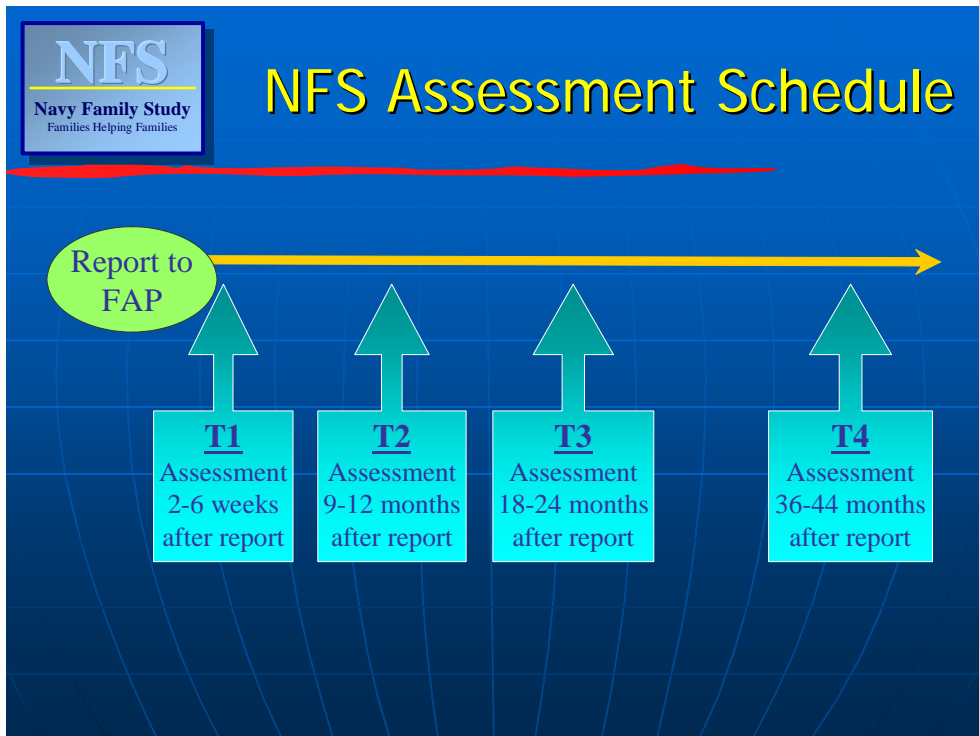


these 530 families. These adult interviews provide the basis for this report.

This figure depicts the participants and data collection methods used.

## Data Collection Schedule

The FAP sample study of the NFS was a longitudinal, prospective study of families reported to FAP. Data were collected from the alleged Offending Parent (OP) (i.e., the parent purported to be the offender in the emergent allegation of family violence), the Non-Offending Parent (NOP), and the Index Child (IC) depending upon who agreed to participate in the study. All participants were assessed 4 times over a 3 to 4 year period. The initial assessment (T1) occurred as soon as is feasible after the initial report to FAP, usually within 4 to 6 weeks. The T2 assessment was conducted 9-12 months after the report to FAP. The T3 assessment occurred 18-24 months after the report, and the T4 took place 36-40 months after the report to FAP. The figure below depicts the data collection schedule for the FAP sample. The comparison sample was interviewed on only one occasion.



## Human Subject Protection

The research protocol used for the Navy Family Study was approved by the Institutional Review Boards of the University of New Hampshire, the Medical University of South Carolina, and Wellesley College. Each of these boards monitored the study for human subject protection.

## Informed Consent

Participation in the project was completely voluntary for all potential respondents, including for service members. All participants completed an informed consent procedure and signed an informed consent form approved by the appropriate Institutional Review Board acknowledging their understanding of the study and their voluntary participation in it. Custodial parents or guardians granted permission for children to participate. If a child had been taken into foster care, the relevant custodial guardian agency granted permission for the child to participate. Children whose parent or guardian gave consent for them to participate also went through the informed consent procedure and granted assent to participate in the study.

## Confidentiality

An extraordinary level of confidentiality was exercised in this study. The NFS data collection procedure was completely separate from regular FAP activities. Names or identifying information for participants were not revealed to anyone, including FAP staff. No identifying marks were allowed on paper records of study data. All records were maintained by code number only. All records and data are stored and maintained outside of the states of the participating bases. All data are reported only in aggregate form and are not separated by base or location. All project staff signed a confidentiality oath and were thoroughly trained in the confidentiality procedures used in the project. A Certificate of Confidentiality was obtained from the U.S. Department of Health and Human Services to protect the project data from compelled disclosure.

The project used a progressive person in danger protocol for assessing, judging, and responding to situations discovered where a participant may have been in imminent danger or a serious threat of harm existed, and confidentiality had to be broken for human protection. This protocol is similar to those used in previous studies and was designed to offer the highest levels of confidentiality while providing appropriate responses to situations of risk or danger. This protocol was disclosed and discussed in the informed consent process.

## Information Collected from Adult Participants

As noted above, participants in the FAP sample completed structured in-person interviews. These interviews were completed at all 4 assessment points. Diagnostic interviews assessing major depression and posttraumatic stress disorder were also administered, and participants completed a set of standardized measures. Information collected in these interviews included:

- Demographic characteristics
- Family history
- Victimization history
- Family and other interpersonal violence perpetration
- History of substance use and abuse
- Navy history
- Criminal history
- Service Utilization and Feedback

Assessment of victimization and perpetration history followed currently accepted procedures for this sort of assessment. Adults were asked multiple behaviorally-specific questions within each class of violence. Past research has shown that assessments using multiple screening questions that are behaviorally-specific typically yield more accurate results than single “gate” questions, or questions that are more vague in their descriptions. Many of these victimization questions and the diagnostic interviews were revisions of the interview used in the Women’s Study and the Men’s Study – similar in-person interviews (see for example Williams, Siegel, & Pomeroy, 2000).

Adults also completed a battery of standardized assessment measures. The standardized measures included:

- Trauma Symptom Inventory
- Child Behavior Check List
- Family of Origin Scale
- Dyadic Adjustment Scale
- Derogatis Sexual Functioning Inventory
- Parent Perception Inventory (parent form)
- Child Abuse Potential Inventory
- Family Environment Scale
- Cattell 16 Personality Factor Inventory
- Index of Self-Esteem
- SCL-90-R
- Children(s) Sexual Behavior Inventory
- Relationship Scales Questionnaire

Each of these measures is a well-accepted scientific measure with levels of reliability and validity. Each is commonly used in behavioral science research.

## Results for FAP Sample Adult Participants

### Demographics

During the first wave of the study (T1) we interviewed at least one person in each of 530 families who participated in the Navy Family Study. The total number of adults interviewed was 864. Of the 864 adults, 379 (44%) are male and 485 (56%) are female. Some analyses examine the characteristics and responses of males and females (i.e., the fathers/husbands and mothers/wives) and other analyses separate the adults into two groups, namely the alleged offending parents (OP) and non-offending parents (NOP).

The table below presents the demographic characteristics of 478 NOPs and 384 OPs interviewed at T1. In the full sample the majority of the NOPs (non-offending parents) are female (85%). Of the OPs the majority (80%) were male. The average age of non-offending and the offending parents at the time of the index report to FAP was 30. Over half of each group was white (European American) and nearly one-third were African American. Between 8 and 9 % of the adults were Hispanic/Latino and the NOPs were more likely to be Asian (4.5%) than the OPs (1.9%).



## Demographic Characteristics of NFS Adult Participants

	NOP (N = 478)	OP (N = 384)
<b><u>Gender</u></b>		
Male	15.0%	79.7%
Female	85.0%	20.3%
<b><u>Race/ethnic</u></b>		
African-American	29.1%	32.2%
White	56.0%	55.6%
Hispanic	8.3%	9.0%
Asian	4.5%	1.9%
Native American	0.4%	0.0%
Mixed	1.7%	1.3%
<b><u>Average Age</u></b>	30	30

Many of the adults had attended or graduated from college and only a small proportion (2.4 % of the OPs and 7.4% of the NOPs) had not completed high school. The educational level of the sample reflects the requirements for enlistment in the Navy. Most of the OPs were Navy service members (80%). Only 26% of the NOPs were in the Navy. In regard to the income level of the adults, there were more discrepancies between OPs and NOPs. More than a quarter of the non-offending parents had no personal income while only 7.6% of the offending parents were similarly situated. Thus, non-offending parents tended to have lower personal economic resources than did the perpetrators.

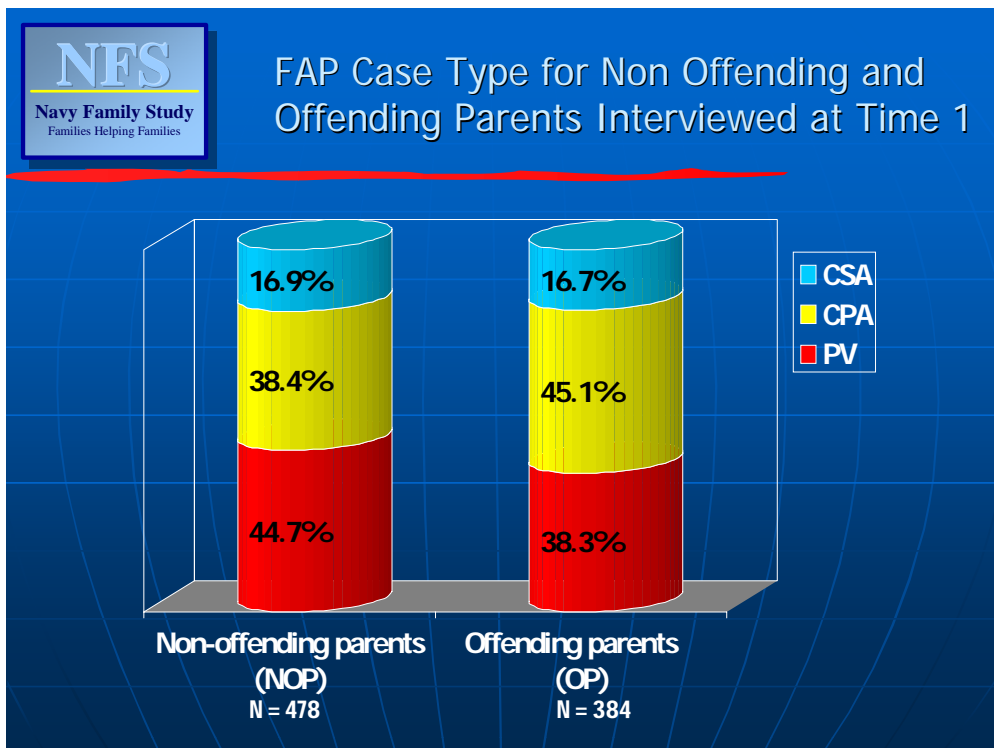
Most of the study participants who were in the Navy were enlisted personnel. The rank of the Navy service member non-offending parents at the time of the index report to FAP ranged from E1 to O4, with E4 (27%) as the most common rank. The rank of Navy service member perpetrators ranged from E1 to O6, with E5 as the most frequently reported rank.

It should be noted that these demographic characteristics are not representative of all FAP-referred clients. This sample is likely older and of higher rank as it was a requirement of the study that each couple have at least one child. For example, many of the couples referred to FAP for partner/ spousal violence are younger, relatively more recent recruits with no children-- participants left out of this study. We also over-sampled cases of child sexual abuse-- commonly cases that involve the abuse of a child older than age seven by a perpetrator over age 30.

## FAP Case Type


Of 530 families in our sample 261 (46%) were reported to FAP for partner violence, 211 (40%) were reported for child physical abuse and 99 (17%) were reported for child sexual abuse (note the figures reflect the fact that 41 families were reported for two or more types of abuse). Of the NOPs interviewed 44.7% were known to FAP due to a report of PV, 38.4% due to a report of CPA and 16.9% due to a report of CSA. Of the OPs interviewed 38.3% were known to FAP due to a report of PV, 45% due to a report of CPA and 16.7% due to a report of CSA. Again, it should be noted that these percentages do not reflect the actual breakdown of all FAP cases because of the sampling scheme used in selecting cases. Because of the very large volume of partner violence cases and the substantial number of child physical abuse cases, families referred to FAP for these types of violence were randomly sampled. However, all cases of child sexual abuse were eligible for the study. These numbers also reflect the willingness of individuals to participate in the study and the ability of researchers to locate the individuals.

The graph below illustrates the breakdown of the type of case report that brought the adults in the interviewed sample into contact with FAP.



Another way of looking at the sample and analyzing the data is comparing the findings for the adult males and adult females (fathers and mothers) who participated in the NFS.

The table below presents the demographic characteristics for the 379 males and 485 females interviewed in the FAP study. Over half of each group was identified as Caucasian, and about 30% were African American. The median age of the interviewed males was 30.5 and the women were on average 29.7.



## Demographic Characteristics of NFS Adult Participants

	<b>Males</b> ( <i>n</i> = 379)	<b>Females</b> ( <i>n</i> = 485)
<b><u>Race</u></b>		
Asian	2.4	4.4
Black	30.7	29.3
Hispanic/Latino	8.2	8.5
Caucasian	57.4	54.3
Other	1.4	3.5
<b><u>Age</u></b> (M (SD))	30.5 (6.6)	29.7 (7.1)

### Reports of Partner Violence in all Case Types

Our interview data reveal a great deal of overlap of case types. Many families reported to FAP for one type of abuse such as Partner Violence (PV), Child Physical Abuse (CPA) or Child Sexual Abuse (CSA) also have reported to us a history perpetrating other types of abuse.

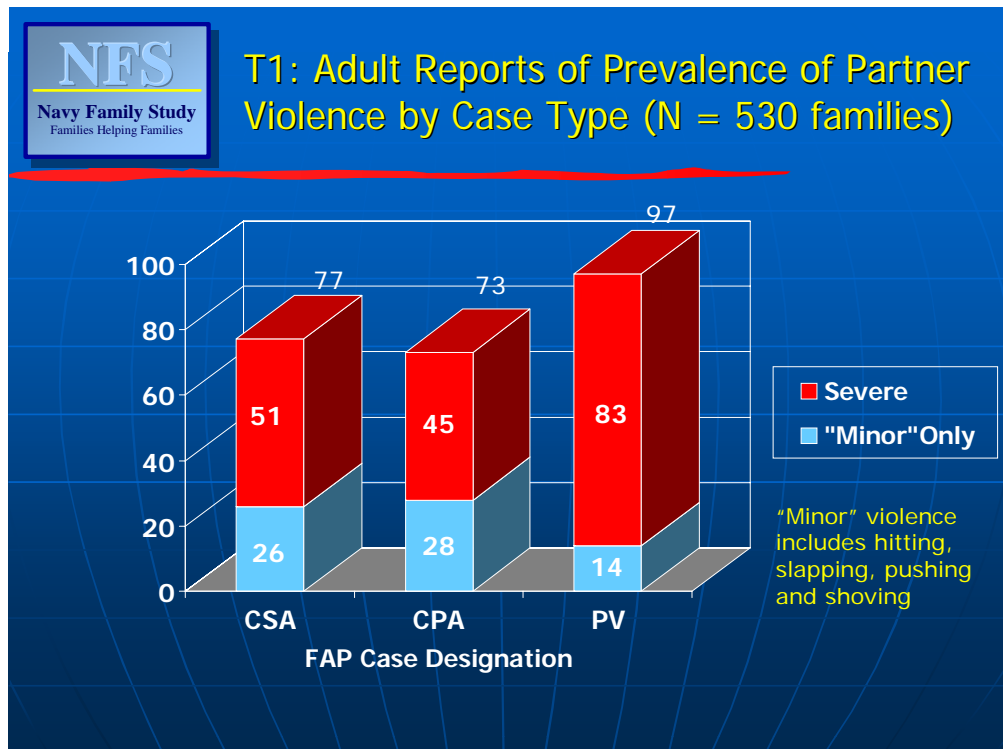
Based on the reports of the adults from families interviewed at T1 [using a behaviorally-specific screening tool for partner violence, based on a modified version of the Conflict Tactics Scale (Straus, 1990)] a very large percentage (91%) of the couples in these families had experienced partner-directed emotional abuse, 84% had experienced at least one act of physical violence, and 63% had experienced at least one act of severe partner violence. We defined severe violence as acts highly likely to lead to injury and included reports of any prior occurrence of threatening with weapons, beating up, kicking, punching, hitting with objects, choking, burning or scalding, and threatening to kill or have someone else kill the partner.

The graph which follows breaks these data down and provides the prevalence of PV for each FAP case type as reported to us in the T1 interview. The first set of bars in the graph below reveals that in families reported to FAP due to allegations of child sexual abuse (CSA) 51% told the NFS Interviewer about prior severe abuse of one partner by the other. In 45% of the families that came to the attention of FAP due to allegations of child physical abuse (CPA) adults told the researchers about severe physical abuse of one partner by the other. And, not surprisingly, in 83% of the families reported to FAP for

partner violence (PV) at least one of the adults told us about severe partner violence that had occurred.

The data presented here on violence overlap are based on questions that cover the entire relationship of a couple, not only the "index" incident that brought them to the attention of

FAP and into our study. These data, however, make it clear that the majority of families known to FAP experienced prior incidents of partner violence and much of the violence they describe is severe. These findings have important implications for FAP services including intake procedures, safety planning and case management. Based on the large numbers of couples who reported to us that violence has been a problem in their relationship, thorough screening by FAP caseworkers for partner violence in all FAP-referred families is an important first step.




## Impact of Partner Violence on Non-offending parents from any case type (as measured at T1)

As further confirmation of the need to address issues of partner violence in families known to FAP, we have found that for female non-offending parents one critical factor associated with higher levels of trauma symptoms is a prior history of severe violence by the spouse/partner. For this analysis we compared the trauma symptom levels of the adult female participants-- examining differences in scores between NOPs who were referred to FAP due to CSA, CPA and PV. We found few differences in trauma scores in these groups. However, when we examine the Trauma Symptom Inventory (TSI) (Briere, 1995) scores for female NOPs and compare the scores of the 205 women who report having experienced severe spousal/ partner violence at the hands of the current partner with those (n=187) who report no such experiences we find significant and meaningful differences in trauma scores on all of the items measured. In every area of trauma symptoms measured (i.e., anxious arousal, depression, anger, intrusive experiences, defensive avoidance, dissociation, sexual concerns and dysfunction, impaired

self-reference, and tension reduction behavior) the NOPs who have experienced severe partner violence have higher scores. We see that many of the women who experienced severe partner violence at the hands of their current partner *at any time in the past* scored above the clinical cut-off for symptoms at the T1 interview-- indicating that these are significant problems for them. Our findings indicate that the level of distress and depression they are experiencing at the time of referral to FAP is high.

The percentage of this sample of women with symptom scores in the clinical range is found in the parentheses in the table below. Notably from 16% to 28% of the women with a history of severe victimization by a partner fall into the clinical range on depression, intrusive experiences, defensive avoidance, and sexual concerns. While a number of other factors also contribute to these high scores (see the next section of this report), it is important to be aware of this strong association between the women's history of severe partner violence and trauma symptoms at the time of referral to FAP. Asking all adults who have contact with FAP about such experiences can help identify individuals who are in need of additional services from FAP and from other Navy or civilian programs.



Female NOP Trauma Symptom Inventory (TSI) Scores (% above clinical cutoff) at T1 interview by Severe Partner Violence

TSI scale	No Severe PV (N=187)	Severe PV (N=205)
Anxious Arousal*	6.4 (8.6)	7.8 (10.7)
Depression**	6.2 (8.6)	9.0 (16.6)
Anger Irritability**	7.3 (5.3)	9.2 (11.2)
Intrusive Experiences**	5.2 (7.0)	8.7 (22.4)
Defensive Avoidance**	6.8 (11.2)	11.0 (28.8)

\*p<.05 \*\*p<.01

## Understanding Mental Health and Victimization of Men and Women in the FAP sample

A growing knowledge base documents the prevalence of exposure to traumatic events among both children and adults and the profound negative impact victimization has on mental health in both the short- and long-term. This has led to recent calls for further examination of the complexity of trauma in families including the co-occurrence of various forms of family and interpersonal violence (e.g. Bentovim, 1992; Slep, 2001).

Recent research has begun to examine notions of “cumulative adversity” (Turner & Lloyd, 1995, p. 360) or the additive impacts of many different types of stresses across the lifespan in relation to mental health. Some research has examined re-traumatization as a mediator between maltreatment and mental health outcomes. For example, Cloitre, Scarvalone, and Difede (1997) showed the additional mental health consequences of being sexually abused in childhood and again in adulthood. Turner and Lloyd (1995) and Follette, Polusny, and Naugle (1996) showed the mental health impacts of exposure to different types of trauma added together over the lifespan. Banyard, Williams and Siegel (2001) documented the way that re-traumatization mediated the relationship between child sexual abuse and adult mental health outcomes.

The purpose of this section of the report is to provide an overall description of the mental health as self-reported by adults in the FAP-referred sample of the Navy Family Study and the impact of self reported trauma experiences on psychological distress.

### Methods used in these analyses

This section of the report is based on self-report data by adults, combining both offending parents (OPs) and non-offending parents (NOPs), who were part of the Navy Family Study.

*Time one (T1) data.* At the first time point, participants were asked a series of behaviorally specific questions about experiences with physical and sexual abuse in childhood and whether they had witnessed violence between parental figures. They were also asked a series of questions about past partner violence and sexual assault victimizations. At T1 participants also completed the Trauma Symptoms Inventory (TSI) (Briere, 1995) and the Brief Symptom Inventory (SCL-90) (Derogotis & Cleary, 1977; Derogotis, Lipman, & Covi, 1973) as measures of current mental health functioning.

The TSI is a 100-item inventory of mental health symptoms. It includes ten sub-scales: anxious arousal, depression, anger, dissociation, sexual concerns (dissatisfaction with sexuality, negative thoughts or feelings about sex, shame or problems in sexual relationships), dysfunctional sexual behavior (behaviors of a sexual nature that may be problematic including getting into trouble because of sexual behavior, using sex to deal with loneliness, sexual attraction to dangerous persons), intrusions, defensive avoidance, impaired self reference, and tension reduction behavior. Higher scores indicated a greater number of symptoms.

The SCL-90 consists of ten subscales and a global total score of symptoms of psychological distress. Respondents are asked to indicate how much they were distressed by each in a series of symptoms in the past seven days. Responses are given on a five point scale with "0" indicating "not at all" and "4" indicating "extremely." Scores are calculated as the mean response for each subscale. The subscales are as follows; somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, PTSD, and Global severity.


*Time two and three (T2 & T3) data.* At these points in the study, the information relevant to this section of the report was a series of behaviorally specific questions about whether the participant had experienced any physical partner violence or sexual abuse since the incident for which they were referred to FAP.

*Time four (T4) data.* Participants were again asked about re-victimization since the last time they were interviewed. This included behaviorally specific questions about both physical partner violence and sexual assault. At this time participants again completed the Trauma Symptom Inventory and SCL-90 as measures of mental health symptoms.

## Adult Mental Health

Our findings below indicate that a significant number of adults in the FAP sample experienced a range of mental health symptoms on both the TSI and SCL-90. While women reported higher levels of mental health symptoms than did men, nearly one quarter of the men reported significant symptom levels. Overall, 228 participants or 28.1% of the adults (23% of men and 32% of women) had scores in the clinical range on at least one subscale of the TSI.

The most prevalent symptoms in the clinical range in the adult sample include sexual concerns and problematic behaviors (e.g., sexual dissatisfaction, unwanted sexual thoughts and feelings, sexual dysfunction), use of tension reducing behaviors (such as suicide threats, self-mutilation, anger outbursts), intrusions (e.g. flashbacks, nightmares), and defensive avoidance (e.g. pushing painful thoughts out of one’s mind, avoiding things that remind one of difficult events).



### Adult Mental Health when Referred to FAP: NFS Time 1—TSI results

TSI Mental Health Scale Results at T1	Average Total Scores	Females (N=466)	Males (N=367)	Gender difference (two tailed t-test)
Anxious arousal	6.04 (5.16)	7.00(5.48)	4.82(4.44)	-6.19***
Depression	6.17 (5.80)	7.54(6.08)	4.43(4.91)	-7.97***
Anger/irritability	7.44 (5.98)	8.31(6.11)	6.33(5.61)	-4.82***
Intrusions	5.79 (5.72)	6.88(6.06)	4.40(4.93)	-6.39***
Defensive avoidance	7.66 (6.33)	8.80(6.67)	6.21(5.55)	-5.98***
Dissociation	4.70 (4.73)	5.39(5.08)	3.83(4.10)	-4.77***
Sexual concerns	4.22 (5.04)	4.32(5.22)	4.09(4.81)	-.67
Dysfunctional sex beh	2.61 (3.98)	2.60(4.00)	2.63(3.96)	.12
Impaired self reference	5.49 (5.23)	6.22(5.50)	4.56(4.71)	-4.59***
Tension reducing behs	2.83 (3.42)	3.16(3.69)	2.41(2.98)	-3.16**

\*\*\* p<.001; \*\* p<.01

## Adult Mental Health when Referred to FAP: NFS Time 1—SCL-90 results

SCL-90 Scale scores at T1	Average Total Scores (N=779-829)	Females (N=466)	Males (N=367)	Gender difference (t-test)
Somatization	.58(.63)	.72(.71)	.40(.46)	-7.58***
Obsessive compulsive	.73(.72)	.84(.78)	.60(.60)	-4.81***
Interpersonal sensitivity	.65(.67)	.76(.72)	.51(.56)	-5.32***
Depression	.90(.80)	1.07(.86)	.68(.70)	-7.11***
Anxiety	.50(.63)	.58(.69)	.39(.54)	-4.16***
Hostility	.59(.68)	.66(.71)	.51(.63)	-3.22***
Phobic Anxiety	.23(.46)	.30(.55)	.13(.28)	-5.47***
Paranoid Ideation	.75(.73)	.78(.75)	.71(.69)	-1.26 (not signif)
Psychoticism	.37(.50)	.41(.52)	.33(.47)	-2.41*
PTSD	.58(.58)	.68(.63)	.45(.48)	-5.77***
Global severity		.71(.62)	.48(.46)	-5.91***

p<.05; \*\* p<.01; \*\*\* p<.001


## Adult Mental Health when Referred to FAP: NFS Time 1—TSI % in clinical range

TSI Mental Health Scale—Adults in Clinical Range at T1	% in clinical range	Females (N=466)	Males (N=367)	Gender difference (Chi square)
Anxious arousal	7.1%	9%	4.6%	5.99**
Depression	9%	10.9%	6.5%	4.82*
Anger/irritability	7.3%	9%	5.2%	4.42*
Intrusions	11.9%	14.8%	8.2%	8.56**
Defensive avoidance	11.8%	16.1%	6.3%	19.01***
Dissociation	7.1%	8.1%	5.7%	1.82 (not signif)
Sexual concerns	8.5%	10.5%	6%	5.34*
Dysfunctional sexual beh	9.5%	9.9%	9%	.18 (not signif)
Impaired self reference	7.9%	9.4%	6%	3.31 (not signif)
Tension reducing behs	10.2%	12.9%	6.8%	8.24**

\* p<.05; \*\* p<.01; \*\*\* p<.001

# The Interpersonal Violence Victimization History of Men and Women Referred to FAP

The interpersonal violence victimization histories for women and men in the FAP sample are compared in the following Table using data from T1.



## Adult Interpersonal Violence Victimization History: NFS Time 1

Victimization history as reported by adults at T1	Total Sample (n=842-862) Number (%)	Women (N=473-483)	Men (N=369-378)	Gender difference (Chi square)
Physical abuse as child	326 (37.9%)	37.3%	38.6%	.17 (not signif)
Sexual abuse as child	429 (50.2%)	59.7%	38%	39.59***
Witness PV as child	259 (30.2%)	31.6%	28.5%	.99 (not signif)
Physical partner violence	600 (71.3%)	71.7%	70.7%	.09 (not signif)
Severe partner violence	438 (52%)	56.2%	46.6%	7.69**
Sexual assault as adult	192 (22.3%)	35.1%	5.8%	105.27***
Emotional abuse as adult	665 (78.9%)	80.3%	77%	1.37 (not signif)

\*\* p<.01; \*\*\* p<.001

Many of the women and men in the sample of adults referred to FAP had serious victimization histories in childhood and as adults. Over a third were physically abused as a child. Many were sexually victimized in childhood – three out of every five women and nearly two out of every five men reported

experiencing child sexual abuse. In adulthood, physical assault by a partner, and severe physical abuse and emotional abuse were prevalent for a majority of men and women. Sexual assault in adulthood was frequent for women, with 35% reporting such victimization history.

We found high rates of co-occurrence of trauma experiences. Remarkably, only 63 participants (7.6%) reported no victimizations. Total scores for the rest of the sample ranged from one to six victimizations with the mean number of types of victimization being 2.71 (SD = 1.18). Fourteen percent of the sample reported having experienced all three types of childhood abuse (physical, sexual and witnessing violence).

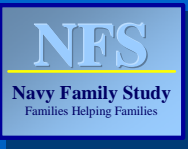
## Links between Victimization and Adult Mental Health Symptoms at T1

Correlational analysis was used to examine the relationship between victimization history reported at T1 and the range of mental health symptoms. Reports of having experienced child physical abuse, child sexual abuse, or child witness to parental partner

violence were all associated with higher levels of reported symptoms on all of the TSI subscales and the SCL-90 global severity index. This was also true for the adult victimization variables assessed at time one. Self report of having experienced any of these adult victimizations was significantly related to higher symptom scores on all TSI subscales and the global severity scale of the SCL-90. Thus, those with higher levels of psychological distress in the adult sample were more likely to have experienced victimization across the lifespan. We also found that the greater the number of types of trauma experienced, the higher the reported symptoms across all subscales of both the TSI and the SCL-90.

## Changes in Adult Mental Health Over Time: NFS Time 4

In order to examine the changes in adult MH scores in the clinical range on the TSI we compared the T1 and T4 scores.



**Changes in Adult Mental Health Over Time: NFS Time 4**

Change in TSI score in clinical range (comparing T1 scores with T4 scores)	Total sample (N=426)	Women (N=235)	Men (N=191)
Not in clinical range at either time	280 (65.7%)	61.7%	70.7%
In clinical range both times	48 (11.3%)	14.9%	6.8%
Moved into the clinical range by time 4	21 (4.9%)	4.7%	5.2%
Moved out of the clinical range by time 4	77 (18.1%)	18.7%	17.3%

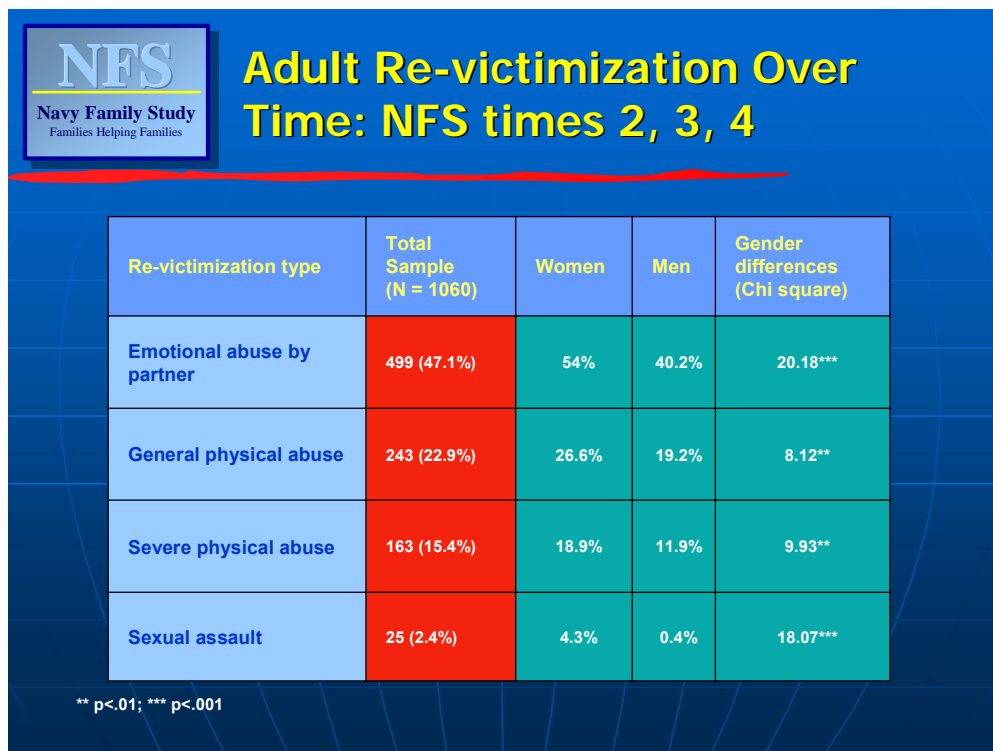
Overall, for most participants, they were consistent in whether or not they reported any symptoms in the clinical range on the TSI when we compared T1 and T4 scores. An interesting minority (18%), however, reported *improvement* in symptoms over time and at T4 no longer had any TSI symptom scores in the clinical range. In fact,

when difference scores were computed by subtracting time one scores from time 4 scores, on average, symptom scores across subscales decreased. Eleven percent of the adults remained in the clinical range at both T1 and T4 and nearly one in 20 who did not have symptoms in the clinical range at the T1 interview developed clinically significant symptomatology by the T4 interview (36-40 months later). Interestingly there were no gender differences in proportion who changed scores from T1 to T4 on mental health symptoms.

## Adult Re-victimization Over Time: NFS times 2, 3, 4

Variable construction for these analyses was complex and took several time points and many interview questions into account. For purposes of this report composite scores were created by initially assigning all NFS adult participants a “0” for revictimization” in each category. This was recoded to a “1” if at any re-interview time point they indicated that a (re)victimization had occurred. These results should be interpreted with caution as some of the participants who were coded as “0” may in fact really have been re-victimized but have missing data due to missed follow up interviews.

These results indicate that adults in the NFS sample continue to report high rates of victimization, in the form of re-victimization following their referral to FAP. More than



one in four women reported being the victim of at least one new physical assault during the study period. One in five women reported a new severe beating or assault by a partner. In fact, 506 participants (47.7%) reported at least one form of re-victimization in the form of severe physical partner violence, emotional abuse, and sexual

abuse. We found significant gender differences with women reporting higher rates of re-victimization across all types of violence. Clearly trauma continues to be an ongoing part of FAP family’s lives even after referral to services.

## Re-victimization and Adult Mental Health: NFS Time 4

Correlational analyses were conducted to examine the relationship between re-victimization variables and mental health outcomes (see table below).

NFS


Navy Family Study  
Families Helping Families

### Re-victimization and Adult Mental Health: NFS Time 4 (correlations)

Mental health outcome measured at the T4 interview	Emotional revictimization (T4)	Physical revictimization (severe) (T4)	Sexual revictimization (T4)
TSl anxious arousal	.13**	.11*	.25***
TSl depression	.19***	.19***	.24***
TSl anger/irritability	.17***	.15***	.23***
TSl intrusive experiences	.09*	.12**	.19***
TSl defensive avoidance	.19***	.17***	.22***
TSl dissociation	.15***	.17***	.18***
TSl sexual concerns	.15***	.10*	.17***
TSl dysfun sex behavior	.12**	.26***	.24***
TSl impaired self reference	.17***	.17***	.28***
TSl tension reduction beh	.15***	.25***	.32***
SCL-90 global severity	.16***	.16***	.23***

Correlations were also computed between victimization history as reported at T1 and re-victimization variables.



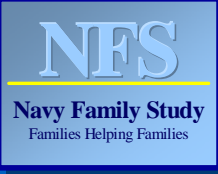
### Victimization and Re-victimization (correlations)

Time 1 victimization report	Emotional revictimization (T4)	Physical revictimization (severe) (T4)	Sexual revictimization (T4)
Childhood physical abuse	.08*	.05	.08*
Childhood sexual abuse	.12***	.12***	.09**
Child witness violence	.08*	.01	.07*
Adult emotional abuse	.31***	.19***	.06
Adult severe physical abuse	.18***	.23***	.08*
Adult sexual assault	.10**	-.00	.12***

\* p<.05; \*\* p<.01; \*\*\* p<.001

In many instances, those with serious victimization histories reported at T1, were more likely to be revictimized during the course of the study (by T2, T3 or T4 reinterview).

Finally, a series of regression equations were computed. Each subscale of the TSI was used as the dependent variable. The T1 score for that TSI scale was entered on the first step to control for T1 reports of mental health symptoms. Three re-victimization variables (emotional abuse, severe physical partner violence, and sexual assault) were then entered on the next step.



## Table of regression equations on Adult Mental Health in NFS sample

Outcome Variable Predictors	R <sup>2</sup>	β
<b>1. TSI anxious arousal time 4</b>		
Step 1: Time 1 TSI anxious arousal	.27***	.50***
Step 2: Emotional re-victimization	.32***	.02
Severe physical re-victimization		.07
Sexual re-victimization		.20***
<b>2. TSI depression time 4</b>		
Step 1: Time 1 TSI depression	.28***	.49***
Step 2: Emotional re-victimization	.34***	.05
Severe physical re-victimization		.11**
Sexual re-victimization		.18***
<b>3. TSI anger/irritability time 4</b>		
Step 1: Time 1 TSI anger/irritability	.28***	.50***
Step 2: Emotional re-victimization	.34***	.06
Severe physical re-victimization		.08a
Sexual re-victimization		.21***
<b>4. TSI intrusive experiences time 4</b>		
Step 1: Time 1 TSI intrusive experiences	.29***	.53***
Step 2: Emotional re-victimization	.31**	-.02
Severe physical re-victimization		.05
Sexual re-victimization		.13***

a p<.10; \* p<.05; \*\* p<.01; \*\*\* p<.001

These analyses reveal that reports of having been re-victimized whether emotionally, physically, or sexually, were associated with higher symptom scores on all TSI subscales and with higher scores on the SCL-90 global severity index at T4. Victimization history at T1, especially child sexual abuse and a history of any type of adult partner violence, made a report of re-victimization between times one and four more likely. Re-victimization after referral to FAP, however, contributed significantly to higher levels of mental health symptoms at T4 even after controlling for level of symptomatology at T1.



## Table of regression equations on Adult Mental Health in NFS sample

Outcome Variable Predictors	R2	β
<b>5. TSI defensive avoidance time 4</b>		
Step 1: Time 1 TSI defensive avoidance	.31***	.52***
Step 2: Emotional re-victimization	.34***	.05
Severe physical re-victimization		.08*
Sexual re-victimization		.15***
<b>6. TSI dissociation time 4</b>		
Step 1: Time 1 TSI dissociation	.22***	.44***
Step 2: Emotional re-victimization	.25***	.03
Severe physical re-victimization		.13**
Sexual re-victimization		.13**
<b>7. TSI sexual concerns time 4</b>		
Step 1: Time 1 TSI sexual concerns	.13***	.34***
Step 2: Emotional re-victimization	.16***	.07
Severe physical re-victimization		.04
Sexual re-victimization		.14***
<b>8. TSI dysfunctional sexual behavior time 4</b>		
Step 1: Time 1 TSI dysfunctional sexual behavior	.19***	.40***
Step 2: Emotional re-victimization	.27***	-.00
Severe physical re-victimization		.20***
Sexual re-victimization		.21***

A p<.10; \* p<.05; \*\* p<.01; \*\*\* p<.001



## Table of regression equations on Adult Mental Health in NFS sample

Outcome Variable Predictors	R2	β
<b>9. TSI impaired self reference time 4</b>		
Step 1: Time 1 TSI impaired self reference	.26***	.48***
Step 2: Emotional re-victimization	.34***	.03
Severe physical re-victimization		.11**
Sexual re-victimization		.24***
<b>10. TSI tension reduction behavior time 4</b>		
Step 1: Time 1 TSI tension reduction behavior	.24***	.44***
Step 2: Emotional re-victimization	.35***	-.00
Severe physical re-victimization		.17***
Sexual re-victimization		.29***
<b>11. SCL-90 global severity time 4</b>		
Step 1: Time 1 SCL-90 global severity	.31***	.51***
Step 2: Emotional re-victimization	.36***	.05
Severe physical re-victimization		.11**
Sexual re-victimization		.17***

A p<.10; \* p<.05; \*\* p<.01; \*\*\* p<.001

Sexual re-victimization was significantly related to all sub-types of symptoms at T4. Severe physical abuse was particularly important for understanding higher symptoms of overall problems as measured by the SCL-90, impaired self reference, tension reduction behavior, dysfunctional sexual behavior, dissociation, and depression.

Emotional abuse was not significantly related to mental health outcomes except in its association to sexual and severe physical abuse. This may be because of the broad measure of emotional abuse used that included a wide range of behaviors some of which might be more distressing than others.

## **Implications of findings on Mental Health and Victimization of FAP-referred Adults**

A number of implications can be drawn from these results that highlight the range of presenting mental health concerns of adults seen at FAP:

1. A significant number of adults in the Navy Family Study report symptoms that put them in the clinical range for a psychological problems including anxiety, depression, and sexual concerns.
  - Adults referred to FAP because of a report of family violence should be offered a range of mental health services and should receive comprehensive screening for psychological distress regardless of the nature of the emergent incident.
2. A substantial number of adults referred to FAP report childhood histories of family violence as well as histories of interpersonal violence victimization as adults.
  - Intake procedures should include comprehensive, behaviorally specific screening for victimization history.
3. Victimization histories are related to reports of higher rates of a range of mental health symptoms as well as to future revictimization.
  - Assessment of client functioning should include trauma symptom assessment.
  - Stage oriented trauma treatment that includes empirically supported PTSD treatment (e.g. Foa, Keane, & Friedman, 2000) interventions to help with stabilization, processing of trauma, and reconnection with supports and resources (e.g. Herman, 1992) should be made available.
  - Ongoing staff training related to trauma treatment and staff support to prevent vicarious traumatization (e.g. Pearlman & Saakvitne, 1995).

4. Revictimization even after involvement with FAP is a problem for a significant number of adults and this revictimization is predictive of mental health over time.
  - Ongoing safety planning is needed for families dealing with interpersonal violence.

## **Findings on the Partner Violence Sample**

### **Demographic Characteristics of the FAP-Identified Spousal/ Partner Violence Sample**

Of the 530 families in the NFS, 261 (49%) were reported to FAP for spousal/partner violence (PV). Although most were reported to FAP for PV only, 7% of these families were dual reported cases, that is, they were also concurrently reported for another type of family violence. These analyses focus on these 261 families (officially identified by FAP at intake as spousal/ partner violence cases). In these families the majority of the alleged perpetrators were males (85.7%). The adults in this PV sample are on average slightly younger than those in the full NFS sample. Examining the demographics of all of the 261 PV families (not just the interviewed adults) the average age of perpetrators at the time of the index report to FAP was 29. The average age of adult victims was 28. Alleged perpetrators of PV were almost as likely to be African American (40.2%) as Caucasian (43.8%). Forty-four percent of the adult PV victims were Caucasian and 37.2% were African American.

As in the overall sample, most of the alleged PV perpetrators were Navy service members (82%), and most of the PV victims were not in the Navy (76%). Also as in the overall sample, regardless of role, most of the Navy service members were male. Of the male alleged perpetrators 95% were Navy personnel while only 14% of the female alleged perpetrators were Navy service members. Similarly, 94% of the male PV victims were Navy personnel while only 14% of the female PV victims were in the Navy. The military rank of Navy service member perpetrators at time of the index report to FAP ranged from E1 to O3, with the two most frequently reported ranks being E4 (32%) and E5 (28%). The rank of the 57 Navy service member PV victims ranged from E1 to E7, with E5 (28%) and E3 and E4 (26% each) the most frequently reported rank.

### **The FAP-Identified Intimate Partner Violence Sample: Context of the Violence**

Among the 261 families reported to FAP for spousal/ partner violence, we interviewed 171 alleged perpetrators (OPs) and 248 victim-partners (NOPs). The majority of alleged PV perpetrators were male (85.8%) and the majority of these interviewed PV victims were female (87.5%)

*Partner Violence Frequency.* A frequency of partner violence score was determined in one of two ways: In cases in which we had the report of only one adult, that adult's report was used; in cases in which both adults were interviewed by the NFS and provided frequency information, an average score was generated and used. We provide the median (mid-point) reported frequencies here because extreme values of this measure skew its mean.

The range of frequencies of PV incidents reported was one to 150 incidents. For the vast majority of PV families, the alleged perpetrator's physical abuse of the victim was not a one-time occurrence. At the time of our first interview, only 18% of study participants reported that there was "only" one solitary incident. The median number of PV incidents perpetrated by the alleged offender by the T1 interview (including the index incident) was three. However, the reported frequency of PV incidents differed based on the gender of the identified perpetrator. The FAP cases involving a report of female-perpetrated PV were nearly twice as likely as male-perpetrated PV incidents to be one-time occurrences (31%,  $n = 36$  versus 16%,  $n = 214$ ). Female alleged perpetrators engaged in somewhat fewer incidents of PV overall than male alleged perpetrators. The median number of PV incidents committed by female perpetrators prior to our first interview was between two and three. The median number of PV incidents by male alleged perpetrators was between three and four.

*Alcohol and Drug Use.* There are many ways to examine the association of alcohol and drug use with PV in our sample of FAP-reported cases. Two of the measures we have examined with regard to alcohol use are reported here. One set of interview questions asks respondents whether the perpetrator was under the influence of drugs or alcohol at any time when an act of PV was committed. Any "yes" answers by the perpetrator, the victim, or both to these questions were treated as a yes response to the question of whether there was any perpetrator alcohol or drug use during incidents of PV. In almost half of the PV cases (49%,  $n = 246$ ), the alleged perpetrator had used alcohol and/or drugs during at least one PV incident. Male perpetrators were nearly twice as likely as female perpetrators to have used alcohol or drugs in conjunction with an incident of PV (53%,  $n = 210$  versus 28%,  $n = 36$ ).

There are several ways of obtaining a measure of whether a respondent has an on-going alcohol or drug problem based on our T1 standardized measures and demographics data. The approach we have used here combines questions about frequency and volume of drinking in the past year to identify problem drinking patterns. Respondents are asked these questions about their own behavior. Of 171 alleged PV perpetrators in our sample, 28% reported an on-going problem with alcohol use at the time of the T1 interview. We found important differences in the rates of alcohol problems in male and female perpetrators. Of the 143 male perpetrators who answered these questions, 33% reported problems with alcohol in the past year. Of the 28 female perpetrators who answered these questions, 4% reported problems with alcohol in the past year.

As with our measure of past year alcohol use, we asked respondents about their own drug use in the past year. Past year drug use was defined as a "yes" answer to any of 11 questions about the use of illegal street drugs and the use of prescription

medications for non-medicinal ("recreational") purposes. Of the 164 alleged perpetrators for whom we have data on this measure, 9.8% reported some drug use in the past year. Female perpetrators were more likely than male perpetrators to report past year drug use (21%, n = 28 versus 7%, n = 136).

## **Emotional Abuse, Violence, and PV-Related Injury Ever in the Relationship**

There are several ways to obtain global or summary measures of categories of PV from our data. In these analyses we examine the data in terms of whether any adult reports any of a set of behaviors as having occurred (the case level). This level of analysis is the form that maximizes detection of PV because it utilizes multiple sources to obtain the information of interest.

Based on the entire sample of 261 families referred to FAP for PV, in the vast majority of cases some form of emotional abuse (97%) and physical aggression (97%) were reported by at least one adult as having occurred at least once prior to the T1 interview. Also important is the finding that in most of the cases (83%), at least one act of severe PV was reported to have occurred prior to the T1 interview. Sexual abuse/assault by the alleged batterer had occurred prior to the T1 interview in 17% of the PV cases.

These families also reported an extensive history of injuries related to PV. In 78% of the PV families at least one person in the couple had been injured by PV at least once. Victims (72%) were more likely than perpetrators (45%) to have ever been injured during PV incidents. These statistics reflect the serious history of violence that was reported to us for most of the FAP-referred spousal violence cases.

## **Emotional Abuse, Violence, and PV-Related Injury During the Index Incident (the incident that led to the report to FAP)**

While it is clear that the adults in FAP-referred PV cases report an extensive prior history of PV in the relationship with their partner, we also have data on the extent and nature of the violence that allegedly took place during the incident that brought the family to the attention of FAP. This incident is usually the focus of the FAP investigation. It is important to note that, in the majority of cases, some form of physical aggression (90%) was reported by at least one adult to have occurred during this Index Incident. In most of the cases (70%), at least one act of severe PV reportedly occurred during the Index Incident. Sexual assault, as measured by a single question about the use of force or threat of force to make one's partner have any type of sex (against his or her will), was reported to have occurred in 5% of these PV Index Incidents and emotional abuse was reported in 87% of the cases.

## Emotional Abuse and Violence During the Index Incident by Gender of the Perpetrator

To get a better sense of what types of acts of emotional abuse, physical violence, and sexual violence occurred during the Index Incident we examined what victims reported their partners had done during the Index Incident and categorized the data by gender of perpetrator. We then examined victim reports of injuries received during the Index Incident PV, categorized by gender of victim.

Male perpetrators were more often reported to have engaged in emotional abuse and physical aggression during the Index Incident, but male and female perpetrators were equally likely to have been reported to have used severe physical aggression in the index incidents (62%). Only male perpetrators were reported to have sexually assaulted their partners (6%). Emotional abuse included restricting victims' access to the telephone, verbally pressuring partners to have sex, and threatening to take the children away from the partner.

As has been found in other studies, the most commonly occurring category of PV acts, regardless of the gender of the perpetrator, is pushing, shoving, or grabbing. However, there were more reports of this behavior by males than by female perpetrators.

In one-quarter of the female perpetrator cases and nearly one-third of the male perpetrator cases, the partner was beaten up, kicked or punched. Men reported that female perpetrators were more likely to threaten them with a weapon (25.8%) and hit them with something that could hurt (19.4%). Women reported that male perpetrators were more likely to choke them (29.3%), threaten to kill or have them killed (15.3%), and to use force or threat of force to have sex (5.6%). The largest discrepancies in the behaviors of male and female alleged offenders were in the categories of pushing and shoving or grabbing and choking (only one female perpetrator was reported to have choked her partner). Only male perpetrators burned or scalded, threatened to kill or have someone kill the partner, or sexually assaulted her. The rate of occurrence of these serious acts in a single "index" incident is cause for grave concern.

High rates of reported injuries were also found in this sample of FAP-referred PV cases. One out of every eight women in our sample reported that as a result of the index incident that brought them to the attention of the Navy they had had a broken bone or serious cut or wound. Over one-half of the women had bruises, scrapes, a black eye or other injuries. Forty percent of the men also report suffering such injuries. Although the women were more likely to have received injuries that required a doctor's attention.

# Recidivism in a sub sample of families reported to FAP with allegations of male partner violence

## Background

Many battered women want their relationships to remain intact, at least for some period of time, despite the dangers they may face from their partners and the concomitant emotional abuse that most victims of intimate partner violence (PV) experience from their abusers. In many cases, this means years of risk past the initial PV incident (Hofeller, 1982; Horton & Johnson, 1993). The reasons for wanting to keep an abusive relationship going range from emotional attachment, to misattributions of blame and responsibility, to social and religious pressures, to economic, social, and personal safety barriers, and they are usually multiple (e.g., Barnett & LaViolette, 1993; Choice & Lamke, 1997; Mouradian, 2004). Regardless of the reasons, however, the desire of many PV victims to preserve their relationships and the determined persistence of some men to have access to their victims even after a relationship ends (Fleury, Sullivan, & Bybee, 2000; Johnson & Sacco, 1995; Mechanic, Weaver, & Resick, 2000), means many victims continue to be at risk for harm after the violence becomes publicly known and even after the perpetrator, the victim, or both have received some type of intervention service. Thus the problem of recidivism in PV cases is an important health and safety issue. A better understanding at the point of service contact of what predicts future PV, including what characteristics of the perpetrator and the abuse dynamics predict future PV and of which currently available interventions, if any, are associated with a decreased likelihood of future PV would help legal, social, mental health, and public health service providers better tailor or create interventions to circumvent this problem.

Just as the reasons for relationship maintenance in the face of PV have proven complex and varied, so have the explanations for why battering occurs in the first place and why it continues or desists. A diversity of batterer profiles and the sheer number of underlying correlates and risk factors which have been identified (Hotelling & Sugarman, 1986; Hilton & Harris, 2005; Tolman & Bennett, 1990). Most likely PV like other forms of aggression, is multiply determined. Battering behavior both may share etiology with other forms of aggression and have unique characteristics.

Much of what is known about PV recidivism is based on three types of studies: studies of violence continuation/desistance in longitudinal samples of newlyweds (Leonard & Senchak, 1996; Quigley & Leonard, 1996; Schumacher & Leonard, 2005) or young adults (Woffordt, Mihalic, & Menard, 1994); evaluation studies of the utilization and effectiveness of specific or coordinated interventions for PV (Gondolf & Jones, 2003; Maxwell, Garner, & Fagan, 2001); studies that have examined what factors predict recidivism in samples of men or couples who have all received a common treatment, such as arrest, batterer group intervention services (Gondolf & White, 2001), or couples counseling. Collectively, these studies have identified risk factors for PV recidivism that include the existence of verbal aggression/psychological abuse by the perpetrator (Schumacher & Leonard, 2005), severity and frequency of partner violence prior to intervention/the study follow-up period (Jones & Gondolf, 1997; Gondolf & White, 2001;

Quigley & Leonard, 1996; Tolman & Bhosley, 1991), alcohol/drug abuse by the perpetrator (Gondolf & White, 2001; Jones & Gondolf, 1997; Leonard & Senchak, 1996; Woffordt, Mihalic, & Menard, 1994), a history of generalized violence by the perpetrator (Gondolf & White, 2001), and a prior arrest history (Gondolf & White, 2001; Hamm, 1991; Maxwell, Garner, & Fagan, 2001). The findings on recidivism post batterer treatment are mixed (Gandolf, 2003; Dunford, 2002). A recent meta-analysis (Babcock, Green, & Robie, 2000) and multi-site quasi-experimental study (Gondolf & Jones, 2003), however, have found small to moderate desistance effects associated with completion of batterer treatment programs. Some research suggests that better results may be obtained depending on the fit of batterer characteristics with treatment modality (e.g., Saunders, 1996).

Analyses of the relationship of arrest to recidivism also have tended to include design flaws that have resulted in inconsistent findings and interfered with a determination of arrests' actual effects.

Intimate partner homicides of PV victims can be considered a special and the most extreme form of PV recidivism. Studies of risk factors for intimate partner homicides of battered women have identified some factors which also may be relevant to predicting PV recidivism generally. These include, but are not limited to, perpetrator's childhood history of exposure to family violence, drug and alcohol abuse by the perpetrator, perpetrator's attempts to control the victim's daily activities, extreme jealousy or possessiveness, injury to and stalking and sexual abuse of the adult victim by the perpetrator, and abuse of children in the home (Aldridge & Browne, 2003; Campbell, 1995).

The analyses presented here builds on PV recidivism and homicide research by testing predictive models of PV recidivism that include measures of PV dynamics, history and characteristics of the perpetrator, and the effects of interventions. Such comprehensive model testing is possible with data from the NFS. This analysis focuses on a sub-sample of couples where both were interviewed at several time points.

We predicted the following results from our current analysis of recidivism more than two years post-report:

- Violence would be more likely to be repeated by perpetrators with a history prior severe PV than by perpetrators of "minor" PV (severity was defined by the likelihood of injury associated with various acts, actual injury to the alleged victim, or both)
- Violence would be more likely to be repeated by perpetrators who had used PV more than once in the past than by those who were first-time offenders at the time of the report to FAP
- Violence would be more likely to be repeated by perpetrators who also had a history of physically and/or sexually abusing children in their care than perpetrators who had never done so.

We also examined financial control and social isolation of the woman by her partner, since these tactics would maximize her dependence on him and make it more difficult for her to leave. We predicted that perpetrators with a history of engaging in these control strategies would be more likely than perpetrators without such a history to recidivate PV.

We predicted that men who had experienced family violence during childhood would be more likely than men who had not to repeat violence. Across studies, the most consistently identified risk factor for PV among male perpetrators is childhood exposure to family violence (Hotelling & Sugarman, 1986; Tolman & Bennett, 1990). Both modeling effects for the use of any violence and for a pattern of repeated violence could be considered consistent with social learning theory (Bandura, 1977) explanations of PV since a recidivistic parental figure could be observed both to reap some benefits from and fail to experience (immediate) punishments for repeated acts of PV. We expected the relationship between childhood exposure to family violence and PV recidivism later in life to be strongest for men whose fathers had been perpetrators, reflecting an identification effect within the modeling effect.

We wanted to test the relationship of arrests for PV prior to the PV index incident with PV recidivism since specificity of arrest type should prove a better predictor of subsequent behavior than more general measures, but the infrequency of clear reports of this type of arrest in our data prevented this variable's use. However, because PV clearly is a type of violence, and there is a subset of batterers who have been identified in prior research who are characterized by a generalized violence pattern we tested the prediction that men who had been arrested/charged prior to the index PV incident for acts of violence would be more likely to engage in PV subsequently.

Alcohol and drug misuse are common concomitants to PV incidents, although the exact nature of the role substance abuse plays in PV dynamics and trajectories has not yet been established. Because altered cognitive states associated with alcohol and drug misuse can interfere with judgment (Chermack & Taylor, 1995) and because these "alternate states" are frequently invoked after the fact to excuse behavior (Critchlow, 1983), we predicted that men who reported problems with alcohol or drug use prior to/during the index PV incident would be more likely to recidivate than those who did not report substance abuse problems.

We predicted that if the couple had divorced by the last interview, the likelihood of recidivism would be reduced. We made this prediction based on the assumption that the end of the relationship should mean a relative lack of access to the victim for most perpetrators, which should in turn mean a relative lack of opportunity to repeat violence. However, as noted earlier, some men persist in contriving in-person contacts their former partners and, in some cases, assault them after the relationship has come to an end.

We predicted that system interventions including arrest, the provision of mental health and/or PV-specific services, and the perpetrator's perception of his command's response to the Index Incident would decrease the likelihood of repeat PV, since they all carry a message that the behavior is in need of change. In some cases, intervention failures also carry implications for additional sanctions against the alleged perpetrator. We tested perpetrator race, income, education, and Navy rank, although we made no specific predictions of how these variables would affect recidivism. Across studies inconsistent results have been obtained regarding whether and how racial and socio-economic variables are related to PV. For example, Woffordt, Mihalic, and Menard, (1994) found that higher occupational status was associated with an increased risk for

continued marital violence, and Maxwell, Garner, and Fagan (2001) found nonwhite status to be significantly related to a reduced likelihood of PV recidivism. Finally, based on the results of prior studies on PV intimate homicides, we predicted that perpetrators who also have sexually assaulted their partners would be more likely to recidivate than those who had never sexually assaulted their partners. Men who had sexually assaulted their partners in the past, however, may also be more likely to be separated from them. Thus, we included an interaction term in the models tested for the present study. This interaction term addresses the joint effect of divorce status and sexual assault perpetration status on PV recidivism.

## **Method used for these analyses**

### **Study Participants**

The sub-sample for these analyses consisted of those couples reported for an incident of PV in which the male was the alleged perpetrator, the couple still had some contact at the time of the last interview, and for which we had a T1 interview for both the man and the woman and either a T3 (18-month follow-up) interview for both the man and the woman and/or a T4 (36-month) interview for both the man and the woman. We restricted the analysis to those couples with a male alleged perpetrator because the number of alleged female perpetrators was small and the dynamics in relationships with an officially identified male perpetrator versus those with an officially identified female perpetrator may be different. The participation in a T3 or T4 interview criterion insured we had a sample of couples in which an average of 42.04 months (sd = 12.70) had elapsed between a first interview (conducted soon after the FAP report) and a last interview. A long exposure period was considered desirable for detecting PV recidivism because previous studies have found evidence of new incidents of PV occurring as late as 24 to 36 months after initial interview (Dunford, 1992; Woffordt, Mihalic, & Menard, 1994). The emphasis on couple-participation ensured that we would have multiple reporting sources for detecting recidivism. Having multiple reporting sources should counterbalance reporting biases that may exist based on actual or purported role in PV dynamics. The sub-sample selected for analysis using all of these criteria consisted of 98 couples.

Demographically, the sub-sample selected for analysis was similar to the sample of 261 families in which partner violence had been reported to FAP.

### **Analysis Strategy**

Data were analyzed in multiple steps due to the need to reduce the large pool of relevant predictor variables and covariates to a reasonable number. The overall pool of relevant measures was determined on theoretical and empirical grounds based on past research and the observations of clinical and advocacy professionals found in the PV literature. Where multiple measures and/or multiple levels of specificity of candidate variables existed, the versions of these variables included in subsequent logistic regression analyses was determined by the strength of their bivariate relationships with the outcome measures and/or whether they exhibited sufficient base rates of response on which to base statistical predictions.

## Outcome Measures

*PV Recidivism.* Because of the degree of variability in the time elapsed between assessment sessions and because we wanted to maximize our ability to detect PV recidivism, we created global outcome variables that consisted of a summation of the reports of the alleged offender and the alleged victim across all follow-up interviews. The two outcome measures, tested in separate logistic regression models were: any acts of PV by the alleged perpetrator since the FAP report and any severe PV by the alleged perpetrator since the FAP report. Severe PV was defined to be consistent with prior research practice as behaviors that are highly likely to lead to injury when enacted. Severe PV also included evidence of injury to the victim.

## Covariates

*Time Elapsed.* We reduced some of the variability in elapsed time by limiting the sub-sample for analysis to couples in which both had been interviewed either at T3, at T4, or both. However, it was still necessary to statistically control for the variability of elapsed time and to examine its relationship to PV recidivism in our models. To do this, we calculated the time elapsed in months between the first and last interviews completed by a member of the couple for each couple and included it as a continuous covariate in each model.

*Divorce Status.* This was a dichotomous measure of whether the couple had divorced by the last interview. Relationship status has implications for the perpetrator's access to his victim and to his motives for violence. This variable was constructed based on respondents reports of the nature of their relationship to the index partner at each wave of the study.

## Predictor Variables

*Age of Alleged Perpetrator.* This was a continuous measure which was based on Navy FAP intake information and verified through participant responses to a question about their age at T1.

*Race of the Alleged Perpetrator.* This was a dichotomous indicator variable based on respondent reports. Bivariate analyses revealed the contrast with the strongest relationship to PV recidivism to be that of African American identification versus all others, therefore, race in this instance is an African American versus Other contrast.

*Alleged Perpetrator's Navy Rank.* All but four of the alleged male perpetrators in this sub-sample were Navy Service Members. Self-reported rank at the T1 interview was dichotomized based on a median split.

*Income of Alleged Perpetrator.* This was an interval-level measure based on self-reported income at T1. Categories ranged in \$10,000 intervals from no income to \$60,000 or Over.

*Education of Alleged Perpetrator.* Based on bivariate analysis results, a dichotomized version of this variable was included in logistic regression analyses. This variable indicated whether the perpetrator's level of educational attainment as of T1 was High School or Less versus Some College or More.

*Frequency of PV.* This was a measure of the frequency of PV enacted by the alleged perpetrator prior to and including the index incident. During the first interview, each adult who had indicated on the CTS-style checklist at least one type of PV had occurred prior to or during the index incident was asked to estimate the number of separate incidents in which such acts had occurred. It was possible to obtain an estimate from each member of the couple of how often acts of male-perpetrated PV had occurred by consulting the male's estimates of the frequency of his own acts of PV and the female's estimates of the frequency of her partner's acts of PV. These estimates were averaged. In cases in which only one member of the couple reported male-perpetrated PV prior to and/or during the index PV incident, that person's estimate was used for the couple. The composite frequency measure was then dichotomized into two categories for use in analyses: Once and Twice or More Often.

*Severity of PV.* This was a dichotomous indicator measure of the severity of PV enacted by the alleged male perpetrator prior to and including the index PV incident. Severe PV was treated as absent in couples in which severe violence was denied consistently across reporters. Because we were interested in rape/sexual assault in the relationship and injuries to the woman in the couple as separate risk factors for future violence, indications of these problems in the couple relationship were treated as separate predictor variables.

*Sexual PV (Rape/Sexual Assault).* This was a dichotomous indicator measure of whether the alleged male perpetrator had ever sexually abused/assaulted his partner prior to and including the index incident.

*Injury to Alleged Victim.* This was a dichotomous indicator measure of whether the alleged male perpetrator had ever injured his partner due to acts of PV (including sexual assault).

*Social Isolation of Victim.* This was a dichotomous indicator measure of whether the male alleged perpetrator had engaged in behaviors designed to interfere with his partner's contact with others and/or her ability to maintain or begin relationships with others outside of the home.

*Financial Control of Victim.* This was a dichotomous indicator measure of whether the male alleged perpetrator had engaged in behaviors designed to interfere with his partner's ability to have or obtain material resources that could be used to support herself and/or the family and that might engender independence.

*Child Physical Abuse by the Alleged PV Perpetrator.* This was a dichotomous variable indicating whether the male alleged perpetrator of PV had ever physically abused a child under his care prior to and including the index PV incident..

*Child Sexual Abuse by the Alleged PV Perpetrator.* This was a dichotomous variable indicating whether the male alleged perpetrator of PV had ever sexually abused a child under his care prior to and including the index PV incident.

*Alleged Perpetrator's Problems with Alcohol.* This dichotomous variable was based on the alleged male perpetrator's responses to the Michigan Alcoholism Screening Test (MAST; Selzer, 1971) at T1.

*Alleged Perpetrator's Drug Misuse/Abuse.* This was a dichotomous indicator variable measuring whether the alleged perpetrator had used any of a list of illegal street drugs or misused prescription medications for recreational purposes during the year leading up to the T1 interview.

*Alleged Perpetrator's Exposure to PV in the family-of-origin.* This was a set of four dichotomous predictor variables that identified the type of exposure (exposure to PV, victim of child physical abuse) and the relationship of the perpetrator-parent to the alleged PV perpetrator (and, therefore, the sex of the parent-perpetrator).

*Alleged Perpetrator's History of Arrests/Charges for Violence.* This was a dichotomous variable indicating whether the alleged perpetrator had ever been arrested for violence prior to the index PV incident.

*Total FAP and Non-FAP Intervention Contacts.* This continuous variable was a self-reported total across T1-T4 of the number of telephone and face-to-face social and mental-health intervention service contacts the male alleged perpetrator had had subsequent to the index PV incident. This variable was included as an indicator of post-incident behavioral monitoring of the alleged perpetrator. It was dichotomized into categories of 0-19 and 20+ contacts.

*Any Batterer/PV-Prevention Treatment.* This was a dichotomous variable indicating whether, by the T2 assessment, the male alleged perpetrator had attended batterer treatment or services specifically aimed at reducing the likelihood of future PV as a result of the index PV incident.

*Arrest for Index PV Incident.* This was a dichotomous variable indicating whether the male alleged perpetrator had been arrested and/or charged with a crime by the date of the T2 assessment due to the index PV incident.

*Any Case Review Committee (CRC) Substantiation of the Index PV Incident.* This measure was included as an indicator of the couple's perception of the Navy's response to the index PV incident. At T2 respondents were asked if the CRC had ever reviewed their (index incident) case and if so, the disposition of the case.

*Alleged Perpetrator's Command Took the Index PV Incident Seriously.* This was a dichotomous indicator of whether the male alleged perpetrator perceived his commander as having taken the index PV incident seriously. At T1, Navy service member participants were asked to report their level of agreement or disagreement with the following statement "Your commander has shown you that he or she thinks that this situation which

has come to the attention of Family Advocacy is very serious.” Couples in which the male alleged perpetrator agreed or strongly agreed with this statement were assigned a “1” (“Yes”) on this variable. Couples in which the male alleged perpetrator disagreed or strongly disagreed with this statement were assigned a “0” (“No”) on this variable. Since not all male alleged perpetrators were Navy service members, logistic regression analyses were run with and without this variable.

All logistic regression models were run such that predictor variables were entered in one step and statistical relationships were then net of the effect of all other variables in a model.

## **Results: Recidivism Rates**

A majority of the alleged male perpetrators in this sample (54.1%) engaged in some form of physical or sexual PV (including injury to the alleged victim) subsequent to the index PV incident. A large percentage of these perpetrators (39.8%) engaged in severe violence, (severe physical violence, sexual violence, and/or injury to the victim) after the index PV incident. Breaking the recidivism rates down by subtype of violence, we found that 48.9% of perpetrators had engaged in “minor” violence, 32.7% had engaged in severe physical violence, 13.3% had sexually assaulted the victim, and 25.5% had injured the victim in one or more subsequent incidents.

## **Predicting Any and Severe Partner Violence Recidivism**

Final logistic regression models confirmed many of our hypotheses, but there were also some surprises in the results. Results from the final model predicting any PV recidivism post-index PV incident will be summarized first, followed by the results from the final model predicting severe PV behavior post-index PV incident.

### **Any PV Recidivism.**

Men who had used violence two or more times by the time the PV was reported to FAP and men who had used social isolation tactics against their spouses were more likely to have committed new acts of PV than men who were reported to have committed PV “only” once and men who were not reported to have used socially isolating tactics in their relationships. An effect in the expected direction also was found for exposure to parental PV during childhood as well, albeit, not from the expected modeling source. Men who reported having witnessed their mothers use violence against their fathers were more likely to have repeated PV than men who did not report this experience.

Although we made no predictions of how race would affect recidivism, the final model indicates African American men had increased risk for PV recidivism. However, this finding was qualified by a statistically significant interaction effect of race and arrest history for violence prior to the index PV incident.

As expected, divorced perpetrators were less likely to have recidivated post-index incident than non-divorced alleged perpetrators. The counterintuitive result for prior

sexual PV found in a preliminary analysis of our data (Mouradian, Williams, & Saunders, 2003), was replicated as well; namely, men who had sexually assaulted their partners in the past were less likely than men who had not sexually assaulted their partners in the past to recidivate PV. However, a chi-square test of the relationship of divorce status with sexual PV history did indicate that men who had committed sexual assault against their index partners were more likely to be divorced from them at final interview than men who had not sexually assaulted their index partners ( $\chi^2 = 4.56$ ,  $df = 1$ ,  $p = .033$ ). And, although the interaction effect in the logistic regression model is not statistically significant, chi-square tests of the relationship of prior sexual PV and PV recidivism by divorce status indicated, as expected, that it is the divorced sexual PV offenders only who are less likely to have repeated PV.

One of the surprises among the predictors of any PV recidivism was the finding that MAST scores in the clinical range (indicating problems with alcohol) were associated with a decreased likelihood of recidivism. In addition, although it was not a statistically significant predictor, the odds of recidivism was double for those with 20 or more contacts with service providers.

**Logistic Regression Results Predicting Any Intimate Partner Violence Recidivism  
Following the Report of an Intimate Partner Violence Incident to FAP (n = 98 Couples)**

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp. B</b>
<b>Couple Was Divorced at Last Interview</b> (Two Categories – Yes, No)	-2.086	.904	5.325	1	.021	.124
<b>Alleged Perpetrator Is African American</b> (Two Categories – Yes, No)	1.571	.674	5.435	1	.020	4.811
<b>Alleged Perpetrator’s Navy Service Status at Last Interview</b> (Two Categories – Active Duty, or Not)	-1.209	.694	3.036	1	.081	.298
<b>Alleged Perpetrator’s Total Mental Health /Social Service Contacts Post Index Incident</b> (Two Categories – 19 or Fewer, 20 or More)	1.158	.636	3.317	1	.069	3.184
<b>IPV Frequency Prior to the Index Incident</b> (Two Categories – Once, More Than Once)	1.964	.748	6.764	1	.009	7.001
<b>Alleged Perpetrator Socially Isolated Victim Prior to/During the Index Incident</b> (Two Categories – Yes, No)	1.493	.615	5.892	1	.015	4.452
<b>Alleged Perpetrator Was Financially Controlling Toward Victim Prior to/During Index Incident</b> (Two Categories – Yes, No)	.761	.573	1.763	1	.184	2.140
<b>Interaction of Divorce Status with Alleged Perpetrator’s History of Sexually Assaulting the Victim Prior to/During the Index IPV Incident</b>	-3.233	1.788	3.270	1	.071	.039
<b>Alleged Perpetrator Sexually Assaulted Victim Prior to/During the Index IPV Incident</b> (Two Categories – Yes, No)	-2.920	.927	9.918	1	.002	.054
<b>Alleged Perpetrator Arrested for Violence Prior to Index Incident</b> (Two Categories – Yes, No)	1.029	.567	3.299	1	.069	2.799
<b>Alleged Perpetrator’s Michigan Alcohol Screening Test Score</b> (Two Categories – Clinical Score or Not)	-1.092	.579	3.554	1	.059	.336
<b>Alleged Perpetrator Witnessed Mother-to-Father IPV During Childhood</b> (Two Categories – Yes, No)	2.230	.840	7.045	1	.008	9.298

## Severe PV Recidivism

As predicted, longer exposure time between the first interview and subsequent interviews was associated with an increased the likelihood that severe PV had reoccurred. Consistent with hypotheses and with results for any PV recidivism, severe PV was more likely to have occurred if the perpetrator had engaged in PV two or more times in the past than if he had “only” used it once. There was a trend for social isolation of the victim to impact severe PV but it did not make the contribution that it did to the model for predicting ANY PV. The same relationships between race and the interaction of race with arrest history for violence existed for severe PV recidivism as for any PV recidivism. African American perpetrators and non-African American perpetrators with a history of arrests for violence were more likely to have recidivated than other perpetrators. Two of the factors that were associated with a decreased likelihood of recidivism in the any PV recidivism analysis were similarly associated with decreased likelihood of severe PV recidivism; namely, divorce and prior sexual assault of the index partner. The interaction term of sexual assault by divorce status was not included in the final model predicting severe PV recidivism because its presence did not lend to model prediction or adequacy statistics.

Several variables were found to predict the likelihood of severe PV recidivism only. The presence of prior injury infliction to the index partner was associated with very large odds of repeating severe PV and was by far the strongest effect in this model. Notably for Navy policy, the man’s perception that his command had taken the initial PV report seriously was associated with decreased likelihood of severe PV recidivism. The odds of severe violence occurring after the index incident were increased nearly seven fold for men who had 20 or more service contacts (a result consistent with that for any PV recidivism).

**Logistic Regression Results Predicting Severe Intimate Partner Violence Recidivism Following the Report of an Intimate Partner Violence Incident to FAP (n = 84 Couples)**

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp. B</b>
<b>Constant Term</b>	-8.659	2.656	10.625	1	.001	.000
<b>Exposure Time</b> (Longest Time Elapsed Between a T1 Interview in the Couple and the Latest Last Interview of a Member of the Couple)	.120	.042	8.131	1	.004	1.127
<b>Time Couple Spent Apart Due to Navy Service</b> (Total Across All Interview Waves)	-.783	.396	3.915	1	.048	.457
<b>Couple Was Divorced At Last Interview</b> (Two Categories – Yes, No)	-2.356	1.021	5.325	1	.021	.095
<b>Alleged Perpetrator Is African American</b> (Two Categories – Yes, No)	3.201	1.124	8.109	1	.004	24.555
<b>Alleged Perpetrator’s Total Mental Health/ Social Service Contacts Post Index Incident</b> (Two Categories – 19 or Fewer, 20 or More)	1.944	.958	4.117	1	.042	6.984
<b>Alleged Perpetrator Reported His Command Took the Index IPV Incident Seriously</b> (Two Categories – Yes, No)	-2.312	1.008	5.257	1	.022	.099
<b>IPV Frequency Prior to the Index Incident</b> (Two Categories – Once, More Than Once)	2.373	1.082	4.809	1	.028	10.728
<b>Alleged Perpetrator Socially Isolated Victim Prior to/During the Index IPV Incident</b> (Two Categories – Yes, No)	1.720	.904	3.617	1	.057	5.585
<b>Alleged Perpetrator Sexually Assaulted Victim Prior to/During the Index IPV Incident</b> (Two Categories – Yes, No)	-3.662	1.264	8.392	1	.004	.026
<b>Alleged Perpetrator Injured Victim Prior to/During the Index IPV Incident</b> (Two Categories – Yes, No)	4.665	1.548	9.083	1	.003	106.149
<b>Alleged Perpetrator’s Father Perpetrated Child Physical Abuse During His Childhood</b> (Two Categories – Yes, No)	-2.921	1.247	5.484	1	.019	.054

## Discussion and Implications of Recidivism Findings

These findings have important implications for Navy FAP services:

1. This long-term followup of couples referred to FAP because of an allegation of PV reveals high rates of recidivism. It is important to note that for 46% of the couples our several years of follow up interviews elicited no reported PV recidivism. Unfortunately, the majority of the perpetrators in this sample (54.1%) reportedly did engage in some form of physical or sexual PV (including injury to the alleged victim) subsequent to the report to FAP. Even more concerning is the finding that a large percentage of these perpetrators (39.8%) engaged in severe violence when they recidivated. And 13.3% of the batterers sexually assaulted the victim during the followup period. In addition, one fourth of the perpetrators had injured the victim in one or more subsequent incidents.
2. Recidivism can be predicted most clearly by examining prior history of the perpetrator at the time of referral. Those with two or more prior incidents of PV or with a prior incident that involved injury to the victim are more likely to recidivate. The findings make it clear that victimization screening for of prior history of PV is necessary to assist FAP in identifying couples with the highest risk for recidivism by the male perpetrator. Screening procedures and victim safety planning must take these factors into account.
3. Recidivism was also more likely for African American men. Steps must be taken to address these high rates (67% recidivism for African American men in this sample). Further evaluation is needed to determine if FAP and other community services provide adequate victimization screening for African American families and the if there is adequate for safety planning in place for the partners of African American men. Services and interventions provided to African American batterers need to be relevant socially and culturally. Special consideration of any unique needs of African American service members and their families may be required to reduce recidivism.
4. The finding that those men who thought that their Navy commanders took the allegations of PV seriously were less likely to recidivate (i.e., re-offend with severe violence against their partner) has important implications for Navy policy and training. Commanders should be informed of this finding so that they can take steps to make sure that they do everything to support cessation of partner violence among service members and to make sure that alleged perpetrators know that they take these matters seriously.

# Adult Feedback on Family Advocacy Program Services

For most families the time immediately following an incident of family violence and an official report to authorities is a time of serious crisis. Although ultimately the goal of those who receive the report is to investigate the allegation, stop abuse, protect the victim and hopefully resolve the conflict, for the family the stressors of a violent event are likely compounded by the “official” report and investigation.

All of the families in the NFS were reported to FAP due to an allegation of family violence. Many families were also involved with military and civilian law enforcement and criminal justice agencies and civilian child protective services.

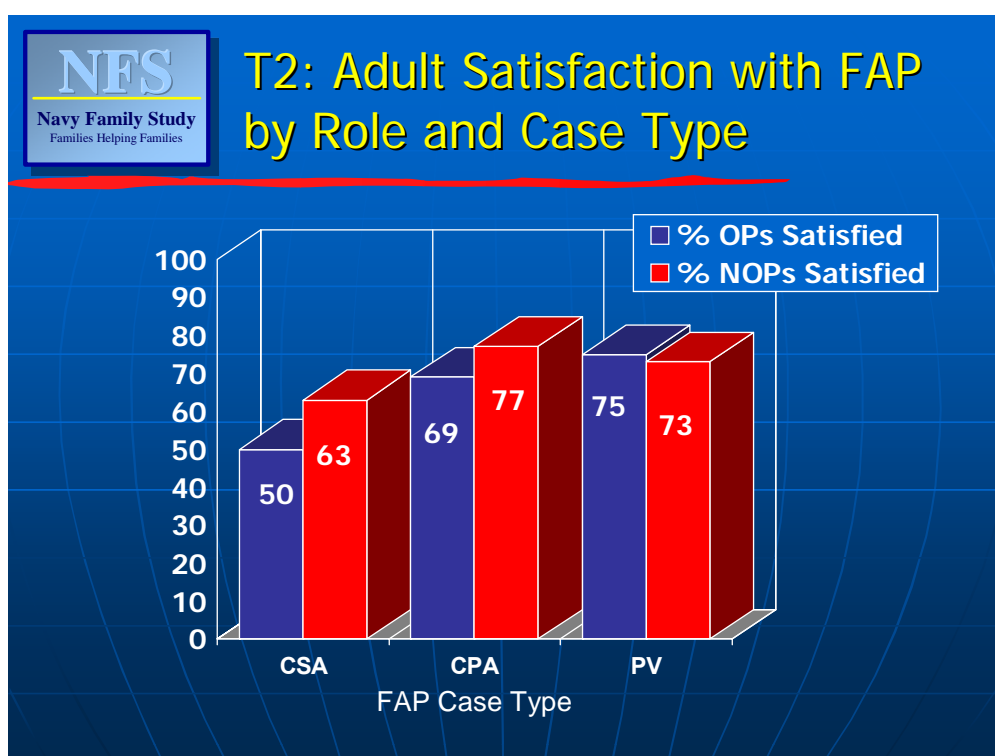
At the T1 interview we asked the adults about their concerns, fears, and feelings soon after the report was made to FAP. The table below presents the proportion of offending parents (OPs) and non-offending parents (NOPs) who endorsed each item.

Concerns/ Feelings of Adults After Report to FAP (T1)		
CONCERNS:	OP	NOP
a. Coworkers Finding Out	30%	18%
b. Others Finding Out	31%	33%
c. Discharge from Navy	41%	48%
d. Legal Consequences	57%	50%
e. Self/ Partner Going to Jail/Prison	45%	41%
f. Losing Kids	57%	51%
g. Divorce/Permanent Separation	42%	41%
h. Other Family Disruption	47%	48%
i. Feelings of Anger	62%	69%
j. Feelings of Relief	35%	48%
Total number of respondents	N=374	N=465-7

The majority of both offending and non-offending parents were concerned about losing their child or children as a result of the allegations of child abuse or partner violence. Many of the responses of the adults reflected their embarrassment or shame and fear that others would find out about the abuse or the allegations. In addition, they feared disruption of their lives in other ways, such as, through divorce, family dissolution or discharge from the Navy. The major emotion they reported was anger – 62% of the OPs and 69% of the NOPs reported feeling anger at the time of the report to FAP. Anger could be directed at an array of targets including the victim, the perpetrator, the person who reported the incident, oneself, military command or the “system” in general.

Ninety-five percent of the offending parents had some type of contact with FAP by the time of the T2 interview. Nearly all of these contacts were face-to-face with a case manager at FAP. For the non-offending parents, 87% reported that they had contact with FAP– 16% had contacts only via phone and 71% had at least one face-to-face meeting with a case manager or victim services specialist by the time they were interviewed at T2.

During the T2 interview we asked the adults to rate their satisfaction with their interaction with FAP. The figure below illustrates the responses of the adults (% satisfied) broken down by case type (CSA, CPA and PV) and role (OP or NOP).



While not all adults were satisfied it is notable that, except for the CSA OPs, the majority of the adults were satisfied with their interaction with FAP. Interestingly, 73% of the NOPS in child physical abuse cases were satisfied and 77% of the PV NOPS (alleged victims) were satisfied. Alleged offending parents (except for the CSA Ops) also had high rates of satisfaction.

The tables on the next three pages provide the adults' evaluations of FAP services based on data collected from their T4 interviews. In these tables data for all case types are combined as the ratings were very similar for all types (except the CSA OPs), and the data are displayed so that the responses of the OPs and NOPS can be compared.

REPORTS OF SATISFACTION WITH FAP-- TIME 4 INTERVIEW*		
	OP	NOP
<b>A. FAP NOT HELPFUL: Hassle or waste of time</b>		
<i>Strongly disagree or Disagree</i>	59%	58%
<i>Strongly agree or agree</i>	35%	37%
<b>TOTAL</b>	<b>N=231</b>	<b>N=327</b>
<b>B. FAP helpful or meaningful to me personally</b>		
<i>Strongly disagree or Disagree</i>	37%	37%
<i>Strongly agree or agree</i>	61%	58%
<b>TOTAL</b>	<b>N=231</b>	<b>N=326</b>
<b>C. FAP helped: feel more hopeful about the future</b>		
<i>Strongly disagree or Disagree</i>	45%	45%
<i>Strongly agree or agree</i>	53%	49%
<b>TOTAL</b>	<b>N=230</b>	<b>N=326</b>
<b>D. FAP helped: feel less nervous and stressed</b>		
<i>Strongly disagree or disagree</i>	51%	48%
<i>Strongly agree or agree</i>	47%	47%
<b>TOTAL</b>	<b>N=230</b>	<b>N=322</b>
<b>E. FAP helped: make decisions concerning my child</b>		
<i>Strongly disagree or disagree</i>	47%	48%
<i>Strongly agree or agree</i>	49%	45%
<b>TOTAL</b>	<b>N=231</b>	<b>N=328</b>
<b>F. FAP NOT HELPFUL: destroyed my family</b>		
<i>Strongly disagree or disagree</i>	92%	90%
<i>Strongly agree or agree</i>	7%	6%
<b>TOTAL</b>	<b>N=231</b>	<b>N=324</b>
<b>G. FAP NOT HELPFUL: interefered with my/my partner's Navy career</b>		
<i>Strongly disagree or disagree</i>	70%	75%
<i>Strongly agree or agree</i>	27%	22%
<b>TOTAL</b>	<b>N=230</b>	<b>N=320</b>
<b>H. FAP helped: FAP and Respondent a good match</b>		
<i>Strongly disagree or disagree</i>	16%	15%
<i>Strongly agree or agree</i>	83%	79%
<b>TOTAL</b>	<b>N=232</b>	<b>N=326</b>
<b>I. FAP helped: provided emotional support</b>		
<i>Strongly disagree or disagree</i>	43%	38%
<i>Strongly agree or agree</i>	55%	56%
<b>TOTAL</b>	<b>N=230</b>	<b>N=325</b>

<b>REPORTS OF SATISFACTION WITH FAP-- TIME 3 INTERVIEW*</b>		
	<b>OP</b>	<b>NOP</b>

<b>J. FAP helped: provided practical advice or information</b>		
<i>Strongly disagree or disagree</i>	29%	23%
<i>Strongly agree or agree</i>	69%	71%
<b>TOTAL</b>	<b>N=232</b>	<b>N=326</b>
<b>K. FAP helped: get resources or services</b>		
<i>Strongly disagree or disagree</i>	31%	35%
<i>Strongly agree or agree</i>	67%	59%
<b>TOTAL</b>	<b>N=233</b>	<b>N=330</b>
<b>L. FAP Has been fair to me</b>		
<i>Strongly disagree or disagree</i>	22%	21%
<i>Strongly agree or agree</i>	76%	74%
<b>TOTAL</b>	<b>N=229</b>	<b>N=325</b>
<b>M. FAP helped: feel more hopeful about the future</b>		
<i>Strongly disagree or disagree</i>	44%	42%
<i>Strongly agree or agree</i>	53%	52%
<b>TOTAL</b>	<b>N=232</b>	<b>N=328</b>
<b>N. FAP helped: feel more confident in my ability to handle pers'l problems</b>		
<i>Strongly disagree or Disagree</i>	44%	41%
<i>Strongly agree or agree</i>	55%	53%
<b>TOTAL</b>	<b>N=227</b>	<b>N=324</b>
<b>O. FAP helped me improve my relationship with Partner</b>		
<i>Strongly disagree or Disagree</i>	61%	67%
<i>Strongly agree or agree</i>	34%	25%
<b>TOTAL</b>	<b>N=230</b>	<b>N=325</b>
<b>P. FAP helped me be a better parent</b>		
<i>Strongly disagree or Disagree</i>	44%	48%
<i>Strongly agree or agree</i>	52%	42%
<b>TOTAL</b>	<b>N=232</b>	<b>N=328</b>
<b>Q. FAP helped me have fewer verbal arguments with Partner</b>		
<i>Strongly disagree or Disagree</i>	57%	61%
<i>Strongly agree or agree</i>	36%	28%
<b>TOTAL</b>	<b>N=231</b>	<b>N=328</b>
<b>R. FAP helped me have fewer physical fights with Partner</b>		
<i>Strongly disagree or Disagree</i>	41%	52%
<i>Strongly agree or agree</i>	36%	27%
<b>TOTAL</b>	<b>N=232</b>	<b>N=32</b>

REPORTS OF SATISFACTION WITH FAP-- TIME 4 INTERVIEW*			
	OP	NOP	
<b>S. FAP NOT HELPFUL: harmed my relationship with IP</b>			
<i>Strongly disagree or Disagree</i>	88%	81%	
<i>Strongly agree or agree</i>	9%	12%	
<b>TOTAL</b>	<b>N=232</b>	<b>N=330</b>	
<b>T. FAP helped me make better decisions about Navy family life</b>			
<i>Strongly disagree or Disagree</i>	49%	55%	
<i>Strongly agree or agree</i>	48%	37%	
<b>TOTAL</b>	<b>N=232</b>	<b>N=326</b>	
<b>U. FAP provided names, contact info for services and programs</b>			
<i>Strongly disagree or Disagree</i>	32%	29%	
<i>Strongly agree or agree</i>	66%	65%	
<b>TOTAL</b>	<b>N=232</b>	<b>N=327</b>	
<b>V. FAP provided lists of services and programs IRRELEVANT to me</b>			
<i>Strongly disagree or Disagree</i>	71%	67%	
<i>Strongly agree or agree</i>	19%	22%	
<b>TOTAL</b>	<b>N=227</b>	<b>N=320</b>	
* percentages do not total to 100% due to missing values (e.g., not mentioned/ not applicable)			

Again, although there were some dissatisfactions, in most categories more people were satisfied than dissatisfied. And there were some notable endorsements. FAP was found to provide practical advice and information. Three out of four adults reported that FAP had been fair to them and 83% of the OPs and 79% of the NOPs said FAP helped because FAP and the respondent were a good match (item H).

It is important to note, in light of critiques of family advocacy that may at times be voiced in other parts of the system, 70% of the OPs and 75% of the NOPs disagreed with the statement that FAP had interfered with the respondent's or his/her partner's Navy career. In other words most said that FAP did not interfere with the Navy career (item G). Also, only a very small minority said that FAP "destroyed my family" (7% of OPs and 6% of NOPs) (item F). While "destroying" one's family is a very serious charge and it should be of concern that some adults do think that FAP destroyed their family, it is clear that this is endorsed by a relatively small sample.

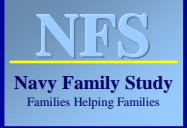
Areas that need improvement can also be gleaned from these responses. Most said FAP did not help them have fewer arguments or physical fights with their partners (items Q and R). In fact, although much of this concern was attributable to the responses of adults from families reported to FAP for PV, many of the respondents who came into contact with FAP due to allegations of child abuse also reported that FAP involvement did not help reduce the conflict between partners— over two out of five adults involved in CPA cases and three out of five adults in CSA cases said FAP did not help reduce the number of fights. Even more said FAP did not help reduce the number of arguments between the partners. Of the adults in PV cases only about ½ said that their involvement with FAP helped reduce the number of fights. As we have reported in an earlier section for this report all of the case types in the NFS reported high levels of partner violence and we have called for more attention to partner violence regardless of presenting problem. These data support that recommendation and suggest that while there are many who are very satisfied with FAP (see table below), more needs to be done to change behaviors that are so harmful to Navy families.

<b>TIME 4 Interview Feedback on FAP</b>	<b>PV</b>		<b>CPA</b>		<b>CSA</b>		<b>TOTAL</b>	
<b>Broken down by Case Type and Role</b>	<b>OP</b>	<b>NOP</b>	<b>OP</b>	<b>NOP</b>	<b>OP</b>	<b>NOP</b>	<b>OP</b>	<b>NOP</b>
<b>FAP can help with problems</b>								
No contact with FAP	0%	0%	0%	0%	0%	2%	0%	0%
Strongly disagree	5%	10%	9%	5%	18%	8%	8%	8%
Disagree	12%	16%	13%	20%	14%	10%	13%	17%
Agree	67%	57%	62%	57%	46%	65%	62%	58%
Strongly Agree	17%	17%	16%	18%	23%	16%	17%	18%
<b>TOTAL</b>	<b>N=84</b>	<b>N=138</b>	<b>N=108</b>	<b>N=125</b>	<b>N=22</b>	<b>N=51</b>	<b>N=214</b>	<b>N=314</b>
<b>FAP will improve home situation</b>								
No contact with FAP	0%	0%	0%	0%	0%	2%	0%	0%
Strongly disagree	5%	11%	10%	5%	23%	12%	9%	9%
Disagree	23%	27%	23%	32%	32%	32%	24%	30%
Agree	65%	48%	53%	52%	27%	46%	55%	49%
Strongly Agree	7%	14%	14%	11%	18%	8%	12%	12%
<b>TOTAL</b>	<b>N=82</b>	<b>N=133</b>	<b>N=104</b>	<b>N=123</b>	<b>N=22</b>	<b>N=50</b>	<b>N=208</b>	<b>N=306</b>

Adult NFS participants were asked at the end of each interview if they had any recommendations for FAP or the Navy. Many replied that they were happy with the services they received adding how a particular worker or program helped their family. One participant at the T2 interview stated, “FAP is doing a good job. It’s impressive and very nice that they have such an open door to help anyone out.”

## Recommendations from Navy Families

The majority of NFS study participants provided some thoughtful feedback based on their experience as a Navy family. These responses have been coded into the following categories and detailed in the text below.

 <b>Recommendations by Adults in NFS FAP sample – T2, T3 and T4 combined N=1606</b>	
Recommendations	Percentage
Mentioned needed improvement of quality of services provided to Navy families	33%
Suggested new services for Navy families	20%
Suggested improving the investigation process	12%
Suggested an Increase in family violence prevention work by Navy	10%
Requests an Increase in the Navy Command's involvement in helping Navy families confronting family violence	12%

The following is a list of the most relevant and most commonly reported specific suggestions and recommendations the adult participants provided at the end of the interviews. Clearly some of these cover areas where FAP is already working, however, this work may not be apparent to these families nor are such services and expertise always available at every installation.

- Adults' recommendations for improving quality of services provided to Navy families:
  - Provide more follow-up and check-ins with family
  - Increase number of available counselors/case managers
  - Provide more training to staff
  - Be family focused (i.e., involve whole family)
  - Provide compassionate and non-judgmental counselors that listen
  - Provide individualized care
  - Take family violence more seriously (e.g., respond more quickly)
  - Ensure confidentiality

- Adults' recommendations for policies and services:
  - Increase services for dependants
  - Increase child/teen services and specialists
  - Increase marriage and family counseling
  - Increase number of office locations for services (e.g. off-base, near Navy housing)
  - Provide home based services for families in need
  - Enforce counseling attendance
  - Increase groups and classes offered
  - Provide shelter/safe housing for victims
  - Improve/offer day care and respite care (e.g., for parents to attend groups, counseling)
  - Improve partnership with civilian services (e.g, discounted rates for dependants)
  - Offer family legal services
  - Offer/ improve crisis services
  
- Adults' suggestions for improving FAP and CRC investigation process
  - Interview more people
  - Treat as "not-guilty" until proven otherwise
  - Allow OP to attend Case Review Committee (CRC)
  - Inform family of process and case status
  - Expedite process
  - Improve coordination of care/ case information
  - Decrease punishments
  
- Adults' recommendations for Increasing focus on family violence prevention
  - Publicize FAP and other services available to families
  - Provide/ require counseling (marriage, stress management, financial advisory) to all newly enlisted couples
  - Increase outreach
  - Educate command on signs of family violence and where to refer families
  - Inform families (even those not yet involved with FAP) about Transitional Assistance
  - Conduct research and request feedback from Navy families
  
- Adults' recommendations for increasing compatibility between Navy family services and Navy lifestyle
  - Offer services/ groups on ship
  - Have a FAP representative on deployment
  - Offer evening and weekend hours
  - Pay more attention to challenges of Navy life

- Adults' recommendations for Command
  - Increase Command's involvement in helping families
  - Command should support and encourage FAP recommendations (i.e. career should not be threatened if the offender seeks help)
  - Command should be more family oriented
  - Command should see that benefits available to victims are improved

Many participants communicated a desire to have longer involvement with FAP caseworkers and stated they enjoyed having someone check-in with their family. Many had very specific suggestions such as: "Work more on letting service members know what's available to them – i.e. have a FAP representative come out on two week deployment and have classes informing the service member about program/services." Another NOP stated, "When a couple gets married, send a packet to the dependant spouse with resources they can use with FSC, FAP, etc."

Finally one participant (an offending parent) stated, "FAP program and other programs in the Navy that support the sailor and his family are extremely needed, valuable and important to the readiness of the armed forces and to the families that stand behind the service men".

## Conclusions

The NFS study began with an examination of three types of cases referred to the Navy's Family Advocacy Program. Careful victimization screening of all participants revealed that there was much overlap of case types and that a significant proportion of families referred for child abuse also had experienced partner violence. Men and women, Navy service members and non-service members, offending parents and non-offending parents all had considerable experience with victimization in childhood. In turn, the extensive histories of victimization experiences in both childhood and adulthood were found to be associated with mental health problems in a significant proportion of the adults who come to the attention of FAP as a result of a report of family violence. These findings indicate the importance of FAP services for screening and managing interventions for these families.

Followup and careful victimization screening of adults from families reported to FAP as a result of alleged partner violence indicates that, even though many of the allegations are never substantiated by FAP case review committees, most identified couples report experiences with partner violence when given the guarantee of confidentiality that was provided by the NFS. Many of the partner violence experiences were prior to the date of the emergent incident that brought them to FAP. Unfortunately, we found that a majority of these participants experienced revictimization during the 3 year followup. In our subsample of couples where both the husband and the wife were interviewed for followup, the partner violence recidivism was found to be 54%. Our findings suggest that careful victimization screening will help identify families at highest risk for recidivism. These families at the least require safety planning for the victim, careful monitoring and followup (Dunford, 2000). Our findings of high rates of recidivism

for African American PV perpetrators suggests that in addition to further study to assess the multiple pathways to recidivism for these men, FAP services may benefit from further investigation of the needs of these families and assessment of the adequacy of services provided to them.

One important finding for the Navy is the role that the Command response to partner violence played in reducing recidivism. Those men who perceived that their commanders took the report of partner violence seriously were less likely to recidivate. Commanders should be informed of this finding so that they can take steps to make sure that they do everything to support cessation of partner violence by service members and to make sure that alleged perpetrators know that they take these matters seriously.

The NFS also demonstrated that most adults who had been in contact with FAP were very willing to provide feedback about their interactions with FAP and to offer very concrete and useful suggestions about how services can be improved. They should be consulted on a regular basis. The majority of the adults were satisfied with their interactions with FAP. Many wanted to make sure that others with whom they serve in the Navy learn about the services FAP can provide and they even suggested more involvement of FAP when service members are deployed. A strong pitch was made by 10% of the adults for FAP to get more involved in prevention work. By this they meant letting families know about services (e.g., transitional assistance) and providing counseling to couples new to the Navy. A similar vocal minority suggested that the Command needs to take a more active role in detection and intervention in cases of family violence, in supporting the services FAP provides and in helping to enforce the recommendations of FAP.

It is clear from the findings of the NFS that the adults who come into contact with FAP are in need of a wide range of services (see also, Saunders, Williams, Smith & Hanson, 2005, for findings concerning the children). Helping to provide Navy families with supports that enhance their functioning free from family violence is a goal of the Navy's Family Advocacy Program. Helping FAP to achieve this goal will contribute to the ability of service members to contribute to the accomplishment of the mission of the Navy.

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