

An Evaluation of the Strength at Home Intervention

The National Center on Family Homelessness

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I. Introduction

The prevalence of intimate partner violence (IPV) is a growing concern within the military community. In the summer of 2002, the issue of IPV in military families dominated the national media spotlight when four women were killed by their husbands—all soldiers stationed at Fort Bragg. Three of the soldiers had tours of duty in Afghanistan in special operations units. This incident highlighted what remains a significant issue within the military community.

Veteran status is associated with increased rates of IPV, with veterans perpetrating violence up to three times as much as civilians (Marshall, Panuzio & Taft, 2005; Sayers et al., 2009). When veterans commit IPV, they are more likely than civilians to cause significant injury to their spouses (Marshall et al., 2005). Research indicates that IPV within military families can largely be attributed to combat-related Post-Traumatic Stress Disorder (PTSD) or to a prior history of trauma (Marshall et al., 2005; Orcutt, King & King, 2003; Taft et al., 2005). Veterans with PTSD are two to three times more likely to engage in IPV than veterans without PTSD (Washington University, 2008). Rates of Traumatic Brain Injury (TBI) are also high, which can result in depression, anxiety, and increased levels of aggression and impulsiveness (Okie, 2005) that put families at risk for violence.

Blue Shield Foundation of California provided grant support to conduct the *Strength At Home:* Family and Friends intervention in the Central Valley region of California as the core component of *Community Circles of Support for Veterans' Families (CCSVF)*, and evaluate the program and disseminate findings. The intervention helps strengthen interpersonal relationships between veterans and their romantic partners, family, and friends to reduce relational difficulties and the risk of IPV. *Strength at Home* is a skills-based intervention for couples. The intervention pairs a veteran with a traumatic stress-related disorder with an intimate partner, relative, or friend and provides education about the impact of trauma on relationships and concrete skills to strengthen relationship functioning.

II. Need for the Intervention

Family support is essential to the well-being of deployed and returning troops. These service members turn to their families for help in recovering from the wounds of war. When military members return, families are challenged as they reintegrate into family life, reconnect to social supports, recover from physical and psychological injuries, and redefine their roles in the community. Combat-related stress, including post trauma responses, may also increase the likelihood of various emotional problems (American Psychological Association [APA], 2007), domestic violence (Clark and Messer, 2006), child abuse (Prigerson, Maciejewski, and Rosenheck et al., 2002), and substance use. The stress of these difficult transitions is especially profound for young families, families with young children, and families with lower incomes (APA, 2007).

Eligibility for supportive resources from the U.S. Departments of Defense (DoD) and U.S. Department of Veterans Affairs (VA) is generally reserved for service members, with limited services available for families. DoD and VA are now recognizing the critical importance of providing family support during and after deployment, but have yet to develop coordinated access to comprehensive, high quality services for families (APA, 2007). National Guard and Reserve families, in particular, rarely receive services as they are often isolated from typical military support systems.

Available services that address the emotional needs of family members—such as post trauma responses—are often inaccessible and characterized by long wait lists, uncoordinated referrals, shortage of qualified personnel, and transportation issues (APA, 2007). The increasing numbers and lengths of deployments seen in OIF/OEF wars, coupled with lack of available services to support families, create a precarious situation for our nation's returning warriors.

Impact of PTSD on Veterans and their Families

The rates of Post-Traumatic Stress Disorder (PTSD) within the veteran community are high. Hallmark symptoms of PTSD include:

- Avoidance: Avoiding situations or experiences that remind the person of a past traumatic experience.
- *Hyperarousal*: A persistent feeling of heightened anxiety that includes being constantly on alert for danger and focusing on survival.
- Reexperiencing: Reexperiencing the traumatic event in the form of flashbacks, nightmares, intrusive thoughts, images, etc.
- Emotional Numbing: Disconnecting from overwhelming feelings associated with the traumatic experience, which can lead to difficulties in feeling and expressing a range of positive and negative emotions.

Post-trauma responses do not exist in a vacuum. Trauma-related mental health issues, such as PTSD, are accompanied by a host of symptoms that can impact individuals and their families. The ways in which individuals respond to their experiences impact their relationships with significant others and, in turn, these relationships impact an individual's post-trauma responses. How couples cope with and manage these responses may inadvertently exacerbate or perpetuate post-trauma symptoms. Symptoms in one or both partners can result in poor communication, difficulty managing conflict, negative interactions, and in more extreme cases, verbal and/or physical aggression. Studies have found that populations of people who join the military are often at increased risk for divorce (Karney & Crown, 2007). PTSD is also associated with aggression, which can create an unhealthy and potentially unsafe environment for children and adults (Watkins, Taft, Hebenstreit, King & King, 2008).

Veterans and Intimate Partner Violence

Rates of IPV among military populations range from 13.5% to 58%, but the rates vary considerably across studies (Marshall, Panuzio & Taft, 2005). One study reported that active duty service members had higher rates of moderate to severe IPV than the civilian communities

(Marshall, Panuzio & Taft, 2005). The study found a rate of 13.1% moderate IPV among active duty service members, compared to 10% of the civilian population, and a rate of 4.4% severe IPV, compared to 2% among the civilian population (Marshall, Panuzio & Taft, 2005).

Veteran status has been associated with increased rates of IPV, with veterans perpetrating violence up to three times as much as civilians (Marshall, Panuzio & Taft, 2005; Sayers et al., 2009). This can be largely attributed to combat-related PTSD or to a prior history of trauma (Marshall et al., 2005; Orcutt, King & King, 2003; Taft et al., 2005). Furthermore, the culture of the military enforces violence as a means of resolving conflicts and veterans may apply this culture to domestic life upon leave of the service (Taft et al., 2005). Additionally, when veterans commit IPV, they are more likely than civilians to cause significant injury to their spouses (Marshall et al., 2005).

The effects of IPV have far-reaching consequences for individuals, families, and the broader community. A meta-analysis of studies on the mental health impact of IPV showed that almost half of all women victimized by domestic violence suffer from depression, almost one-fifth struggle with suicidal thoughts and feelings, and over 60% meet criteria for PTSD (Golding, 1999). While some abused women manage to maintain consistent and effective parenting despite their victimization (Levendosky, Lynch, & Graham Berman, 2000; Stephens, 1999), their own struggles with the impact of IPV often affect their capacity to stay attuned to their children's needs or to foster a sense of safety and security (Levendosky & Graham-Bermann, 1998; Osofsky, 1999). Research has shown a positive association between battered women's levels of parental stress and their children's functioning (Holden & Ritchie, 1991; Jackson, 2003; Jouriles et al., 1998; Levendosky & Graham-Bermann, 1998). In addition to the emotional effects of IPV on adults and children, IPV interferes with housing and employment stability and a family's access to community supports. Domestic violence is the direct cause of homelessness for all the mothers in domestic violence shelters and 22%-55% of women in general family shelters (Levin, McKean & Raphael, 2004; Wilder Research Center, 2003).

Research suggests that risk factors for IPV include individual issues such as depression, anger and isolation from others, relationship factors such as marital conflict and instability, and community factors such as a lack of broader social connections to people and institutions (World Health Organization, 2002). Therefore, prevention strategies should address all levels of risk: individual, relationship and community (World Health Organization, 2002). For veterans, this means providing programming that includes psycho-education about the impact of traumatic stress on the individual and his/her partner, skill-building to strengthen intimate relationships, peer supports to encourage connection, and community awareness to create broader networks of support.

III. Strength at Home: Family and Friends

The Strength at Home: Family and Friends intervention is designed to provide veterans and their families with skills to communicate effectively and develop relationship skills, despite the negative impact of PTSD on relationships. The skills acquired then support the couple and family in avoiding aggressive conflict and IPV. Strength at Home includes ten weekly two-hour sessions with supplemental practice assignments to reinforce skills and knowledge (Figure 1). The sessions are conducted in groups of four to six pairs by a Masters-level clinician. The first stage of the intervention provides information about post-trauma issues such as PTSD and TBI, with a focus on how these impact an individual and his/her relationships with significant others, and can increase conflict and violence. The second stage focuses on building communication, problem-solving, and conflict management skills through the use of concrete exercises. The intended outcomes of Strength At Home are stronger interpersonal relationships among veterans and their intimate partners, families and friends, and a reduction in IPV.

Program Implementation

After an unsuccessful attempt to site the program in Antelope Valley, CA, the program was sited in Fresno, CA (www.sjvv.org). The program site, San Joaquin Valley Veterans (SJVV), actively recruited, screened and ran *Strength at Home* intervention groups from October 2010 through March 2012. The CCSVF program trained 30 clinicians to conduct the *Strength At Home* intervention. All clinicians were trained in appropriate administration of the project evaluation instrument, storing and management of completed instruments, and informed consent. Written training materials were distributed to San Joaquin Valley Veterans and all clinicians. To accommodate limited reading abilities and to increase completion rates, all instruments were adapted for oral administration (by telephone and in-person). Clinicians were trained in oral administration in Summer 2010 and began to collect data by telephone if respondents either did not return written surveys, or were reluctant to complete surveys for any reason. Follow-up post intervention interviews continued for an additional three months with the help of a SJVV clinician. Data collection concluded in July of 2012. A final site visit for

the process evaluation was intended for March 2012, but deemed unnecessary by the program staff because the intervention was proceeding smoothly.

Participants were referred to the program by affiliated veteran organizations and through promotional outreach. After meeting with the program administrator, each prospective group member met with a clinician, who then obtained informed consent, and administered an intake interview. Intake measures required approximately thirty minutes to complete. Participants who did not wish to participate in the research element were still able to participate in the 10-week intervention.

During the intake interview (Time 1), participants completed the following measures:

- Demographic and Residential Stability Form
- Military History Form (for veteran only)
- HELPS Screening Tool (for veteran only)
- PTSD Symptom Check List (PCL)
- Personal Health Questionnaire
- Quality of Relationship Inventory (QRI)
- Alcohol Use Disorders Identification Test (AUDIT)
- Drug Abuse Screening Test (DAST)
- Quality of Relationship Inventory (QRI)
- Dyadic Adjustment Scale (DAS)
- Revised Conflict Tactics Scale (CTS2).

At the end of the 10-week intervention (Time 2), research participants again completed the same pen and paper measures, except for the HELPS screen, the Residential and Demographic survey form, and the Military History form. At Time 2, participants also completed an Exit Survey to measure participant satisfaction with the intervention. At three months post intervention (Time 3), participants completed these same measures again via electronic survey

or by mail. Gift cards were used as an incentive to encourage participants to complete the survey electronically or by mail.

In May 2011, the number of individuals targeted by the intervention was reduced. Several factors contributed to this decision, including increasing the intervention from eight to ten sessions, incorporating the attrition rate, relocating the site which resulted in a geographic service delivery change, and encountering significant barriers around recruitment, enrollment and intervention completion.

A process evaluation site visit was conducted in 2011 during which staff and clinicians were given the opportunity to share both their successes and challenges. Phone interviews were conducted in December 2012 between SJVV staff and Dr. Casey Taft (the primary developer of the intervention) to obtain their reflections and insights of the program as the project came to a close. The most significant impact of the feedback from the evaluation site visit was an adjustment in the supervision process for clinicians. Prior to the site visit, Dr. Taft provided remote supervision. The site visit raised concerns about this remote supervision. Clinicians were apprehensive about a lack of accountability and felt that client care could potentially suffer. With help from Dr. Taft, SJVV program management quickly identified a local clinical supervisor, Dr. Sherry Walling, Assistant Professor at Fresno Pacific University, already trained in *Strength At Home*. Dr. Walling, under Dr. Taft's supervision, took over weekly supervision of the clinicians.

During program implementation, staff invested considerable time to create cooperative relationships with local providers and develop their commitment to provide veterans with the opportunity to benefit from the program. An important referral source was the Post Traumatic Stress Disorder Team at U.S. Department of Veterans Affairs in Fresno, CA. All of the *Strength at Home* staff met at least once with the entire team or with a psychologist on the team to promote the program and build a cooperative relationship. A fortuitous connection was made with the local Veteran's Employment Committee. This provided direct connection to several organizations serving veterans, including: the local Veterans Employment Representative, the

Disabled Veterans Outreach Program, Operation Welcome Home, Fresno State University, Fresno City College, Fresno County Social Services, and the Fresno County Veteran Center. These organizations provide the majority of referrals to the program along with space to conduct the group sessions. Their support validated the program, helping to gain "buy-in" from veterans.

Session 1: Introduction and Welcoming

Clinician establishes a working alliance with each couple, validating and address participants'
concerns and reservations about counseling, and to model and encourage healthy group
interactions.

Session 2: PTSD and Relationships I

- Group members explore their beliefs about healthy and unhealthy relationships.
- Psychoeducational material focuses on understanding forms of partner abuse, PTSD symptoms, and the impact of trauma and PTSD on couples' relationship functioning.

Session 3: PTSD and Relationships II

• Discussion of several themes related to trauma that can affect relationships, including trust, power and control, self- and other-esteem, and intimacy.

Session 4: Conflict Management I: Assertiveness

- Continues development of understanding the impact of trauma and PTSD on relationships, and conflict management styles in particular.
- •Members identify positive communication styles rather than potentially harmful styles during conflict.

Session 5: Conflict Management II: Time Outs

- Developing strategies to deescalate conflict situations.
- Couples develop and practice a detailed "Time Out Plan" to use during potential conflict situations.

Session 6: Communication Skills I: Active Listening

• Active listening skills are emphasized because they are the foundation of good communication and are critical for de-escalating conflict and enhancing intimacy.

Session 7: Communication Skills II: Assertive Messages

•Developing communication skills to reduce the negative impact that PTSD has on communication, and to further the development of intimacy, improve relationship problem solving, and facilitate the sharing of trauma-related material.

Session 8: Communication Skills III: Expressing Feelings

•Understaning how PTSD-related avoidance can lead to difficulties expressing emotions in relationships and strategies for expressing feelings.

Session 9: Communication Skills IV: Common Communication Traps

• Five communication traps that undermine assertive communication and strategies to avoid them.

Session 10: Reviewing Treatment Gains and Planning for Future

- •Identify goals and strategies for future change along with barriers to change and strategies to overcome these barriers.
- •Members develop a realistic appraisal of changes made, and identify areas needing continued attention and strategies for continuing this work after the group ends.

Figure 1. The Strength at Home: Family and Friends Intervention

Implementation Challenges

In general, feedback from program participants and community stakeholders was very positive. On multiple occasions, veterans commented that the group sessions "saved the marriage." Community stakeholders continue to ask for the program to return, citing both the ongoing need for the intervention as well as its prior success. There were some challenges and obstacles in the process of providing the program. One of the first lessons learned was that flexibility from staff and clinicians to accommodate group members was an essential factor to success. This included providing additional support such as childcare during the group sessions, as well as adjusting the program to accommodate the participants' schedules. This was particularly challenging for project staff because the clinicians were graduate students who worked part-time on the project while tending to other responsibilities and commitments. Initially, staff tried to insist that group participants adjust their schedules to the program, but they quickly realized this was not a realistic possibility for most participants. Instead, the staff adjusted their own schedules to arrange meetings according to participants' availability. A participant was never turned away because of a scheduling conflict. An on-line calendar was established to facilitate coordination of the clinicians' schedules with the availability of participants.

Another barrier to enrollment was referral of veterans to the program who were not appropriate for the intervention. Some couples needed more intensive intervention of counseling, which the program was not designed to provide. Twenty-three veterans referred to the program were not enrolled because of substance use or mental health problems, or due to violence in their relationships. However, program staff developed referrals for these veterans, so that every veteran in contact with the program received some information and guidance to address their needs.

From the perspective of SJVV staff, additional barriers to program recruitment and retention included:

- Unemployment in San Joaquin Valley was at 18%, causing veterans and families in the
 area to struggle in maintaining their housing. Veterans were been forced to prioritize
 housing, employment, and other pressing financial needs over a relationship
 enhancement intervention.
- There was a "seasonal effect" on recruitment: summer and winter experienced very low enrollment, while fall and spring were had high participation. In response, the program staff increased their efforts during spring and fall and anticipated a decrease in participation for summer and winter.
- Many enrolled participants exited the program prematurely to pursue employment opportunities outside the program's geographic area.
- A strong stigma about seeking help is ingrained in US military culture and this follows
 veterans into civilian life. This stigma is especially strong around the admission of
 mental health issues (e.g., PTSD and related symptoms).
- The program was viewed by some veterans as a form of "marriage counseling." This
 misconception discouraged participation by unmarried veterans who might otherwise
 want to attend the program with a non-romantic partner.
- By the time some veterans entered the program, the relationship with their partner was
 so severely deteriorated that the relationship did not survive the duration of the
 program. Many couples parted ways during the course of the intervention and left the
 program before completion.
- Some veterans still serving in the Reserve or who were connected with military service
 organizations did not participate out of concerns that records from a "mental health"
 program would impact their military service records. Nineteen veterans participated in
 the program but declined to participate in the research element.
- "Life events" interrupted the intervention for some participants to take their attention away from participating. In some cases, these pairs were brought back to the program over time.

 Follow-up over time was challenging with a population that is geographically mobile due to issues of employment.

An important consideration when implementing this program is that one of the primary symptoms of PTSD is avoidance. The veteran may be reluctant to participate in any program that is perceived as possibly triggering a trauma response or reliving memories a veteran is trying to avoid. Unfortunately, such avoidance actually worsens PTSD symptoms and places relationships at greater risk. Dr. Taft provided the following reflections:

"Perhaps the largest barrier to recruiting clinical samples of military veterans and their families is the issue of stigma. Military members may have internalized messages from commanding officers or fellow service members that those who seek help for traumarelated problems are weak in some way, despite recent attempts by command to reduce such stigma. While many veterans report that they benefit from talking to other veterans and military families about their difficulties, they may experience some shame in discussing difficulties with other service members. Despite our assurances that all research materials are confidential, there is often a concern among military members that if they seek help for trauma, somehow military command will find out and they will lose their military status or rank.

"In our work with the *Strength at Home* model, it is often helpful to enlist the assistance of a family member, relationship partner, or friend who encourages the veterans to participate in the dyadic intervention. Thus, the dyadic nature of the group is often a strength and generally tends to enhance retention among those who initially seek out treatment and begin the intervention group. There are also challenges inherent in a dyadbased group, however, including the fact that both members of the dyad need to be willing and able to attend. Some relationships dissolve prior to or immediately upon entering the program, which precludes participation."

Dr. Taft also noted that a dyad ending during the program early is not necessarily a negative outcome. Clinicians have noted that during the process of learning about healthy relationships and communication, a couple can realize their relationship was never strong and the best outcome is to break up. The couple is able to recognize the qualities of a healthy relationship, realize their relationship cannot be repaired, and agree to part without acrimony or aggression.

IV. Program Findings

A total of 170 participants were enrolled in the research portion of the *Strength at Home* program and completed the intake measures. At the first follow up interview, 90 participants completed the measures. At the second follow up, 82 participants completed the measures.

Sample Characteristics

Fifty-four percent (n = 91) of the sample was male; 46% (n = 77)¹ was female, with an age range of 18 to 70 years. Nearly half (49%) were White, 40% were Latino, 15% were African-American, 9% were American Indian, 1% was Asian, and 26% were 'other' (please note that participants who were Latino could also select another ethnicity, and therefore the percentage exceeds 100%). The majority (80%) had children, one half (50%) had children under age 18, and 48% had children living with them at home. The sample was largely well educated, 14% held a bachelor's degree or higher, 49% had some college attendance, 13% had an associate's degree, 18% had a high school degree or GED equivalent, and only 6% did not graduate from high school.

Relationship Quality

Changes in relationship quality were evaluated with the Quality Relationship Inventory (QRI) and Dyadic Adjustment Scale (DAS). The QRI is a 29-item self-report measure that assesses supportive and conflictual aspects of relationships, including friendships. It consists of three subscales: perceptions of social support, conflict, and depth of relationship (28). The DAS is a 32-item self-report measure that assesses dyadic adjustment, in which adjustment is defined as "a process, the outcome of which is determined by the degree of: (1) troublesome dyadic differences; (2) interpersonal tensions and personal anxiety; (3) dyadic satisfaction; (4) dyadic cohesion; and (5) consensus on matters of importance to dyadic functioning" (Spanier, 1976, p. 17).

16

¹ Data was missing from two participants.

The QRI scores did not change significantly from baseline to follow up (p = .81), indicating neither improvement nor decline in the relationship. There were also no significant changes in DAS scores (p = .45), again suggesting there were no changes in the quality of the relationship from baseline to follow-up.

To further examine these outcomes, we compared the scores of the veterans to the scores of their partners to determine if they were experiencing their relationships differently. There was no significant difference between the veterans and their partners in relationship quality changes.

Future of Relationship and Happiness/Satisfaction in Relationship

We then examined subsections of the DAS to assess specific aspects of relationship quality. To assess the participants' feelings about the future of their relationship, we examined the following question from the DAS:

- Which of the following statements best describes how you feel about the future of your relationship?
 - I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
 - I want very much for my relationship to succeed, and will do all I can to see that it does.
 - I want very much for my relationship to succeed, and will do my fair share to see that it does.
 - It would be nice if my relationship succeeded, but I can't do much more than I
 am doing now to help it succeed.
 - It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
 - My relationship can never succeed, and there is no more that I can do to keep the relationship going.

There was a significant *decrease* (p < .001) in the scores for this item, indicating low expectations for the future success of the relationship.

We also examined degree of happiness in the relationship, which was assessed with the following question:

- Which best describes the degree of happiness, all things considered, of your relationship:
 - Extremely Unhappy
 - Fairly Unhappy
 - A Little Unhappy
 - о Нарру
 - Very Happy
 - Extremely Happy
 - Perfect

In contrast with the other relationship measure, the degree of happiness with the relationship as measured by the DAS *increased* from baseline to post-intervention (p < .001) and remained elevated at follow up (p < .001). Table 1 presents the mean scores for the three DAS measurements.

TABLE 1. RELATIONSHIP QUALITY: DYADIC ADJUSTMENT SCALE (DAS)

	Total Score		Relationship Future		Happiness	
	Mean	SD	Mean	SD	Mean	SD
Baseline	3.56	.75	3.89	1.05	2.99	1.50
Post-	3.47	.74	4.05	1.14	3.58*	1.25
Intervention						
Follow-Up	3.38	.94	2.21*	1.33	4.49*	1.60
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Mental Health: PTSD and Depressive Symptoms

Table 2 presents the changes in PTSD and depression symptoms. PTSD was assessed using the PTSD Checklist (PCL), which is a self-report measure that inquires about the frequency of PTSD symptoms (e.g., physical reactions such as heart pounding, dreams about the event, emotional numbing). Depression symptoms were assessed using the Personal Health Questionnaire.

PTSD symptoms *decreased* significantly from baseline to post-intervention (p < .001) and remained low at follow-up (p < .001). Symptoms of depression also *decreased* significantly from baseline to post-intervention (p < .001) and remained at this level at follow-up. Both of these outcomes are encouraging, as they suggest the participants gained an understanding of his/her emotional reactions and successfully implemented cognitive-behavioral strategies to manage and minimize trauma symptoms. Table 2 presents the mean scores for the PTSD and depression symptoms.

TABLE 2. CHANGES IN PTSD AND DEPRESSION SYMPTOMS

	PT:	SD	Depression		
	Mean	SD	Mean	SD	
Baseline	28.98	18.86	11.80	8,22	
Post-Intervention	21.29	18.96	7.58*	6.79	
Follow-Up	19.73	18.38	7.56*	6.77	

^{*}p < .001

Aggression

Use of aggression in relationships was assessed with the Conflict Tactics Scale (CTS). This scale measures different forms of aggression, including verbal and physical.

Verbal aggression between couples *decreased* significantly from baseline to post-intervention (p < .01) and was sustained through follow-up (p < .01). There was no significant change in violent behavior, but couples with violence were screened out of the program at baseline, so this finding was expected.

Substance Use

It is not uncommon for veterans with trauma symptoms to self-medicate with drugs or alcohol, so we assessed alcohol use to consider its possible contribution to relationship problems. The vast majority (83%) of the sample did not screen positive for any alcohol use problems, while 7% had harmful or hazardous drinking habits, and 10% likely had alcohol dependence problems.

V. Discussion

The findings indicate that the *Strength at Home* was a successful program for veterans and their families. The program was effective in decreasing verbal aggression, PTSD and depression symptoms, and increasing relationship happiness. While there were obstacles encountered in the recruitment and attendance of participants, these challenges were addressed by the program staff during implementation of the intervention.

Lessons Learned

Program implementation provided valuable information to inform future projects. For recruitment to be successful, project staff need to invest considerable time reaching out to area programs serving veterans to educate them about the program, and to build a collaborative rapport so they are invested in the program and will refer clients for the intervention. This was essential not only to facilitate and streamline the referral process, but also to lend validity to the project from the viewpoint of the veteran. Having professionals endorse the program provided legitimacy to the project.

Another essential component to the success of the program was flexibility with the participants. This included not only with their schedules, but also with providing childcare and conducting the groups in a convenient location. Coinciding groups with participants' availability was particularly challenging for this project. The counselors had limited availability themselves, and it became clear early on that it was not practical for the veterans to rearrange their schedules. The only reasonable solution was to increase flexibility of the project staff. This required considerable organization and ongoing communication among numerous counselors and staff, but a system was worked out –including an online calendar to provide current information about groups and counselor availability. With this flexibility, no participant was turned away due to scheduling conflicts.

The project exhibited a "seasonal effect" on participation. Enrollment dropped in both winter and summer, but jumped up in fall and spring. It is not clear if this was related to activities

typically associated with summer and winter (e.g., vacations, children out of school, holidays) or if it was related to some other phenomena. Project staff increased their program efforts during the fall and spring, recognizing these seasons presented the best opportunities to recruit participants and maximize program participation. Future programs should consider concentrating their efforts during these two seasons.

For this project, veterans with mental health problems, substance use issues, intensive marital problems, or violence in the relationship were excluded from the intervention. However, staff assembled a list of referral sources for veterans with these issues who could not take part in the program. Future programs should anticipate this issue and develop a referral package for veterans excluded from the intervention.

Future programs should also be mindful of the stigma of "mental health" treatment in military culture and how this may act as a deterrent to participation in the intervention. It is difficult for many veterans to seek assistance because of concerns about being perceived as weak or damaged, or having mental health treatment on their military records. Confidentiality must be emphasized, and seeking help for relationship problems should be normalized when discussing the intervention.

Project staff also noted misconceptions by veterans and others that the intervention was marriage counseling; this was an obstacle to recruiting unmarried couples and veterans who would benefit by participating with other family members (e.g., children, parents) or friends. In discussing the program with collaborative agencies that will refer participants, the inclusion of non-married couples and other relationship dyads should be stressed.

Impact of the Intervention

In considering the intervention's primary goal – to reduce aggression and occurrence of IPV – *Strength at Home* was effective in many respects. Verbal aggression decreased significantly, indicating improved understanding of emotional reactions and effective communication strategies. Incidence of violent aggression did not decrease, but those dyads with violence

were excluded from the project, so it was anticipated this would not show a significant change. There was no significant escalation to violent aggression among any of the dyads, which can be considered a successful outcome for these at-risk relationships.

The intervention was also successful at decreasing PTSD and depression symptoms. Both of these outcomes are very encouraging, as they suggest the participants gained an understanding of his/her emotional reactions and successfully implemented cognitive-behavioral strategies to manage and minimize trauma symptoms. Because these mental health problems can have devastating effects on relationships, their reduction provides a greater chance for the relationship to improve.

While the *Strength at Home* intervention improved relationship functioning, specific measures of relationship quality indicated a *decrease*. Hope for the future of the relationship also did not improve. At the same time, happiness in the relationship *increased*. This seemingly contradictory finding likely reflects that the best outcome for some dyads was end to the relationship. As they learned about the qualities of healthy relationships, some couples realized their relationships did not have a healthy foundation, could not be sustained and therefore should end. In these situations, the therapists considered the end of the relationship as a positive outcome. This dynamic seems to have influenced the overall relationship quality measures, which assessed emotional intimacy and the dyad's hopes for the future of the relationship. Happiness increased across the board, both among couples that improved their relationship and those who ended their relationship. Perhaps happiness with the relationship increased among those who ended their relationships because they did so without acrimony or hostility, reaching a mutual understanding that the relationship was not healthy or sustainable.

Study Limitations

Data collection did not capture nuances of each dyad's circumstances, including whether dyads split up or stayed together, and how these situations influenced their outcomes. It is, therefore, unclear whether to draw definitive conclusions about the contradictory findings of

decreased relationship quality and increased relationship happiness. Future research should collect additional information about the circumstances behind dyad separations to gain a better understanding of the broader impact of the intervention. Additionally, the sample size did not allow for analysis of the different configurations of dyads (e.g., husband and wife, significant others, friends, fathers and children). It is important to determine how the intervention affects different types of relationships, not only to better address different types of relationships, but also to promote the intervention as an effective tool for a broad range of relationships.

Conclusion

Strength at Home was effective in improving the relationships of veterans with their families and friends in important ways. The curriculum targeted the specific needs of those returning veterans with trauma symptoms, provided an understanding of how trauma affects relationship functioning, helped veterans and their families develop strategies and skills to minimize the negative impact of PTSD on relationships, and improved communication skills. Over the course of the intervention, depression and PTSD symptoms decreased, improving not only quality of life and emotional functioning for the veterans, but also reducing the negative impact of these mental health disorders on relationships. It is very encouraging that these improvements were seen not only at the completion of the intervention, but also three months later, suggesting a lasting impact for veterans and their families. The intervention also proved to be a welcomed program by community organizations serving veterans, and by the veterans themselves.

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