

**COUPLES TOGETHER AGAINST VIOLENCE (CTAV) INTERVENTION PROGRAM
(a.k.a. CREATING HEALTHY RELATIONSHIPS PROGRAM—CHRP)**

FINAL PROGRESS REPORT

**RELATIONSHIP RESEARCH INSTITUTE
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A. PROJECT SUMMARY

Although marriage, fatherhood/parenting, and intimate partner violence (IPV) are closely related areas of family functioning, interventions to address these issues are typically designed to operate independently of each other. This grant conducted a longitudinal evaluation of a conjoint intervention program for low-income situationally violent parent couples in response to the “Responsible Fatherhood and Healthy Marriage Research Initiative”. The evaluation tested the ability of the Couples Together Against Violence (CTAV) program (a.k.a., Creating Healthy Relationships Program; CHRP) to 1) encourage healthy relationships that could strengthen or otherwise lead to marriages; 2) promote responsible fatherhood through information and skills that support healthy relationships, and 3) reduce a low-level but prevalent form of IPV—situational violence.

Situational Violence. Unlike characterological violence, which involves a clear perpetrator and victim and is marked by controlling and dominating behavior, situational violence is reciprocal in nature. Situational violence is characterized by mutual, low-level physical and psychological violence perpetrated by both partners that occurs somewhat infrequently (e.g., every other month or so). It may take the form of pushing and shoving, for example, that is physical in nature but is not severe enough to cause injury. In addition, the intent with such behavior is not to control, dominate, or assume ownership over one's relationship or partner, as is the case with characterological violence. Situational violence has not been found to escalate into more severe forms of physical assault over time. It is believed that situational violence may occur between couples who lack conflict management skills and thus resort to becoming psychologically and physically aggressive as a means of conflict resolution (Johnson, 1995; 2006; Straus & Smith, 1990). Thus, violent couples may exhibit such behaviors during problem-solving interactions.

Research Questions. Using a sample of low-income situationally violent parent couples, this project sought to address five main research questions:

1. Can a screening tool be developed that accurately identifies situationally violent couples (versus those who are non-violent or experience characterological violence) so that only situationally violent couples can be invited to participate in the intervention?
2. Can a group-based intervention for low-income couples experiencing situational violence be effective in encouraging healthy relationship and conflict management skills?
3. Can such a program be safely implemented and not increase violence in couples who participate? Can program completion directly reduce the incidence of situational violence?
4. If program completion can reduce instances of situational violence, what is the mechanism through which violence is reduced?
5. Can such a program lead to more responsible fatherhood, either directly through program completion, or indirectly through a healthier relationship with the children's mothers?

Hypotheses. To address these research questions, the following hypotheses were tested:

1. The screening instrument used in this study will distinguish between characterological violence, situational violence, and no violence. Self-reported conflict tactics in couples enrolled into the study will reflect only low-levels of IPV and will mirror those found in situationally violent couples from other studies. In addition, negative affect and hostility observed during conflict discussions will be within the acceptable range when compared to situationally and characterologically violent couples in previous observational studies.
2. CTAV will encourage healthy relationships. Compared to the control group, couples in the program group will experience less divorce and relationship breakup, and will report increased use of healthy relationship and conflict management skills.
3. CTAV will be safely implemented in a sample of low-income, situationally violent couples. Both self-reported violence and behaviors that show a susceptibility toward violence (i.e., negative affect and hostility) will not increase in the program group, and there will be less self-reported violence and observed conflict in the program group compared to the control group.
4. CTAV will result in lower levels of violence as a result of couples learning communication and conflict management skills rather than a change in men's attitudes towards violence.
5. CTAV will promote responsible fatherhood. Compared to the control group, fathers will exhibit more co-parenting and be more involved with their children; this will come about via improvements in couple relationship quality.

Participants. Using a new screening tool to distinguish between these forms of violence, 128 low-income situationally violent adult couples were identified and invited to participate in the study. Final eligibility for the study was based on the following criteria: 1) couples must be romantically involved and in a committed relationship for at least one year; 2) be 18 years of age or older, 3) speak fluent English; 4) be experiencing situational violence; 5) have at least one child under age 12 living in the home; 6) have a combined income below the local county median for a family of three (\$73,000); 7) not be experiencing characterological violence, significant substance abuse issues, or have a positive screen for Antisocial Personality Disorder.

Average age of the participants was 35 years (± 8) for males and 34 (± 8) for females. Couples were romantically involved for an average of 7.9 years (± 8 months) and had been living together for an average of 6.6 years (± 7 months). Most couples had 3-4 family members living in the household ($M=3.76 \pm .9$) and an average combined household income of \$53,664¹ (\pm \$29,088). 73.2% of couples were married, 24.7% were unmarried but cohabitating, and 2.1% of couples had separated or divorced before the start of the study but were in the process of reconciling. The racial and ethnic breakdown for males was: 78.8% Caucasian, 16.2% African American, 4% Asian, 4.2% Latin American/Hispanic, 2% Pacific Islander, 2% Native American Indian, and 2% endorsed another racial/ethnic background. Racial and ethnic breakdown for females was: 87.4% Caucasian, 13% African American, 3.1% Asian, 6.8% Latin American/Hispanic, 4% Pacific Islander, 9% Native American Indian, and 4% endorsed another racial/ethnic background. The majority of male participants (35.4%) reported completing high school and no further education; the majority of female participants (33.3%) had completed college but nothing further. Most of the males (69.7%) reported working full-time, although 10.1% were unemployed. Most of the females (52.5%) were unemployed homemakers, although 38% reported working full- or part-time, and 9.1% were unemployed.

Method. Couples were randomly assigned to the intervention or a control group (treatment group $n = 63$ ²; control group $n = 53$) and followed for an 18 month period³. Couples were assessed through self-report, observational, and physiological data collection methods at four time points: baseline (Time 1), ~6 months after baseline (Time 2), ~12 months after baseline (Time 3), and ~18 months after baseline (Time 4). Couples assigned to the treatment group were offered the CTAV intervention program directly after baseline and prior to Time 2. Couples completed surveys on IPV, conflict management and healthy relationship skills, relationship status, relationship satisfaction, co-parenting, and attitudes toward violence. During assessments, couples also participated in a 15-minute “conflict discussion” during which observable behaviors (e.g., anger, contempt, criticism, domineering, stonewalling, belligerence, etc.) were coded. Physiological reactivity (e.g., heart rate, skin conductance) was also measured throughout the discussion.

The Intervention Program. The Couples Together Against Violence (CTAV) program is a psycho-educational intervention based on more than three decades of research with over 3,000 couples, including happily married couples, distressed couples, violent couples, and couples becoming parents for the first time (Gottman, 1994; Gottman & Silver 2000; Jacobsen & Gottman, 1998). Based on this work, Dr. Gottman developed a two-day couples workshop. This workshop and other Gottman interventions, such as Bringing Baby Home for expectant parents, focus on teaching healthy relationship and conflict management skills. Theoretically, changes in

¹ According to the Washington State Housing Finance Commission, those who make 80% of the median income level in King County (e.g., \$51,516 for a family of three; \$61,956 for a family of four) represent low-income families in this region. Thus, the average household income levels obtained from study participants show that they were indeed low-income families.

² Please note that one same-sex couple was screened into the study and randomized into the treatment group. Data collected from this same-sex couple was not included in analyses described in this report.

³ The original sample size after initial screening/intake included 128 couples. Time 1 $N = 116$ couples (12 couples dropped out of the study prior to T1 data collection). Time 2 $N = 67$ couples (59 couples dropped prior to T2). Time 3 $N = 55$ couples (67 couples dropped prior to T3). Time 4 $N = 51$ couples (77 couples dropped prior to T4).

these relationship behaviors should not only improve relationship satisfaction, but also reduce couples' risk of intimate partner violence. However, this possibility has not been fully explored, as the two-day workshop was designed for nonviolent couples; nor had previous Gottman interventions been tailored to meet the needs of diverse, low-income couples.

Based on this need, the Loving Couples Loving Children (LCLC) intervention (used in ACF's Building Strong Families project and Supporting Healthy Marriage evaluation) was developed based on research and experience with Gottman's psycho-educational interventions, but, with assistance from Mathematica Policy Research, was adapted to be more accessible to a population of low-income, ethnically diverse unmarried parents. Realizing that low-income ethnic minority couples have particular concerns and styles of interacting and learning, extensive changes were made to the original intervention approach so that it would be more suitable for and appealing to the target populations.

The CTAV intervention was based largely on LCLC, building on previous psycho-educational interventions for couples. It was developed specifically to strengthen marriage and relationships by addressing low-level situational violence that is commonly the result of poor conflict management skills. It was also geared to specifically address issues related to responsible fatherhood, such as what it means to be a father, and the importance of father involvement.

The CTAV intervention sessions take a solution-focused and strengths-based approach, emphasizing skills for constructive conflict management, creating and maintaining emotional intimacy, coping with stress and depression, and including information about the importance of fathers and healthy marriage. The 22 two-hour sessions, which are facilitated by a male-female pair of Masters+ level clinicians with a group of 4-8 couples, cover five content areas:

Managing Conflict: Preventing harmful fights; accepting influence; understanding two sides to every fight; compromising; what to do when endless fights turn harmful; how to have recovery conversations after a fight or failed bid; regulating physiology during conflicts; and avoiding and healing future violence.

Managing Stress: Coping with stress as allies, not enemies; the stress-reducing conversation; dealing with depression.

Fathers, Marriage, and Parenting: The importance of fathers and positive connection with children, the benefits of marriage for children's well-being, guiding children by example, working with your partner to emotion-coach your children.

Maintaining Intimacy: Maintaining affection and respect by knowing your partner; how to express and respond to partner's bids for connection; learning about and showing support for your partner's past hurts; being proud of each other; preventing and recovering from infidelity; avoiding contempt, criticism, defensiveness, and stonewalling.

Creating Shared Meaning: The importance of listening to your partner's dreams and honoring and respecting them.

Results. Analysis of the data showed the following results regarding the five primary hypotheses:

1. The screening instrument was able to successfully identify situationally violent, versus characterologically violent, versus non-violent couples. Situationally violent couples enrolled into the study were found to report lower levels of IPV compared to characterologically violent couples from a previously collected sample, and comparable levels of IPV to situationally violent from the other sample. Enrolled couples did not report significantly higher levels of IPV compared to a sample of distressed non-violent couples from the other sample, suggesting that the screener may have been sensitive enough to distinguish these two groups, but was better able to identify more divergent groups of couples (i.e., those who were situationally versus characterologically violent). Results suggest that the screener may be a useful tool within research and clinical contexts where discernment between these groups is necessary.
2. Although participation in CTAV did not lead to fewer instances of divorce and relationship dissolution, treatment couples did show improvements in relationship quality over time and in comparison to control couples. Specifically, self-reported relationship satisfaction and use of healthy relationship skills were higher and conflict was lower at Time 2 in comparison to control couples and in comparison to treatment couples at Time 1. In addition, males in the treatment group were more successful in their attempts to physiologically self-soothe at Time 2, as evidenced by a maintenance (over time) in heart rate during conflict, whereas control couples showed a significant increase in heart rate reactivity over time.
3. CTAV was safely implemented in this group of low-income situationally violent couples. Violence did not increase in the program group, although self-reported violence was not directly reduced over time based on program completion. However, observed behaviors that show a propensity toward violence were reduced over time (across all four time points) and in comparison to controls.
4. Although CTAV did not prompt a direct reduction in self-reported violence, IPV was indirectly reduced via use of healthy relationship and conflict management skills. In other words, treatment group status was associated with increased use of intervention skills, which was, in turn, associated with reduced IPV. In contrast, IPV was not reduced via changes in attitudes toward violence.
5. CTAV promoted a stronger co-parenting alliance between partners, although this effect occurred as a function of improvements in couple relationships rather than directly as a result of program completion. Specifically, treatment group status was associated with improvements in friendship and shared meaning (facets of the Shared Relationship House, the theoretical rationale that the intervention is based on), which were, in turn, associated with increased co-parenting reported by both males and females.

Implications. Overall, findings from this study imply that both responsible fatherhood and healthy marriage programs can safely and effectively identify and serve low-income, situationally violent couples in group-based interventions where both parents participate together. Furthermore, participation in such programs may promote use of conflict management and healthy relationship skills, a stronger co-parental alliance, and a reduction in IPV. Finally, couples that may benefit from participation in conjoint treatment options like CTAV (i.e., low-income situationally violent couples) may be properly identified via use of the screening instrument developed as part of this study.

B. MAJOR ACTIVITIES AND ACCOMPLISHMENTS

CTAV CURRICULUM DEVELOPMENT

At the start of this project, researchers collaborated with members of an expert panel in the process of adapting and refining the CTAV curriculum for low-income, situationally violent parent couples. As a result, five new modules were developed and the presentation sequence of these modules was modified to better address the needs of the situationally violent couples participating in this study. A greater emphasis was placed on physiological soothing and conflict resolution at the beginning of the curriculum rather than starting with modules focused on positive affect. The following is an outline of the revised 22-week CTAV curriculum and the order in which these modules were presented:

- 1) Preventing Harmful Fights
- 2) Expressing Needs
- 3) Compromise
- 4) Self-Soothing
- 5) Avoid and Heal Violence (Part 1)
- 6) Avoid and Heal Violence (Part 2)
- 7) Close Conversations
- 8) Stress-reducing Conversations
- 9) Editing out Negativity and Accepting Influence
- 10) Managing Anger
- 11) Building a Culture of Respect and Appreciation
- 12) Self-Care
- 13) Recovery Conversations After A Fight
- 14) Healing Old Wounds
- 15) Prevent/Recover from Infidelity
- 16) Turn Toward, Not Away
- 17) Staying Close
- 18) Magnify and Savor Positive Affect
- 19) Honor Your Partner's Dreams
- 20) When Endless Fights Turn Harmful
- 21) Connect Emotionally
- 22) Romance, Passion, & Good Sex

In addition, we added an additional tool to the CTAV curriculum - an emWave device, which was approved for use by ACF/OPRE. Because conflict is closely associated with one's physiological and emotional state, skills associated with self-soothing and avoiding flooding are also central themes in the CTAV program. A great deal of basic research has recently accumulated to show that a particular physiological indicator—variability in heart rhythm—is associated with relaxed and flexible responding and constructive interaction with other people. High heart rate variability is related to vagal tone, or parasympathetic activation, and is part of the experience of calmness. In contrast, sympathetic activation is related to defense and alarm.

Biofeedback devices that provide information about simple heart rate have been used in the past to help individuals learn how to relax and were thus incorporated into the CTAV program. The emWave was introduced in the fourth session.

OUTREACH & RECRUITMENT

Our recruitment and outreach efforts, aimed at identifying eligible participants to enroll into the study, included establishing extensive partnerships with community based organizations that serve low-income distressed couples, a brochure and flyer-based advertising campaign, and raising awareness of the study through the media (e.g. television, newspaper, online). In general, we found identification of couples who met all eligibility requirements to be highly challenging and this modified our recruitment efforts appropriately during the first half of the grant.

We put lots of effort into fostering relationships with Community Based Organizations (CBOs), who we asked to provide referrals to the study. We regularly checked in with our contacts at each CBO and provided “in-services” for providers as appropriate, where we informed them about the purpose of our study, answered questions, and let them know how to refer couples to the study. We also attended various classes offered at CBOs to present information about the CTAV study and have couples sign-up for more information and screening. We also engaged in additional opportunities to hold resource tables at various venues in the area in order to have more direct contact with lower income families and providers in the area.

We ran two radio campaigns, a Facebook advertisement, and continually posted announcements about our study online via craigslist and various blogs. Our Facebook advertisement targeted a specific population of people based the information placed in their profile. Age range, relationship status, geographical location and misc. key words were selected in order to appropriately target our potential subject pool. Overall, our ad was clicked on 243 times and appeared in 477,389 individual’s profiles.

In an effort to continue to foster our relationship with CBOs, we held a town-hall style event in which Dr. Gottman presented. This 2-hour session was open to all CBOs and couples. Dr. Gottman discussed past research and also covered our current research project, followed by a question and answer session.

We provided direct presentations to potential participants (e.g., parenting and anger management classes) and hosted resource tables at events (e.g., Head Start annual parent picnic) that couples attend whenever possible, which allowed us to: 1) increase our visibility among families and other providers, 2) make direct contact with couples about the program, and 3) directly obtain sign-ups from individuals wanting more information about the study or requesting to be called by a research team member to participate in the screening process.

Recruitment efforts to find couples to participate in this project ended the first week of December 2009. Our most fruitful recruitment sources for finding couples include posting advertisements onto Craigslist.org (15%), radio advertising (19%), and interfacing with our community-based organizations (21%). Our final recruitment numbers are listed below:

Total Screened	Screened-in: Dropped prior to Time 1 Home Visit	Screened-in: Treatment Group	Screened-in: Control Group	Screened-Out
1704	12	62	54	1576

ENROLLMENT & DATA COLLECTION

We initially enrolled 128 couples into the study. A total of 77 couples (out of 128) dropped out of the study for a variety of reasons. The total number of withdrawals and the reasons for each are described below:

Reason for Withdraw	<u># in Treatment Group</u>	<u># in Control Group</u>	<u># Dropped before T1</u>	<u>Total</u>
Relationship Dissolution	17	12	2	31
Domestic Violence	3	0	0	3
Moving Outside of Area	2	3	0	5
Anxiety	2	3	2	8
Unable to Contact	2	8	5	17
No Longer Interested	0	6	2	7
Scheduling/Transportation Issues	4	1	1	6
TOTAL:	30	33	12	77

Please note that, due to the variation in when couples dropped from the study, this level of attrition is not consistent across all data collection time points. Sample sizes for each of the four time points and data collection activity are described below.

- Phone was completed. All 128 couples completed an initial phone screen.
 - Final Screening $N=128$
- All Time 1 (pre-intervention) assessments were completed. We have T1 data from the 116 remaining couples (12 couples dropped prior to T1).
 - Final T1 $N=116$
- All Time 2 (post-intervention) assessments were completed. We collected T2 data from 67 (59 dropped prior to T2). In two instances, we were unable to collect data at T2 but have data from T3 or T4 assessments.
 - Final T2 $N=67$
- All Time 3 (~6-months post-intervention) assessments were completed. We collected T3 data from 55 (67 dropped prior to T3). In six instances, we were unable to collect data at T3 but have data for the T4 assessment.
 - Final T3 $N=55$
- All Time 4 (~12-months post-intervention) assessments were completed. We collected T4 data from 51 couples (77 dropped prior to T4).
 - Final T4 $N=51$

ENTRY AND VERIFICATION OF SELF-REPORTED DATA

All telephone screening data, T1, T2, T3, and T4 self-report data were entered into a dataset. Additionally, all of this data was verified. Data from all four time points was merged into a single dataset that was used for analysis.

OBSERVATIONAL CODING

All Time 1, Time 2, Time 3, and Time 4 observational data from conflict discussions between couples has been "SPAFF" coded for data purposes; 25% of Time 1, Time 2, Time 3, and Time 4 data was also double-coded (i.e., coded by a second research assistant) for reliability purposes.

We also examined alternative ways to capture dyadic interaction patterns observed between our couples that are not captured via SPAFF. We coded all observational data on the Rapid Couple Interaction System. The codes from this system place couples into four categories: (1) hostile, (2) avoiding, (3) hostile detached, and (4) engaging. This will allow us to see how conflict style may change or influence outcomes such as violence reduction. Additionally, we have implemented the Demand/Withdraw Coding System. This system has been used in previous research to examine couple's interaction in both violent and non-violent couples. All data has been coded using this system, as well.

INTERVENTION GROUPS

We successfully completed nine intervention groups for this project. From the entire sample, 62 couples were randomized into the treatment/program group. Of these 62 couples, 24 did not complete the intervention for reasons described below:

- Six dissolved their relationships prior to starting an intervention group, and five dissolved their relationships mid-way through the groups (at weeks 12-15).
- Three couples were asked to leave the groups due to the reporting of characterological domestic violence incidences. In these instances, our facilitators worked with each partner to find appropriate resources.
- Three couples were unable to attend groups due to scheduling conflicts.
- Two couples moved out of the area prior to starting group.
- One couple did not start due to anxiety issues.
- One couple was lost since we were unable to make contact with them again after the initial screen-in.
- Two couples were unable to finish the groups due to serious health concerns.
- One couple never attended intervention groups but chose to remain in the study and complete data collection sessions.

In summary, 24 couples dropped out of the treatment group either prior to beginning the program or soon after, and 38 couples remained in the intervention group and completed at least 50% of the weekly intervention groups. Couples completed an average of 81% of the 22 intervention group sessions ($M=18$ sessions; $range= 12-22$ sessions). Make-up sessions were held for

couples who were unable to attend weekly sessions so that they could still be introduced to the material (make up sessions were not included in the averages reported here).

In general, participant feedback on intervention groups (obtained from self-report surveys that couples are asked to fill out after each group) was quite high, as can be seen in the ratings described below (possible scores range from 0-10 with 10 being the highest and most positive):

- Q1: Did you feel welcomed by the group?* Average participant satisfaction: 9.2
- Q2: Could you relate to the video presented?* Average participant satisfaction: 8.5
- Q3: Did you feel respected by the group facilitators?* Average participant satisfaction: 9.6
- Q4: Did you feel respected by other group members?* Average participant satisfaction: 9.3
- Q5: How helpful were the facts, information, and stories shared by the facilitators?*
Average participant satisfaction: 9.4
- Q6: How helpful were the exercises?* Average participant satisfaction 8.9

In addition to the aforementioned questions, data was also collected on whether or not individuals partook in discussions during each session. Overall, 85% of individuals participated in group discussions. Open-ended feedback that was received from participants was also very positive, with individuals writing in a range comments, such as: “This is proving to be very helpful in our relationship/marriage. It is hard to use these new skills, but we are working on when to use them”, “I’m not alone in my woes”, “The exercise was very helpful; it helped me and my partner talk and actually figure out a way to solve problems we have been having”, “I really enjoyed the Emwave exercise”, and “I think this is going to be a very good learning experience and I am excited for the growth that will come from this”. Our facilitators and in-home interviewers also reported that some of the couples that went to the same intervention group continued to provide support for one another and, for example, gave each other rides to attend group and helped each other in other ways, including finding child care. In addition, at the end of the groups, several couples asked for contact information so that they could be in touch with other group members. Consent from each group member was obtained to distribute their contact information and a list for each group was generated and then given to the appropriate couples. This suggests that the couples who participated in intervention groups were indeed getting to know one another, contacting each other outside of the group context, and providing each other with support.

C. SIGNIFICANT FINDINGS AND DISSEMINATION ACTIVITIES

1. **Short-term intervention impact on couple relationships.** Findings from our initial Time 1-Time 2 assessment were published in January 2011 in the *Journal of Couple and Relationship Therapy*. This was a special edition of the journal focused on couple and relationship education for violent couples; we were invited by guest editor, Dr. Alan Hawkins, to submit a manuscript for publication. These same findings were also presented at the American Psychological Association Annual meeting in August 2011 in Washington, DC. A copy of this paper and presentation are included with this report.

The primary goal of this study was to evaluate a psychoeducational intervention designed to bolster relationships and reduce conflict in low-income, situationally violent couples (CTAV). One hundred fifteen couples were randomly assigned to a treatment or no-treatment control group. Couples reported relationship satisfaction, use of healthy relationship skills, conflict, and relationship status/dissolution at two time points (pre- and post-intervention). It was hypothesized that couples from the treatment group would show improvements in relationship quality at the second data collection point (directly after intervention completion); in other words, relationship quality would be better at that time in comparison to treatment couples' pre-intervention levels, and control group couples' post-intervention levels of relationship quality. Results from this assessment of the short-term impact of the intervention show that the treatment group benefited in several ways: increased relationship satisfaction, greater use of healthy relationship skills, and reduced conflict. This suggests that CTAV was successful in helping couples to learn how to strengthen their relationships in the short-term.

2. **Efficacy of the screener to identify situationally violent couples.** Findings regarding the efficacy of our screening instrument were published in 2011 in the *Journal of Family Violence*. These same findings were presented at the American Psychological Association Annual meeting in August 2011 in Washington, DC. The presentation included an evaluation of the screening instrument that was based on both self-reported violence and observed behavior. Due to page limitations, analysis of the observed behavior was cut from the journal article. A copy of this paper and presentation are included with this report.

Another study goal was to evaluate the efficacy of the screening instrument to correctly identify situationally violent couples versus characterologically violent or non-violent couples, so that only the situationally violent couples could be invited to participate in the study. In order to test this, situationally violent couples from the current CTAV study (i.e., Study 1) were compared to a previously collected sample of characterologically violent, situationally violent, and distressed non-violent couples (i.e., Study 2 couples from the Jacobsen & Gottman, 1998 work). These two samples were compared across self-reported and observational data (i.e., self-reports of relationship violence and observed couple interaction patterns that show a propensity for violence). The main hypotheses stated that couples from CTAV/Study 1 would A) self-report less severe relationship violence and exhibit less observed aggression during non-violent conflict discussions than characterologically violent couples from Study 2, and B) self-report greater amounts of low-level violence and show more observed aggression than distressed non-violent couples from Study 2. Additionally, it was hypothesized that similar rates of both self-reported

violence and observed aggression would be seen for situationally violent couples from both studies. The final hypothesis stated that the Intimate Justice Scale (IJS) would be an effective screening tool when used on its own for identification of situationally violent couples, such that CTAV/Study 1 couples screened in based on IJS scores alone would not differ from those CTAV couples who were screened in based on their disclosure of situational violence via the Conflict Tactics Scale screener questions. Overall, results supported these hypotheses with the exception that situationally violent couples from Study 1 did not significantly differ from distressed non-violent couples in Study 2 (see attached for full paper). Overall, the screening instrument appears to be effective and safe for use within clinical contexts where the aim is to identify situationally violent couples who may be appropriate to treat within conjoint couples therapy.

3. **Short-term intervention impact on men's physiology during conflict.** Findings from the Time 1-Time 2 assessment also showed an impact of the intervention on male physiological reactivity during conflict. These findings were presented at the American Psychological Association Annual meeting in August 2011 in Washington, DC. A copy of this presentation is included with this report.

Physiological arousal and the ability to regulate this arousal contribute to the quality of relationships between intimate partners (Gottman et al., 1995). Maintaining high levels of physiological arousal can be harmful to mental and physical health (Ottaviani, Shapiro, Davydov, & Goldstein, 2008) and is associated with low levels of relationship satisfaction (Levenson & Gottman, 1985). In addition, physiological arousal may underlie specific forms of intimate partner violence (Gottman et al., 1995). In contrast, successful regulation of arousal, especially during conflict, has been associated with relationship satisfaction and stability, as well as better health (Yuan, McCarthy, Holley, & Levenson, 2010). Therefore, it is important to provide couples with support designed to help them manage arousal and subsequently strengthen their relationships. This work evaluated a psycho-educational intervention (CTAV) designed to bolster relationships and help low-income, situationally violent couples learn how to better manage physiological arousal during interactions with one another. Findings showed that males in the treatment group had levels of physiological reactivity that were maintained across time points. In contrast, males in the control group were significantly more reactive during the conflict discussion at the post-test. This suggests that the CTAV Program was effective at helping treatment-group males learn how to maintain levels of physiological reactivity, whereas couples who did not obtain support were more likely to become more reactive and less able to manage physiological arousal over time.

4. **Dyadic validation in low-income distressed versus middle-income normative couples.** A presentation based partially on CTAV data was presented at the Society for Personality and Social Psychology convention in San Diego, CA in January 2012. Although this grant proposal did not include a focus on observed validation and comparison of this construct between distressed/non-distressed couples, due to investigator interest and recent findings that highlight the relevance of validation in couple functioning, we explored relations in this area. A copy of this presentation is included with this report.

Validation between couples is believed to contribute to relationship quality and satisfaction. However, research on validation has focused on middle-income couples, which limits knowledge of how validation functions in other populations, including low-income, distressed couples. Low-income couples often differ compared to middle-income couples. Thus, it is important to assess low-income couples' relationships to gain a better understanding of how they function. This work compared two groups of couples—middle-income non-distressed couples (from a previously collected sample of couples who participated in the QPPHI study) and low-income, distressed couples (who participated in CTAV). Couples self-reported on relationship satisfaction and participated in a conflict discussion, during which observed validation was coded. Validation was associated with relationship satisfaction in both groups, although gender differences appeared for middle-income couples. Results of *t*-tests showed that low-income, distressed couples exhibited less validation than middle-income couples. Findings imply that validation may contribute to low-income, distressed couples' relationship satisfaction, although these couples may not necessarily show as much validation toward one another when they interact.

5. **Evaluation of the mechanisms through which violence would be reduced.** Findings regarding the processes through which the CTAV intervention impacts intimate partner violence in couples were published in 2012 in the *Journal of Marital and Family Therapy*. The initial grant proposal described evaluation of two competing models—one in which violence would be reduced via use of healthy relationship skills, and a second in which violence would be reduced via change in attitudes toward violence. Analysis of these models supported the former. However, due to page limitations and reviewer requests, the description of the unsupported model (where violence was purported to be reduced via attitude change) was not included in the final publication. A copy of this paper is included with this report.

Findings regarding the processes through which the CTAV intervention impacted intimate partner violence (IPV) in low-income situationally violent couples were finalized during the last year of the study. The primary objective was to evaluate the mechanisms through which violence was reduced. Two competing models were tested; one that hypothesized IPV would be reduced via use of therapeutic skills taught during the intervention (i.e., healthy relationship and conflict management skills), and one that hypothesized IPV would be reduced via changes in attitudes toward violence (i.e., acceptance of and accountability for IPV). One-hundred-fifteen couples were randomly assigned to a treatment or no-treatment control group. Couples self-reported use of healthy relationship skills, conflict management, IPV, and attitudes towards violence at multiple time points (baseline, post-intervention, and long-term post-intervention). Results support the model in which violence was reduced via use of intervention-based skills rather than changes in attitudes toward violence. Findings suggest that IPV can be safely reduced in low-income situationally violent couples via conjoint treatment focused on building healthy relationship and conflict management skills.

6. **Long-term intervention impact on self-reported IPV and observable behaviors during conflict.** Findings regarding the impact of the intervention on self-reported IPV and behaviors that show a susceptibility toward violence were submitted for publication to the *Journal of Interpersonal Violence*. In February 2012, we were asked to revise and

resubmit the paper to this journal. However, comments from one reviewer were fairly negative and deemed potentially difficult, if not impossible, to address within a revision. Furthermore, we disagree with a few of the reviewer's points and do not believe they are grounded/accurate (e.g., the request to focus on main effects within our model rather than the interaction when it is the interaction that actually answers our research question). Thus, we inquired with the journal editor, requesting his opinion regarding our ability to overcome this obstacle and asked whether or not we should indeed revise and resubmit. Unfortunately, we have not yet heard back from the editor one month later, despite additional attempts to contact him and obtain feedback. Thus, we are debating whether to submit this paper elsewhere due to both the editor's lack of response and the reviewer's challenging feedback. A copy of this paper and presentation are included with this report.

This work evaluated the long-term impact of the CTAV intervention on both self-reported IPV and observed behavior that others have described as showing a propensity toward violence. The ability of the treatment program to reduce violence between partners was evaluated via a multi-method, multi-informant, multiple time point experimental design. Procedures were completed at four times: baseline/pre-treatment, post-treatment, ~six months post-treatment, and ~12 months post-treatment. At each time point, couples individually self-reported on violence in the relationship and participated in a conflict discussion during which behaviors that show a propensity toward violence (i.e., contempt, belligerence, domineering, anger, and defensiveness) were observed. Results show that the program had no direct impact on self-reported violence. However, the program did impact observed behavior; males in the treatment group showed a significant decline in behaviors that show a propensity toward violence. Although the model for females was not significant, the pattern for females was comparable to that of males.

7. Evaluation of the intervention's impact on co-parenting/father involvement.

Findings regarding the intervention's ability to promote co-parenting and more father involvement are still in the process of being written up. We plan to submit these findings for publication to *The Journal of Family Psychology* in the coming year and will also submit a proposal to present them at the biennial convention of the Society for Research on Child Development, which will be held in Seattle, WA in 2013.

One goal of this study was to evaluate the CTAV interventions ability to promote father involvement and co-parenting. Analysis of the data showed no direct impact of the intervention on parenting. However, mediation analyses showed that co-parenting in the long-term was bolstered when couples' relationships were strengthened shortly after intervention completion. Specifically, findings showed that couples who participated in the intervention reported more friendship and more shared meaning (both facets of the Sound Relationship House) at T2, which predicted a stronger parental alliance/co-parenting at both T3 and T4. Results suggest that improvements in co-parenting can be prompted via improvements in the quality of couple relationships, which were brought on by intervention completion.

D. PROBLEMS ENCOUNTERED

PARTICIPANT ENROLLMENT

Despite the large number of potentially interested individuals (1,704) who contacted us to inquire about study participation, eligibility criteria prohibited most of them from being enrolled into the study. Thus, we ended up changing the eligibility criteria for the study in a way that would better reflect the target demographic of the study and facilitate greater enrollment. Specifically, the following changes were made to the inclusion/eligibility criteria:

- One of the original eligibility requirements was that both partners of a couple must have been biologically related to a child living in the home who was within the set age range. We changed the criterion so that only one partner had to have been biologically connected to the child. After discussions with our partnering agencies, study staff, and the funding agency, it became apparent that low-income families with children under 12 years old typically have only one biologically related parent in the home and a stepparent. This was also reflected and supported by a relatively high number of families that were screened out of the study based on not having both parents biologically related to a child in the home (30 of 180 had been screened out for this reason when we decided to make this change). Therefore, we changed the criterion in order to obtain a more representative sample of lower income families and increase the flow of potentially eligible families into the study.
- We also modified the low-income criterion, as the original criterion was too restrictive. A majority of our recruitment efforts took place in Seattle and Bellevue – both metropolitan areas where living costs make it especially difficult to live on \$40,000 a year (the income criterion level). During the screening process, we found that having a flat income threshold of \$40,000 was limiting due to the relevance of household/family size to income level (e.g., a family of three living on \$40,000 versus a family of five living on the same amount face two very different scenarios). In order to better represent the population from which we were recruiting and adjust for household size, we changed the income criterion using guidelines for providing housing assistance from the Washington State Housing Finance Commission. This income criterion thus increased with each additional member added to the household. The following grid represents these revised guidelines:

Maximum HOUSEHOLD INCOME for ALL Tax Credit and Bond Financed Properties (Required to qualify residents)				
	3 person	4 person	5 person	6 person
80% Median Income	\$51,516	\$61,956	\$72,396	\$82,836

Source: WSHFC (<http://www.wshfc.org/limits/detail.asp?County=king&Year=2007>)

Following these guidelines, we were able to best tap into our region’s definition of “low-income”. These guidelines show that community members who make 80% of our area’s median income are still accessing resources in the community and still represent the low-income population living in King County.

- To ensure that we were properly identifying situationally violent couples, we changed the screening instrument to include use of the Intimate Justice Scale (IJS). In evaluating the obstacle of low participant enrollment into the study, it was clear that a portion of potential participants were excluded for not reporting situational violence in their relationship. In an effort to reduce the likelihood of couples being excluded due to underreporting of situational violence in their relationship, an alternative method of assessing for situational violence in the couple's relationship was considered. The IJS is a 15-item measure that does not explicitly ask about violence in the relationship, but rather asks about other behaviors in the relationship that have been found to be highly correlated with specific types of violence such as situational or characterological violence. Scores ranging from 30 to 45 on the IJS have been highly correlated with reports of minor situational violence in the relationship. Therefore, we changed inclusion criteria so that a person scoring 30 to 45 on the IJS would have met the criteria for situational violence and qualified for participation in the study.

COMMUNITY SUPPORT WITH RECRUITMENT

In addition to changing participant eligibility criteria, we considered other ways to encourage our target demographic (i.e., low-income situationally violent couples) to inquire about study participation. Specifically, we targeted community outreach efforts at CBOs that provide services for such couples. While a large majority of the CBOs that we approached to collaborate with were extremely supportive, we encountered resistance from two organizations: 1) Family Services, a non-profit organization providing services to low-income families, and 2) King County Public Health.

Our team met with the Family Services Domestic Violence Team in an effort to provide the background and significance of our study, and to address any questions or concerns about the CTAV project. We provided the Family Services team with research articles that discuss and support the differences between characterological and situational violence. We also spent time discussing these differences and walking the team through the screening tool and referral process for the study. We also discussed safety issues for currently enrolled and excluded subjects. While the meeting was quite amicable, Family Services decided not to support the CTAV study and did not refer couples to the program and shared this decision with us via the following email:

Family Services Final Response September 2008

Email response from Sandy Lowe at Family Services:

Thank you, Dan, again for coming to our staff meeting. We do appreciate the opportunity to have our questions answered.

Our concerns are based on a fundamentally different conceptualization of domestic violence which does not encompass the theory of "situational violence". We understand that there is a difference of opinion among researchers as to domestic violence, but as an agency with a State of Washington certified domestic violence intervention program (WAC 380-60) adhering to the legal definition of domestic violence, we cannot support a protocol that allows violence (a slap, a push, fit our definition of domestic violence) to continue and that does not address the underlying belief system that allows the use of physical force against one's intimate partner. Our belief is

that a group such as that being researched in your project will abet perpetrators of domestic violence in minimizing their behavior and not accepting responsibility for their actions, blaming their partner instead. We understand that an attempt has been made to screen out couples with domestic violence according to the project's definition of dv. However, given the criteria for "situational violence", which allows for a pattern of violent behavior, we cannot believe that domestic violence is screened out at all. We see this as a dangerous situation and cannot therefore refer clients in our practice to the project.

Thank you for your follow-up.

Sandy Lowe

Sandy Lowe
Vice President Community Services
Family Services

In addition, we submitted all of the study materials to King County Public Health in an effort to begin recruitment through the various Public Health agencies in King County. After reviewing the materials, we were not approved to advertise or recruit in King County Public Health programs. We inquired to ask why this decision was made but did not ever receive an answer regarding their rationale for not supporting the study.

While Family Services and King County Public Health were not in support of the CTAV study, many other family service organizations that we made contact with, such as the various Youth and Family Service organizations, were supportive of the CTAV study and recognized the importance, relevance, and need to address situational violence.

E. OTHER ACTIVITIES

A no-cost extension was requested at the end of the study (in the summer of 2011) so that we could use the remaining funds available in the grant during the six month period after the end the final granting period (i.e., October 2011 through the end of March 2012). The no-cost extension was approved; thus, the grant was extended through March 31, 2012.