REDUCING SITUATIONAL VIOLENCE IN LOW-INCOME COUPLES BY FOSTERING HEALTHY RELATIONSHIP AND CONFLICT MANAGEMENT SKILLS

Renay P. Cleary Bradley, Ph.D.

John M. Gottman, Ph.D.

Relationship Research Institute

Relationship Research Institute
2030 First Ave., Suite 205
Seattle, WA 98121
Phone: 206-973-3455
Fax: 206-832-0301
Email: renayc@rrinstitute.com

ABSTRACT

This work evaluated a psycho-educational intervention designed to reduce intimate partner violence (IPV) in low-income situationally violent couples. 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.

Keywords: intimate partner violence, intervention, situational violence, conjoint treatment, conflict management

The quality of relationships between married and cohabiting couples has significant consequences for the health of all family members (Amato, 2010; Papp, Goeke-Morey, & Cummings, 2004). It is, thus, important to provide couples with support to strengthen their relationships. In the U.S., the quality and stability of those relationships is often threatened by intimate partner violence (IPV). IPV is a widespread problem (Niolon et al., 2009), with higher prevalence rates in couples from lower income brackets (Cox et al., 2003; Cunradi et al., 2002) and those with children (Carlson, 2000). Due to serious risks that IPV presents to the well-being of families (Amato, 2010), it is important to identify evidence-based programs that safely and effectively strengthen couples' relationships and reduce IPV, especially in low-income families with children.

Low-income individuals differ from their middle-income counterparts in many ways (Loprest & Maag, 2009); such differences may explain higher levels of IPV in this group. Low-income individuals are more likely to suffer from increased stress, depression, and health issues (Loprest & Maag, 2009). They are more likely to cohabitate and have children out of wedlock (Gibson-Davis et al., 2005). Those that do marry are more likely to divorce (Edin, Kefalas, & Reed, 2004). They are also more likely to have encountered issues within their own families of origin (e.g., divorce) that may have negative impacts on current relationships. They may, thus, be in particular need of support that helps build skills required for maintaining healthy relationships (Adler-Baeder, Robertson, & Schramm, 2010; Amato, 2010). Unfortunately, most couple and relationship education (CRE) implementation and evaluation efforts have focused on middle-income couples (Dion, 2005; Halford et al., 2008; Ooms & Wilson, 2004), although preliminary work suggests that low-income couples may benefit from CRE (Halford et al., 2008).

The current work evaluated the efficacy of a skills-based CRE program for low-income, situationally violent couples with children. An initial evaluation of post-treatment outcomes has shown the program to be effective at bolstering relationship satisfaction and skills in low-income situationally violent couples (Bradley, Friend, & Gottman, 2011). Next steps for this program include assessing its efficacy to reduce IPV in the long-term and identification of the mechanisms through which this may occur, which is the focus of this work.

Treatment of Intimate Partner Violence

Two sub-types of IPV have recently been identified—characterological and situational (Jacobson & Gottman, 1998; Johnson & Ferraro, 2000). Characterological violence tends to be asymmetrical and involves a clearly identifiable perpetrator and victim. Violence is marked by controlling and dominating behavior; its perpetrators show little remorse, minimize what they do, and attribute blame to others. Situational violence tends to be more reciprocal, stay within the family, and not involve control or dominance. Those involved show remorse, understand the impact of violence, and internalize blame. Situational violence often arises from conflict that has intensified and gotten out of control. Approximately 50-80% of IPV is situational in nature (Jacobson & Gottman, 1998).

A high percentage of couples seeking therapy may exhibit situational IPV, or low-levels of physical aggression perpetrated by both partners (Ehrensaft & Vivian, 1996; Halford & Osgarby, 1993; O'Leary, Vivian, & Malone, 1992). However, most social service programs and therapists may not distinguish between situational and characterological violence. Furthermore, treating characterologically violent couples conjointly may, in fact, be unsafe and increase the risk for further IPV (O'Leary, 1999). However, since situational violence is mutual in nature and does not arise from power/control dynamics, some have argued that treating the couple

concurrently may lead to better therapeutic outcomes (Johnson, 2006). Additionally, treating situationally violent couples via more traditional methods focused on characterological violence (i.e., treatment for male batterers) has been found to be ineffective (Stith, Rosen & McCollum, 2003; Babcock, Green & Robie, 2004). Therefore, it is particularly important to identify safe and effective treatment methods designed to help couples reduce situational violence specifically.

Recent studies (Simpson, Atkins, Gattis, & Christensen, 2008; Stith, Rosen, McCollum, & Thomsen, 2004) designed to address situational violence via conjoint treatment options have shown promising results. One option designed for situationally violent couples aims to reduce violence and improve relationships (Stith et al., 2004). The treatment involves jointly teaching couples conflict management skills. Use of these techniques led to a significant reduction in violence and increase in relationship satisfaction. Other work suggests that couples who exhibit psychological and/or low levels of physical violence can be safely treated using behavioral couple therapy focused on bolstering relationships (Simpson et al., 2008). Treatment was not found to increase violence; rather, violence was reduced once relationship quality improved. Thus, it is possible to safely employ couples-based interventions for highly distressed couples whose conflict is situational in nature. Such methods may be helpful in reducing violence.

The Creating Healthy Relationships Program (CHRP)

This work aimed to evaluate the efficacy of a conjoint CRE program (the Creating Healthy Relationships Program: CHRP) designed to reduce IPV in low-income, situationally violent couples. CHRP 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 (Gottman, 1994; Gottman & Silver, 2000; Jacobsen & Gottman, 1998; Shapiro & Gottman, 2005). CHRP is based on the Sound Relationship House

Theory (Gottman, 1994). The sound relationship house includes seven "floors" that depict different relationship domains that contribute to strong relationships. The Sound Relationship House Theory has been used by Gottman and colleagues to develop other couples-based therapeutic techniques, including the *Bringing Baby Home Program* for new parents and expectant couples (Shapiro & Gottman, 2005), which has been shown to promote increased relationship quality during the challenging transition to parenthood. It is also the foundation for the Gottman method couples therapy (Gottman, 1999), which has been used successfully by Gottman and others (e.g., Gottman, Driver & Tabares, 2002; Liem & Pressler, 2005; Sackey, 2004) to promote healthy relationships within therapeutic contexts.

CHRP incorporates many of the concepts, exercises, and demonstrations used successfully within the methods noted above; however, CHRP content was also tailored to meet the needs of low-income situationally violent couples. CHRP uses a skills-based approach and focuses on helping couples learn techniques that have been shown to foster stronger relationships (e.g., building a stronger friendship and creating shared meaning among couples) and facilitate conflict management (e.g., helping couples identify and manage perpetual versus solvable problems). For a more detailed description of CHRP, see Bradley et al., 2011.

Program Impact on Intimate Partner Violence

CHRP was designed to promote a reduction in IPV amongst low-income situationally violent couple participants. We were particularly interested to assess the specific processes through which this reduction would occur. Thus, two competing models were tested (see Figure 1)—one in which IPV was reduced via use of skills taught during the intervention, and one in which IPV was reduced via changes in attitudes toward violence.

Skills Training. Many recent CRE programs have focused on a highly comparable group of topics, including communication, conflict management, and intimacy/friendship between couples (Adler-Baeder et al., 2010; Bradbury & Karney, 2004; Gottman & Levenson, 2000). A common approach used to address these topics is skills training (Halford, 2004). Skills training focused on communication involves educating couples on functional versus dysfunctional communication patterns and giving them the opportunity to practice using those that have led to successful relationships. Problems surrounding communication are believed to weaken relationships and contribute to their demise, so a focus on strengthening communication skills is essential (Hahlweg & Richter, 2010). Programs focused on conflict management (e.g., Markman, Floyd, Stanley, & Storaasli, 1988) help couples learn strategies for resolving conflict in ways that are not harmful. Conflict management is central to prevention of issues within intimate relationships and thus needs to be at the forefront of programs designed to enhance relationship quality and stability. Inclusion of information and skills pertaining to intimate relations has also been suggested, as sexual intimacy is believed to be a way to maintain intimate relationships (Lieser, Tambling, Bischof, & Murry, 2007) and increase relationship satisfaction (Larson & Holman, 1994; Markman, Stanley, and Blumberg, 1994).

Research has shown skills training to be generally effective at encouraging use of targeted skills directly after program completion (Giblin, Sprenkle, & Sheehan, 1985) and in the long term (Silliman & Schumm, 2000). Furthermore, improvements in relationship quality stemming from intervention focused on bolstering couples' relationships via conjoint sessions also ultimately led to a reduction in IPV (Simpson et al., 2008). This suggests that improvements in the quality of one's relationship, perhaps including use of healthy relationship and conflict

management skills, may be a process through which CRE can reduce IPV, including that which is situational in nature.

Attitudes Toward Violence. Other more traditional models based on the Duluth philosophy (Pence & Paymar, 1993) posit that changes in patriarchal attitudes toward violence and accountability are the mechanisms of change in IPV intervention programs. According to this philosophy, IPV is the result of men's patriarchal beliefs and associated actions that allow them to maintain control over female partners. Programs based on the Duluth model are psycho-educational and involve a series of group sessions, typically held with individuals (i.e., male batterers) rather than couples. Focus is often placed on encouraging accountability for one's actions (Corvo & Johnson, 2003). Participants are shown videos that illustrate IPV, which are followed by discussions regarding why the individual may have resorted to his actions, including his justifications for doing so. This process is structured to open up a dialogue amongst group members, which is believed to promote critical thinking, including thoughts about one's own intentions in exhibiting violent behavior with a partner (Miller, 2010).

The structure of Duluth model IPV intervention programs is designed to encourage male participants to become more accountable for their actions, which should then lead to less use of violent behaviors. Unfortunately, research has revealed that most IPV interventions that follow this model are not successful in reducing IPV (Babcock et al., 2004; Stover, Meadows, & Kaufman, 2009). Some have even questioned the ethical implications of offering such programs due to questions regarding their practices (e.g., disregarding potential substance abuse problems) and efficacy (Corvo, Dutton, & Chen, 2009). Thus, it is important to identify more effective IPV treatment methods that work well for their intended recipients.

The Current Work. Based on research regarding both improvements in relationship skills via programs that focus on skills training and the lack of success with Duluth model IPV treatment programs, it appears as though skills training may be a more likely mechanism to promote healthy relationships. Furthermore, skills training may be particularly effective within intervention models such as CHRP that incorporate both couples, including those who experience situational violence, which is perpetrated by both partners and may result from unmanaged conflict. On the contrary, changes in attitudes regarding IPV may be less likely to result in reduced IPV in situationally versus characterologically violent couples since patriarchal attitudes that promote use of power and control tactics with women do not seemingly encourage situational violence amongst couples. Such attitude adjustments may be more relevant within those who exhibit characterological violence. Therefore, we hypothesize that IPV in the current sample of low-income situationally violent couples will be reduced as a result of use of healthy relationship and conflict management skills learned via CHRP participation.

METHOD

Participants

To qualify for study participation, all couples: 1) were in a committed relationship for at least one year; 2) were 18+ years old; 3) spoke fluent English; 4) experienced situational violence; 5) had at least one child under age 12; 6) had a combined income below the local county median for a family of three ($73,000); 6) were not experiencing characterological violence, significant substance abuse issues, or diagnosed with Antisocial Personality Disorder. The final sample included 115 low-income, heterosexual couples who reported experiencing situational violence at the start of the study[1].

[1] See Bradley et al., 2011 for further demographics. See Friend, Bradley, & Gottman (in press) for further details regarding levels/severity of IPV and screening procedures used to determine participant eligibility.

Procedures

All couples (*N*=115) were asked to fill out a battery of questionnaires that assessed demographic information, relationship adjustment, intervention-based skills, intimate partner violence (IPV), and attitudes toward violence. Questionnaires were filled out at three time points [1=baseline (BL); 2=post-intervention; 3=long-term post-intervention] by members of each couple individually. After completion of Time 1 procedures, couples were randomly assigned to either the treatment or a no-treatment control group (treatment group *n*=62; control group *n*= 53). Couples assigned to the treatment group participated in CHRP. Control group couples were referred to resources available within the community and offered the chance to participate in a one-day CHRP-based workshop at the end of the study. All couples filled out Time 1 surveys at the start of the study (i.e., prior to intervention enrollment), Time 2 surveys ~0-6 months after treatment couples completed the intervention (i.e., ~6-12 months post-BL), and Time 3 surveys ~6-12 months after intervention completion (i.e., ~12-18 months post-BL). Couples were compensated $10/hour (per person) for filling out surveys.

Attrition. Between Times 1 and 2, 41 subjects withdrew from the study (control *n*=21; treatment *n*=20). Between Times 2 and Time 3, 12 subjects withdrew (control *n*=8; treatment *n*=4). Chi-square analyses revealed no difference in attrition rates between groups. A discriminate function analysis designed to assess differences between couples that withdrew versus those that remained in the study showed that only scores for male overall dyadic adjustment[2] at Time 1 differed significantly between groups (λ=.87, *p*=.03), indicating that lower male-reported relationship adjustment may have influenced attrition. Therefore, Time 1 male dyadic adjustment was controlled for in all analyses for males.

Measures

[2] Dyadic adjustment was measured via the Dyadic Adjustment Scale total scale score (Spanier, 1976).

Two domains were used to define use of skills focused on during the CHRP intervention by each partner—healthy relationship and conflict management skills. Two domains were also used to define each partner's attitudes toward violence in their relationships—acceptance of and accountability for violence. A single IPV variable was created for each partner.

Healthy Relationship Skills. Use of healthy relationship skills that pertained to communication and interaction patterns used by partners were measured via the Reduced Sound Relationship House Questionnaire (RSRH; Gottman & Krokoff 1996; Gottman 1999[3]). The RSRH includes a series of statements regarding thoughts, feelings, and behaviors experienced by couples pertaining to the relationship. Statements are divided up into three domains related to relationship skills—friendship, sex/romance/passion, and shared meaning. The *friendship* domain consists of 20 true/false items (true scored as a '1'; false scored as a '0') measuring knowledge of one's partner, fondness/admiration for the partner, and emotional connectedness between the couple. Sample items include 'I can tell you some of my partner's life dreams'. The *sex, romance, and passion* domain includes 28 items in which individuals chose one of two statements that is most congruent with their relationship. Sample statements include 'Our sex life is fine' vs. 'There are definite problems in this area. Statements that reflect healthy sex lives were scored as a '1', and those that reflect issues were scored a '0'. The *shared meaning* domain consists of 20 true/false items (true scored as a '1'; false scored as a '0') that capture the level of agreement on shared goals, roles, rituals, and symbols between couples. Sample items include 'We have similar views about the role of love and affection in our lives'. Scores from all three domains were then summed to create a "healthy relationship skills" score for each person. To create a variable that reflected improvement in use of relationship skills over time, scores for each partner at Time 1 were subtracted from those at Time 2, giving a final possible range of

[3] See Gottman, 1999 for psychometric properties of the RSRH.

scores from -68 to 68, with higher/positive scores indicating an increase in use of healthy relationship skills at Time 2, and lower/negative scores indicating a reduction in use of skills.

Conflict Management Skills. The RSRH Questionnaire (Gottman & Krokoff 1996; Gottman 1999) was also used to measure conflict management within the relationship. The conflict management scale includes 25 true/false items (true scored as a '1'; false scored as a '0') that assess the acceptance of partner influence (reverse scored), harsh starts to arguments, compromise (reverse scored), gridlock on issues, and levels of criticism, defensiveness, stonewalling, and contempt in the relationship. Sample items include 'I feel personally attacked', 'We keep hurting each other whenever we discuss core issues'. Scores were first summed to indicate overall levels of conflict management (higher scores denote less conflict management/more conflict). We then again created change scores by subtracting Time 1 scores from Time 2 scores for each partner, which produced a potential range of scores from -25 to 25, with higher/positive scores indicating less conflict management/more conflict at Time 2.

Acceptance of Violence. The justification of violence subscale from the Acceptance of Violence Survey, which has been shown to be a valid measure (Riggs & O'Leary, 1996), was used to capture partner beliefs regarding whether or not violence toward the other partner is justified during conflict. Three items were summed together for each partner to create this scale. Sample items include "If a [man/woman] pushes [his/her] partner during an argument, is it justified?". Items were scored from '0' (indicating *never*) to '3' (indicating *always*). Change scores were created for each partner by subtracting Time 1 scores from Time 2 scores. Potential scores ranged from -9 to 9 with higher scores indicating more justification of violence at Time 2.

Accountability for Violence. The total scale score from the Accountability for Violence Survey (Costa, Canady, & Babcock, 2007) was used to measure the extent to which partners

acknowledge and accept responsibility for violent actions in their relationships. This scale has been shown to be a valid and reliable measure of accountability for violence perpetration by both males and females (Costa et al., 2007). The scale sums 11 items addressing the degree to which the individual accepts full responsibility for perpetrated violence. Items were rated from '1' (*disagree strongly*) to '4' (*agree strongly*); two items were reverse scored. Sample items include "I have acknowledged to my partner that I committed acts of violence against him/her". Change scores were created to capture improvement in accountability for violence over time by subtracting Time 1 scores from Time 2 scores for each partner. Higher/positive change scores indicate more accountability for violence at Time 2, with potential scores ranging from -21 to 21.

Intimate Partner Violence (IPV). The Conflict Tactics Scale (CTS-2) is a widely used measure that captures instances of perpetrated and victimized IPV reported by both partners (Strauss, 1989; Strauss et al., 1996). Sixty-six items that capture four domains of IPV were used in the current work, including the following (total number of items and sample items are included in parentheses): *physical assault* (24 items addressing physically abusive behaviors; "I/my partner threw something at my partner/me that could hurt" and "I/my partner twisted my partner's/my arm or hair"), *sexual coercion* (14 items addressing sexually coercive behaviors; "I/my partner made my partner/me have sex without a condom"; "I/my partner used force to make my partner/me have oral or anal sex"), *injury* (12 items addressing the amount of injury inflicted; "I/my partner had a sprain, bruise or small cut because of a fight with my partner/me"; "I/my partner passed out from being hit on the head in a fight with my partner/me"), and *psychological aggression* (16 items addressing psychologically abusive behaviors; "I/my partner insulted or swore at my partner/me"; "I/my partner called my partner/me fat or ugly"). Partners each rated the frequency with which all 66 items occurred over the last year on a scale from '0'

(*never happened*) to ‘6’ (*happened more than 20 times in the past year)*. Items were then recoded according to CTS-2 scoring instructions (i.e., values of 3 were recoded to 4; values of 4 were recoded to 8; values of 5 were recoded to 15; values of 6 were recoded to 25; all other values were unchanged) and summed together separately for each partner, resulting in a score reflecting total abusive behaviors perpetrated by each person over the last year. Summed scores were then converted to change scores by subtracting Time 1 scores from Time 3 scores for each partner. Higher/positive scores indicate an increase in IPV by Time 3, whereas lower/negative scores indicate a reduction in IPV, with potential scores ranging from -1650 to 1650.

Intervention Group Status. Following recommendations on how to address participants who did not start or complete an intervention (Hollis & Campbell, 1999), two variables were created to represent group status: 1) an *intent-to-treat* variable that designated a ‘1’ to all couples randomly assigned to the treatment group (*n*=62), regardless of how much of the intervention they completed, and a ‘0’ to those assigned to the control group (*n*=53); 2) a *significant dosage* variable that designated a ‘1’ to couples randomly assigned to the treatment group who completed at least 50% of intervention group sessions (*n*=41), and a ‘0’ to those in the control group (*n*=53). Participants assigned to the intervention group who did not complete at least 50% of the sessions (*n*=21) were excluded from *significant dosage* analyses. Analyses were run using both group status variables. Since findings were highly comparable, only results using the *significant dosage* variable are reported here.

Data Analysis

Mediation (i.e., an intervening variable or indirect effect) was analyzed following the ‘empirical distribution of $\alpha\beta/\sigma_{\alpha\beta}$’ approach described by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002), which was deemed an accurate approach to use when assessing how

intervention programs work to achieve their purported goals. Logistic regression analyses testing eight independent mediation models (four per partner[4]) were run to assess whether change in use of intervention skills (i.e., healthy relationship and conflict management skills), or attitudes toward violence (i.e., acceptance of and accountability for IPV) between Times 1 and 2 were the processes through which participation in the intervention predicted a reduction in IPV by Time 3. To use this method, a series of 16 regression analyses was first run in which a) a relation between the predictor (intervention group status) and mediator (intervention skills or attitudes toward violence) was established, and b) a relation between the predictor and outcome (IPV) was established when the mediator was also considered. Beta weights and *t*-values from these regression analyses (see Table 1) were then used to calculate *z'*, which was then compared to a critical *z* value (at which $p = .05$) in order to identify significant mediation/indirect effects.

RESULTS

Means and standard deviations for all variables broken down by partner and group status are provided in Table 2[5]. Tests of primary hypotheses are presented below.

Healthy Relationship Skills

Tests of mediation revealed a significant indirect effect of relationship skills on the relation between group status and IPV for both males ($z' = -1.59$, $p < .05$) and females ($z' = -1.50$, $p < .05$). Participation in CHRP prompted an increase in use of healthy relationship skills at Time 2, which predicted a reduction in IPV by Time 3.

Conflict Management Skills

Analyses showed a significant indirect effect of conflict management on the relation between group status and IPV for males ($z' = -1.92$, $p < .05$) and females ($z' = -1.20$, $p < .05$).

[4] Baseline levels of dyadic adjustment reported by males were statistically controlled for in all analyses for males.
[5] Please contact first author for bivariate correlations between all primary variables.

CHRP encouraged an increase in conflict management skills (or, alternatively, a reduction in conflict) at Time 2, which predicted a reduction in IPV at Time 3.

Acceptance of Violence

Tests of the intervening effect of attitudes that reflected acceptance of IPV showed that changes in these attitudes at Time 2 were not predicted from group status, and did not predict a change in IPV at Time 3 for either males ($z' = 0.04$, p = n.s.) or females ($z' = -0.49$, p = n.s.).

Accountability for Violence

Tests that evaluated whether individuals' accountability for IPV acted as a mediator on the relation between group status and IPV reduction show no such effects for males ($z' = -0.71$, p = n.s.) or females ($z' = -0.54$, p = n.s.).

DISCUSSION

This work describes an evaluation of a conjoint CRE program designed to reduce IPV amongst low-income situationally violent couples. To our knowledge, this is the first study of its kind to assess a therapeutic technique aimed at bolstering relationships of both low-income and situationally violent couples. Implications from this work are also strengthened via the use of a randomized control group, multiple time point, multi-informant design. Results show that such couples can be safely treated together within a psycho-educational group-based program geared toward promoting skills to foster healthy relationships. Furthermore, findings suggest that such efforts may successfully lead to a reduction in IPV within this population. The focus of this effort was on identifying the specific mechanisms through which this reduction would occur. Two competing models were tested. As hypothesized, IPV was reduced in the long term when couples initially used healthy relationship or conflict management skills upon intervention completion.

Skills Training

Results from the current work corroborate previous research that has shown skills training to be effective at encouraging use of skills incorporated into CRE directly after program completion (Giblin, Sprenkle, & Sheehan, 1985). This work also shows that, as has been seen in other intervention evaluations, therapeutic efforts focused on helping committed couples learn skills that enable them to communicate more effectively (Hahlweg & Richter, 2010), manage conflict (Markman et al., 1988), and enhance intimacy (Larson & Holman, 1994; Lieser et al., 2007; Markman et al., 1994) may be effectively used to strengthen couples' relationships. Indeed, couples who attended CHRP intervention sessions successfully increased their use of healthy relationship and conflict management skills post-intervention. More importantly, teaching of such skills may be safely done with low-income situationally violent couples and may ultimately enable those couples to end or reduce violence in their relationships. This mirrors what previous research (Simpson et al., 2008) with situationally violent couples has shown, where IPV was reduced via conjoint couples-based treatment focused generally on enhancing relationship quality, but only once couples' relationships did indeed improve.

Results also support the notion that situational violence may be the result of couples' unmanageable conflict (Johnson, 1995; 2006). Johnson purported that, with situationally violent couples, within specific situations, they may encounter conflict that they do not know how to handle and thus resort to low-levels of IPV exerted in an attempt to address the situation. Such circumstances may only occur intermittently and are not used as coercive tactics to overpower and control the other partner, as is the case with characterological violence. Since the low-levels of IPV present in the current sample were reduced after couples increased conflict management skills, it seems plausible that the lack of such skills could have initially contributed to IPV.

Attitudes Toward Violence

Findings also showed that, as predicted, changes in attitudes regarding acceptance of and accountability for IPV did not lead to a reduction in IPV in this sample. These results go against previous research and theoretical work based on the Duluth model (Pence & Paymar, 1993) that posits that IPV can most effectively be eliminated by working independently with male batterers to make them more accountable for their violent tendencies. Again, this could be an effect of the type of violence initially exhibited by current study participants. Recent work (Jacobson & Gottman, 1998; Johnson & Ferraro, 2000) has highlighted different IPV subtypes and distinguishes between characterological and situational violence. As has been demonstrated by other intervention efforts focused on situationally violent couples (Simpson et al., 2008; Stith et al., 2004), this type of violence may be more effectively treated by involving both couples and focusing on issues pertaining to the relationship, such as increasing friendship and intimacy. It is still possible that couples who exhibit characterological violence, in which a perpetrator uses power and control tactics to dominate the partner/victim, may be best treated independently. Perpetrators of such violence may also be more susceptible to violence reduction based on intervention tactics aimed at changing their attitudes than their situationally violent counterparts.

Clinical Implications

Study results show that low-income, situationally violent couples may benefit from participation in CRE that encourages them to build skills for healthy relationships, including conflict management. Engagement in such programs may promote stronger relationships that are characterized by little to no IPV. Such programs may be particularly beneficial with couples where both partners initially exhibit low levels of violence in response to unmanageable conflict. It appears as though changes in individual attitudes regarding one's accountability for and

acceptance of violence may not be the mechanisms through which this particular CRE facilitated a reduction in IPV. Such processes may be more relevant to focus on within characterologically violent couples, or within intervention efforts aimed at attitude change more explicitly.

As more empirically validated methods used to identify different sub-groups of violent couples are created (e.g., Friend et al., in press), clinicians and health care professionals will be better prepared to identify such sub-groups and the most appropriate evidence-based treatment options for those groups, including skills training for situationally violent couples. An important first step will be to highlight the existence of IPV sub-groups (e.g., situationally vs. characterologically violent couples) so that it is well understood that IPV is not homogenous. The next step will be correct classification of couples, as treatment efficacy may indeed depend upon the specific type of IPV being treated. It is unlikely that violent couples will be referred to effective therapeutic options if the type of IPV that they exhibit remains unrecognized, as efficacy may depend on IPV type, as the current results suggest.

Furthermore, options such as CHRP, which have been shown to be suitable/effective for low-income couples who face additional individual and relationship stressors (Loprest & Maag, 2009) and are also more likely to experience IPV (Cox et al., 2003; Cunradi et al., 2002), may be more readily identified. Specific characteristics of CHRP (e.g., group-based format, 22 weekly two-hour sessions held in local neighborhood centers, low literacy levels of written program materials, etc.) may have contributed to its success with this low-income population. Such formats may offer a more feasible, cost-effective, and successful alternative to provide support for these couples compared to individual or couples therapy. Implementation of treatment programs like CHRP may also be more easily carried out by social service organizations aiming to assist low-income families due to the structured nature of the program (e.g., couples are all

exposed to the same set of stimuli in the same order by a pair of trained male/female Masters level clinicians over a comparable amount of time).

In addition, inclusion of both partners via conjoint treatment with this population (i.e., situationally violent couples) may be more likely to lead to violence reduction and not an increase in violence, as some have suggested may be a risk with characterologically violent couples (O'Leary, 1999). As others have argued (Stith et al., 2004), IPV intervention options are not likely to be successful when focused on only one partner if both members of a couple engage in violent acts. Thus, committed couples who engage in mutual low-level IPV may be safely and effectively treated conjointly.

Conclusion

This work provides preliminary evidence that participation in CHRP may encourage reduced IPV in couples who successfully learn to engage in healthy relationship and conflict management skills. However, due to several study limitations (e.g., small sample size, attrition, intervention completion rates), findings from the current work should be replicated to ensure generalizability outside of the sample studied. In addition, clinicians should take heed that successful program effects were found within a highly homogenous group of individuals who were screened into the program thoroughly.

Overall, current findings provide support for use of conjoint group-based skills training for low-income situationally violent couples. Such therapeutic options may have the ability to promote better quality relationships and reduce IPV through encouragement of healthy relationship and conflict management skills.

Figure 1. Mediation Models

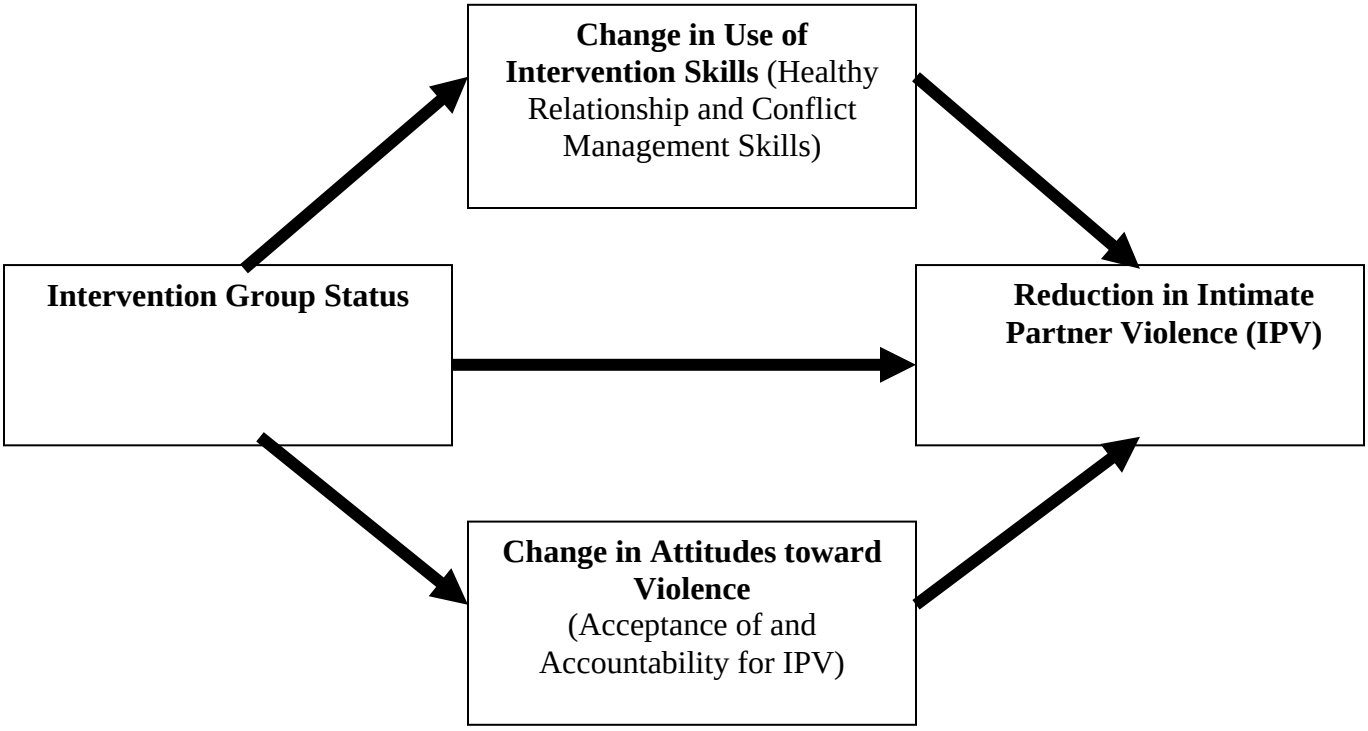

Table 1. Regressions Testing Mediation Models Predicting Reduction in IPV from Group Status

Regression; Model; Step; Outcome	***β***	***t***
Regression 1; Model 1; Step 1; Predicting Male Relationship Skills		
Intervention Group Status	0.46+	2.10+
Regression 2; Model 1; Step 2; Predicting Male-Reported IPV		
Intervention Group Status	-0.15	-0.58
Male Relationship Skills	-0.69*	-2.42*
Regression 3; Model 2; Step 1; Predicting Female Relationship Skills		
Intervention Group Status	0.28	1.66
Regression 4; Model 2; Step 2; Predicting Female-Reported IPV		
Intervention Group Status	0.29	1.58
Female Relationship Skills	-0.65**	-3.54**
Regression 5; Model 3; Step 1; Predicting Male Conflict Management		
Intervention Group Status	-0.41*	-2.14*
Regression 6; Model 3; Step 2; Predicting Male-Reported IPV		
Intervention Group Status	0.09	0.45
Male Conflict Management	0.80**	4.31**
Regression 7; Model 4; Step 1; Predicting Female Conflict Management		
Intervention Group Status	-0.20	-1.22
Regression 8; Model 4; Step 2; Predicting Female-Reported IPV		
Intervention Group Status	0.06	0.47
Female Conflict Management	0.81**	6.16**
Regression 9; Model 5; Step 1; Predicting Male Acceptance of IPV		

Intervention Group Status	-0.01	-0.04
Regression 10; Model 5; Step 2; Predicting Male-Reported IPV		
Intervention Group Status	-0.18	-0.75
Male Acceptance of IPV	-0.12	-0.49
Regression 11; Model 6; Step 1; Predicting Female Acceptance of IPV		
Intervention Group Status	-0.08	-0.52
Regression 12; Model 6; Step 2; Predicting Female-Reported IPV		
Intervention Group Status	-0.04	-0.18
Female Acceptance of IPV	0.19	0.96
Regression 13; Model 7; Step 1; Predicting Male Accountability for IPV		
Intervention Group Status	-0.34	-1.67
Regression 14; Model 7; Step 2; Predicting Male-Reported IPV		
Intervention Group Status	-0.00	-0.01
Male Accountability for IPV	0.28	0.79
Regression 15; Model 8; Step 1; Predicting Female Accountability for IPV		
Intervention Group Status	-0.26	-1.46
Regression 16; Model 8; Step 2; Predicting Female-Reported IPV		
Intervention Group Status	0.22	0.87
Female Accountability for IPV	0.15	0.58

+ $p < .10$, * $p < .05$, ** $p<.01$

Table 2. Descriptive Statistics for Primary Variables by Group and Partner

		Treatment [a]		Control	
Outcome	**Partner**	*M*	*SD*	*M*	*SD*
Change in Relationship Skills between Times 1 and 2	Males	4.86	10.02	-8.33	13.66
	Females	8.50	18.22	-1.11	15.64
Change in Conflict Management between Times 1 and 2	Males	-5.21	5.68	-2.14	4.49
	Females	-1.95	5.24	0.10	5.37
Change in Acceptance of IPV between Times 1 and 2	Males	-0.04	0.62	0.11	0.32
	Females	-0.12	0.67	0.00	0.89
Change in Accountability for IPV between Times 1 and 2	Males	-1.00	3.76	2.00	1.81
	Females	-1.21	4.77	1.15	4.10
Change in IPV between Times 1 and 3	Males	-27.05	45.92	-17.09	31.37
	Females	-25.75	48.21	-22.25	48.80

[a] Number of couples who received at least 50% of the intended treatment dosage.

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