ABSTRACT

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THERAPY FOR PARTNER AGGRESSION: A THERAPY PROCESS AND OUTCOME

STUDY

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The present study investigated roles of common factors related to outcome indices that exist across therapy models in couple therapy for partner aggression. As client common factors, individuals' pre-therapy levels of trust in their partners and degrees to which they vent anger were tested as predictors of change in relationship satisfaction and psychological aggression. As therapist factors degree of empathy expressed toward clients, use of systemic intervention techniques, and degree to which the therapist imposed structure on sessions were examined in relation to therapy outcomes. Based on social learning theory, not only main effects but also interaction effects of client factors and therapist factors on therapy outcomes were examined. Structural equation modeling was used to test an Actor-Partner Interdependence Model in which partners scores on measures of relationship qualities are assumed to influence each other. Female partners benefited more from the therapy than did male partners, particularly in increases in

relationship satisfaction. However, females and males had equal reductions in psychological aggression. Unexpectedly, lower level of trust predicted more positive change in psychological aggression, but not in relationship satisfaction. As expected, higher venting of anger was negatively associated with improvement in relationship satisfaction and psychological aggression. Higher therapist use of systemic techniques predicted more positive change in relationship satisfaction only for female partners. Interaction effects suggesting a buffering role of empathy against the negative effect of a lower level of trust were detected. Overall, it was client factors and not therapist factors that made differences in therapy outcome indices. Also, predominantly actor effects rather than partner effects occurred. That is, clients' changes on outcome indices were related more to their own characteristics than to their partners' characteristics. Strikingly, regarding partner effects, only male-to-female partner effects were found, meaning that female partners' therapeutic changes over the course of therapy were predicted by their male partners' characteristics. Overall, the present study demonstrated that common factors do operate in couple therapy for partner aggression across therapy models, although those common factors are mostly client characteristics rather than therapist behaviors and involve male partners' characteristics.

COMMON FACTORS IN COUPLE THERAPY FOR PARTNER AGGRESSION: A THERAPY PROCESS AND OUTCOME STUDY

BY

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I dedicate this dissertation to my parents, Jongman Park and Jeunghyun Kim.

Throughout my life, you have taught me the true love.

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Chapter 1: Introduction

Statement of the Problem

Partner aggression, often referred to as "common couple violence" (Johnson, 1995) is conceptually defined in the present study as both psychologically aggressive behavior and mild to moderate physical actions against another person that can inflict physical and/or psychological pain on the recipient, based on the actor's motives of expressing anger and/or controlling/punishing the partner. Partner aggression commonly is enacted by both male and female members of heterosexual couples, as well as members of homosexual couples, very often mutually. A study using a randomly selected community-based sample reported that 90% of families with young children reported that at least one type of physical aggression between partners (e.g., pushing, slapping) occurred in the past year (Slep & O'Leary, 2005). Physical aggression is often accompanied by psychological aggression, which often precedes the physical acts (O'Leary, 1999). Partner aggression is more common than battering or intimate terrorism, which denotes more severe physical violence most commonly enacted by males toward female partners (O'Leary et al., 1989). In clinical settings, among couples who seek therapy for relationship problems, a large portion (between 36% and 58%) of the couples are found to experience partner aggression when it is assessed systematically with the individual partners to ensure privacy and safety (Jose & O'Leary, 2009).

Partner aggression is a serious problem affecting couple relationships and the well-being of the members. In O'Leary et al.'s (1989) longitudinal study using a community sample, 25-30% of the couples who experienced physical aggression at all three assessment points (premarriage, 18 months, and 30 months after marriage) fell into the clinically distressed level (below a cutoff score of 90) on the Short Marital Adjustment Test (SMAT; Locke & Wallace,

1959) at 30 months. The effects of psychological aggression have been found to be as detrimental as physical aggression for recipients' psychological well-being (O'Leary, 1999). For example, among the women in physically abusive relationships recruited in a community sample, 72% reported that psychological aggression had a more negative impact on them than physical aggression (Follingstad, Rutledge, Berg, Hause, & Polek, 1990). Psychological aggression and physical aggression both have been found to be associated with lower well-being of partners, particularly with low self-esteem (Aguilar & Nightingale, 1994) and depression (O'Leary, 1999).

Couple therapy has developed as a feasible treatment for partner aggression, despite earlier resistance to using it based on concerns regarding the dangers of treating partners together when severe physical partner violence had occurred. Several outcome studies have been conducted so far on couple therapy for partner aggression. Most models are based on a systemic perspective focused on reciprocal exchanges of non-battering aggressive behavior between partners rather than the feminist perspective that focuses on males' use of violence to control female partners. The couple therapy models were usually developed to prevent mild to moderate level aggression from deteriorating into more severe aggression (Stith, McCollum, Amanor-Boadu, & Smith, 2012).

One of the treatment models focused on the dyadic relationship is behavioral couples therapy (BCT). While BCT is a conjoint intervention primarily designed to treat substance abuse in the couple context by improving the quality of partners' interactions, it also targets partner aggression based on the fact that such negative behavior often co-occurs with substance abuse (Smith, Stover, Meadows, & Kaufman, 2009). Randomized controlled trials (RCT) have demonstrated the efficacy of BCT in treating both substance abuse and partner aggression (Fals-Stewart, O'Farrell, Birchler, Cordova, & Kelly, 2005). Another RCT also showed the superior

effect of BCT to that of individual-based treatment (IBT) on both partner aggression and substance abuse at a 12-month follow-up (Fals-Stewart & Clinton-Sherrod, 2009). However, because BCT primarily targets substance abuse, usually focusing on abstinence from alcohol, it is not a representative couple therapy model for partner aggression per se.

Another treatment model more directly focused on partner aggression is domestic violence-focused couples treatment (DVFCT; Stith, Rosen, McCollum, & Thomsen, 2004). This 18-week manualized program is based on solution-focused therapy and can be delivered either in a multi-couple group (MC) or to a single couple (SC). Stith et al.'s (2004) investigation of the effect of the treatment with couples who experienced mild to moderate physical aggression and/or psychological aggression showed that although both formats, compared to a no-treatment comparison group, showed significant positive changes on partner-reported physical and psychological aggression, overall couples who participated in MC showed larger changes, particularly for males.

The Physical Aggression Couples Treatment (PACT) focused on couples engaging in non-severe violence, using a social learning/cognitive-behavioral approach (Heyman & Schlee, 2003; O'Leary, Heyman, & Neidig, 1999). PACT was tested in comparison with gender-specific separate group treatments for men and women (O'Leary, Heyman, & Neidig, 1999). At post-treatment, husbands exhibited lower psychological and physical aggression. Such reductions were also reported at the one-year follow-up, but the cessation rate at the one-year follow-up was not high (26%).

LaTaillade, Epstein, and Werlinich (2006) developed a conjoint treatment of partner aggression based on cognitive-behavioral principles and methods. Stating that traditional gender-specific group treatment is limited in that it does not address the dyadic processes occurring

between partners and thus leaves couples at risk for further aggression, they stressed the importance of conjoint approaches wherein both systemic and individual cognitive and behavioral risk factors can be addressed. The cognitive-behavioral couple therapy (CBCT) protocol consists of psychoeducation, anger management, cognitive restructuring, communication skills training, problem-solving training, and relationship recovery components. LaTaillade et al. (2006) conducted a treatment outcome study (the Couples Abuse Prevention Program – CAPP) comparing the CBCT protocol to treatment as usual (UT) at their university-based family therapy clinic, which includes various family systems models. They found that both CBCT and UT were efficacious in reducing psychological aggression, improving couples' communication quality, and increasing partners' relationship satisfaction. The couple therapies did not decrease physical aggression significantly, but the sample was low in physical aggression initially.

The conceptualization and implementation of couple therapy for partner aggression has focused mostly on evaluating outcomes of specific therapy models. As reviewed above, the research has been limited so far to a few models. Thus, it will continue to be valuable to conduct that type of research. However, the recent focus on common factors in psychotherapy in general (Lambert & Barley, 2001) and in couple and family therapy in specific (Sprenkle, Davis, & Lebow, 2009) points to a need to identify factors that operate across models that can influence the effectiveness of couple interventions for partner aggression. LaTaillade et al.'s (2006) findings that CBCT and UT interventions had similar positive effects are consistent with the idea that there may be factors shared by various therapy models that account for much of the improvement seen in outcome studies. However, as yet there has been little research on common

factors in couple and family therapy, particularly regarding treatments for partner aggression (Evans, 2011).

The common factors approach challenges the assumption that therapeutic changes result predominantly from specific therapy models/conceptualizations and accompanying therapist skills/techniques, based on meta-analytic findings showing that to date there has been no empirical evidence that any therapy model is more effective than another (Sprenkle, Davis, & Lebow, 2009). Instead, advocates of the common factors approach assert that various common factors existing across models produce therapeutic changes. The common factors approach provides a counterbalance to the dominant model-centered paradigm in the psychotherapy field. The common factors change paradigm focuses more on contextual qualities of treatment. It contends that factors such as therapists' and clients' personal characteristics, their attitudes and emotions toward therapy and each other, their behaviors in sessions all are involved in therapeutic change. In this paradigm, roles of therapists and clients are much more important than they are in the older model-specific treatment effects paradigm. Although therapists cannot control some types of common factors (e.g., the length of time a couple has been together), they have considerable potential to influence many common factors (e.g., aspects of the therapist's behavior and the quality of the therapeutic alliance between the therapist and clients). Therefore, research on common factors in therapy has significant implications for shaping clinical practice as well as increasing knowledge about the process of effective therapy. Given that there already is growing evidence that couple therapies are a viable and effective modality for treating partner aggression, it is important to increase knowledge about the aspects of couple interventions that contribute to positive effects.

Purpose

Given the limited prior research on common factors influencing outcomes of couple therapy for those exhibiting psychological aggression and/or mild to moderate physical aggression, the present study is designed to investigate the roles of several client and therapist common factors that have rarely been studied previously but theoretically appear to be highly relevant to therapy outcome: trust and anger management as client common factors and therapist in-session behaviors as therapist common factors.

In the present study, social learning theory (Bandura, 1977) is used as a framework for identifying client and therapist common factors that may influence therapy outcomes. Social learning theory involves a set of constructs that account for ways in which humans learn a variety of interpersonal behavior patterns through their histories of interactions with other people. The theory posits that, "learning results from the positive and negative effects that actions produce" (Bandura, 1977, p. 17), which is termed *expectancy learning*. When people initiate actions, some actions produce positive responses, whereas other actions produce negative ones. Through such differential reinforcement contingencies, people acquire expectancies (predictions regarding probabilities) that certain behaviors will create valued benefits. Through the expectancies or anticipatory thoughts, "people convert future consequences into current motivators of behavior" (Bandura, 1977, p. 18). They select and enact behaviors that are expected to yield beneficial outcomes and discard apparently ineffectual behaviors that are expected to produce neutral or punishing outcomes.

In the context of social learning theory, dyadic trust between partners is expected to play a very important role in the therapy process. Each individual's commitment to the couple relationship is based on his or her expectancy that the partner will provide positive outcomes and

a low rate of negative outcomes. Essentially, the favorable ratio of positive to negative behavior anticipated from the partner constitutes the individual's level of trust in the partner. The level of trust evolves as the couple interacts over a period of time and each person observes the other's behavior. A low level of trust in one's partner reflects an expectancy that one's caring actions toward the partner, intended to contribute to the other's well-being, will not be reciprocated by the partner (Rempel, Holmes, & Zanna, 1985). Consequently, trust can be a factor influencing the individual's current commitment to the relationship, and thus it is a theoretically important factor to be considered in regard to individuals' levels of satisfaction and commitment to their relationships.

Specifically relevant to the therapy process, a low level of trust in a partner may be associated with an expectancy that although the partner agreed to participate in couple therapy the partner will not change his/her behaviors in a positive way. Thus, partners may believe that their efforts, guided by therapists, to improve their relationship will not be reciprocated by their partners, and this overall negative expectancy eventually will impede the individual's active engagement in therapy. Given this theoretical importance of trust, it is important to investigate the degree to which trust acts as a common factor influencing couple therapy outcome in a sample of couples treated for partner aggression.

Also, it seems self-evident that anger expression is a very important factor influencing partner aggression. Trait anger and anger expression styles have been found to strongly predict the enactment of psychological aggression (Taft et al., 2006) and physical violence in intimate relationships (Barbour, Eckhardt, Davison, & Kassinove, 1998; Schumacher, Slep, & Heyman, 2001). Consequently, therapeutic interventions for partner aggression typically include anger management components (Heyman & Schlee, 2003; LaTaillade, Epstein, & Werlinich, 2006).

However, little is known about the degree to which anger expression acts as a common factor influencing the outcome of couple therapy for partner aggression. On the basis of social learning theory, experienced and expressed anger in sessions may contribute to partners developing negative expectancies about possible benefits and effectiveness of couple therapy. Partners who themselves experience and express relatively unregulated anger during therapy sessions may conclude that their engagement in the therapy does not produce favorable outcomes, which may disrupt their subsequent active engagement in treatment. Furthermore, individuals who are the targets of a partner's unbridled anger may likewise develop the anticipatory expectancy that the therapy will not produce positive changes in the couple's relationship.

Furthermore, Weiss (1980) proposed that members of distressed couples commonly experience negative *sentiment override*, in which an individual's pre-existing feelings about a partner override the partner's current behavior in determining the individual's emotional response to the partner. Thus, an individual who has unregulated anger toward a partner is likely to experience relatively undifferentiated anger toward the partner even when the partner is behaving in a neutral or positive way. This bias not only contributes to relationship distress in daily life; it also seems likely to detract from the individual's capacity to experience positive feelings when the partner behaves in positive ways during therapy sessions. In this manner, poor anger management is a client characteristic that seems to be a risk factor for poor therapy outcomes. Consequently, even though couple interventions may specifically target anger management, partners' levels of anger expression may interfere with the therapy process. The present study examined anger expression as a common factor potentially influencing therapy outcome.

The current study also investigated therapist common factors that may influence therapy outcome for couples being treated for relationship distress and partner aggression. In the broader field of psychotherapy, therapist characteristics and their influence on the therapeutic alliance are the common factors that have been studied the most. However, to date, most studies have been conducted on individual psychotherapy (Heinonen, Lindfors, Laaksonen, & Knekt, 2012; Nissen-Lie, Monsen, & Rønnestad, 2010), whereas very few studies have addressed therapist factors in couple therapy, particularly for partner aggression (Evans, 2011).

From a social learning perspective, positive therapist in-session behaviors (in this study, empathy, use of systemically-based techniques, and degree of session structuring) are expected to have direct positive effects on outcomes of couple therapy for partner aggression. The therapist behaviors also are expected to moderate or reduce the negative associations that low client trust in his/her partner and high venting of negative emotions have with couple therapy outcomes such as level of marital satisfaction. Specifically, clients who have lower levels of trust in their partners may have a negative expectancy that their efforts to improve the couple relationship through therapy will not be reciprocated by their untrustworthy partners, which may decrease their motivation to put energy into the therapeutic change process. However, if their therapist is empathic and the therapist uses interventions based on systemically-based techniques that change negative dyadic couple interaction patterns, the clients may come to believe that the therapist is dependable and has sufficient ability to handle the couple's problems. As a result, the clients may develop an expectancy that their active engagement in therapy will yield positive changes in their couple relationships. Such positive expectancies may increase partners' engagement in the therapy, moderating negative effects of low levels of trust on therapy outcome.

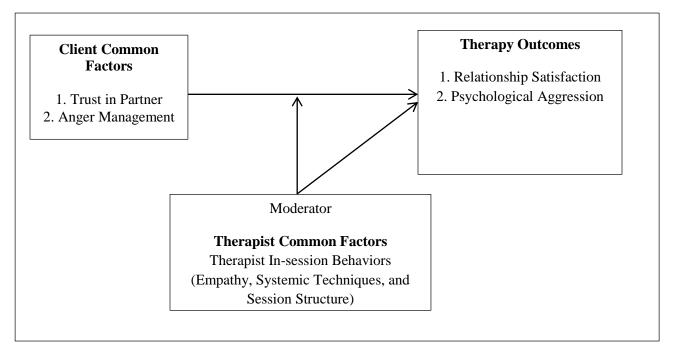
Also, clients who show poor anger management are more likely to experience and express anger in sessions or at home during the period of therapy than their counterparts with better negative emotion regulation ability. Such negative experiences may create an expectancy that their active participation in the therapy will not be fruitful. However, if the clients work with therapists who are empathic, and who can structure the sessions, they may develop an expectancy that even though sometimes anger may interrupt the therapy process, the therapists can control the situation and show constant support for them, which may buffer the negative effect of unregulated anger on the therapy outcome.

In summary, the present study arises from some gaps in prior research on couple therapy for partner aggression. First, in general, studies on couple therapy for partner aggression have neglected scrutiny of various elements of therapy that may operate across models (common factors), while focusing primarily on effects of specific therapy approaches/models. The present study addressed such common factors, including therapist behaviors and client characteristics. For assessing therapist factors, unlike most studies that have used questionnaires for assessment of therapist characteristics, the present study used observational data in which video-recorded therapist behaviors during sessions were coded. For client factors, trust and anger expression/management, both of which have rarely been assessed in couple therapy outcome studies but are highly relevant to treatment focused on reducing partner aggression, were investigated.

Figure 1 shows the conceptual model for the present study. The conceptual model consists of hypothesized relationships among the variables. First, negative client common factors (lower trust in one's partner and poorer anger management) are hypothesized to be negatively associated with desired therapy outcomes (i.e., associated with less increase in relationship

satisfaction and less decrease in psychological aggression). Second, constructive therapist common factors (therapist in-session behaviors) are hypothesized to be associated with more positive therapy outcomes and are hypothesized to moderate the association between negative client common factors and poorer therapy outcomes. More fully specified hypotheses are presented later in the hypotheses section.

Figure 1. Conceptual model of the study



Chapter 2: Literature Review

Partner Aggression

Partner aggression includes both physical and psychological forms of behavior that inflict physical and/or emotional pain on the recipient, and it may be used to convey unhappiness or anger to the recipient, or to control the recipient through punishment. Partner aggression is pervasive in couple relationships. According to a study using a randomly selected community-based sample, 90% of families with young children reported that at least one type of physical aggression between partners, as measured by Conflict Tactics Scale—Revised (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996), occurred in the past year. Also, three or four types of any physical aggression were reported by over 40% of the families (Slep & O'Leary, 2005). Physical aggression is often accompanied by, and preceded by, psychological aggression (O'Leary, 1999).

The term partner aggression tends to be synonymous with the term "common couple violence" (Johnson, 1995), and is used to denote aggressive acts that generally are of mild to moderate severity and are enacted bilaterally by male and female members of heterosexual couples. It is distinguished from *intimate terrorism* or battering, which refers to severe physical violence, often resulting in injury as well as significant fear on the part of the victim, committed by males against female partners. Whereas partner aggression is identified and studied more often in community-based samples, intimate terrorism is usually detected through samples drawn from domestic violence shelters or other relevant agencies (Holtzworth-Munroe & Stuart, 1994; Johnson, 1995; Johnson, 2008; Johnson & Ferraro, 2000). Because the two forms of aggressive behavior involve different dynamics in the couple relationship and may have different antecedents and consequences, it is important to examine the samples and types of aggression carefully when describing results of research studies on aggression/violence in couples.

The physical and psychological forms of partner aggression have been found to exert negative influences on couple relationships and the well-being of the members. A longitudinal study with a community sample (O'Leary et al., 1989) found that 25-30% of the couples who reported physical aggression at all three points (pre-marriage, 18 months, and 30 months after marriage) were clinically distressed at 30 months, scoring below a cutoff score of 90 on Short Marital Adjustment Test (Locke & Wallace, 1959) that has been found to discriminate between clinically distressed and non-distressed couples (Jouriles, Ramirez, & O'Leary, 1986, as cited in O'Leary et al., 1989). Also, the effects of psychological aggression commonly are as detrimental as physical aggression, and the incidence of psychological aggression in early stages of marriage predicts subsequent physical aggression (O'Leary, 1999). For example, in a study using a community sample, 72% women in physically abusive relationships reported that psychological aggression had a more negative impact on them than did physical aggression (Follingstad, Rutledge, Berg, Hause, & Polek, 1990), which is consistent with findings from another community-based study, which found that psychological aggression had a stronger negative effect on victims' psychological and physical symptoms than physical aggression (Taft et al., 2006).

Several risk factors for the perpetration of partner aggression, primarily physical aggression, have been identified by researchers. According to a brief literature review (LaTaillade, Epstein, & Werlinich, 2006), family background, psychological, cognitive, gender-related, and couple interactional factors are associated with perpetration of partner aggression. As family background factors, a history of child abuse victimization and witnessing parental violence is associated with greater partner aggression (Dutton, 1988; Gottman et al., 1995). Regarding psychological factors, personality disorders (e.g., borderline personality disorder) and

other psychopathology such as anxiety, substance abuse, and depression are risk factors for violence perpetrated by males (Leonard & Roberts, 1998). Also, high levels of jealousy and a preoccupied insecure attachment style have been found more often among violent men than nonviolent men (Dutton & Golant, 1995). Violent men are also more likely to make negative attributions about a partner's intentions and motives and show greater assertion problems compared to nonviolent men (Holtzworth-Munroe, Meehan, Rehman, & Marshall, 2002). Concerning gender and power, unequal distribution of socioeconomic power between partners has been associated with higher risk of partner aggression (Babcock, Waltz, Jacobson, & Gottman, 1993). Lastly, as interactional factors during discussions of couple issues, violent men are more likely to exhibit communication problems such as defensiveness and other hostile behaviors toward their partners (Margolin, Burman, & John, 1989). Also, negative reciprocity, a pattern in which one partner's negative action increases the probability that the other partner will respond negatively, is observed more often among violent couples than nonviolent counterparts (Cordova, Jacobson, Gottman, Rushe, & Cox, 1993).

Risk factors for the perpetration of psychological aggression also have been identified. According to a review (Schumacher, Slep, & Heyman, 2001), socioeconomic status (SES) variables and family of origin factors, such as, witnessing parental aggression and being physically disciplined, do not predict male partners' psychological aggression toward their female partners. As characteristics of individuals, men's trait anger, borderline personality organization, and passive-aggressive or self-defeating personality problems have been found to be risk factors for perpetration, showing moderate to strong effect sizes. Interpersonal factors also predict male-to-female psychological aggression with moderate to strong effect sizes, including a wife demand/husband withdraw or a husband demand/wife withdraw pattern when

couples are engaging in conflict, men's lower marital adjustment, and men's fearful attachment. However, Schumacher, Slep, and Heyman's (2001) review does not provide any information on risk factors for female-to-male psychological aggression, even though female partners enact psychological aggression equally.

Taft et al. (2006) also identified some correlates of psychological aggression that appear to be *consequences* of receiving the aggression or potential causes of perpetration, using a community sample of 145 heterosexual couples. Gender-neutral correlates of psychological abuse victimization included greater psychological distress (measured with the Brief Symptom Inventory; BSI), physical health symptoms (measured with the Physical Symptom subscale of the Health and Daily Living Form), and anxiety (measured with the Anxiety subscale of BSI), controlling for physical aggression. Only for women, victimization was associated with higher levels of depression symptoms. Regarding psychological perpetration, trait anger and poor relationship adjustment were strongest correlates, regardless of gender. Gender-specific correlates were also found. Only for men, father-to-child and father-to-mother aggression were correlates of psychological abuse perpetration within the couple relationship, which were not reported as risk factors in the previous review mentioned above (Schumacher, Slep, & Heyman, 2001).

Theoretically, although causes of intimate terrorism or battering have been explained well by feminist theory, particularly in terms of power issues (Hornung, McCullough, & Sugimoto, 1981), non-battering partner aggression may be better understood with a family systems perspective, because partner aggression seems to involve dyadic processes including several risk factors. To illustrate partner aggression with focus on couple dynamics, it seems that partners do not successfully manage or resolve conflicts emerging in family life because their

communication pattern is dysfunctional (Cordova, Jacobson, Gottman, Rushe, & Cox, 1993). If a couple faces a serious conflict of opinions and their negative emotions increase, one partner or both of them may employ physical and/or psychological aggression in order to show his/her accrued negative feelings such as anger and/or to punish the other partner. However, because partners who are aggressive toward each other often still maintain affection toward each other and rely on each other emotionally, they may apologize to each other and promise not to commit psychologically or physically aggressive acts in the future (Holtzworth-Munroe & Stuart, 1994). However, if the couple fails to change its continuing dysfunctional pattern of behavior, the aggression may start anew (Kim, Laurent, & Feingold, 2008) and their marital dissatisfaction may increase (Lawrence & Bradbury, 2007). Also, in this repetitive pattern of aggression, the self-esteem of both partners may worsen (Aguilar & Nightingale, 1994). This lowered selfesteem, in turn, may contribute to the partners misinterpreting interpersonal cues from each other; they may react in defensive ways and even use violence to protect their self-esteem. If the vicious cycle persists, the couple may lose hope for improvement, and they may become emotionally and behaviorally frustrated and depressed (Taft et al., 2006), which in turn may worsen their relationship.

A Common Factors Approach to Therapy

Clinicians and researchers have exhibited increasing levels of interest in therapist factors, client factors, and the quality of the therapist-client therapeutic alliance as discourse regarding common factors in therapy has developed. The common factors approach challenges the assumption that therapeutic changes result predominantly from specific therapy models/conceptualizations and accompanying therapist skills/techniques, based on meta-analytic findings showing that to date there has been minimal empirical evidence that any one therapy

model is more effective than another. Instead, advocates of the common factors approach assert that various common factors exist across models and produce therapeutic changes. The common factors approach provides a counterbalance to the dominant model-centered paradigm in the psychotherapy field.

Sprenkle, Davis, and Lebow (2009), who have been major proponents of the common factors paradigm in the couple and family therapy field during the last decade, contrast it to the traditional model-driven change paradigm, which equates therapeutic models with medications that each have specific active ingredients that target particular types of disease processes, or in the case of therapy models particular disorders. In contrast, the common factors change paradigm focuses more on contextual qualities of treatment. It contends that factors such as therapists' and clients' personal characteristics, their attitudes and emotions toward therapy and each other, their behaviors in sessions, and so on all are involved in the rapeutic change. In this paradigm, roles of therapists and clients are much more important than they are in the older model-specific treatment effects paradigm. Sprenkle et al. (2009) point out that this contrast between the two paradigms does not occur only at a theoretical level. It also influences the psychotherapy research field. For example, traditionally most funded research on forms of psychotherapy (e.g., by the National Institutes of Health) has been based on the medical model paradigm that focuses on model-specific interventions, although a small portion of funded research has addressed process research.

The history of the common factors paradigm actually goes back several decades (Sprenkle, Davis, & Lebow, 2009). For example, Sprenkle et al. (2009) identify Carl Rogers (1957) as a key proponent of common factors, in that he emphasized therapist attributes and behaviors such as positive regard, empathy, and congruence as necessary conditions for

therapeutic change, which can be applied by clinicians using all types of therapy models. The Division of Psychotherapy of the American Psychological Association (Norcross, 2002) concluded that several common factors, such as the therapeutic alliance, cohesion in group therapy, therapist empathy, and goal consensus (clients and therapists sharing the same goals for treatment), and collaboration between clients and therapists, can be considered to be empirically established as predictors of therapy outcome. Although many researchers whom Sprenkle and colleagues regarded as influential figures in the history of the common factors paradigm explicitly mention the term "common factors" in their works (e.g., Lambert & Barley, 2001; Luborsky, Singer, & Luborsky, 1975), not all of the researchers (including Carl Rogers) labeled their approach as a common factors approach. Nonetheless, it seems to be clear that even as the number of specific therapy models has grown rapidly over the past several decades, there also have been constant warnings that it is inappropriate to see therapy solely within the lens of specific models, while ignoring the fact that common factors seem to affect therapeutic change.

It is important to note that there are two perspectives on common factors (Sprenkle et al., 2009). First, there are common factors that reside in multiple therapy models as active ingredients of the models. Interventions that reduce an individual's anger responses toward a partner by reducing the person's anger-eliciting thoughts about the partner are an example of that type of common factor. Second, there are common factors relevant to the context of the therapy. Those common factors include client characteristics (e.g., trust in one's partner), therapist characteristics (e.g., warmth), and aspects of the therapeutic relationship (e.g., a collaborative bond), on which most of the existing common factors studies have focused.

The emerging common factors paradigm has been supported by considerable empirical evidence. First, treatment models/orientations have been found to have almost equivalent effect

sizes, which encouraged Wampold et al. (1997) to declare, "Everybody has won, and all must have prizes" (p. 203). Many reviews and meta-analyses of therapy outcomes have reported that common factors contribute more to therapy outcome than do specific treatment factors (Lambert & Barley, 2001; Shadish & Baldwin, 2003; Wampold et al., 1997). However, some critics (Chambless, 2002; Sexton, Ridley, & Kleiner, 2004) have argued that almost all empirical support for the effects of common factors has been drawn from meta-analyses. Sprenkle et al. (2009) contend that such critics consider the randomized clinical trial comparing specific treatments as "the gold standard of research" and do not recognize the findings from meta-analyses as convincing evidence of the effects of common factors.

The old traditional model-specific paradigm has dominated the couple and family therapy field as well as the individual psychotherapy field. Sprenkle et al. (2009) attribute this phenomenon to the historical fact that the early development of family therapy depended on the charisma of such master therapists as Murray Bowen, Virginia Satir, Salvador Minuchin, and Jay Haley, who popularized their models. This strong influence of legendary therapists and their models was depicted in Gurman and Fraenkel's (2002) millennium review article of couple therapy. Ironically, the popularity of the master therapists and their models led to more of a focus on the models themselves than on the characteristics of these charismatic therapists (i.e., common factors) that may have contributed significantly to the vivid successful case demonstrations that the masters presented at professional conventions and in textbook therapy session transcripts.

Lastly, Sprenkle et al. (2009) criticize Wampold's (2001) extreme position on common factors, that one therapy model is just as good as another, therefore minimizing the value of specific models. Sprenkle and colleagues take a moderate position on common factors,

contending that models are important as "vehicles through which common factors operate." (Sprenkle, Davis, Lebow, 2009, p. 68). Valuing a "both-and" stance, they encourage attention to the effects of both common factors and model-specific factors.

The position of the present author is close to the moderate position rather than either extreme position on the continuum between a focus on model-specific factors and a focus on common factors. On the one hand, more research is needed to identify model-specific treatment effects, but on the other hand it is important to investigate common factors that operate to produce therapeutic change across models. That is, common factors studies should play a complementary role in the field other than simply replacing the older paradigm.

Client Common Factors in Couple Therapy Research

Traditionally, couple therapy for violence between partners was avoided due to the assumption that it would place victims at risk of further abuse (O'Leary, 2008). However, as research on partner aggression has grown, it has been found that many couples experience low to mild levels of physical aggression and a good deal of psychological aggression enacted by both partners (Slep & O'Leary, 2005). Also, outcome research on couple therapy for partner aggression has indicated its effectiveness and an absence of harm to participants (LaTaillade, Epstein, & Werlinich, 2006; Stith, Rosen, McCollum, & Thomsen, 2004). However, compared to studies on specific models, there have been few studies on roles of common factors in couple therapy for partner aggression (Evans, 2011). Thus, this study addressed how common factors operate in couple therapy for partner aggression. Specifically, the present study focused on client factors and therapist factors.

Client Characteristics Predicting Outcomes in Prior Couple Therapy Studies

Even though couple therapy has proved its therapeutic effectiveness (Gurman & Fraenkel, 2004; Shadish & Baldwin, 2003), there has been considerable variability in clients' responses to couple therapy (Christensen et al., 2004; Hahlweg & Klann, 1997; Jacobson et al., 1984). Therefore, researchers have called for studies identifying factors predictive of a positive or negative outcome, and some such studies have been conducted. Those prediction studies can be understood as focusing on common factors, particularly, client characteristics. Those types of common factors have been studied for a longer time and much more thoroughly in the field of individual psychotherapy, with parallel efforts in the couple therapy field only being in the very early stages (Sprenkle, Davis, & Lebow, 2009). Published studies on predictors of couple therapy outcome have not even referred to the variables they have examined as common factors, probably because it has not been until recently that the common factors paradigm has drawn attention from couple and family therapy scholars.

Given that not all of the couples who participate in couple therapy experience success in changing their relationship and presenting problems, identifying specific characteristics of clients that interfere with their improvement is very important. Once client common factors that are detrimental to effectiveness of couple therapy for partner aggression are identified, this knowledge can guide treatment revisions. That is, clinicians who meet couples with partner aggression, regardless of their preferences for specific therapy models, need to consider effective ways to deal with the harmful client common factors, so that clients with such characteristics also can benefit from therapy. However, in the literature on partner aggression treatment, studies examining predictors of outcome, especially client common factors, have been very rare. Thus,

the present review summarizes findings from prediction studies in general couple therapy to identify potential predictors of outcomes for couple therapy focused on partner aggression.

Jacobson, Follette, and Pagel (1986) conducted a study that explored variables that predict the outcome of behavioral marital therapy (BMT) with a sample of 60 married or cohabiting heterosexual couples. Age, divorce potential, and femininity did not predict the criterion variable of marital satisfaction that was measured at termination and at a 6-month follow-up. Unexpectedly, partners' initial levels of depression were associated with increases in the level of marital satisfaction, which was assessed with the Dyadic Adjustment Scale (DAS; Spanier, 1976). According to the authors, this may indicate that couples with greater depression associated with relationship distress respond to BMT better. However, the authors also suggested the possibility that statistical regression to the mean (based on cases with worse initial functioning showing more improved scores on re-testing) may account for their findings, and they called for replication studies. Lastly, women with higher levels of affiliation and men with higher levels of independence did not benefit as much from the therapy. The authors interpreted those findings as meaning that couples who follow traditional gender roles of women being more focused on intimacy versus men being more focused on autonomy are less likely to benefit from BMT. Also, the authors argued that given that BMT is based on an egalitarian perspective emphasizing collaboration and compromise, couples who exhibit evidence of adhering to a culture of traditional marriage may not respond well to the model.

Snyder, Mangrum, and Wills (1993) conducted multivariate analyses to explore predictors of couple therapy outcome measured at termination and 4-year follow-up with a sample of 59 married couples who received behavioral marital therapy (BMT) or insight oriented marital therapy (IOMT), a psychodynamically oriented model emphasizing clarification and

interpretation by the therapist. Relationship distress was used as the therapy outcome and was measured with the Global Distress Scale of the Marital Satisfaction Inventory with the cutoff T score of 59 (Snyder, 1981). Findings indicated that although at termination and at the 6-month follow-up no differences between the treatment conditions were detected, at the 4-year follow-up a significant difference was observed—specifically, 38% of the BMT couples experienced divorce, whereas 3% of the IOMT couples did. Socio-demographic information, except for occupational status, did not predict the outcome. Occupational status, specifically being unemployed or employed in a position involving unskilled labor, predicted higher levels of relationship distress at the 4-year follow-up, but that finding may have less to do with effects of therapy per se than being a reflection of corrosive effects of chronic life stressors on couples' relationships. Neither did verbal and nonverbal behaviors during problem-solving exchanges that were coded at the intake assessment with Gottman's (1979) Couples Interaction Scoring System (CISS) predict therapy outcome. Pretreatment marital adjustment measured by the DAS (Spanier, 1976) was negatively correlated with the outcome at termination and the 4-year followup, with the correlation being stronger short-term (at termination). Greater intake depression symptoms predicted greater marital distress at both termination and the 4-year-follow-up, regardless of client gender, which is contradictory to the findings Jacobson, Follette, and Pagel's (1986) study. However, whereas Snyder et al.'s study (1993) used post-treatment scores as the outcome index, Jacobson et al.'s (1986) study employed the change between the pre-treatment and the post-treatment scores. The possibility that the difference between the studies' findings may be due to that difference in outcome indices should not be overlooked. Overall, although the authors explored a wide range of potential predictors of couple therapy outcome, which is a benefit of using a multivariate analysis, they did not provide any detailed discussion about the

role of each predictor in relation to the outcome. However, compared to the other prediction studies conducted in the context of a single specific model (mainly behaviorally oriented couple therapy), this study investigated client predictors across clearly different types of treatment models (BMT and IOMT). Studies such as the one by Snyder, Mangrum, and Wills (1993) help identify how client factors operate among different therapy models.

A prediction study by Gray-Little, Baucom, and Hamby (1996) focused on power in marriage, with a sample of 53 couples who received variations of BMT. Before treatment, the couples were asked to hold discussions to resolve two marital problems, and their 5 to 8-minute interactions were videotaped. The interactions were coded using the Marital Interaction Coding System (MICS; Patterson et al., 1975). A summary score of negative behavior such as criticizing and complaining (Negative MICS) and the ratio of negative behavior to combined positive and negative behavior (Negative Ratio) were used as outcomes, along with marital satisfaction, as measured with the Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959) and the DAS (Spanier, 1976). A self-report questionnaire (Margolin, et al., 1983; Weiss, et al., 1973) was also used to measure the amount of change desired in the partner. Condensed transcripts of the videotaped interactions were rated by trained raters to classify the solution into one of the power patterns: (a) husband-dominant pattern (only or primarily the husband's position was accepted as the solution), (b) egalitarian pattern (both positions equally accepted), (c) wifedominant pattern (only or primarily the wife's position accepted), or (d) anarchic (failure to reach an agreed-upon solution). Egalitarian couples showed the highest overall marital adjustment both before and after treatment. Wife-dominant couples responded to couple therapy better (improved more on the outcome measures) than the other types of couples. In particular, the wife-dominant couples showed improvement in marital satisfaction and the negative ratio, whereas husbanddominant couples did not show such improvement. Anarchic couples showed improvement only in the negative ratio, not in marital satisfaction. Egalitarian couples showed no significant change in any outcome, which was notable because other studies have shown that egalitarian couples tend to be higher in relationship satisfaction (e.g., Gray-Little & Burks, 1983).

Vansteenwegen (1996) investigated client factors associated with success in couple therapy with a program implemented in Belgium. The marital therapy program consisted of conjoint therapy sessions and multi-couple group sessions. The group sessions focused on cognitive restructuring and behavioral training involving practical skills for effective communication, management of feelings, a positive sexual relationship, and conflict resolution. Out of 52 couples who participated in the program, ten "most changed/successful" couples and ten "least changed/successful" couples were included in the final sample. Measurements were conducted before treatment, at termination, at a six-month follow-up, and at a two-year followup. To identify the most successful and the least successful couples, several measures were taken into consideration: the Barrett-Lennard Relationship Inventory (Wampler & Powell, 1982) assessing dyadic changes on four subscales (positive regard, empathy, transparency, directivity); Shostrom's Personal Orientation Inventory (Shostrom, 1963) assessing individual changes on two subscales (autonomy; time experience – the ability to live fully in the present); global therapist ratings of couples' improvement; the partners' global perceptions of relationship improvement; and scores by independent judges of short problem outlines written by the clients before and after two years. Findings indicated that couples in the success group were significantly younger than those in the failure group. Also, in the success group more couples reported infertility, some sexual problems, and jealousy as initial problems, which seemed to be resolved through therapy. In the failure group, an extreme dominance of one partner and aversion to the partner, and more severe psychopathology diagnoses were more frequent. The finding that the extreme dominance of one partner was detrimental in regard to therapeutic responses is in part consistent with Gray-Little et al.'s (1996) finding that only husband-dominant couples, not wife-dominant couples, did not respond to the therapy well. However, other variables (duration of marriage, number of children, duration of problems, level of education, level of occupation, age difference between partners, and presence of follow-up sessions) did not differentiate the success group from the failure group. However, because this study used a very specific treatment program, the findings cannot be generalized to other types of couple therapy. Also, because this study used only ten couples each group, the statistical power of the study was not strong. That is, this study may not be sensitive enough statistically to detect actual group differences to a sufficient degree.

Atkins et al. (2005) analyzed data from 134 couples who received either Traditional Behavioral Couple Therapy (TBCT) that was comprised of the standard BMT components of communication skills training and behavioral contracting or Integrative Behavioral Couple Therapy (IBCT; Jacobson & Christensen, 1996) that blended BMT behavior change strategies with interventions focused on increasing partners' greater acceptance of each other's characteristics. The researchers assessed couples at four time points to reveal how therapeutic change occurs: at the pretreatment assessment, after 13 weeks of treatment, after 26 weeks of treatment, and at termination. As the outcome, marital satisfaction was measured with the DAS. As demographic variables, age, years of education, monthly pretax income, years married, presence of children, and wife's employment outside the home were measured. As intrapersonal variables, neuroticism (from the NEO Five-Factor Inventory, Costa & McCrae, 1989), mental health (assessed with the Compass Outpatient Treatment Assessment System; Sperry, Brill,

Howard, & Grissom, 1996; and the Structured Clinical Interviews for DSM-IV for Axis I and II; First, Spitzer, Gibbon, & Williams, 1994), and family history of distress (assessed with the Marital Satisfaction Inventory—Revised (MSI-R); Snyder, 1997) were used. Interpersonal variables included communication (Communication Patterns Questionnaire; Christensen & Sullaway, 1984), desired level of closeness (Closeness and Independence Inventory; Heavey & Christensen, 1991), dissatisfaction with the amount of affection expressed by the partner (from the Marital Satisfaction Inventory—Revised; Snyder, 1997), sexual dissatisfaction (MSI; Snyder, 1997), and commitment stability (Marital Status Inventory; Weiss & Cerreto, 1980). The investigators used hierarchical linear modeling (HLM) and automatic variable selection based on Bayesian Information Criterion (BIC), because prior prediction studies had not identified precise hypotheses about predictors of therapy outcome.

Atkins et al. (2005) found that only 4% and 3% of the variance of slopes (linear change) and quadratics (curvilinear change indicating acceleration or deceleration of change), respectively, was explained by predictors, meaning that overall the change in therapy outcome was difficult to predict even with numerous diverse client factors. Demographic variables as a block predicted slopes, and intrapersonal variables as a block predicted both slopes and quadratics. However, interpersonal variables as a group did not predict slopes or quadratics. The findings showed that gender and years married were predictive of both change components of slopes and quadratics. Male partners improved faster, but their rate of change decelerated over time. Couples who had been married longer improved more rapidly, thus reaching higher levels of marital satisfaction at termination, which was inconsistent with the findings of Vansteenwegen (1996). Also, severely distressed couples (identified by their low initial marital satisfaction) reported a greater deceleration in marital satisfaction over time, compared to those

who were moderately distressed. Also, the TBCT couples, relative to the IBCT couples, improved more rapidly initially, but they showed a greater deceleration in progress over time. Initial level of sexual dissatisfaction interacted with treatment condition, such that TBCT couples with higher levels of sexual dissatisfaction improved fast early in the course of therapy, but their improvement slowed and they started to lose some degree of marital satisfaction toward termination. However, IBCT couples with higher initial levels of sexual dissatisfaction improved more slowly early on but continued to improve toward the end of therapy. Overall, the authors described it as striking that they found few predictors of marital therapy outcome. Their study contributes to the literature methodologically, in that it provides information about the trajectories of therapeutic change by using HLM. However, similar to other previous studies, the study examined various predictors of therapy outcome at one time solely based on statistical rationale, without theoretical considerations.

Baucom, Atkins, Simpson, and Christensen (2009) conducted a two-year prediction study, tracing the performance of the sample from the Atkins et al. (2005) study. They examined demographic, intrapersonal, communication, and other interpersonal predictors and two moderators (pretreatment severity of marital dissatisfaction and type of therapy) — unlike the previous short-term study, communication variables were added. As communication variables, the researchers employed indices of power processes and expressed emotional arousal, based on the couples' recorded pretreatment problem-solving interactions. Power processes are about whether couples use hard language or soft language, which was assessed by analyzing transcriptions of pretreatment discussions using latent semantic analysis (LSA; Landauer & Dumais, 1997). Hard language means discussing something with one's partner without allowing him/her to respond in various ways. In contrast, soft language refers to a collaborative

communication style giving the partner the freedom to respond without restrictions. Emotional arousal was measured using the method of fundamental frequency (f_0) , which is the pattern of vibration generated by the vocal folds during phonation and is very highly correlated (up to r = .9) with perceived pitch. Fundamental frequency (f_0 : maximum f_0 - minimum f_0 measured in hertz) was produced through analyses of couples' audiotaped pretreatment problem-solving discussions with the Praat computer program (Boersma & Weenink, 2005). Baucom et al. (2009) noted that compared to existing physiological measures of arousal that are "complicated, expensive, time consuming, and invasive" (p. 163), fundamental frequency is less expensive and complicated. As the therapy outcome index, clinically significant change categories based on the change in the averaged Dyadic Adjustment Scale (DAS) scores across partners between pretreatment and 2-year follow-up were used. The categories include deterioration (change in the direction of greater dissatisfaction), no change, improvement (change in the direction of greater satisfaction), and recovery (improvement and movement into the non-distressed range). The pretreatment severity was a dichotomous variable of either moderate or severe marital dissatisfaction based on averaged scores of the husband and wife on the DAS and the Global Distress Scale (GDS) of the MSI-R (Snyder, 1997).

Baucom et al. (2009) found that, overall, communication factors were more useful in predicting therapy outcome than demographic and intrapersonal factors were. Among demographic variables, couples who had been married longer benefitted more from TBCT or IBCT in the long-term, which was consistent with the finding from the short-term study (Atkins et al., 2005). However, other demographic variables, such as, age, education, income, presence of children, parental marital status, and the two- or three-way interactions among demographic variables that were tested failed to predict the long-term outcome. Intrapersonal variables and

interpersonal variables did not predict response to therapy, which is not consistent with the shortterm study (Atkins et al., 2005). Also, the type of therapy (TBCT versus IBCT) was found to moderate the relationship between wives' emotional arousal (vocal fundamental frequency) and clinically significant change. Specifically, the negative effect of wife's encoded arousal at intake assessment on treatment response was stronger for couples who had received TBCT than for couples who had received IBCT. This finding suggests that therapists need to take into account therapeutic models as well as couples' characteristics in order to predict how the couples will respond to therapy. In another moderation effect, the authors found that couples who used lower levels of hard language at intake assessment were more likely to benefit from treatment, but only when they were moderately distressed before treatment; for those who were severely distressed, this association was not found. Also, lower levels of the wife's encoded emotional arousal predicted a positive outcome only for couples who were moderately distressed at intake. This study shows that emotional arousal is an important client factor that can interfere with clients' improvement during therapy. Also, this study reveals that some client predictors, albeit a few, can predict clients' responses to treatment in the long-term over 2 years.

Overall, previous couple therapy outcome studies have addressed a variety of characteristics of couples and identified several predictors of treatment outcome. However, the overall pattern has been that relatively few of the variables that have been investigated have been reliably significant predictors of outcome, thus making systematic interpretations and synthesis of findings difficult. Moreover, researchers' selections of predictor variables for their studies generally have not been guided by clear theoretical perspectives. In addition, most studies, except Snyder et al.'s (1993) study, examined predictors under the context of a single specific model, primarily, behaviorally oriented couple therapy. Thus, it is not clear whether the

treatment-specific predictors can be generalized to the contexts of other treatments. Furthermore, most previous studies have used the averaged outcome scores from husbands and wives, which sacrificed some knowledge regarding the distinct effect of therapy on each spouse. Lastly, most studies have been conducted with samples of generally distressed couples (overlooking particular types of presenting problems), and studies focusing on special populations, such as couples with partner aggression, for which particular predictor variables might be especially relevant, have been rare.

There is a clear need for studies in which predictors of couple therapy outcome are investigated based on a conceptual model in which they are hypothesized to influence the process of couple therapy, especially for a sample of client couples with particular presenting problems, such as partner aggression. Thus, it is important that studies investigate client factors that are theoretically related to clients' presenting problems and to the targets and goals of the therapy. Given that the present study focused on therapy for couples who have been experiencing psychological and/or mild to moderate physical aggression, the client and therapist common factors should be conceptually related to the presenting problems and the foci of the couple therapy. The following sections describe the variables that this investigator chose as relevant for couples experiencing partner aggression; namely, dyadic trust and anger management.

Finally, there has been minimal attention in the couple therapy outcome research literature to ways in which client characteristics may interact with therapist behaviors in influencing treatment outcome. Ideally, well-trained therapists should be able to adapt their approaches to the characteristics and needs of clients with diverse characteristics; it seems likely that variations in therapist behaviors toward clients will have different effects on clients, depending on the clients' characteristics. Given the overall lack of outcome studies comparing

theoretical models, it may be premature to conduct studies with types of therapist behavior as a moderator variable, but there is a wealth of evidence from individual psychotherapy process and outcome studies that point to types of therapist behavior that can facilitate or interfere with positive outcomes. Interactions between client characteristics and therapist behaviors is especially worthy of attention in that this would address two of the major categories of common factors identified in the literature regarding both individual and couple therapy (Sprenkle et al., 2009). Thus, the present study investigated not only the main effect of client factors on therapy outcomes, but also the main effects of therapist behaviors and interaction effects between client factors and therapist behaviors.

Trust as a Common Factor Influencing Couple Relationships with Partner Aggression

Conceptualization of trust in intimate relationships. Trust is a core component of an intimate relationship, as it forms the basis for a secure attachment between two people. Larzelere and Huston (1980) suggested that in order to have trust in one's intimate partner an individual must attribute benevolence to the partner, based on whether the individual perceives the partner as pursuing the couple's mutual interests rather than his or her own interests. They also suggested that trust is based on the individual attributing honesty to the partner, based on a belief that he or she can believe the authenticity of what the partner says or does. These two attributions involved in trust actively influence couple interactions and the individual's level of comfort and security in the relationship. If partners believe each other to be benevolent and honest, they may continue to be committed to the relationship. In the present study, trust was considered to be highly relevant to partner aggression, because it seems likely that individuals who are victimized by a partner will have low trust in the partner as a benevolent person, and in instances of

repeated aggression the partner's honesty in claiming "I won't hurt you again" is considered unreliable.

Rempel, Holmes, and Zanna (1985) suggest some important features of trust. First, couple trust evolves over time from past experience and interactions. Second, consistent with Larzelere and Huston's (1980) view, in a couple relationship trust is usually based on the belief that the other person has a disposition of being reliable. Third, trust leads partners to take risks such that they yield or sacrifice for the other person, related to the fourth characteristic, that the individual has confidence that the other person will care and respond to his or her needs. Based on this conceptualization, Rempel et al. (1985) suggested three components of trust -
predictability, dependability, and faith. Predictability relates to "the consistency and stability of a partner's specific behavior, based on past experience" (p. 101). Dependability refers to "the dispositional qualities of the partner, which warrant confidence in the face of risk and potential hurt" (p. 101). Lastly, faith refers to "feelings of confidence in the relationship and the responsiveness and caring expected from the partner in the face of an uncertain future" (p. 101).

Predictors of trust in couple relationships. Empirical research has identified various individual and relationship factors involved in dyadic trust between intimate partners. In the literature, trust has been variously positioned conceptually and statistically as an independent, dependent, mediating, or moderating variable.

Several studies have investigated factors that may predict or are associated with level of trust, employing trust as a dependent variable. A study by Finkenauer, Kerkhof, Righetti, and Branje (2009) identified perceptions of concealment of information by a partner as a predictor of lower trust, using nine months of prospective data from 199 Dutch newlywed couples recruited from eight Dutch municipalities. To assess perceived concealment, the authors used an adapted

six-item version of Larson and Chastain's (1990) Self-Concealment Scale (e.g., "My partner has an important secret that (s)he hasn't shared with me." Trust was measured with Rempel et al.'s (1985) Trust Scale. In addition, perceived exclusion from one's partner was assessed with three items (e.g., "How often do you feel separated from your partner?"). Marital adjustment was measured with the DAS (Spanier, 1976). Findings showed that greater concealment at time 1 was associated significantly with lower marital adjustment and trust at time 2. Also, this link between concealment and trust was mediated by perceived exclusion from the partner. This study suggests that a partner who is perceived as concealing information is understood by the other partner as distancing himself or herself from the person, which, in turn, has a deleterious effect on trust in the partner.

Black and Schulte (2006) focused on the partners' past experiences, particularly their childhood experiences with parents, in relation to young adults' romantic relationships, using a sample of 205 undergraduate students. Positivity of childhood experiences with parents was measured with the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996).

Participants were asked to choose five adjectives that describe their childhood relationship with each parent. Then, positive, neutral, and negative adjectives (e.g., "caring", "joking", and "tense", respectively) were assigned the values 1, 0, and -1, respectively, and scores were summed. Also, in order to know the extent to which the parent behaved in emotionally supportive and available ways, parent loving scores were constructed. Specifically, participants chose the two most descriptive adjectives for each parent and described two childhood incidents that were very relevant to those adjectives. Raters evaluated mothers' and fathers' behavior, as described in those childhood incidents, using the loving subscale (with a range from 0-9) from

the Adult Attachment Scoring and Classification system (Main & Goldwyn, 1994; as cited in Black & Schulte, 2006). Trust was measured with the trust subscale of Brennan and Shaver's (1995) Adult Attachment Scale, which assesses the extent to which participants trust their romantic partners and "open up" to them. Black and Schulte (2006) reported that partners who experienced positive relationships with their mothers (higher scores in both positivity and loving), not with their fathers, in their childhood reported more trust in their partners. Although this study shows a significant connection between past experiences with parents, particularly mothers, and present trust in romantic partners, the study is limited in that trust was assessed with a measure of attachment, and data on past and current variables were both assessed in the present.

Religious behavior in couple relationships can also be involved in the formation of dyadic trust. Religious/spiritual behaviors have been found to positively affect trust among married couples. Lambert, Fincham, LaVallee, and Brantley (2012) investigated the relationships among prayer, unity, and trust through three studies. In Study 1, 29 undergraduates completed an item to assess frequency of joint prayer ("My partner and I pray together," with responses ranging from "never" to "very frequently"). Then, they were asked to engage in a 5-min interaction with their partner in which they answered several questions (e.g., "Describe the future of your relationship"). Their answers were rated by trained coders on "How much does this person appear to trust his or her partner?" Results indicated that praying with one's partner was positively associated with the coded trust ratings. In Study 2, 210 undergraduates completed questionnaires, with joint prayer measured with the same item as Study 1, trust measured with Rempel et al.'s (1985) scale (e.g., "He or she keeps me informed of things I should know about."), and unity assessed with two items: "During the last week I felt united with my partner

or close friend," and "During the last week I felt at one with my partner or close friend." Because no difference was found between the partners and close friends for the effect of prayer on trust, all participants were combined. Results showed that joint prayer was positively related to trust. Also, the link between prayer and trust was mediated by unity.

Lastly, Lambert et al. (2012) conducted an experimental study (Study 3) to confirm the relationships among prayer, unity, and trust found in Studies 1 and 2. A sample of 80 undergraduates completed measures at pretest and posttest. The same measures of trust and unity from Study 2 were used. After the pretest, participants were randomly assigned to either the joint prayer condition in which they prayed together or prayed for each other, or the positive interaction condition in which they discussed positive news events of the week. These assigned activities had to be practiced twice a week over a 4-week period. Participants in the joint prayer condition showed significantly higher trust and unity than those in the positive interaction condition. Also, the connection between experimental condition and trust was mediated by posttest unity. Applying symbolic interaction theory, which presumes that human interaction conveys not only the behaviors of actors per se but also symbolic meanings attached to the behaviors, the authors noted that meanings attached to the prayer behavior, such as a sense of unity in the couple relationship, might have contributed to strengthen dyadic trust. Based on the results, the authors suggest that couple therapists utilize prayer as an effective means to build dyadic trust, at least for religious/spiritual clientele.

Finally, given that marriage is a social institution affected by other societal entities, it is important to point out that marriage/divorce laws can influence levels of trust in marriage. From an economic perspective, Rowthorn (1999) addressed the relationship between no-fault divorce and marital trust. According to Rowthorn, no-fault divorce has damaged the contractual nature of

marriage, and thus debilitated its stability. Consequently, partners are less likely to make long-term investments in marriage, and this may undermine trust between partners. Even though couple therapists commonly take a systemic view of their clients' relationships, Rowthorn's (1999) point raises an interesting issue of whether it is important for clinicians to inquire about the impact of divorce laws on partners' levels of security and trust in their relationships, in addition to the micro-system assessment of the effects of breaches of trust occurring directly between the two partners. Also, clinicians may inform couples of the current challenges interfering with building dyadic trust in the no-fault divorce era, through which clinicians can advise that partners make more mutual efforts to build trust.

Effects of trust on the couple relationship. Several studies on trust in couple relationships have explored the effect of trust on aspects of couple functioning by employing it as an independent variable. Several individual and relational outcomes or dependent variables were predicted by trust level longitudinally or were statistically predicted by it in cross-sectional designs, including infidelity, partners' attributions about each other, their evaluations of relationship quality and conflict, and indices of their mental and physical health.

First, not surprisingly, lower trust between partners is associated with infidelity. In a randomized clinical trial of marital therapy comparing traditional behavioral couple therapy (TBCT) to integrative behavioral couple therapy (IBCT), the differences in characteristics between couples with or without infidelity were investigated (Atkins, Baucom, & Christensen, 2005). Logistic regression analysis showed that lower levels of trust predicted affairs in the current relationship, along with sexual dissatisfaction, time spent together, marital stability, and dishonesty. However, the authors did not specify the measure of trust, making the interpretation of the findings difficult, and the cross-sectional nature of the study precludes causal inferences.

Rempel, Ross, and Holmes (2001) examined how trust is associated with partners' attributions about each other, in a study of a community-based sample of 35 Canadian couples. In the laboratory, couples completed questionnaires including Rempel and Holmes' (1986) Trust Scale and the Locke-Wallace Marital Adjustment Test (Locke & Wallace, 1959). Then, couples discussed a problematic issue in their relationship for 15 minutes, and the discussions were videotaped. The couple's interactions in the laboratory were coded by trained coders. For the coding, an attribution was defined as "a statement that goes beyond an objective description of an event and seeks to explain or examine the reasons why the event occurs" (Rempel, Ross, & Holmes, 2001, p. 60). Based on the definition, coders identified attributional statements together with the events (e.g., behaviors, thoughts, or feelings) that were being explained. Also, after the discussions, partners separately evaluated each other's behaviors with semantic-differential items (e.g., pleasant vs. unpleasant, critical vs. accepting). Likewise, motives of the other partner (i.e., attributions for causes of the partner's behavior) were evaluated with semantic differential items (e.g., caring vs. uncaring, indifferent vs. concerned). Since partners' characteristics were not statistically independent, showing high correlations between partners on each variable, average couple scores were used for the analyses. Interestingly, the relationships of events and their accompanying attributions to trust were curvilinear, not linear, as the quadratic term for trust in the regression equation predicted the valence of events and attributions. Specifically, high-trust couples made the most positive attributions. The attributions, however, were relatively negative for the couples with a moderate level of trust. However, the negativity in attributions was different among low-trust couples. Low-trust couples made more positive attribution than moderate-trust couples and as positive as those of high-trust couples, even after controlling for marital adjustment. However, the publicly observed positive attribution statements made by lowtrust couples did not correspond with their private self-reported attributions assessed immediately after the couple interactions. Actually, the relationships of privately reported events and attributions to trust were linear, not curvilinear, in that low-trust couples made more negative attributions regarding the interactions. The difference between self-reported attributions and coder-identified attributions suggests that members of couples may have hidden their genuine inner evaluations regarding events and their partner's motives in front of each other and in public (in the laboratory discussion). Rempel et al. (2001) interpreted this veneer of politeness in lowtrust couples between each other and in public as possibly being due to the couples having an expectancy that their struggle to find solutions to problematic issues during the lab discussion would not yield any positive outcomes. That is, the couples may have wanted to hide the negative interactions that may have occurred in their daily life, at least in front of the researchers, because such interactions are not socially desirable. These findings have important implications for couple therapy practice. When low-trust couples visit therapists, due to their common masks of politeness in public, clinicians may overestimate the quality of the couple relationship, which may interfere with therapists' rigorous assessment and intervention. Also, because members of low-trust couples commonly make negative attributions for their partners' behaviors, even though therapists may induce them to make guided behavior changes in therapy, they are more likely than high-trust partners to discount the sincerity underlying each other's changed behaviors.

Trust has also been found to be related to variability in individuals' perceptions of relationship quality. Campbell, Simpson, Boldry, and Rubin (2010) conducted two studies to address the relationship between trust and fluctuations in perceptions of relationship quality. In study 1, 103 dating couples from a university in the United States completed questionnaires

including trust (Rempel et al., 1985) and perceived relationship quality (Fletcher et al., 2000). Then, they completed daily diary questionnaires for 14 consecutive days. To assess daily relational quality, partners responded to several questions (e.g., "How satisfied did you feel with your relationship today?"). For an index of variability of perceived daily relational quality, the standard deviation of relationship quality during the diary period was used. After the two diary weeks, partners participated in a videotaped discussion in which they were asked to attempt to resolve a relational issue. Independent coders rated destructive interaction style (e.g., being defensive), positive emotion (e.g., appearing happy), and constructive interaction style (e.g., making positive comments to the partner). As expected, findings showed that persons who trusted their partners were more likely to experience more stable perceived relationship quality. Also, individuals' reported levels of relationship quality were more stable (less variable from day to day) when they had more trusting partners. However, this partner-effect was confirmed only among men. That is, males' perceived relational quality was more stable when their female partners reported more trust in them. However, this partner-effect was not significant among women. Moreover, greater variability of perceived relationship quality predicted more post-diary negative behavior, as well as less positive behavior, as rated by independent observers. In Study 2, Study 1 was replicated using a different sample of 67 long-term cohabiting couples in Canada. The diary period was extended to 21 days. Similar to Study 1, the actor-effect and partner-effect of trust on variability in daily perceptions of relationship quality were confirmed. The findings suggest that the uncertainty that low-trust couples hold about the future of their couple relationship may lead the individuals to monitor their partner's behavior and the interactions occurring in their relationship closely, to gain evidence regarding their partner's care and commitment. Therefore, their day-to-day evaluations of relationship quality will change

considerably according to the quality of their partner's' behaviors on a specific day. This study shows that low-trust can interfere with stabilizing perceptions of relationship quality, and that the instability of perceived relationship quality may elicit more negative interactions between partners.

Finally, a study by Schneider, Konijn, Righetti, and Rusbult (2011) demonstrated that trust even affects physical health. The investigators explored the process between trust and physical health, using 5-wave longitudinal data (6-month intervals between waves) with 187 couples living in North Carolina who were relatively young (mean age = 26.47 at time1). Trust was measured with Rempel et al.'s Trust Scale (1985). Physical health was assessed with a modified version of Cohen and Hoberman's (1983) Physical Health Scale that consists of 33 items asking about the respondent's experiences of specific health problems during the past 6 months (e.g., "acid stomach or indigestion"). For mental health, anxiety and depression subscales of the Derogatis Psychological Adjustment Scale (Derogatis, 1994) were used. The results indicated that higher levels of trust predicted fewer physical health problems and lower levels of anxiety and depression over time. Also, the link between greater trust and better physical health was mediated by quality of mental health; specifically, fewer symptoms of anxiety and depression.

The mediating or moderating role of trust in couple relationships. A few studies have investigated whether trust mediates or moderates relationships between other variables. Brunell et al. (2010) conducted a cross-sectional study to examine the relationships among dispositional authenticity, couple functioning, and relational and individual outcomes using a sample of 62 young adult heterosexual couples (mean age = 19.47). Dispositional authenticity was defined as "the unimpeded operation of one's core or true self in one's daily enterprise" and was assessed

with the Authenticity Inventory 3 (AI-3; Kernis & Goldman, 2006). The AI-3 measures the extent to which people function authentically in four domains: awareness (e.g., "For better or for worse I am aware of who I truly am."), unbiased processing (e.g., "I find it very difficult to critically assess myself," reverse-coded), behavior (e.g., "My behavior typically expresses my personal needs and desires.") and relational orientation (e.g., "I express to close others how much I truly care for them."). To construct a variable of positive couple functioning, a number of variables, namely, trust, self-disclosure, self-concealment, emotional self-disclosure, destructive reactions, and fear of intimacy were measured with several scales (e.g., Rempel et al.'s (1985) trust scale) and combined. Relationship outcomes such as commitment and satisfaction were measured with Rusbult, Martz, and Agnew's scale (1998), and individual outcomes such as life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985), affect-balance (Brunstein, 1993), and psychological well-beings (Ryff, 1989) were also assessed. As expected, results revealed that dispositional authenticity predicted couple functioning, which in turn predicted relationship outcomes, finally leading to individual well-being. This study shows how personality affects the quality of a relationship, via the couple functioning including trust, but since the trust was only one aspect of the composite index of couple functioning, one cannot tell if trust itself played a mediating role. At this point, there has been no study focusing specifically on trust as a mediating factor in couple functioning.

Trust also may function as a moderator that influences associations between other variables in couple relationships. In a cross-sectional study using a sample of 188 Dutch newlywed couples, Vinkers, Finkenauer, and Hawk (2011) examined couple intrusive behavior, such as reading one's partner's text messages without consent and rummaging through the partner's pockets. Disclosure was measured using the Partner-Specific Disclosure Scale

(Finkenauer, Engels, Branje, & Meeus, 2004) (e.g., "I share my most intimate thoughts and feelings with my partner."). Intrusive attitudes were measured with the Intrusiveness subscale of the Level of Expressed Emotion questionnaire (Hale, Raaijmakers, Gerlsma, & Meeus, 2007) (e.g., "I have to know everything about my partner."). To assess intrusive acts, an adapted version of Petronio's (1994) questionnaire was used. The scale asks couples the frequency with which they exhibited intrusive acts (e.g., "reading my partner's e-mail without permission"). Trust was measured with Rempel et al.'s (1985) trust scale. A descriptive analysis indicated that both partners reported that wives disclosed more than husbands. Also, partners agreed that wives exhibited more intrusive behavior than husbands. As hypothesized, lower levels of disclosure by one partner predicted more intrusive attitudes and behavior by the other partner. However, this inverse association between disclosure and intrusive behavior was significantly reduced by higher trust levels. That is, trust functioned as a protective factor, buffering the effect of lower levels of disclosure on intrusive behavior. As the authors suggest, trust may reduce partners' doubts that arise from the other person's ambiguous behavior, which in this study was lower levels of disclosure. However, similar to the few studies on the mediating effect of trust in couple relationship, the present literature review identified no further studies on the protective role of trust in couple relationships.

Interactional patterns involving trust. A recent trend in research on couple trust has paid attention to cyclic or reciprocal patterns observed in couple relationships, beyond limiting trust to a single role as a predictor, outcome, mediator, or moderator variable. In other words, the research has examined whether trust both influences and is influenced by other aspects of couple functioning. For example, using a cross-lagged panel design with a sample of 75 married couples over a 2-year period, Miller (2004) investigated the connection between trust and partners'

attributions about each other. At time 1, couples independently completed questionnaires. They also participated in 15-minute discussion to resolve a relationship conflict issue. Then, partners completed a questionnaire assessing their perceptions of their partner's behavior and motives during the discussion. At time 2 (two years later), couples completed a questionnaire to measure trust. They also re-watched the videotape of their time 1 discussion and rated their partner's behavior and motives in the discussion.

Trust was measured by the revised Rempel and Holmes (1986) Trust Scale. Ratings of partner behaviors in the discussion were assessed using 7-point semantic differential items (e.g., irrationally-rationally, angry-agreeable). Likewise, ratings of partner motives were assessed with 7-point semantic differential items (e.g., uncooperative-cooperative, self-centered-considerate). Using the ratings of behavior and motives, an index of partner-enhancing attributional processes was created. Specifically, the ratings of partner's motives were regressed on the ratings of partner's behavior, and the residuals were obtained. Positive values of residuals indicate partner enhancement (i.e., "a tendency for people to attribute more desirable motives to their partner than would be expected even on the basis of their own descriptions of the partner's behavior"). In contrast, negative values denote partner diminishment.

Miller (2004) reported that the cross-sectional analyses showed that partner-enhancing attributions were positively related to trust. Longitudinal findings identified a reciprocal causal pattern between attributions and trust. The results indicated that in general trust levels were stable over time. Also, partner-enhancing attributions at time 1 were associated with increased trust at time 2, and greater trust at time 1 was associated with more partner-enhancing attributions at time 2, forming a reciprocal cycle. Further, it was partner-enhancing attributions (residuals), not the ratings of partner's motives, that predicted change in trust over the 2-year

period. This study shows how trust develops – trust influences partner-enhancing attributions, which, in turn, influence trust. That is, initial trust leads couples to interpret the motives behind each other's behavior more positively, and such positive cognitions contribute to building trust further.

Similarly, there is evidence that lower trust and greater self-concealment can form a reciprocal pattern in couple relationships. Uysal, Lin, and Bush (2012) conducted two substudies, a 8-to-10-week longitudinal survey and a 14-day daily record study. The first study showed that perceived partner concealment predicted reduced trust, assessed with the Remple et al. (1985) Trust Scale, and lower trust also predicted increases in self-concealment. Also, trust mediated the link between perceived partner concealment and self-concealment. The second study also demonstrated the reciprocal causal pattern between trust and concealment. On the days in which partners reported more perceived partner concealment, they also reported lower trust. Reciprocally, on the days in which partners reported lower trust, they also exhibited increased self-concealment from their partners.

A behavioral observation study also indicated that the level of trust in a relationship is influenced by reciprocal patterns between partners. Shallcross and Simpson (2012) observed how partners who reported lower or higher chronic trust responded differently during "strain-test" discussions with their partners. "Strain-test" situations denote ones "in which what is the best outcome for one partner involves considerable costs for the other partner." A sample of 92 married/cohabiting community couples was recruited. First, participants completed an online survey assessing chronic trust with the Rempel et al. (1985) Trust Scale. One week later, they engaged in two strain-test discussions at the laboratory. Each member chose a goal that would require the other partner's great sacrifice. Couples discussed each partner's goal for 6-7 minutes

in two separate discussions. Shortly after discussions, each partner completed a three-item scale assessing state trust ("How much can you trust/count on/depend on your partner right now, at this moment?"). Also, before discussions, each partner answered a question assessing the degree of sacrifice requested (for the individual asking for the sacrifice: "How negative or costly is attaining this goal for your partner?" and for sacrifice responders: "How negative or costly is [your partner] attaining this goal for you?"). After the discussions, the asking partner completed a scale to assess the level of perceived accommodation (e.g., "How helpful was your partner in thinking of ways s/he might help you achieve the goal?"). The discussions were videotaped and subsequently were rated by trained coders. For example, the asking partner's level of collaboration was rated based on five behaviors (e.g., openness to the responder's accommodation attempts and acknowledgement of the responder's sacrifice). Findings showed that partners who reported higher trust exhibited more attempts to accommodate their partner's requests while tolerating some sacrifices, compared to lower trust partners. Also, high trust askers were more collaborative with the partner's accommodation than low trust askers. Furthermore, higher trust partners overrated the amount of accommodation that they received from their partners, compared to the ratings of accommodation made by independent coders. In addition, high chronic trust askers showed increases in state trust, irrespective of the level of accommodation from their partners. However, low trust askers' change in state trust depended on the level of the accommodation they received. Combining the findings, it appears that individuals who had higher trust in their partner were more responsive to the partner, and their partners overestimated this accommodation, thereby experiencing greater trust. This pattern seems to contribute eventually to a shaping of reciprocal trust.

To summarize, the literature demonstrates that trust plays an integral role in the quality of couple relationships. Trust is not only influenced by various characteristics of the individuals and their relational pattern; it also exerts influences on emotional, cognitive, and behavioral aspects of couple functioning. Trust also mediates associations between some other couple responses and moderates some associations. Most important, trust appears to develop or weaken over time via reciprocal processes with other behaviors such as concealment and responsiveness in communication between partners. Considering these central roles of trust in couple interaction, it seems reasonable to expect that trust also will play an important role during couple therapy, influencing degrees to which partners engage in interactions that facilitate or impede therapeutic change. For example, the findings from prior studies suggest that greater trust can facilitate selfdisclosure and acceptance of a partner's disclosures, which can build further trust and security in a relationship that has suffered from insecurity in the past. Given that partner aggression is a threat to trust and security in intimate relationships, it is important that therapeutic interventions build a reciprocal pattern of trust and increased positive couple behavioral interactions. Conversely, low trust may be a barrier to partners' engagement in couple therapy that asks partners increasingly to be vulnerable with each other.

Anger as a Common Factor in Distressed Couple Relationships

The emotion of anger is experienced frequently in couple relationships when partners' goals, needs, or preferences are in conflict, or when one member of a couple perceives the other as treating him or her unfairly (Epstein & Baucom, 2002). When anger is triggered by events in a relationship that can involve one person observing the other's behavior or even just thinking about the other person, it can range in intensity from mild irritation to rage. Anger responses often play an important role in couple interaction processes, influencing both moment-to-

moment interactions and partners' overall relationship satisfaction. Anger is such a common correlate of aggressive behavior in interpersonal relationships that anger management training has become a key component of treatments for partner aggression (LaTaillade, Epstein, & Werlinich, 2006; O'Leary, Heyman & Neidig, 1999; Rosenbaum & Kunkel, 2009). Although reducing and managing anger is a common focus and desired outcome of couple interventions for partner aggression, chronic high levels of anger also have been considered a possible barrier to effective therapy, as the intense negative arousal might interfere with therapeutic change. Thus, pre-therapy level of anger is a common factor that needs to be taken into account when studying the process and outcome of couple therapy for partner aggression.

Predictors of anger and anger management. Several intrapersonal and interpersonal factors have been found to be risk factors for anger responses, in general and in intimate relationships. The following is a brief summary of empirical findings.

In couple relationships, individuals' negative attributions about their partner's characteristics and motives have been found to be associated with anger. The relation with anger appears to differ according to the types of attributions that the individual makes. Fincham and Bradbury (1992) developed the Relationship Attribution Measure (RAM) to assess three different dimensions of attributions (causal, responsibility, and blame attributions) in marital couples. Causal attributions involve an individual's explanation for the locus, stability and globality of the cause of an observed event. To assess *causal attributions*, the RAM asks the extent to which the person sees the cause of an event in the couple's relationship as located in the other partner (locus), as likely to stay the same versus change (stability), and as influencing other domains of their relationship versus having effects in a restricted area (globality). *Responsibility attributions* are assessed by asking how much the individual believes that his or her partner

intentionally committed an act, had selfish motivation in behaving that way, and did it for justifiable reasons (mitigating circumstances for a negative act). Lastly, *blame attributions* involve evaluative judgments involving the partner's liability for criticism. Fincham and Bradbury (1992) hypothesized that these three types of attributions occur in an orderly sequence (identification of the cause of a negative event leads to holding that source responsible for the event, which in turn leads to blaming that source and feeling anger toward the source). Their findings from a non-clinical sample of 47 married couples supported the hypothesized mediational sequence (cause → responsibility → blame → anger). Specifically, correlations of anger with blame attributions were highest, followed by those with responsibility attributions and those with cause attributions. Also, partial correlations showed that controlling for earlier attributions in the sequence did not affect the association between later attributions and anger. However, controlling for later attributions nullified the significant relation between earlier attributions and anger, supporting the mediation process. This result supports the idea that anger is triggered in couple relationships through complicated cognitive processes.

Gender has been found to moderate the relationship between attributions and anger. In Sanford's (2005) study, a community sample of 77 couples who had been married for 3 years or less was administered measures of relationship sentiment that indicated a person's global and subjective evaluation of his or her relationship, schematic attribution (a person's general tendency to make attributions that criticize his or her partner for the partner's behavior based on schemata or memories about how things are in general in their relationship), and event-dependent attributions (attributions about the partner that are made based on a specific situation). Event-dependent attributions were the strongest predictor of wives' anger, but schematic attributions were the best predictor of husbands' anger. Furthermore, for wives, relationship

sentiment and schematic attribution did not predict wives' anger, but relationship sentiment did predict husbands' anger. These results show that anger is associated with different cognitive processes for women and men. Sanford's findings suggest that husbands' anger-related cognitions are at more global level, whereas wives' anger-related cognitions function at a more specific-context level. For wives, fluctuations in attributions across situations were predictive of anger, but for husbands relatively stable attributions are more highly associated with anger.

Regarding cognition related to anger, mindfulness is also a relevant factor. Wachs and Cordova (2007) explored the connection between mindfulness and anger management by analyzing a sample consisting of 33 couples. They found that being mindfully aware was negatively associated with hostile demonstration of anger (Anger Out; e.g., "I say hateful things") and positively with self-soothing of anger (Control of Anger In; e.g., "I try to relax") and control of anger expression (Control of Anger Out; e.g., "I keep my anger in restraint"). However, mindfulness was not linked to internalization of anger (Anger In; e.g., "Inside I see the anger without showing it").

Also regarding cognition, how a person evaluates the degree to which his or her partner values him/her is important in relation to the occurrence of anger toward the partner. Lemay, Overall, and Clark (2012) recruited 105 dating or married couples (including three same-sex female couples). The subjects were asked to complete a baseline questionnaire in a laboratory session and a daily report administered at home between 7 p.m. and midnight for 7 consecutive days. Chronic perception of the partner's valuing measured at baseline was a composite of perceived regard, commitment, and care scales (e.g., perceived regard - "The person thinks I have a number of good characteristics"). Anger proneness was administered at baseline with four items adapted from the Multidimensional Anger Inventory (Siegel, 1986), which asks about the

frequency, duration, and extremity of anger (e.g., "I frequently get angry with this person"). The findings drawn from the laboratory session showed that a partner's perception of the other partner's valuing of him/her was negatively associated with anger proneness in the couple relationship. In terms of daily reports, daily perceptions of partner valuing were measured using several items focusing on daily experiences (e.g., "How did person view you today?") on 9-point response scale (1 = extremely negatively, 9 = extremely positively). Daily anger was assessed with one item ("How angry did you feel toward this person today?"). The analysis showed that daily perceived partner valuing was inversely related to daily experienced anger. That is, on days when they felt their partner viewed them negatively, individuals experienced more anger.

Attachment styles have also been found to be associated with anger expression. In a study with 581 heterosexual couples in the Southwest U.S., Guerrero, Farinelli, and McEwan (2009) examined the relationships among attachment styles and anger communication. Participants answered a series of items to assess each attachment style (security, dismissiveness, preoccupation, and fear of intimacy) (e.g., security - "I am confident that other people will like me"). Anger communication was measured using Guerrero's (1994) scales. Participants were asked to recall the last few occasions when they were angry with their partner. Avoidant anger expression (e.g., "I keep angry feelings to myself") was positively associated with fear of intimacy and negatively associated with security/confidence. Aggressive anger expression (e.g., "I criticize my partner") was positively associated with preoccupied insecure attachment and negatively associated with security/confidence. Passive aggressive anger expression (e.g., "I give my partner the 'silent treatment'") was positively associated with dismissive insecure attachment, fear of intimacy, and preoccupied insecure attachment, and negatively associated with

security/confidence. However, unexpectedly, assertive anger expression (e.g., "I discuss problems with my partner") was not associated with any attachment style.

The degree to which individuals perceive inequity in their couple relationships also has been found to be associated with anger. Based on equity theory that emphasizes the balance between benefits and costs that members experience in a relationship, Guerrero, La Valley, and Farinelli (2008) investigated whether perceived inequity is related to emotional experiences of anger, guilt, and sadness, using a sample of 92 married couples. The average length of marriages was about 10 years (ranging from 6 months to 35 years). The authors hypothesized that the more a partner views himself or herself as under-benefited in the relationship, the more the person will experience anger. Equity was assessed with three items asking about global equity, contribution equity, and reward equity. Anger expression was measured using Guerrero's (1994) scale that consists of four subscales (integrative-assertion, distributive-aggression, passive aggression, nonassertive denial). Consistent with equity theory, they found that perceptions of being underbenefited were positively related with the intensity of anger experienced. Perceived equity also was related to the behavioral expression of anger. Partners who perceived more equity in their marriages used more integrative-assertion behavior (e.g., "listen to my partner's side of the story"), when they felt angry. The more partners perceived themselves to be under-benefited in their marriage, the more likely they were to use distributive-aggression behavior (e.g., "criticize my partner," "slam doors") when angry.

Intention to exert social influence or control on partners can also induce anger. Brown and Smith (1992) conducted a study to explore physiological effects of social control in couple relationships with a sample of 45 married couples in which at least one partner was an undergraduate student. They found that husbands in the social influence condition in which they

received rewards if they succeeded in persuading their partners showed larger increases in anger than their counterparts in a discussion condition in which there was no incentive associated with successfully persuading the partner. However, the different incentive conditions did not affect wives' anger. At least for men the pressure of trying to change a partner's mind to gain some benefit induced anger. This gender difference was consistent with gender differences in communication in which men are more likely than women to interpret efforts to discuss issues as struggles over control, whereas women are more likely to view them as efforts to connect with the other person (Tannen, 1990).

Anger also can be induced from one partner to the other partner. Schoebi (2008) asked 166 married couples living in three urban regions of Switzerland to report their affective states 6 times per day for a week (around breakfast, 9:30 a.m., 12:30 p.m., 3:30 p.m., 6:30 p.m., and 9:30 p.m.). The average marriage length was 19.1 years (SD = 4.9). "Hard affect" was measured on a scale ranging from 1 = angry to 6 = calm. With a multilevel actor-partner interdependence model, crossover effects were examined. In specific, the author tested whether previous hard affect of a person at separate situations (usually before 5:30 p.m.) predicts change in hard affect in his/her partner between separate and common situations (usually after 5:30 p.m.). Findings showed that wives' experience of anger at the separate time predicted change in husbands' anger between the separate and the common time, demonstrating crossover of anger between partners. However, husbands' anger did not predict change in wives' anger.

A recent study also suggests that genetic factors are involved in anger and anger control. Richter et al. (2011) probed the association between anger expression and genetic polymorphism (Pro100Leu) in the A-kinase-anchoring protein 5 gene, with a cohort of 527 young, healthy subjects. Findings showed that subjects with the less common Leu allele reported lower levels of

anger control. Moreover, in an experiment using magnetic resonance imaging, the authors demonstrated that during emotional interference Leu carriers displayed increased activation of the anterior cingulate cortex, which predicts shorter reaction times and is associated with control over anger. Consequently, clinicians should not dismiss some clients' claims that they "have a short fuse" as mere excuses for continuing a pattern of poor anger management. Nevertheless, anger management components of therapy programs used for partner aggression are highly relevant for helping individuals develop skills for responding constructively when angry at a partner.

Effects of the roles of anger expression and anger management in couple relationships.

Anger expression and degree of anger management can affect various areas of intimate couple relationships, including partners' levels of relationship satisfaction, the probability that the relationship will end, and aspects of partners' mental and physical health. For couples who have children, exposure to aggression between parents also can have negative effects on child physical and mental well-being.

Regarding effects of anger on relationship satisfaction, Renshaw, Blais, and Smith (2010) analyzed a sample of 301 middle-aged and older couples from the Utah Health and Aging Study. Path analyses in their cross-sectional study revealed that expression of angry hostility had an effect on the recipient's marital satisfaction. The negative effect of anger on marital satisfaction/adjustment was also demonstrated in a prospective study by Baron et al. (2007). The researchers examined whether the affective experience of anger and the likelihood of expressing anger negatively affected marital adjustment over time in a sample of 122 married couples. In cross-sectional analyses, wives' trait anger was negatively associated with both wives' and husbands' marital adjustment. Similarly, husbands' trait anger was negatively related to both

husbands' and wives' marital adjustment. In longitudinal analyses, gender differences were detected. Hierarchical regression and structural equation modeling (SEM) revealed that only wives' anger was a unique predictor of change in husbands' and wives' marital adjustment. For husbands, conflict in marriage mediated the association between wives' anger and their marital adjustment.

Beyond *experiencing* anger, how individuals *control or express* their anger is also related to marital quality. The aforementioned study on mindfulness and anger by Wachs and Cordova (2007) investigated the relationship between anger management skills and marital quality.

Because the results did not change considerably when analyzing men and women separately, the authors collapsed scores for husbands and wives by using the couple mean. Findings showed that hostile anger expression (Anger Out) and control of anger expression (Control of Anger Out) were associated with global marital quality measured with the Dyadic Adjustment Scale (DAS; Spanier, 1976), negatively and positively, respectively. However, self-soothing regarding anger (Control of Anger In) and keeping of anger inside (Anger In) were not associated with global marital quality. These findings are of interest and warrant replication, because some anger management programs include practice of skills for self-soothing.

There is evidence that anger expression has a more negative effect on a couple's relationship than the expression of hurt feelings. In Lemay et al.'s (2012) dyadic daily diary study mentioned previously, anger appeared to communicate a message of low commitment to partners, whereas hurt appeared to deliver a signal of high commitment. Furthermore, lagged daily analyses suggested that whereas perpetrators made changes on days after they hurt their partners (e.g., increased care for the partner, decreased anger expression), perpetrators who made their partners angry did not subsequently make changes; rather, their anger increased. Similar

findings were found in another sub-study of behavioral observation conducted in New Zealand with a sample of 180 heterosexual dating or married couples (Lemay et al., 2012). Consistent with the findings from the diary study, victims' level of commitment to their couple relationship predicted their degree of hurt reactivity, but not anger reactivity. Furthermore, their degree of hurt predicted their partners' constructive reactions, whereas their level of anger induced their partners' destructive reactions.

Even though the literature shows that in general anger has negative effects in couple relationships, the experience and expression of anger are not in themselves destructive enough to be a major predictor of divorce. Gottman, Coan, Carrere, and Swanson (1998) examined seven types of marital interactions (e.g., active listening) using a sample of 130 newlywed couples. Results showed that the husbands' and wives' expressed anger to the other partner did not significantly differ between stable versus divorced couples. Anger observed by trained coders during a couple's video-recorded problem resolution discussion session failed to predict the couples' probability of divorce 6 years later. Thus, it is not *whether* anger is expressed but rather *how* it is expressed that influences the quality of the relationship.

Guerrero et al. (2008) investigated whether expressions of anger, guilt, and sadness are associated with partners' perceptions of inequity in their relationship and their levels of marital satisfaction. They found that experiences of anger mediated perceived inequity (being in a one-down position) and marital satisfaction. Also, aggressive behaviors (e.g., "criticize my partner," "slam doors") mediated the link between perceiving inequity (that one was under-benefitted in the couple relationship) and lower marital satisfaction. For women, both aggression and assertive behavior (e.g., "discuss problems with my partner") partially mediated between anger and lower

marital satisfaction. However, for men, only aggression partially mediated between anger and lower marital satisfaction.

Anger management problems also can affect physical and mental health of the partners. For example, Carrere, Mittmann, Woodin, Tabares, and Yoshimoto (2005) investigated, in a sample of 52 married couples, whether the ability to control anger identified through a Marital Meta-emotion Interview (e.g., "individual has difficulty regulating the intensity of her or his anger") affects couples' mental and physical health. Mental health was measured with the Beck Depression Inventory (BDI; Beck, 1978). Physical health was measured using a single item that asks the respondent to rate his or her health on a scale of 0 to 100. Results revealed the deleterious effect of anger on physical and mental health. However, gender differences were detected, such that, for wives but not for husbands, anger deregulation was associated with more depression symptoms, and for husbands but not for wives, anger deregulation was associated with self-rated poorer health.

A prospective study in a cancer-patient population conducted in Finland by Julkunen, Gustavsson-Lilius, and Hietanen (2009) investigated whether anger expression style predicts the partner's social support and the patients' health over time. The partner's anger control was positively associated with the partner's support, whereas anger suppression (anger-in) was negatively related to the partner's support. Path analyses revealed gender differences. For female patients, the husband's anger expression (anger-out) predicted worsening in the wife's symptoms of mental health over 8 months. Also, female patients' own anger suppression (anger-in) predicted greater worsening in their own health-related quality of life, compared to male patients. However, for male patients, strikingly, the wife's anger expression (anger-out) was positively associated with the husband's mental health. The authors suggested that outwardly expressing

anger may not necessarily have a negative impact on the other partner's health. For example, expressing anger outwardly may be interpreted as a sign of engagement, compared to withdrawal.

Regarding the negative effects that anger expression within the couple's relationship can have on children, Katz and Gottman (1993) conducted a 3-year longitudinal study with a sample of 56 families in order to determine whether couple interactions can predict children's subsequent externalizing and internalizing problems. The findings showed that the husband's anger and withdraw ("stonewalling") behavior observed when children were 5 years old predicted teachers' ratings of children's internalizing behaviors when the children were 8 years old. Other studies have indicated that children exposed to parental partner aggression are at risk for negative social-emotional health outcomes such as depression, anxiety, low self-esteem, poor peer relationships, and poor academic performance (Kitzmann, Gaylord, Holt, & Kenny, 2003; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003).

In sum, there are a variety of biological, individual, and interpersonal predictors of anger responses. In turn, the experience and expression of anger have negative effects on couple relationships, although anger does not necessarily lead to the dissolution of relationships. How partners control and express anger plays important roles in the consequences for couple relationships. Specifically, both anger-out (venting) and anger-in (trying to suppress anger but still feeling it internally) patterns appear to have negative influences on the quality of couple relationships. Furthermore, in addition to the various negative effects that anger can have on the physical and psychological well-being of the partners, children who are exposed to negative expressions of parental anger and conflict are at risk for a variety of negative outcomes. Thus, treatment of destructive expression of anger appears to be an important component of couple

therapy. Given that anger has been shown to lead to forms of negative couple interaction, it also is important to determine whether anger is a barrier to progress in couple therapy, in general and specifically in the treatment of partner aggression.

Anger and Intimate Partner Aggression

Most studies on the relationship between anger and partner aggression have examined the experience and management of anger as independent variables or predictors of aggression.

However, some recent studies have examined mediating and moderating conceptualizations, showing more complex roles of anger in aggressive behavior.

Anger as a predictor of IPV. There is evidence that anger commonly plays a role in perpetration of physical violence in couple relationships. Jacobson, Gottman, Waltz, Rushe, Babcock, and Holtzworth-Munroe (1994) recruited 60 couples reporting severe husband-to-wife violence and 32 couples who reported marital distress but no violence. In the laboratory, couples were asked to discuss two current relationship problems for a total of 15 minutes. Results showed that husbands and wives in the couples experiencing violence displayed more anger toward each other, compared to the couples with no violence. Interestingly, although women in couples with violence showed more fear than their nonviolent counterparts, they also displayed more anger than their husbands and nonviolent counterparts, with this combination of emotional responses increasing their cardiovascular arousal during the couple interaction more than that of their husbands. It is important to note that this sample can be categorized as displaying intimate terrorism (IT) involving severe battering by husbands, rather than the milder levels of aggression found in the sample for the present study. Also, the findings from the group comparison in the Jacobson et al. (1994) study do not indicate that anger directly caused couples' violence.

A review of studies on risk factors for male-to-female physical aggression reported that anger was one of the most frequently identified psychological risk factors (Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001). The authors identified seven studies published in the 1980s and the 1990s that addressed anger in relation to male-to-female physical aggression. The majority of the studies used samples of court-involved male perpetrators, who presumably are similar to IT batterers. Although anger was a consistent correlate of male-to-female physical abuse, the effect size in the studies ranged from small (r = .18) to large (r = .52), and the correlational nature of the studies and common reliance of retrospective self-reports of batterers leaves the causal relation between anger and aggression perpetration unclear.

A community sample also provided evidence of a link between trait anger and partner aggression, particularly psychological aggression perpetration. Taft et al. (2005) investigated correlates of psychological aggression perpetration among 145 heterosexual married or cohabiting couples. Results indicated that trait anger and relationship adjustment (assessed as positive feelings toward one's partner) were the stronger correlates of psychological aggression by both sexes than father-to-child physical aggression, mother-to-child physical aggression, father-to-mother physical aggression, mother-to-father physical aggression, alcohol use frequency, and alcohol consumption. Again, the correlational nature of the study does not allow conclusions about causation.

Some studies focused on anger management as well as the experience of anger as a factor influencing aggressive behavior. Barbour and colleagues (1998) examined the relationships among experienced anger, anger expression styles, and degree of domestic violence with a community sample comprised of 31 maritally violent (MV) men (identified by at least four incidents of physical violence by husband toward wife within the past year), 23 maritally

dissatisfied-nonviolent (DNV) men, and 34 maritally satisfied-nonviolent (SNV) men. Findings indicated that MV men, compared to DNV and SNV men, showed higher scores on measures of Trait Anger and Anger Out (venting of anger). Also, MV men reported lower scores on the measure of Anger Control (anger management). This study shows that MV men are more likely to experience anger more frequently and express it outwardly rather than effectively controlling it.

Using the same sample as Barbour et al. (1998), Eckhardt, Barbour, Davison (1998) explored cognitive correlates of anger arousal by administering the Articulated Thoughts in Simulated Situations (ATSS) paradigm to men in response to anger-arousing audiotapes. The ATSS paradigm asks the subject to express thoughts that he or she is experiencing in the specific situation, in this case while listening to a recording that was designed to be anger-arousing. In comparison to maritally violent (MV) men and maritally dissatisfied-nonviolent (DNV) men, maritally satisfied-nonviolent (SNV) men articulated more anger control statements, including expressing the desire to walk away from the character or escape the situation in order to calm down, attempting to actively change one's views about the situation or characters in order to decrease negative emotionality, suggesting counseling or other external mediation, initiating a request to calmly talk over the situation, or using other anger-control strategies.

With similar methodology, but with a different population, Eckhardt, Jamison, and Watts (2002) investigated the relationships among anger experience, anger management, and partner aggression among dating couples. A sample of 33 male undergraduate students who were in a committed dating relationship was used, consisting of 17 men who reported at least one incident of physical aggression against a dating partner within the past year (DV) and 16 non-violent men (NV). Compared to NV men, DV men showed higher scores on Trait Anger, Anger In, Anger

Out, and lower scores on Anger Control measured by the State-Trait Anger Expression Inventory (STAXI; Spielberger & Sydeman, 1994). Furthermore, during the ATSS paradigm, relative to NV men, DV men displayed more aggressive behavior (a composite of verbal aggression, physical aggression, and belligerence).

The mediating and moderating roles of anger. There have been some studies on the mediating effect of the experience and expression of anger. Using a community sample of 310 adults in intimate couple relationships in Switzerland, Bodenmann, Meuwly, Bradbury, Gmelch, and Ledermann (2010) examined whether anger (measured by the Multidimensional Anger Inventory; Siegel, 1986) mediates between current stress (e.g., relationship stress, job stress, financial strain, and stress in other relationships) and intimate partner verbal aggression (measured by the Verbal Aggression subscale of the Conflict Tactics Scales; Straus et al., 1979) and whether the link is moderated by individual and dyadic coping styles. Regarding individual coping, the investigators measured 15 functional (e.g., positive reinterpretation) and dysfunctional (e.g., consumption of substances) coping strategies. To assess dyadic coping styles, three scales were used: positive dyadic coping (e.g., how positively a partner reacts to the other partner in a stressful situation), negative dyadic coping, and common dyadic coping (coping as a couple). Concerning the statistical analyses, in all regression models a partial indirect effect from stress level to anger to verbal aggression was demonstrated. That is, the experience of anger mediated the link between stress and verbal aggression toward a partner. However, how the participants coped with stress individually and as couples did not modify the path from anger to aggressive behavior. This study shows that various life stresses including environmental demands spill over into couples' psychological aggression, specifically through anger.

How individuals deal with their anger seems to influence the connection between past violence in their lives and current violence. Particularly, there is evidence that childhood experiences of domestic violence influence adults' current anger expression styles, which, in turn, affect their engagement in partner aggression. Wolf and Foshee (2003) investigated the effect of exposure to family violence (experiencing it oneself or witnessing it between other family members) on dating violence among adolescents, mediated by anger expression style (constructive, destructive direct, destructive indirect), based on social learning theory. Findings from 1,965 eighth- and ninth-grade students showed gender differences. For girls, both destructive indirect and destructive direct anger expression mediated the link between childhood experience of family violence and dating violence perpetration. However, for boys, the link was mediated primarily by destructive direct anger expression. Also, for girls, witnessing family violence was associated with dating violence perpetration, mediated only by destructive direct anger expression. However, for boys, witnessing family violence was not related to their dating violence. This study shows how violence can be transmitted across generations, highlighting gender differences, with girls being more susceptible to experiencing negative influences of past violence on current violence.

A study by Maneta, Cohen, Schulz, and Waldinger (2012) also probed the connections among childhood physical abuse (assessed with the Childhood Trauma Questionnaire; CTQ), anger expression (assessed with the Multidimensional Anger Inventory), and adult partner aggression (assessed with the revised Conflict Tactics Scales; CTS). The data were drawn from a community-based sample of 109 couples living in the Boston metropolitan area who reported on the CTS that they experienced physical violence at least twice in the prior year. Analyses based on the actor-partner interdependence model (that includes both partners' scores in the same

statistical model) indicated that only women's anger suppression fully mediated the relationship between their childhood experiences of physical abuse and both their perpetration and victimization of intimate partner aggression. Based on the findings, the authors suggest that anger suppression, rather than anger vented outward, may be more provocative, although outward anger expression may function well if the expression is conveyed in a controlled way. However, the cross-sectional nature of the data limits this causal conclusion.

A study by Lafontaine and Lussier (2005) addressed both the mediating and the moderating effect of experiencing and expressing anger in relation to the association between individuals' levels of insecure attachment and their use of partner aggression. On the basis of attachment theory, the investigators collected a representative sample of 316 French-Canadian heterosexual couples through a random sampling procedure, using telephone numbers. They investigated the relationships among attachment, psychological and physical aggression, and anger, using the measures of Experiences in Close Relationships questionnaire (ECR; Brennan, Clark, & Shaver, 1998), the couple version of the STAXI (Spielberger, 1988) assessing both state and trait anger responses, and the Revised CTS (Straus et al., 1996). Gender differences were found regarding the experience and expression of anger. Compared to men, women were more likely to perceive a range of situations as annoying (Trait Anger on the STAXI), to express anger externally toward their partners (Anger Out subscale), and to fail to control their expression of anger (Anger Control subscale). There were also gender differences in the paths between insecure attachment and partner aggression. For men, State Anger and Trait Anger mediated the association between avoidance of intimacy and perpetration of psychological aggression. However, for women, anxiety over abandonment was associated with greater experience of anger across settings (Trait Anger) and uncontrolled expression of anger (Anger

Out), which in turn was associated with physical and psychological aggression toward the partner. A moderating effect of anger was detected only for men. Anger Control and Trait Anger moderated the association between anxiety over abandonment and their use of physical aggression. The moderating effect differed from that hypothesized, such that when men reported a higher level of Trait Anger, the association between their anxiety over abandonment and their use of physical aggression was negative. Also unexpectedly, when men reported a lower level of Anger Control, their anxiety over abandonment was negatively related to their use of physical violence. However, the authors fail to provide any theoretical explanation for these unexpected findings. Nevertheless, this study enhances our understanding on the association between insecure romantic attachment and intimate violence by revealing the important role of anger as a significant mediator and moderator. That is, this study suggests that experience and expression of anger be taken into account to fully comprehend the relationship between attachment and partner aggression.

Another study conducted in Canada with a sample of 62 heterosexual couples extends the level of investigation to the ecological context, specifically the work and family context. Dupré, Barling, Turner, and Stride (2010) examined the cross-relationship spillover effect between individuals' perceived injustice from their work supervisors and their romantic partners. Findings showed that unlike supervisor injustice, which predicted aggression that the individual directed toward the supervisor, perceived partner injustice did not predict aggression toward the partner. This finding was not consistent with Guerrero, La Valley, and Farinelli's (2008) previously described study on inequity in which perceived inequity in the couple relationship was positively associated with individuals' anger experience and external expression of anger. In the Dupre et

al. (2010) study, the correlation between supervisor-directed aggression and partner-directed aggression was not significant, which indicated relationship specificity of aggression.

Overall, the research literature has indicated that the experience and management of anger play important roles in occurrence of partner aggression, in both battering and common couple violence contexts. Findings regarding gender have shown that women commonly experience and outwardly express anger in couple relationships, and that anger is a risk factor for partner aggression by both women and men. The experience and expression of anger as risk factors for partner aggression are affected by various factors such as the individual's current life stress, his or her past experiences of abuse victimization, and attachment styles. Consequently, treatments that are intended to reduce partner aggression need to take anger experience and expression into account, and clients' anger patterns may influence the process and outcome of couple therapy.

Therapist Factors in Psychotherapy

Therapist Factors Influencing Psychotherapy Working Alliance and Outcome

Therapeutic outcomes vary depending on therapist characteristics (Okiishi et al., 2007). The literature has identified a variety of therapist characteristics that can influence the success of treatment. In particular, a substantial body of studies predominantly conducted on individual psychotherapy has indicated that therapist characteristics account for a large portion of the variance in therapy outcome indices. The following is a summary of such findings.

The relationship between therapist characteristics and therapy outcome and alliance. Heinonen, Lindfors, Laaksonen, and Knekt (2012) investigated the relationships between therapists' professional and personal characteristics and the outcome of short-term psychotherapy (solution-focused therapy with a maximum of 12 sessions or short-term

psychodynamic psychotherapy with a maximum of 20 sessions) and long-term psychotherapy (psychodynamic psychotherapy up to 3 years) within a sample of 326 Finnish outpatients with mood or anxiety disorders and 55 therapists who had at least two years of clinical experience. In order to measure both professional and personal characteristics, the Development of Psychotherapists Common Core Questionnaire (DPCCQ), a 392-item self-report questionnaire, was used. Most importantly, for personal characteristics the predictors of outcome varied depending on the duration of therapy. Specifically, in short-term therapy, the more active, engaging, and extroverted therapists were, the more their clients' symptoms decreased. However, in long-term treatment, non-intrusiveness by the therapist was related to positive symptom outcomes. Regarding the therapist's professional characteristics, patients working with therapists with lower confidence benefited less in short-term therapy than in long-term therapy.

Therapists' culture or cultural competence also has been found to be associated with therapeutic outcomes. Suarez-Morales et al. (2010) investigated the link between therapist culture and therapy outcome with a sample of 235 Spanish-speaking substance users and 16 therapists. Clients of therapists who feel comfortable with Spanish and enjoy Hispanic cultural activities showed fewer days of substance use, whereas clients of therapists with higher levels of acculturation into American culture reported more days of substance use in the period of treatment. However, other culture-related indexes, such as the degree of similarity in birthplace and acculturation level between clients and therapists, did not predict the number of days of substance use during the treatment period. Also, unexpectedly, clients of therapists who were born in Latin America reported greater substance use while in treatment.

The impact of therapist factors on therapy outcome was also investigated in couple therapy. Evans (2011) tested whether therapist factors predict couple therapy outcome with a

sample of 40 couples who reported mild to moderate psychological and/or physical abuse and who participated in ten double-length (i.e., 90-minute) sessions of couple therapy. Therapist behaviors in session four were coded by trained independent coders. Findings indicated that as expected, therapist use of technique factors (systemically-based techniques and those that imposed structure during sessions) was negatively related to psychological abuse at the end of therapy by male partners. However, contrary to expectation, therapist presence (asking personal questions/showing interest in clients' lives, staying on topic, eye contact, and body language) was negatively associated with males' positive change in relationship satisfaction. Also, for female partners, therapist use of technique factors was related to less positive change in relationship satisfaction and increased use of psychological abuse. The moderating effect of therapist factors between client pre-treatment factors and therapy outcome was also tested. Unexpectedly, therapist factors did not buffer the detrimental impact that negative communication patterns and attributions had on therapy outcomes. Rather, positive therapist behaviors intensified existing relationships between negative client factors and therapy outcomes, regardless of the direction of the relationship being positive or negative. Specifically, in some positive relationships between client negativity and therapy outcomes (e.g., female negative communication and change in female relationship satisfaction), higher levels of therapist factors (technique factors, presence, validation) strengthened the positive relationship; in other negative relationships between client negativity and therapy outcomes (e.g., female negative communication and change in male relationship satisfaction), higher levels of therapist factors (warmth, presence, validation) amplified a negative relationship between pre-treatment negativity and positive therapy outcome. Overall, this study showed that therapist positive

behaviors observed at mid-point of treatment do not necessarily lead to positive therapy outcomes.

Many studies have addressed therapist factors in relation to success in establishing positive therapeutic alliances, rather than focusing on therapy outcomes, assuming that a high-quality therapeutic relationship is essential to achieving desirable outcomes. Therapeutic alliance, which also has been labeled working alliance, therapeutic bond, or helping alliance, generally denotes "a sense of working together in a joint struggle" against presenting problems or "a sense of 'we-ness'" between clients and therapists (Luborsky, 1976, p.94). Ackerman and Hilsenroth (2001), in their review article, summarized what therapist factors are associated with poor therapeutic alliances. According to their findings, therapists who are critical, tense, rigid, uncertain, distant, and distracted are likely to fail to establish a positive therapeutic alliance with clients. They also pointed out several counterproductive therapist techniques; namely, inappropriate use of silence, inappropriate self-disclosure, over-structuring the therapy sessions, and excessive use of transference interpretation (linking conflicted dynamics between the patient and therapist with problems that the patient may have had with parental figures in the past).

As a sequel to their review on detrimental characteristics of therapists, Ackerman and Hilsenroth (2003) published a review of therapist characteristics positively affecting the therapeutic alliance. Similar to the previous review, both therapist personal attributes and techniques were found to influence the quality of the therapeutic relationship. Beneficial therapist personal attributes included being respectful, flexible, honest, confident, trustworthy, open, warm, and interested in one's clients. Several therapeutic techniques were also found to be associated with better therapist-client relationships; namely, communicating a sense of hope for patients to achieve their goals, understanding, accepting, and respecting patients, referring to

common experiences between the patient and therapist, conveying a feeling of working together in a shared effort against the patient's anguish, leading a discussion with the patient about the psychotherapy process, attempts to explore patients' problems and psychodynamics, attending to the patient's experience, exploration and accurate interpretation of patients' salient interpersonal themes (e.g., patient's wish in relationships with others and expected or actual response from the others), collaborating with patients to develop goals, exploring assessment results with patients, and adherence to treatment guidelines.

In addition to the two review studies described above, there have been continued efforts among scholars to identify therapist factors influencing the alliance-building process. Littauer, Sexton, and Wynn (2005) conducted a qualitative study in Norway to identify therapist factors in relation to the therapeutic relationship. They interviewed 36 clients after their second therapy session regarding their reactions to types of therapist behavior. Positive therapist behaviors and attributes included accepting and understanding clients, being prepared and having a plan for therapy, balancing attentive listening with questioning and commenting, and behaving in a confidence-inspiring and calm way.

Hersoug and colleagues (2009) examined the connection between various therapist factors and the working alliance in long-term treatment with a sample of 201 patients and 61 therapists in Norway. The findings showed that therapists who had a colder/detached interpersonal style were rated as having more negative working alliances by both clients and the therapists. Therapists who had experienced better maternal care in their own lives up to adolescence were rated by patients as having more positive therapeutic alliances. However, interestingly, greater professional training (years of formal postgraduate training, including supervision, personal therapy, and participation in advanced psychotherapy training) was

negatively associated with sound alliance-building as rated by patients. For the length of training, the authors suggest three possible explanations: (1) longer training may fail either to help therapists develop characteristics facilitating more positive interactions with patients or to alter therapist characteristics that impede the formation of a working alliance; (2) in the psychotherapy field, the 'neutral and distant' therapist has been considered as an exemplar and recommended through training and (3) therapists who have more interpersonal problems may participate in more training.

Nissen-Lie, Monsen, and Ronnestad (2010) investigated therapists' behaviors and experiences in therapy in relation to the quality of the therapeutic working alliance in the early stages of therapy, based on data drawn from Norwegian 68 therapists and 335 outpatients, the majority of whom suffered from anxiety disorders. Various characteristics of the therapists accounted for approximately 17% of variability in clients' ratings of the early alliance. Three major characteristics contributed to the effect: the therapist's warm interpersonal style (an affirmative manner with clients), relational skills (skillfulness in the use of one's own and the client's emotions in the therapy relationship), and the therapist's subjective experience of difficulties in conducting therapy (doubt about one's professional efficacy; difficulties in practice). Therapists' self-reported experience of difficulties in practice was negatively associated with clients' ratings of the quality of the early working alliance. However, unexpectedly, therapists' professional self-doubt (doubt about one's professional efficacy) was positively related to the quality of the therapeutic relationship as rated by clients.

Therapist in-session self-awareness also has been found to be related to the quality of the therapeutic alliance. Williams and Fauth (2005) defined therapist self-awareness as momentary recognition of and attention to their immediate thoughts, emotions, physiological responses, and

behaviors during a therapy session, while distinguishing it from insight or retrospective reflection about those experiences. According to findings drawn from a sample of 18 therapists and 18 undergraduate student clients, therapists experienced in-session self-awareness as generally helpful (M = 5.95, SD = 1.20, on a scale ranging from 1 = very hindering to 9 = very helpful). Also, clients' positive reactions to therapist interventions (e.g., feeling understood, supported) after one session were positively associated with level of therapist in-session self-awareness.

The importance of therapist variables in relation to the quality of the therapeutic relationship was also confirmed in another therapy modality; specifically, group psychotherapy. Lorentzen et al. (2012) conducted a study to examine the relationship between therapist characteristics and three aspects of alliance; namely, bond, task, and goal, in the context of group psychotherapy. Such distinctions among the three aspects of alliance are based on Bordin's (1979) conceptualization. Alliance of bond denotes an affective bond between patient and therapist. Alliance of goal means the degree to which the therapist and patient agree on treatment goals. Alliance of task refers to the extent to which patient and therapist agree on specific tasks that vary depending on the therapy model (e.g., in psychoanalysis, use of free association with the therapist away from patients' center of vision). A sample of 148 Norwegian clients almost all of whom had an Axis I disorder according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV; American Psychiatric Association, 1994) were recruited. The therapy working alliance was rated by patients with The Working Alliance Inventory - Short Form (Tracey & Kokotovic, 1989). Findings showed that longer therapist formal training was associated with a more negative early alliance of task. The results also indicated an interaction effect between group therapy length and the extent of the therapists' clinical experience on the

quality of the early working alliance (bond, task, and goal). Surprisingly, therapists who had been in clinical practice longer were evaluated lower on the early bond by clients in the long-term group, whereas such therapists were not rated as lower on the early bond in the short-term group as in the long-term group. Regarding alliance of task, longer clinical experience was positively related to initial alliance of task in the short-term group, whereas it was not related to initial alliance of task in the long-term group. Concerning alliance of goal, longer clinical experience was positively associated with initial alliance of goal in the short-term group, whereas it was negatively linked to that in the long-term group. In sum, this study revealed that longer clinical training and experience themselves do not guarantee success in the alliance-building process, which is consistent with findings from Hersoug, Hoglend, Havik, Lippe, and Monsen's (2009) study.

A study by Johnson and Caldwell (2011) examined the degree of match between therapist and client characteristics in relation to client satisfaction with the therapeutic relationship. They investigated whether gender, race, and confidence match are associated with client satisfaction with the working alliance, based on data from 232 clients and 182 masters and doctoral level therapists at a university-based marital and family therapy clinic. The clients received individual, couple, or family therapy. The therapeutic relationship was rated by the clients after the fourth session of therapy, using the item ("How satisfied are you with your relationship with this therapist?") Also, at the same point, clients' perceptions of therapists' confidence was assessed ("How confident does your therapist seem to you?"). Therapists also completed a survey assessing their confidence and relationship with the clients after the fourth session. The findings indicated that racial similarity between therapist and client was not related to client satisfaction with the therapeutic relationship. However, this finding is limited because the vast majority of

both clients (87.1%) and therapists (74.7%) were white. Although when the gender match was tested in isolation, clients who were treated by therapists of the same gender showed greater satisfaction with the therapeutic relationship, this was not so in the MANOVA analysis with all other variables taken into account. Lastly, 44.3% of the therapist-client dyads either corresponded precisely or corresponded within one point on the therapist confidence scale. Independent-sample *t*-tests indicated that there was a significant difference in satisfaction with the therapeutic relationship between the confidence match (within one point) group and the confidence non-match group. Specifically, therapists reported greater satisfaction when therapist and client were matched on confidence in the therapist. Conversely, clients showed greater satisfaction when there was a mismatch on the confidence ratings. However, the authors did not report the direction of mismatches (which ratings between clients and therapists were higher). Thus, despite the contribution the study made to the literature by focusing on confidence-match, the authors did not provide any clear explanation for their findings.

Therapists' characteristics and their own experience of therapy. Characteristics and behaviors of therapists also influence their own experiences of therapy, which may subsequently influence the therapy process and outcome. Schroder, Wiseman, and Orlinsky (2009) identified relevant factors regarding therapists' thoughts about their clients between sessions, with 1,040 therapists in United States, Canada, and New Zealand. The therapist intersession experiences were measured with a 5-item-scale asking about experiences of thinking how best to help clients, recalling clients' feelings, and reflecting on feelings regarding clients. The findings indicated that the intersession experiences were positively associated with therapists' general level of difficulties in practice in terms of professional self-doubt (r = .31; e.g., "Demoralized by your inability to find ways to help a patient"), negative personal reactions (r = .24; e.g., "Unable to

withstand a patient's emotional neediness"), and frustration in treating cases (r = .31; e.g., "Distressed by your powerlessness to affect a patient's tragic life situation). Also, intersession experiences were positively associated with use of constructive coping strategies (r = .22; e.g., "Trying to see the problem from a different perspective" and "Discussing the problem with a colleague") and avoidant coping strategies (r = .18; e.g., "Avoid dealing with the problem for the present."). This study shows that when faced with difficulties, therapists' internal worlds become more focused on their challenging cases, and they may respond with either constructive or non-constructive coping strategies.

In sum, there has been a substantial body of literature on therapist characteristics that can influence the process and outcome of therapy. However, there are many gaps in knowledge. With regard to research design, therapist characteristics have been utilized as mostly independent variables in relation to therapeutic outcome, therapeutic alliance, or other dependent variables such as therapists' own experiences. There have been few studies that examined whether therapist characteristics may mediate or moderate relations between client characteristics and therapy outcomes. In addition, methodologically, most quantitative studies, except Evans' (2011) study, have used self-report questionnaires to assess therapist characteristics. Observational studies have been rare. Regarding external validity, the studies have been conducted overwhelmingly in the individual therapy field. Few studies have investigated the influence of therapist factors in couple and family therapy, and there is no obvious reason why one can assume that findings in studies of individual therapy would generalize to the different types of processes that occur in couple and family therapy. Actually, the aforementioned Evans (2011) study, which investigated the role of therapist factors in couple therapy, did not replicate the positive influence of positive therapist factors on therapy outcomes which were reported in

individual therapy. Rather, some positive therapist behaviors had negative effects on therapy outcome. Thus, there is a great need for research on effects of therapist characteristics in those relational therapies.

Therapist Empathy

Empathy, which is now considered as one of the core principles of effective psychotherapy, was initially proposed by Rogers (1957) to be one of the necessary conditions leading to successful therapy. According to Rogers, two aspects seem to be important in understanding the concept of empathy. First, empathy involves a therapist's accurate understanding of the client's awareness of his or her own subjective experiences. Second, empathic therapists should not be stuck in the emotions of clients beyond understanding and experiencing them. Regarding such points, Rogers stated: "To sense the client's private world as if it were your own, but without ever losing the "as if" quality - this is empathy, and this seems essential to therapy. To sense the client's anger, fear, or confusion as if it were your own, yet without your own anger, fear, or confusion getting bound up in it, is the condition we are endeavoring to describe." (Rogers, 1957, p. 99)

Empathy was recognized as a well-established common factor predictive of outcomes by the Division of Psychotherapy of the American Psychological Association along with other factors, such as therapeutic alliance, cohesion in group therapy, goal consensus, and collaboration (Norcross, 2002). However, some reviews have discussed challenges faced in dealing with empathy conceptually and methodologically and have made some recommendations (Kurtz & Grummon, 1972; Duan & Hill, 1996; Elliott, Bohart, Watson, & Greenberg, 2011).

In the early 1970s, Kurtz and Grummon (1972) examined methods for measuring therapist empathy. They reported that client-rated empathy was more strongly correlated with

therapy outcome than was empathy rated by judges from videotapes of sessions. After decades have passed during which studies on empathy decreased substantially, Duan and Hill (1996) reviewed the empathy research and suggested some implications. They noted that the reason why studies on empathy decreased is that the definition of empathy seems unclear and the literature does not reach convincing findings. Basically, the term empathy has been used to refer to three different constructs. Specifically, the first approach conceptualized empathy as personality trait. This understanding of empathy posits that some individuals' ability for empathy can be better than that of others. The second orientation viewed empathy as a situation-specific cognitiveemotional state. This understanding assumes that empathy is changeable according to situations. The third approach sees empathy as a process involving multiple stages or multiple elements. However, Duan and Hill (1996) argued that such a notion of empathy as processes has been descriptive rather than empirically explanatory, because the multi-phases are hard to measure. The authors suggest that researchers use more specific terms for the three different constructs, instead of using the universal term, empathy; namely, dispositional empathy, empathic experience, and empathic process.

Regarding the nature of empathy, although Duan and Hill (1996) recognize Gladstein's (1983) distinction between two types of empathy; namely, cognitive empathy and affective empathy, in that the categories reduce confusion about the nature of empathy, they argue that the types may induce a false dichotomy, because in some studies affective and cognitive processes influence each other, although other studies found that they are independent of each other. Duan and Hill (1996) contend that due to a shortage of studies addressing empathic emotions (i.e., feeling the client's pain rather than understanding it) compared to cognitive empathy, the whole nature of empathy, including not only the two aspects but also interaction between them, has not

been investigated sufficiently. Methodologically, they argue that specification of measured attributes of empathy (trait or experience, cognitive or emotional aspects) is important.

Duan and Hill (1996) also reviewed findings regarding whether therapist cognitive, intellectual empathy is associated with therapy outcomes, concluding that the majority of the literature has supported the effect of empathy on clients' change, supporting Rogers' understanding of accurate empathy as a "necessary condition" leading to client change, with some criticism that empathy, however, is not a *sufficient* condition for therapeutic success given methodological and conceptual limitations of existing empirical studies.

Finally, concerning the drastically reduced empathy research during the past decades, the authors make suggestions to encourage future empathy research, including, (a) measuring distinct constructs of intellectual empathy and empathic emotion as situation-specific experiences, (b) testing interactional patterns between intellectual empathy and empathic emotion, (c) investigating roles of counselor and client emotions in predicting counselor empathy, (d) testing the association between empathic readiness and cultural differences, and (e) investigating the role of therapeutic empathy, as helpful versus unhelpful.

Recently, Elliott and colleagues (2011) presented an updated review. Based on studies in neuroscience during the past decade, they offered a consensus in the field that empathy comprises three neuroanatomical sub-processes, each of which is activated in different parts of the brain: (a) an emotional simulation process in the limbic system; (b) a conceptual, perspective-taking process in prefrontal and temporal cortex; and (c) an emotion-regulation process in the orbitofrontal, prefrontal, and right parietal cortex.

Also, methodologically, Elliott et al. (2011) argue that due to the complex and multidimensional nature of empathy recently confirmed by neuroscience, different types of

measures of empathy have been developed, which fall into four categories, adding one more category to Duan and Hill's categorization: empathy rated by nonparticipant raters (expressed empathy); client-rated empathy (received empathy); therapists rating their own empathy (empathic resonance); and empathic accuracy (congruence between therapist and client perceptions of the client). Among those measures, client-rated empathy was the strongest predictor of therapy outcomes, followed by observer-rated empathy and therapist-rated empathy.

Overall, empathy has been recognized as a well-established common factor predicting therapy outcome. However, this status has faced some conceptual and methodological challenges, which leads to the recent decrease in relevant studies. Thus, empathy researchers need to specify which dimension of empathy they intend to measure and which method they use to measure the dimension.

Systemic Techniques

The therapist's use of systemic techniques during therapy sessions is a common factor that is largely unique to couple and family therapy, based on its roots in family systems theory (Nichols & Schwartz, 1998). Sprenkle et al. (2009) propose four common factors that are distinctive to couple and family therapy: "(1) conceptualizing difficulties in relational terms, (2) disrupting dysfunctional relational patterns, (3) expanding the direct treatment system, and (4) expanding the therapeutic alliance" (p. 34). All of these common factors operating across family therapy theoretical models are based on core family systems theory concepts regarding the interrelatedness of members of a family system, that presenting problems are caused or maintained by repetitive interaction patterns among family members, that therapeutic interventions must take an ecological perspective involving attention to multiple levels of

interpersonal influences on the family and its members, and that the therapist must establish positive alliances with all family members in order to maximize impacts on the whole system.

Conceptualizing presenting difficulties in relational terms is in contrast with the medical model paradigm for understanding psychopathology, which focuses on intra-personal causes of disorders. In other words, the common factor across family therapy models involves therapists' attention to interpersonal processes in which family members exert mutual influences on each other. Davis and Piercy (2007a, 2007b) provided qualitative evidence that this factor is found across therapy models by interviewing major proponents of three models (cognitive-behavioral couple therapy, internal family systems therapy, and emotionally focused therapy), their students, and their clients about factors that they viewed as responsible for therapeutic success. Across models, these respondents believed that the success of therapy is due in part to therapists' efforts to have clients view their problems through a systemic lens.

Regarding the common factor of focusing on disrupting relational patterns, Sprenkle (2002) described how all of the empirically validated models include attention to identifying dysfunctional interpersonal patterns in a family and intervening to change them. The research of Davis and Piercy (2007a, 2007b) also indicated that, regardless of models, therapists were involved in the disruption of cyclical, interactional patterns, with some differences in emphases on aspects of affect, cognition, or behavior.

Concerning the expansion of the system that is treated, in couple therapy, where the therapeutic alliance involves two clients and thus is more complex, it is recommended that therapists balance their attention between the two partners equally or equitably. Sprenkle et al. (2009) assert that if the therapist has an unbalanced alliance, the benefits from directly intervening with the system (involving all significant family members in the therapy, rather than

only an individual) may become costs. Furthermore, couple and family therapists may expand their treatment system beyond the couple or family. For example, Sprenkle et al. (2009) note that some therapists may involve the school to which the clients' child belongs. This involvement of larger systems is quite different from individually-oriented therapies that primarily focus on intra-psychic processes to understand a client's problems. It also requires that the therapist establish positive alliances with representatives of those larger systems (e.g., teachers and school administrators), as well as with the family members.

In spite of the conceptual appeal of systemic approaches for evaluating and treating clients' problems, there is a major lack of empirical research examining outcomes of systemic forms of therapy. Sprenkle et al. (2009) note that there have been no randomized clinical trials comparing couple and family approaches that specifically include "systemic techniques" with those that do not. To date, the major support for common factors involving systemic interventions has been based on indirect reasoning, in that couple and family therapy approaches that have been based on systemic concepts have been demonstrated to be efficacious and effective (Sprenkle et al., 2009). Unfortunately, there is no guarantee that a therapeutic approach based on systemic *concepts* actually employs systemic *interventions* such as disrupting and modifying repetitive family interaction patterns. The present study was designed to assess therapists' use of systemic interventions during therapy sessions, across theoretical models, and to test how they are related to therapy outcomes.

Session Structure

The degree to which the couple therapist is able to impose structure on therapy sessions and control the degree of negative expressions of conflict while reinforcing positive interactional change is also an important factor associated with therapeutic success (Davis & Piercy, 2007b).

Davis and Piercy reported that master therapists are good at achieving a balance between imposing some structure and allowing a session to flow spontaneously. They described the therapist as a coach or facilitator, stating, "most of the work in therapy was done by the clients, but within the structure that the therapist set up" (p. 349).

The influence of structuring sessions on therapy outcome has been examined empirically. For example, in a study of team consultations following a Milan family therapy model style, Green and Herget (1991) found that ratings of the degree to which the therapist actively structured sessions significantly predicted clients' positive outcome (client-reported level of goal attainment) at 1-month and 3-year follow-ups. Also, a review by Ackerman and Hilsenroth (2001) of therapist characteristics negatively affecting the therapeutic alliance reported that the therapist's failure to structure therapy was negatively associated with the quality of the working alliance in psychodynamic treatment, but also in other orientations, such as cognitive-behavioral and client-centered approaches. Over-structuring as well as under-structuring can be problematic. For example, therapists' rigid adherence to a treatment model and inflexibility in responding to clients' needs in sessions were associated with a weaker therapeutic alliance. Overall, the literature on session structure has indicated that what matters is balancing structure and flow. That is, therapists need to manage sessions cautiously, on the one hand guiding clients toward replacing destructive negative interaction patterns with positive ones, but on the other hand maintaining flexibility in order to facilitate clients' own autonomy and creativity.

In sum, common factors that therapists bring to their interactions with clients include characteristics of their therapeutic style, such as empathy, as well as aspects of their intervention techniques that involve a systemic approach and structuring sessions to replace negative family interactions with constructive ones. These therapist factors have been studied minimally in

couple and family therapy process and outcome research, and generalizing from findings regarding therapist factors in individual therapy to those influencing therapy with intimate relationships seems unwarranted. Therefore, the present study examined effects of such therapist factors on outcomes of couple therapy in a sample of couples who have experienced partner aggression. The focus on therapist relationship factors and therapist technique factors has the potential to enhance knowledge of common factors influencing the effects of couple therapy for partner aggression.

Theoretical Model for the Study

In the empirical literature on couple therapy, outcome prediction studies tend to neglect elaborated theoretical frameworks to select variables to investigate as predictors and outcome indices. The hypotheses often are not clearly based on theoretical constructs linking interventions to risks for aggression and to change processes. Most of the studies have simply reported findings on prediction of outcomes, without an explicit rationale for the predicted links between interventions and outcomes (e.g., Jacobson, Follette, & Pagel, 1986). Thus, in the present study, hypotheses were drawn from a specific theory, namely, social learning theory (Bandura, 1977), which seems to be highly relevant to understanding risk factors for partner aggression and processes actively contributing to therapeutic change.

Social learning theory proposes that to a great degree human learning is shaped and facilitated by social interactions with other people throughout an individual's life. The theory notes that stimulus events, such as another person's actions, reinforcing consequences for acts such as reward and punishment, and cognitive processes such as attention and inferences, develop and regulate human behavior. Regarding the link between cognition and behavior, the theory suggests that when a person has developed, through his or her experiences, an expectancy

that engaging in a particular action will bring a desired outcome (obtaining a rewarding positive response from another person or the termination of an aversive response from the other person), the person is likely to engage in that activity. In contrast, when a person has an expectancy that a particular action will have a negative outcome (punishment) such as being exposed to others' outward expression of anger, the likelihood that the person will engage in that action will be lower. In a couple relationship, the partners develop expectancies regarding consequences of their actions through their ongoing interactions with each other. They also are likely to have brought expectancies that were learned in prior close relationships (Epstein & Baucom, 2002). Furthermore, members of a couple develop expectancies regarding processes that occur during therapy. Through their interactions with therapists, members of couples may develop expectancies that particular actions on their parts will lead to particular positive or negative responses from the therapist, *as well as from their partners*, and those expectancies influence the quality and quantity of each individual's engagement in the process of therapy.

Trust and Therapy Process and Outcome

Partners with lower levels of trust in each other seem less likely to benefit from couple therapy for partner aggression, because lower levels of trust in one's partner may undermine confidence that the partner will be reliable and committed to making positive changes in the relationship. As described earlier, research on couples' attributions has indicated that inferring that a partner's behavior is shaped by selfish motives lowers the attributor's relationship satisfaction and increases negative behavior toward the partner (Campbell et al., 2010; Shallcross & Simpson, 2012; Uysal et al., 2012; Vinkers et al., 2011). Because low trust involves negative attributions about the motives and actions of another person, it appears to be a risk factor that interferes with the process of successful couple therapy, including the working alliance with the

therapist and partner, adherence to homework tasks, honest in-session self-disclosure, etc. For example, individuals with lower levels of dyadic trust may have negative expectancies that their therapy-guided positive behaviors (e.g., engaging in caring behaviors toward the partner) will not be reciprocated. Therefore, even though a therapist may strongly encourage the individuals to initiate new behaviors aimed at improving the couple relationship, the partners may hesitate to initiate those behaviors, and positive outcomes of therapy are limited.

Also, because partners with low trust are likely to have the expectancy that the other person will not put as much effort into improving their relationship as they do, they may unduly monitor the other's adherence to homework or therapist-guided behavior changes. Behavioral marital therapists (e.g., Jacobson & Margolin, 1979) have labeled the biased perceptual process of focusing predominantly on another's negative actions, to the exclusion of the partner's positive behavior, "negative tracking." Even relatively small negative acts by the partner may strengthen the individual's negative expectancy that the partner is likely to behave negatively overall and not reciprocate the individual's positive actions, reducing the individual's own positive actions. Even though the partner verbally expresses an intention to change, the individual may not view the stated intent as reliable (i.e., will not trust that the partner will make positive changes) (Rempel, Ross, & Holmes, 2001). The lack of trust may also consistently interfere with constructive communication between partners both in therapy sessions and at home.

Anger expression and therapy process and outcome

During couple therapy for partner aggression, poorly managed anger may interrupt the therapeutic process. Partners who do not know how to express anger in a constructive way may express their anger in a negative way in the therapy room. Therapists who are not accustomed to

and adept at intervening to manage partners' strong emotions in sessions may lose control of a session, creating an aversive experience for the members and detracting from the therapeutic alliance (Nissen-Lie, Monsen, & Rønnestad, 2010). If the therapist fails to manage anger experiences and expression in sessions, individuals who feel victimized by their partners in sessions may develop an expectancy that the therapist will not be effective in protecting them from abusive experiences, which may impede their engagement in the treatment.

In addition, intense negative arousal can contribute to the perceptual bias of negative sentiment override, in which the person primarily will notice and think about negative aspects of the partner and relationship, interfering with the therapist's attempts to increase attention to positives. Moreover, the high negative arousal may interfere overall with constructive logical thinking and problem solving (Fruzzetti & Iverson, 2006). As a result, negative interactions between the partners will continue or may even worsen, leading to further negative expectancies and emotional arousal, a pattern that can undermine progress in therapy.

The Interaction between Client Common Factors and Therapist Common Factors

When a couple becomes involved in therapy, they are inviting a stranger (a therapist or co-therapists) into their existing couple system. The therapist's degree of impact on the couple's system can vary considerably, with some clinicians inducing major shifts in the homeostasis of a couple's interactional patterns, but others having minimal or even a harmful effect. The impact of a therapist may depend on an interaction effect between the clients' characteristics and the therapist's behavior.

For example, as described earlier, an individual with low trust in his or her partner may come to therapy with a defensive attitude. Even though his or her partner has agreed to participate in couple therapy, the individual may have a low expectancy that the other partner

will actually change his/her behavior in a mutually favorable way rather than continuing to exhibit untrustworthy behavior. Thus, the individual may hesitate to engage in therapy enthusiastically because he/she predicts that such efforts may become another sacrifice unless the partner makes significant changes. In such a case, if the couple's therapist behaves in an empathic manner, the low-trust partner may experience feelings of connectedness with the therapist. That is, the individual may develop an expectancy that the therapist will respond to his/her thoughts, feelings, and behaviors in a positive way. Such feelings of connectedness and positive expectancies are likely to contribute to building a solid therapeutic alliance between clients and therapist, as evidenced by empirical studies (Ackerman & Hilsenroth, 2003; Joyce & Piper, 1998). Then, the established alliance will facilitate clients' active engagement in the therapy. Specifically, the clients may change their dysfunctional, aggressive interactional patterns by following the therapist's guidance, leading to positive change in the couple's relationship. In addition, such positive therapist behavior may reduce the defensiveness of the partner who has been the object of distrust, increasing that individual's engagement in therapy.

In addition to possible moderating effects of therapist behavior that establish a positive alliance with clients, therapist behavior that focuses on mutual responsibility for constructive interaction may counteract distrust. Specifically, individuals with lower levels of trust in their partner are likely to attribute relationship problems to the partner's selfish and untrustworthy personality. However, if therapists frequently and appropriately use systemic intervention techniques that focus on *mutual* influences between partners, the individuals may be more likely to view their relationship through a systemic lens, as a product of their repetitive destructive couple interactions rather than the other person's stable personality. They may be more likely to develop an expectancy that change is possible through mutual efforts to change behavior in

constructive ways. The more positive expectancy for change may heighten motivation to change their behavior.

Nevertheless, Evans (2011) found that positive therapist behaviors do not necessarily lead to more positive outcomes in couple therapy, as a member of a couple may interpret the therapist's empathy conveyed for the other member as taking sides. More information is needed on effects that therapist behaviors have as they potentially moderate negative associations between negative client characteristics (e.g., distrust) and progress in couple therapy. The present study was designed to test such moderating effects of therapist behavior.

The hypothesized negative effects of clients' anger management difficulties on therapy outcomes may also be moderated by therapist behaviors. From a cognitive perspective, anger emerges when an individual perceives that his or her rights or interests are violated and thus experiences a sense of injustice (Epstein & Baucom, 2002). During conjoint couple therapy sessions, a partner is likely to experience and express anger either when remembering past incidents in which the other partner seemed to treat him or her poorly, or when the other partner is perceived as behaving unjustly during the session. When the partner experiences and expresses anger in sessions for either reason, if therapists structure sessions well (controlling negative expressions of anger; making sure that both partners have opportunities to be heard), it seems likely that the partners will develop an expectancy that sessions will be safe and productive, and they will comply with the therapist's guidance. Similarly, when therapists appropriately convey empathy for the clients, the partners' negative emotional arousal will be regulated. Even if partners experience anger during sessions, if therapists express their understanding of why the partners feel such intense emotions, the partners will form positive expectancies that they will be understood and they will be less likely to behave in adversarial ways.

Also, a therapist may model for each member of the couple how one can respond effectively to a partner's anger expression. As Bandura (1977) noted, learning does not emerge solely through actors' direct experiences of consequences of their behavior. Actors also learn from observing others' experiences. A core concept in social learning theory (that has strong supportive evidence) is that when an observer sees the benefits that accrue from another person's behavior, the observer is likely to imitate the others' actions (Bandura, 1977). If therapists demonstrate effective responses in managing partners' anger expression, the partners may learn and reproduce the therapist's constructive behavior in their own interactions with each other, within sessions and at home.

Research Questions and Hypotheses

Based on the previous literature and relevant theory, the following research questions and hypotheses are addressed.

- 1. Do pre-treatment client common factors predict couple therapy outcome?
 - Hypothesis 1: Lower relational trust will predict less positive change in relationship satisfaction and psychological aggression.
 - Hypothesis 2: Poorer client anger management in the form of higher venting of anger will predict less positive change in relationship satisfaction and psychological aggression.
- 2. Do couple therapist common factors predict couple therapy outcome?
 - *Hypothesis 3*: Higher levels of therapist empathy will predict positive change in relationship satisfaction and psychological aggression.
 - Hypothesis 4: Higher levels of therapist use of systemic techniques will predict positive change in relationship satisfaction and psychological aggression.

Hypothesis 5: Higher levels of session structure will predict positive change in relationship satisfaction and psychological aggression.

3. Do couple therapist common factors moderate the effect of client common factors on therapy outcome?

Hypothesis 6: For couples who work with therapists showing higher levels of empathy, the association between low level of trust and less positive change in therapy outcomes for relationship satisfaction and psychological aggression will be weaker.

Hypothesis 7: For couples who work with therapists showing greater use of systemic techniques, the association between low level of trust and less positive change in therapy outcomes for relationship satisfaction and psychological aggression will be weaker.

Hypothesis 8: For couples who work with the therapists showing higher levels of empathy, the association between greater venting of anger and less positive change in therapy outcomes for relationship satisfaction and psychological aggression, will be weaker.

Hypothesis 9: For couples who work with therapists using higher levels of session structure, the association between greater venting of anger and less positive change in the therapy outcomes for relationship satisfaction and psychological aggression, will be weaker.

Chapter 3: Method

Sample

This study used previously collected data from a sample of 40 couples who sought assistance for a variety of relationship issues at a university-based training clinic, the Center for Healthy Families (CHF) at the University of Maryland, College Park. The couples participated in a larger ongoing couple therapy outcome study, "An Evaluation of Couple Treatments for Domestic Abuse," also called the Couple Abuse Prevention Program (CAPP) study. The CAPP study investigates the efficacy of different couple therapy models with couples who at their intake assessment reported psychological aggression and/or mild to moderate physical aggression in their relationship. All couples who were identified as meeting inclusion criteria for the study and no exclusion criteria were offered the opportunity to participate in the CAPP study on a voluntary basis.

Inclusion criteria. The following criteria were used during the original data collection to determine couples' eligibility for participation in the CAPP study: 1) both partners were aged 18 or older; 2) the partners had maintained their intimate relationship for at least six months; 3) at least one partner reported perpetrating and/or receiving psychological and/or mild to moderate physical partner aggression during the last four months; 4) both partners indicated their intention to improve their couple relationship; 5) partners spent time together at least once per week during the period of treatment; 6) each partner independently reported feeling safe participating in conjoint treatment and living with the other.

For the present study, only couples who completed both the pre- and post-treatment measures were selected. Also, for research purposes, video recordings of therapy sessions 1, 4, 8, and 10 had been stored under confidential conditions in a locked records room in the CHF, following the approved IRB protocol for the CAPP study. For some cases, a session four tape

was not available either because of technological problems with the video recorder or therapists' errors. Those cases were not included in this study.

Exclusion criteria. Several exclusion criteria were used in the original data collection so the sample would include couples in committed relationships and exclude those who were at risk for violence during the treatment process: 1) one or both partners had experienced physical injury due to partner aggression during the past four months that required or should have required medical treatment or attention; 2) a partner had used a weapon against the other; 3) at least one partner reported current untreated drug or alcohol abuse (based on substance use being a risk factor for aggressive behavior); 4) the couple was participating in another couple treatment elsewhere. Cases that met any of those criteria were not included in the CAPP study (or treated in any type of couple therapy at the CHF). Couples who were excluded from couple therapy were offered separate individual therapy for each partner at the CHF as well as referrals to other clinical services in the community.

Descriptive Statistics for Sample Demographics

The sample for this study was comprised of 40 heterosexual couples (40 female partners and 40 male partners) who completed pre-therapy and post-therapy assessments for the CAPP study, as well as the standard number of therapy sessions (as described below). The mean age for female participants was 31 years (ranging from 20 to 51), and the mean age of the male participants was 33 years (ranging from 22 to 51). The mean length of relationship was six years.

83% of the participating couples were married (and living together) or cohabitating, and the other 17% were living separately but spent time together at least once a week. Among the females, 62% were White, 21% African American, 10% Hispanic, and 8% Other. Among the males, 74% were White, 15% African American, 3% Hispanic, and 8% Other. Table 1 provides

Table 1 Individual Characteristics of the Sample (Percentage in Parentheses)

	Males		Females	
Characteristics	$(n = \frac{1}{2})^n$	40)	(n = 40)	
Education				
Less than high school	1	(3)	2	(5)
High school degree/some college	19	(48)	18	(45)
College degree or higher	20	(50)	20	(50)
Income				
Less than \$10,000	0	(0)	10	(25)
\$10,000-\$19,999	1	(3)	5	(12.5)
\$20,000-\$29,999	5 (1	2.5)	4	(10)
\$30,000-\$39,999	9 (2	22.5)	10	(25)
Greater than \$40,000	24	(60)	9	(22.5)
Missing	1	(3)	2	(5)
Employment status				
Employed outside the home	35	(88)	29	(72.5)
Homemaker	0	(0)	5	(12.5)
Student	2	(5)	3	(7.5)
Unemployed	2	(5)	3	(7.5)
Retired	1	(3)	0	(0)

other information on individual characteristics of the sample.

Descriptive Statistics for Therapists

All participating couples worked with co-therapy teams comprised of graduate students in the Couple and Family Therapy (CFT) master's degree program at the University of Maryland, College Park. The CFT master's program offers coursework and supervised clinical training. The program is accredited by the Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy (AAMFT). The students experience supervised therapy from the first semester. They are required

to complete at least 400 hours of face-to-face client contact, including at least 250 hours of relational therapy with couples or families. Also, the students accrue at least 100 hours of weekly supervision by licensed marriage and family therapists. 84% of the therapists who worked with the couples in the sample were female, and 16% were male. 68% of the co-therapy teams consisted of two female therapists, and 32% were comprised of one female and one male therapist. However, there were no co-therapy teams of two male therapists.

Participant compensation

The CHF operates on a sliding scale ranging from \$20 to \$60 per session based on client income, in order to make services available to low-income families. If the couples who entered the original treatment study remained until the termination of treatment, they received a retroactive discounted fee for their participation in the CAPP study.

Procedure

Data collection. The data for the present project were retrieved from the data file collected for the ongoing CAPP study at the Center for Healthy Families (CHF). All couples who seek couple therapy at the Center for Healthy Families are required to complete a pre-treatment assessment involving a clinical interview with each partner and a set of self-report questionnaires. Couples who are eligible and voluntarily participate in the CAPP study also complete a Day 2 Assessment consisting of another battery of self-report questionnaires. The current project will use the following measures from the Day 1 Assessment: the Dyadic Adjustment Scale (DAS; Spanier, 1976) and the Revised Conflict Tactics Scales (CTS2; Straus et al., 1996). In addition, the following measures from the Day 2 Assessment will be used: the Spielberger State/Trait Anger Inventory (STAI; Spielberger & Sydeman, 1994) and the Dyadic Trust Scale (DTS; Larzelere & Huston, 1980).

After completing the assessments, couples were randomly assigned to one of two couple therapy conditions: cognitive-behavioral couple therapy (CBCT) or treatment as usual at the Center for Healthy Families (UT). The CBCT was a manualized protocol specifically designed to help couples who are experiencing psychological and/or mild to moderate physical aggression. The CBCT protocol includes psychoeducation about partner aggression (types, risk factors, and consequences), communication skill training, problem-solving training, anger management, modification of cognitions that trigger or maintain aggression, and strategies to help couples recover from emotional trauma from past psychological and physical aggression in their relationships. In the UT condition, therapists were able to use any standard couple therapy model (narrative, strategic, structural, emotion-focused, etc.) used in the CHF other than CBCT. Therapists in both conditions were trained about intervention with partner aggression. Each couple worked with two master's degree student co-therapists from the Couple and Family Therapy Program for ten double-length (90-minute) sessions. After the ten double sessions were completed, if a couple and their therapists believed that additional sessions were needed, the couple could continue in treatment as long as needed; however, they participated in a posttherapy assessment after their 10th session. The post-therapy assessment included the same measures that the couple completed during the pre-therapy assessment.

Each component of the CAPP study is designed to maximize the safety of each member of the couple. Therapists received specific training in treating partner aggression and are supervised weekly by licensed couple and family therapists who are AAMFT approved supervisors or supervisor candidates. During the screening process, each partner is asked privately to report his or her sense of safety in the relationship, as well as with participating in couple therapy. When a concern for safety emerges, therapists in both the CBCT and the UT

conditions are prepared to develop safety contracts with couples. Also, if a violent incident occurs between sessions, the therapists are able to schedule up to two additional crisis intervention sessions, and at any point can discontinue the conjoint treatment. In order to be included in the study and be compensated for participation, the couple should finish the treatment within four and a half months.

Although every therapy session was video recorded for supervision purposes, only the recordings from sessions 1, 4, 8, and 10 were stored confidentially for research purposes, allowing the observation of therapist-couple interaction initially, in mid-treatment and at the end of therapy.

Measures

Independent Variables: Couple Characteristics

Dyadic trust was assessed using the Dyadic Trust Scale (DTS) (Larzelere & Huston, 1980) (see the Appendix A). In order to develop a measure of dyadic trust, Larzelere and Huston (1980) operationally defined trust as "the extent to which a person believes another person to be benevolent and honest." (p. 596) The DTS was designed to assess dyadic trust in both dating and marital relationships. Subjects indicate their agreement with eight items on a 5-point Likert scale ranging from (1) Disagree Strongly to (5) Agree Strongly. The DTS has demonstrated high internal consistency reliability ($\alpha = .93$) and construct validity (Larzelere & Huston, 1980). Some sample items are: "My partner is primarily interested in his or her own welfare.", "My partner is perfectly honest and truthful with me.", and "My partner treats me fairly and justly."

Anger Expression was measured with the State-Trait Anger Expression Inventory (STAXI) (Spielberger & Sydeman, 1994) (see the Appendix B). The STAXI consists of three subscales: Anger-In, Anger-Out, and Anger-Control. Anger-In is defined in terms of "how often

an individual experiences, but holds in (suppresses), angry feelings." Anger-out is defined in terms of "the frequency that an individual expresses angry feelings in verbally or physically aggressive behavior." Anger-control denotes individual's use of emotion regulation strategies to reduce the intensity of his or her anger (Spielberger & Sydeman, 1994, p. 306). Each subscale consists of eight items, and respondents rate themselves using a 4-point frequency scale: (1) almost never, (2) sometimes, (3) often, and (4) almost always. The literature revealed that the Anger-In and Anger-Out subscales measure two independent anger-expression dimensions (Forgays, Forgays, & Spielberger, 1997; Knight, Chisholm, Paulin, & Waal-Manning, 1988), as independent factors with almost zero correlation. The Anger-Out and Anger-Control subscales have been found to be negatively correlated (Spielberger, Krasner, & Solomon, 1988). The concurrent and discriminant validity of the STAXI have been demonstrated (Spielberger & Sydeman, 1994). Specifically, regarding concurrent validity, the Anger-Out subscale was significantly correlated with the Trait-Anger/Angry Temperament subscale of the State-Trait Anger Scale (STAS), which denotes "a general disposition to experience anger with little or no specific provocation" (Spielberger & Sydeman, 1994, p. 310). Also, both Anger-Out and Anger-In subscales were significantly correlated with the Trait-Anger/Angry Reaction subscale of STAS, which signifies "a general disposition to feel angry when criticized or treated unfairly" (Spielberger & Sydeman, 1994, p. 310). In addition, the Anger-Out and Anger-In subscales were correlated with The State-Trait Personality Inventory (STPI; Spielberger, 1988) Trait-Anxiety subscale. However, the correlations between Anger-Out and Anger-In, and STPI Trait-Curiosity were almost zero, which indicates discriminant validity. The present study used only the angerout subscale, because anger-out is most consistently associated with marital quality (Guerrero et al., 2008; Wachs & Cordova, 2007) and physical violence (Barbour et al., 1998).

Moderator Variables: Therapist In-Session Behaviors

Therapist in-session behaviors toward client couples were measured with the Ratings of Therapists' General Clinical Skills/Qualities Scale (TGCSQ; Epstein, McDowell, & Evans, 2009) (see the Appendix C). The TGCSQ was developed to assess therapist in-session common behaviors across therapy models. Guided by Blow and Sprenkle's (2001) article, the measure was designed to assess two dimensions of therapist behaviors: relationship factors (warmth, empathy, validation, therapist presence, and therapist collaboration), and technique factors (systemicallybased techniques and techniques used to structure therapy sessions). Undergraduate students participated in the study as coders for two semesters. The students were trained regarding diverse topics: human subject issues such as confidentiality, basic research methods, an introduction to couple therapy models and techniques, and instructions on how to perform reliable coding. Two trained undergraduate students coded 90-minute couple therapy tapes of session number four independently of each other. Averages of the coders' scores were used as indicators of each type of therapist behavior. Each behavioral cue representing each type of therapist behaviors was coded on a 4-point scale ranging from 0 ("not at all") to 4 ("very much"). Given that each couple was treated by a co-therapy team, one score was assigned for each type of therapist behavior. The reason why the therapists were coded as a unit is that in some cases it was difficult to code both therapists' behaviors in the therapy room due to the camera position. Also, sometimes, one therapist's behavior was contradictory to the other therapist's behavior. In this case, the coders considered both therapists' behaviors in making an overall judgment regarding the level of a particular type of therapist relationship behavior or technique behavior. In instances when one therapist interacted with the couple and the other therapist was comparatively quiet, the coders focused on the lead therapist's behavior while considering the other therapist's behavior as well.

The *relationship factors* assessed by the TGCSQ consist of five types of therapist behaviors: warmth, empathy, presence, validation, and collaboration. The present study only used empathy for analyses, because empathy has been recognized as *empirically effective* (Bohart, 2002) and because empathy is theoretically expected to moderate the association between trust and anger-out and outcome. Empathy was coded with one type of behavior, namely reflective statements.

The *technique factors* assessed with the TGCSQ consist of two types of therapist behavior: systemically-based techniques and session structuring. Both types of behavior were used for analyses in the present study, since they are theoretically hypothesized to buffer the negative effects of lower levels of trust and higher levels of anger-out on therapy outcome. The therapist's use of systemically-based techniques is coded with four types of behavior: balance in attention to partners, noting cyclical patterns in couple interaction, circular questioning, and seeking information and/or creating interventions based on multiple environmental levels. The index of the systemically-based techniques is the sum score of the average scores for each of these behaviors. Session structuring consists of four types of therapist behavior: control of conflict, pacing and efficient use of time, opportunities for both members of couple to express concerns and goals, and therapist reinforcement of positive change using positive feedback, encouragement, etc. The index of session structure is the sum score of average scores of each of the behaviors.

Criterion Variables: Couple Therapy Outcomes

Relationship satisfaction was measured with a set of items from the dyadic satisfaction subscale of the Dyadic Adjustment Scale (DAS; Spanier, 1976) (see the Appendix D). The DAS is a 32-item scale designed to measure overall adjustment in couple relationships. It consists of

four subscales (dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression) constructed by Spanier (1976) based on item content, and although Spanier intended that each subscale could be used alone, most often researchers and clinicians use the total instrument score. The DAS is the most frequently used measure of couple relationship quality; for example, within 10 years of its publication, more than 1,000 studies had used it (Spanier, 1985). Criterion-related validity and construct validity of the DAS have been demonstrated (Spanier, 1976). In addition, according to a reliability generalization meta-analysis (Graham, Liu, & Jeziorski, 2006) across 91 published studies with 25,035 participants, the DAS total and dyadic cohesion, consensus, and satisfaction subscales showed acceptable internal consistency, regardless of respondents' sexual orientation, gender, marital status, or ethnicity. The dyadic satisfaction subscale (10-items) had a mean Cronbach alpha of .85.

In recent years, researchers commonly have used only the dyadic satisfaction subscale rather than the total DAS, because many items on the other subscales describe behavioral correlates of relationship satisfaction rather than satisfaction itself (Graham, Liu, & Jeziorski, 2006). Furthermore, the present study did not even use all 10 items of the dyadic satisfaction subscale, for a similar reason. Fincham and Bradbury (1987) mentioned the problem of overlap between items used to measure independent variables explaining variance in marital quality and a subset of the items used to assess marital quality, consequently making the interpretations tautological. For example, DAS item #19 "Do you confide in your partner?" possibly overlaps with the item in the DTS, "My partner is perfectly honest and truthful with me," and it is a behavior that might be associated with satisfaction but in itself does not assess subjective feelings of satisfaction. Thus, DAS item #19 was not included in the present study.

The content validity of some other dyadic satisfaction subscale items is also an issue. For example, item #23 ("Do you kiss your partner?") assesses a behavior with limited validity as an index of level of relationship satisfaction, as some couples may be satisfied with their relationship but not express their satisfaction through kissing. Although it was originally included in the dyadic satisfaction factor (Spanier, 1976), its loading on the factor was only .32. Other dyadic satisfaction subscale items that also can be regarded as assessing behavior rather than subjective relationship satisfaction involving cognitions and affect are #17 "How often do you or your partner leave the house after a fight?"; #21 "How often do you or your partner quarrel?"; #22 "How often do you and your partner 'get on each other's nerves'? As further support for eliminating those items, they were originally included in the dyadic satisfaction factor (Spanier, 1976) but were not included in a subsequent study by Sharpley and Cross (1982).

Alternatively, use of the single item #31 as a proxy for the dyadic satisfaction subscale scale was also considered. In Sharpley and Cross's (1982) study, the item-total correlation for item # 31 was .86, and the authors concluded that for quick assessment sole use of the global item #31 could be sufficient. However, using a single item will limit variability of responses, and thus may fail to be sensitive enough to therapeutic changes. Therefore, in order to measure preto post-therapy change in relationship satisfaction, the present study only used items #16, 18, 20, 31, and 32 from the dyadic satisfaction subscale. Specifically, items 16, 18, and 20 use a 6-point Likert scale with responses regarding frequency of occurrence ranging from *All the time* to *Never*: specifically, "How often do you discuss or have you considered divorce, separation, or terminating your relationship?" (#16), "In general how often do you think that things between you and your partner are going well?" (#18), and "Do you ever regret that you married (or lived

together)?" (#20). Item 31 asks about the degree of happiness in the relationship on a 7-point Likert scale ranging from *Extremely Unhappy* to *Perfect*, with the instruction, "The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree or happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship." Item 32 asks about the respondent's views about the future of the relationship on a 6-point Likert scale ranging from "My relationship can never succeed, and there is no more that I can do to keep the relationship going." to "I want desperately for my relationship to succeed, and would go to almost any length to see that it does." The instruction for item 32 states, "Which of the following statements best describes how you feel about the future of your relationship? Check the statement that best applies to you." In the data collection at the Center for Healthy Families, relationship satisfaction was assessed before treatment and at termination. The index of change in relationship satisfaction across therapy is the difference score between the pretreatment score and the posttreatment score (posttreatment score - pretreatment score).

Physical aggression was measured with the Revised Conflict Tactics Scales (CTS2; Straus et al., 1996) (see the Appendix E). The CTS2 was developed to measure the extent to which partners in a dating, cohabiting, or marital relationship are involved in psychological abuse, sexual coercion, and physical aggression toward each other, physical violence causing injury, and use of negotiation to handle conflicts. To measure physical aggression in the present study, the investigator used 22 of the 78 CTS2 items, primarily from the physical assault subscale (18 items), and some from the injury subscale (four items). Those items are among the ones used as inclusion criteria for the original CAPP study. Among the inclusion criteria items,

six that belong to either the psychological aggression subscale or the sexual coercion subscale were not used to measure physical aggression in this study.

Examples of the items that were used to measure physical aggression in the present study are: "Threw something at my partner" (Physical Assault subscale) and "Had a sprain, bruise, or small cut because of a fight with my partner" (Injury subscale). The response scale asks the respondent to report twice on the frequency with which each type of aggressive act was enacted, (a) by either respondent and (b) by his/her partner, in the past four months, with the responses ranging from 0 = This has never happened to 6 = More than 20 times in the past four months; additionally, a response of 7 indicates *Not* in the past four months, but it did happen before. In terms of scoring, midpoints for the response categories were used (Straus et al., 1996). For example, for categories 3 (3-5 times) the midpoints is 4. For category 4 (6-10 times), 5 (11-20 times), 6 (More than 20 times) it is 8, 15, and 25, respectively. For category 0, 1, and 2, midpoints are the same as the category number. The midpoints were summed to calculate a total score. The CTS2 was administered at both pre-treatment and post-treatment assessments at the CHF.

Because people commonly underreport their aggressive behavior (Archer, 1999), researchers commonly rely on partner reports of an individual's behavior or average the reports of each person's behavior by both members of the couple. The latter procedure was used in the present study to take the perspectives of both members into account.

Regarding psychometric characteristics, with a sample of 317 college students in a dating, cohabiting, or marital relationship, the alpha reliability coefficients of the physical assault subscale were .86. The construct validity of the physical assault scale was evidenced by its high level of correlation with the psychological aggression scale (r = .71 and .67 for men and women,

respectively), which is consistent with the conflict-escalation theory of couple violence (Berkowitz, 1993) and empirical findings supporting the theory (e.g., Murphy & O'Leary, 1989). As another evidence of construct validity, the physical assault scale was negatively correlated with the social integration (SI) scale (Ross & Straus, 1995, as cited in Straus et al., 1996) that is based on the control theory of crime, which posits that an individual's lack of integration into conventional society leads him or her to engage in criminal acts, including physical assault on a partner. In the CHF sample, physical aggression was assessed both at pretreatment and post-treatment. The index of change in physical aggression is the difference between the pretreatment score and the post-treatment score.

Psychological aggression was assessed with the psychological aggression subscale of the CTS2 (Straus et al., 1996) (see the Appendix F). The scale developers changed the name of the subscale from verbal aggression in the CTS1 to psychological aggression in the CTS2, because some items describe nonverbal acts (e.g., "Stomped out of the room"). The psychological aggression subscale consists of 16 items that represent both minor and severe levels of aggressive behavior. Sample items indicating minor and severe aggression are, respectively, "Shouted or yelled at my partner," and "Destroyed something belonging to my partner." Internal consistency reliability for the CTS2 psychological aggression subscale was found to be .79 in a sample of 317 college students in dating, cohabiting, or marital relationships (Straus et al., 1996). As mentioned above, the subscale's construct validity was supported in part by the correlation between the CTS2 psychological aggression and physical assault subscales (.71 for men; .67 for women). A more recent study with 100 newlywed couples (Ro & Lawrence, 2007) reported lower but still high correlations between the CTS psychological aggression and physical assault subscales (.61 for husbands; .55 for wives). These correlations may be interpreted as threatening

the discriminant validity of the psychological aggression subscale. However, given the common co-occurrence of psychological and physical aggression (Murphy & O'Leary, 1989), such high levels of correlations seem plausible. Convergent validity of the psychological aggression subscale was also supported by correlations with other measures of psychological abuse, specifically the Multidimensional Measure of Emotional Abuse (MMEA; Murphy & Hoover, 2001) (r = .54) and the Test of Negative Social Exchange (TENSE; Ruehlman & Karoly, 1991) (r = .48) (Ro & Lawrence, 2007). The same scoring strategy described above for scoring physical aggression was used to construct scores on the psychological aggression subscale.

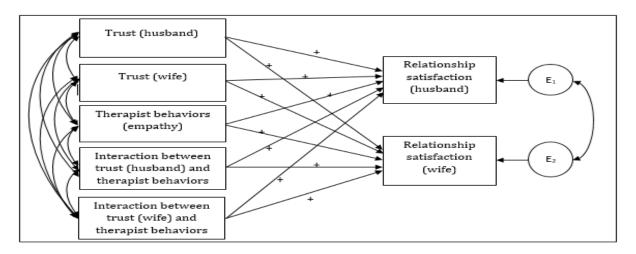
Data Analysis Plan

In analyzing data from couple therapy, interdependence between aspects of partners' functioning becomes problematic. For example, multiple regression analyses that are most often used in the social and behavioral sciences assume independence between participants. However, members of a couple are likely to influence each other, so that measurements that are made of the two individuals violate this independence assumption, biasing parameter estimates (Kenny, Kashy, & Cook, 2006). Consequently, in order to take into account the non-independence between partners, dyadic analyses with the dyad as the unit of analyses are suggested (Kenny et al., 2006). In particular, the Actor-Partner Interdependence Model (APIM) was used in the present study, because mutual influence between partners is inevitable when couples' intimate relationships are examined in therapy studies (Kenny et al., 2006). In the model, an *actor effect* (or intrapersonal effect) occurs when a person's score on a predictor variable influences his/her own score on an outcome variable. A *partner effect* (or interpersonal effect) occurs when a person's score on a predictor variable influences his/her own score on a predictor variable affects his/her partner's score on an outcome variable. The APIM approach is a more complicated, in-depth technique compared to the use of a sum or

average score for the dyad, which has been used in the majority of the prior studies on couple relationships. As Kenny and Cook (1999) demonstrated, computing a sum or average score for the two members of a couple implicitly assumes that the actor and partner effects are equal, which cannot be guaranteed.

The present study used structural equation modeling (SEM) for data analyses. SEM is a data-analytic technique that is often used for the analysis of dyadic data, along with multilevel modeling (MLM) (Kenny et al., 2006). According to Kenny et al. (2006), SEM is the simplest analytic solution for the APIM approach. In particular, SEM is very effective for analyzing dyads in which each member is distinguished from the other based on a certain differential characteristic, such as husband versus wife, and parent versus child, whereas MLM is the more straightforward method for use with indistinguishable dyads (Kenny et al., 2006). To test an interaction effect in SEM, the product between a predictor variable and a moderator variable is created and entered into the equations. To do this, each variable, including both independent and dependent variables, was centered around the grand mean for the variable across both men and women. For the analyses, the software of EQS 6.2 was used. A path diagram specified for tests of this study's hypotheses is presented in Figure 2.

Figure 2. Example APIM model for hypotheses tests



Chapter 4: Results

Data Cleaning

A series of steps were taken to secure statistically precise hypothesis tests. First, regarding missing data, a few missing values were detected (Table 2). For missing values on psychological aggression (CTS2), the other partner's report regarding the person's specific behavior on the item replaced the missing value. Regarding marital satisfaction, based on the high level of internal consistency of the measure (Cronbach's Alpha = .83), the prorated sum score was used to estimate the missing value. Then, composite variables (trust, anger-out, relationship satisfaction, and psychological aggression) were constructed from individual items by pooling responses to the items as described in the method section. Physical aggression was dropped from the analyses, because at pretreatment over half of the cases reported no incidence of physical aggression within the last four months. Thus, physical aggression is actually close to a constant, rather than a variable, and cannot correlate highly with other variables.

After constructing each scale to assess the study's variables, univariate descriptive statistics were calculated to ensure the accuracy of the data file. All of the values for the variables were within the plausible ranges. To detect univariate outliers, standardized scores of variables were checked. Cases in excess of 3.29~(p < .001), two-tailed test) were considered potential univariate outliers. Only one case showed a value over 3.29~on anger-out. The outlier was not deleted—instead, a transformation was conducted (Tabachnick & Fidell, 2006), which will be described later. Multivariate outliers were screened by consulting three measures for identifying outliers, namely the Mahalanobis distance, Cook's distance, and Leverage (Tabachnick & Fidell, 2006). For the Mahalanobis distance, a conservative p-value threshold (p < .001) was used (Tabachnick & Fidell, 2006). For the other two indices, cutoff scores suggested

by Cohen, Cohen, West, and Aiken (2003) were used. If values of any two of the three indices exceeded the cutoff scores, the case was considered a multivariate outlier. For model 1, there were no outliers. For model 2, one case was identified as a multivariate outlier, with a Mahalanobis distance of 28.93 (p < .001), Cook's distance of .00 (proposed cutoff = 1.0), and Leverage of .74 (proposed cutoff = .60). Model 3 showed one outlier, with the Mahalanobis distance of 24.8 (p < .001), Cook's distance of .32, and Leverage of .63. For model 4, two outliers were detected, with one showing a Mahalanobis distance of 25.0 (p < .001), Cook's distance of .44, and Leverage of .64, and another of 29.0 (p < .001), .02, and .74. Model 5 showed no outliers. Model 6 included one outlier with values of 30.1 (p < .001), .42, and .77. In model 7, one outlier was found with values of 23.6 (p < .005), 1.09, and.61. Model 8 reported one outlier with values of 28.7 (p < .001), .10, and .74. The multivariate outliers were temporarily excluded from the data set when running each model.

All continuous variables were screened for normality, because if variables are not normally distributed solutions are inaccurate - for example, non-normal kurtosis creates an underestimate of the variance of a variable (Tabachnick & Fidell, 2006). Thus, values of skewness and kurtosis were considered. Three variables (anger-out, psychological aggression, and use of systemic techniques) showed significant skewness and kurtosis (p < .01). Therefore, transformations were performed, since through transformations and thereby enhancing normality the results of analyses usually substantially improve (Tabachnick & Fidell, 2006). For anger-out and use of systemic techniques, log-transformations were performed, resulting in improved normality. However, for psychological aggression, a transformation was not conducted, because attempted transformations (log or square root) did not improve normality.

In order to reduce multicollinearity among the predictor variables and to enhance interpretation of the findings, all variables were centered (Tabachnick & Fidell, 2006). Then,

Table 2. *Missing data*

Variables	N	Percentage (%)
Psychological Aggression (Pretreatment) (16 items)	2	2.5%
Psychological Aggression (Posttreatment) (16 items)	2	2.5%
Marital Satisfaction (Pretreatment) (5 items)	4	5.0 %
Marital Satisfaction (Posttreatment) (5 items)	1	1.3%
Other Variables	0	0%

Note. For psychological aggression, all of the respondents above with missing values had one or two missing items for the 16 items of the scale. For marital satisfaction, the respondents above had only one missing item among the five items of the scale.

interaction terms were created. Following the instructions of Kenny (2014), the individual structure was transformed into a dyad structure in which the data of both male and female partners is placed on the same row in the data file. Before statistical tests, it was considered whether to use one-tailed tests or two-tailed tests. Although the hypotheses, which include the direction of the effect, were based on theoretical rationales, given the lack of previous studies empirically examining the hypotheses, two-tailed tests that do not assume the direction of the effect were employed.

Descriptive Statistics

Descriptive statistics were obtained to understand the overall characteristics of the variables and the relationships among them. In order to assess mean differences between males and females on the variables, *t*-tests were performed. Because the unit of analysis of the study is the dyad, non-independent individual paired-samples *t*-tests were used. Also, another series of paired-samples *t*-tests were performed to assess whether significant therapeutic change occurred by gender.

Table 3. Descriptive statistics of client variables and results of t-tests assessing gender differences

	Possible	Females	Males	_
Variables	Range	M(x)	t	
Trust (pretreatment)	8 – 40	26.28 (7.18)	28.83 (8.50)	-1.78
Anger-out (pretreatment)	8 – 32	17.23 (4.54)	15.20 (3.31)	2.12*
Relationship Satisfaction (pre)	0 - 26	14.76 (4.35)	16.40 (4.81)	-2.47*
Relationship Satisfaction (post)	0 - 26	19. 05 (5.01)	17.73 (4.61)	2.01
Relationship Satisfaction (change: post – pre)	-26 – 26	4.29 (4.28)	1.34 (4.34)	3.17**
Psychological Aggression (pre)	0 - 200	23.43 (21.40)	19.98 (20.15)	1.60
Psychological Aggression (post)	0 - 200	12.68 (11.26)	12.85 (10.05)	15
Psychological Aggression (change: post – pre)	-200 - 200	-10.75 (18.01)	-7.13 (18.65)	-1.67

Note. Changes in relationship satisfaction and psychological aggression are the outcomes of the present study.

Table 3 indicates that the participants reported a moderate level of trust in their partner at pretreatment (means of 26.28 and 28.83 of the maximum score of 40, for females and males, respectively). It also indicates that they, on average, *sometimes* vented their anger (means of 17.23 and 15.20 of the maximum score of 32, for females and males, respectively). Wives showed significantly higher venting of anger than husbands (t = 2.12, p < .05). Participants were moderately satisfied with their relationship at pretreatment (means of 14.76 and 16.40 of the maximum score of 26, for females and males, respectively). Husbands reported higher relationship satisfaction than wives at pretreatment (t = -2.47, p < .05). However, husbands, compared to wives, showed less positive therapeutic change in relationship satisfaction (t = 3.17, p < .01). Overall, the level of psychological aggression occurring in the couple relationships was not high (means of 23.43 and 19.98 out of the maximum score of 200, for females and males, respectively), and there were no significant gender differences in frequency of enactment of

Table 4. Descriptive statistics for client variables and results of t-tests assessing differences between pretreatment and posttreatment scores by gender

	Pretreatment	Posttreatment	
Variables	M(SD)	M(SD)	t
Female Relationship Satisfaction	14.76 (4.35)	19. 05 (5.01)	-6.34***
Female-reported Psychological			
Aggression	23.43 (21.40)	12.68 (11.26)	3.77**
Male Relationship Satisfaction	16.40 (4.81)	17.73 (4.61)	-1.95
Male-reported Psychological Aggression	19.98 (20.15)	12.85 (10.05)	2.42*

Table 5. Descriptive statistics for therapist in-session behavior

	Possible rage	Minimum/Maximum	M (SD)
Empathy	0 – 4	2.5/4.0	3.28 (.53)
Systemic Techniques	0 - 4	2.0/3.88	2.72 (.37)
Session Structure	0 - 4	1.38/3.71	2.77 (.52)

psychological aggression at both pretreatment (t = 1.60) and posttreatment (t = -.15). Also, there was no significant gender difference in the apeutic change in psychological aggression (t = -1.67).

The data in Table 4 show that both genders showed improvement in relationship satisfaction and psychological aggression. However, overall, females benefitted more from the treatment than males. Female partners showed significant increases in relationship satisfaction (*t*

= -6.34, p < .001) in psychological aggression (t = 3.77, p < .01). Male partners only presented significant improvement in psychological aggression (t = 2.42, p < .05).

Table 5 shows descriptive statistics for therapist in-session behavior. Overall, therapists exhibited a high level of empathy, with a mean of 3.28 (between *quite a bit* and *very much* on the scale) and a standard deviation of .53. Therapists exhibited a moderate to high level of use of systemically-based techniques (mean = 2.72, between *moderately* and *quite a bit*) with a standard deviation of .37. They also showed a moderate to high level of structuring of sessions (mean = 2.77, standard deviation = .52).

Bivariate Correlations

In order to determine the linear relationships between all pairs of variables, bivariate correlations were performed. Because the correlation matrix is presented in Table 6, only correlations significant at conventional but conservative levels (p < .01) are described. However, more detailed interpretation and discussion of correlations will be presented in the discussion section.

Therapists' use of session structure was strongly correlated with use of systemically-based techniques (r = .53, p < .001). Women's trust in their male partners was positively correlated with their pretreatment relationship satisfaction (r = .48, p < .01) and with female and male posttreatment relationship satisfaction (r = .55 and .32, p < .001 and .01, respectively). Males' trust in their female partners was positively correlated with female and male pretreatment relationship satisfaction (r = .43 and .46, respectively, both p < .01).

Female pretreatment relationship satisfaction showed a strong positive correlation with female posttreatment relationship satisfaction (r = .59, p < .001). Female change in relationship satisfaction was positively related to their posttreatment relationship satisfaction (r = .57, p

< .001). Male pretreatment relationship satisfaction was positively associated with female pretreatment and posttreatment relationship satisfaction (r = .59 and .47, respectively, both p < .001). Male posttreatment relationship satisfaction also was positively correlated with female pretreatment and posttreatment relationship satisfaction (r = .71 and .63, respectively, both p < .001) and with their own pretreatment relationship satisfaction (r = .58, p < .001). Male change in relationship satisfaction had a negative correlation with their own pretreatment relationship satisfaction (r = -.50, p < .01) and a positive correlation with posttreatment relationship satisfaction (r = .42, p < .01).

Female pretreatment psychological aggression was negatively associated with female trust (r = -.62, p < .001). Female posttreatment psychological aggression showed a positive relationship with their own anger-out (r = .52, p < .01). Female posttreatment psychological aggression was positively to their own pretreatment psychological aggression (r = .54, p < .01). Female change in psychological aggression displayed positive relationships with female and male trust (r = .56 and .48, p < .001 and .01, respectively). Female change in psychological aggression was negatively associated with their own pretreatment psychological aggression (r = .85, p < .001).

Male pretreatment psychological aggression was negatively associated with female trust (r = -.56, p < .001). Their pretreatment psychological aggression showed a positive relationship with female pretreatment psychological aggression (r = .79, p < .001) and a negative relationship with female change in psychological aggression (r = -.76, P < .001). Male posttreatment psychological aggression was negatively related to female trust in male partners and positively to female anger-out (r = -.44 and .45, respectively, p < .01). Male posttreatment psychological aggression was positively associated with female pretreatment and posttreament psychological

aggression (r = .56 and .76, p < .001, respectively). Male change in psychological aggression was significantly correlated with their partners' change in psychological aggression and their own pretreatment psychological aggression (r = .72 and -.87, respectively, p < .001).

Hypotheses Tests

In order to test the research hypotheses, the APIM analyses were conducted by employing eight SEM models. The first to fourth models focused on trust as a client factor and empathy and systemic techniques as therapist factors. The first and second models were used to test the hypotheses 1, 3, and 6. Specifically, the first model (see Figure 3) included trust, empathy, and the interaction terms between trust and empathy as predictors of change in relationship satisfaction. The second model (see Figure 4) contained trust, empathy, and their interaction terms as predictors of change in psychological aggression. The model 3 and 4 were used to test the hypotheses 1, 4, and 7. The model 3 (see Figure 5) included trust, use of systemic techniques, and their interactions as predictors of change in relationship satisfaction. The model 4 (see Figure 6) included trust, use of systemic techniques, and their interactions as predictors of change in psychological aggression.

The model 5 to 8 addressed venting of anger as a client factor and empathy and structuring of session as therapist factors. The model 5 and 6 examined the hypotheses 2, 3, and 8. The model 5 (see Figure 7) contained venting of anger, empathy, and their interactions as predictors of change in relationship satisfaction. The model 6 (see Figure 8) included venting of anger, empathy, and their interactions as predictors of change in psychological aggression. The model 7 and 8 examined the hypotheses 2, 5, and 9. The model 7 (see Figure 9) addressed venting of anger, structuring of session, and their interactions as predictors of change in relationship satisfaction. The model 8 (see Figure 10) included venting of anger, structuring of

session, and their interactions as predictors of change in psychological aggression.

Regarding model-data fit assessment, the APIM is essentially a *just identified model*. In other words, the APIM has the same number of parameters to be estimated as unique pieces of information in the variance/covariance matrix. Thus, in traditional APIM studies, data-model fit indices are not reported. Accordingly, in the present study, data-model fit assessment was not conducted.

The following are results of the tests of the study's hypotheses regarding the main effects of client common factors on therapy outcomes:

Hypothesis 1: Lower relational trust will predict less positive change in relationship satisfaction and psychological aggression. This hypothesis was not supported. In models 1 (Figure 3) and 3 (Figure 5), lower levels of trust did not significantly predict less positive change in relationship satisfaction. However, in model 2 (Figure 4) and model 4 (Figure 6), there were significant main effects of dyadic trust on psychological aggression. However, the directions were the opposite of the hypothesized direction. Male lower trust predicted *more* positive change in male psychological aggression (unstandardized coefficient (standardized coefficient) = .41 (.34), p < .05, in both models 2 and 4).

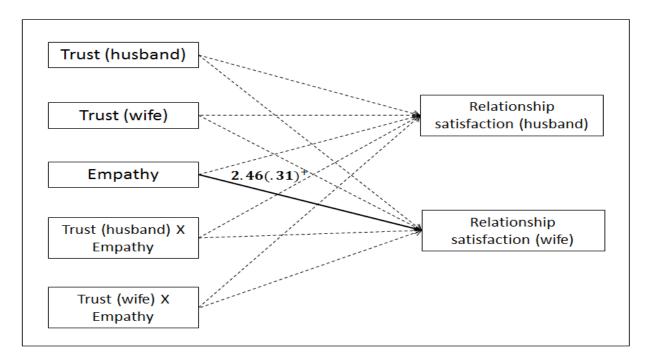
In models 2 and 4, male-to-female partner effects were found. Male partners' lower trust in their female partners predicted more positive change in their partners' psychological aggression (unstandardized coefficient (standardized coefficient) = .65 (.37) and .65 (.37), p < .01 and .05, in model 2 and 4, respectively). However, the main effect of husband trust on wife psychological aggression shown in model 2 is actually a conditional effect which can be gained only on the condition that therapist empathy is at the mean (Aiken & West, 1991). Because there was a significant interaction effect between husband trust and therapist empathy, the association

Table 6. Bivariate correlations among variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.Trust_F	-																		
2.Trust_M	.34*	-																	
3.Anger-out_F	09	.14	-																
4.Anger-out_M	06	.03	16	-															
5.Empathy	11	06	.01	05	-														
5.Techniques	.05	.18	.15	.07	.35*	-													
7.Structure	17	.11	.07	.27	.29	.53***	-												
3.RS_F(pre)	.48**	.43**	.37*	22	16	15	12	-											
O.RS_F(post)	.55***	.33*	.08	06	.05	.19	07	.59***	-										
10.RS_F(change)	.16	05	29	.16	.22	.38*	.05	33*	.57***	-									
1.RS_M(pre)	.38*	.46**	.10	.11	.14	.02	01	.59***	.47***	05	-								
2.RS_M(post)	.32*	.31	.22	18	.08	17	03	.71***	.63***	.02	.58***	-							
13.RS_M(change)	07	18	.13	32*	07	20	01	.11	.15	.07	50**	.42**	-						
4.PA_F(pre)	62***	39*	.36*	07	.16	05	01	20	32*	18	26	06	.22	-					
5.PA_F(post)	28	.02	.52**	.06	08	11	21	.13	21	38*	.13	.08	06	.54**	-				
16. PA_F(change)	.56***	.48**	10	.12	23	00	12	.32*	.25	03	.38*	.12	30	85***	02	-			
7.PA_M(pre)	56***	37*	.05	.09	.18	08	.00	27	18	.07	28	01	.31	.79***	.28	76***	-		
8.PA_M(post)	44**	08	.45**	.01	20	26	15	01	39*	46**	05	04	.01	.56***	.76***	19	.39*	-	
9.PA_M(change)	.36*	.35*	.19	09	30	05	08	.29	02	32*	.28	01	32*	55***	.11	.72***	87***	.11	-

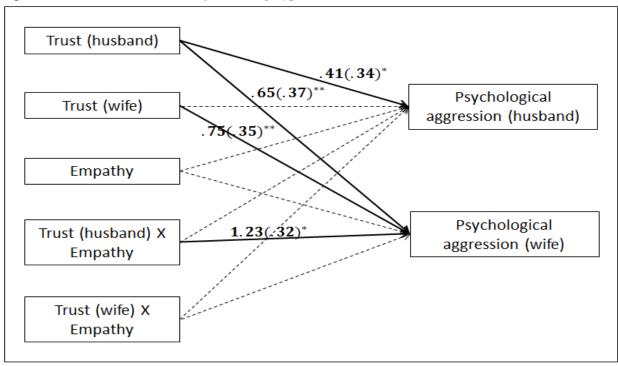
Note. F = Female, M = Male, RS = Relationship Satisfaction, PA = Psychological Aggression; *p < .05 **p < .01 ***p < .001; changes in RS and PA are the outcomes of the study.

Figure 3. SEM—APIM Model 1for testing hypotheses 1, 3, and 6



Note. ^{+}p < .10; the outcome is the *change* score for relationship satisfaction.

Figure 4. SEM—APIM Model 2 for testing hypotheses 1, 3, and 6



Note. *p < .05 **p < .01; the outcome is the *change* score for psychological aggression.

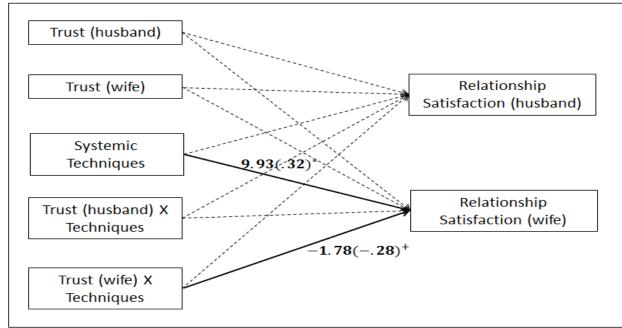


Figure 5. SEM—APIM Model 3 for testing hypotheses 1, 4, and 7

Note. $^{+}p < .10 ^{*}p < .05$; the outcome is the *change* score for relationship satisfaction.

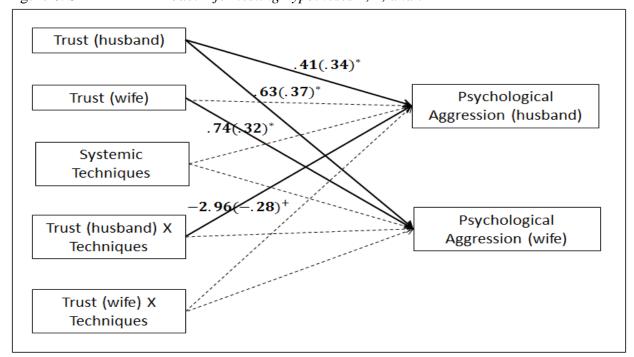


Figure 6. SEM—APIM Model 4 for testing hypotheses 1, 4, and 7

Note. $^{+}p < .10 ^{*}p < .05$; the outcome is the *change* score for psychological aggression.

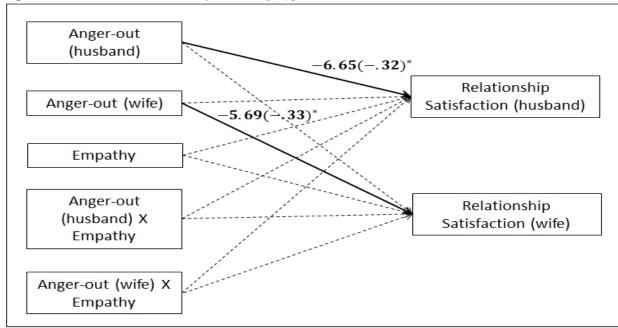


Figure 7. SEM—APIM Model 5 for testing hypotheses 2, 3, and 8

Note. *p < .05; the outcome is the *change* score for relationship satisfaction.

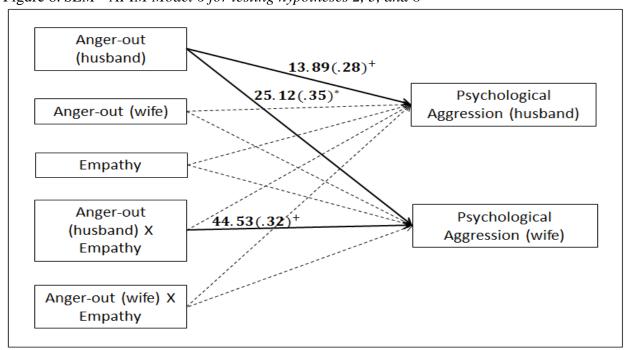


Figure 8. SEM—APIM Model 6 for testing hypotheses 2, 3, and 8

Note. ^{+}p < .10 $^{*}p$ < .05; the outcome is the *change* score for psychological aggression.

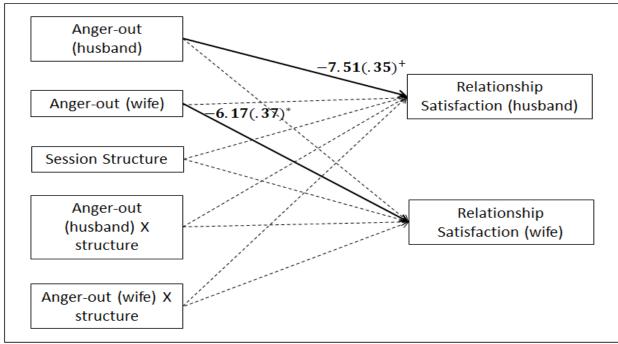


Figure 9. SEM—APIM Model 7for testing hypotheses 2, 5, and 9

Note. $^{+}p < .10^{*}p < .05$; the outcome is the *change* score for relationship satisfaction.

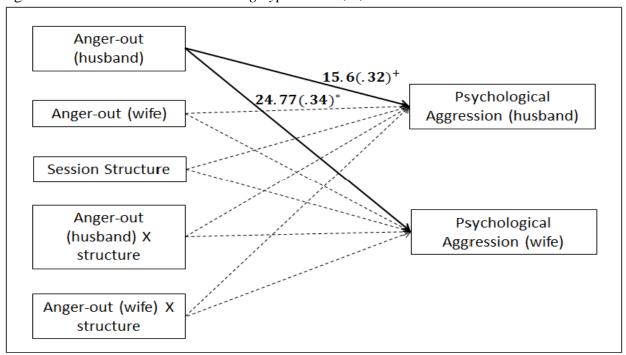


Figure 10. SEM—APIM Model 8 testing hypotheses 2, 5, and 9

Note. $^+p < .10 ^*p < .05$; the outcome is the *change* score for psychological aggression.

between husband trust and wife psychological aggression depends on the level of therapist empathy. Wives' low trust in their husbands also predicted a greater decrease in their own psychological aggression (unstandardized coefficient (standardized coefficient) = .75 (.35) and .74 (.32), p < .01 and .05, in model 2 and 4, respectively). However, in models 2 and 4, partner effects from wife to husband were not found.

Hypothesis 2: *Poorer client anger management in the form of higher venting of anger will predict less positive change in relationship satisfaction and psychological aggression.* This hypothesis was largely supported. In model 5 (Figure 7) and model 7 (Figure 9), there were male and female actor effects. Specifically, higher venting of anger of husbands and wives predicted less positive change in their own relationship satisfaction (male actor effect in model 5: unstandardized coefficient (standardized coefficient) = -6.65 (-.32), p < .05; male actor effect in model 7: unstandardized coefficient (standardized coefficient) = -7.51 (-.35), p = .05; female actor effect in model 5: unstandardized coefficient (standardized coefficient) = -5.69 (-.33), p < .05; female actor effect in model 7: standardized coefficient = -6.17 (-.37), p < .05).

In model 6 (Figure 8) and model 8 (Figure 10), there were non-significant trends for actor effects. Husbands' higher venting of anger almost significantly predicted less positive change in their own psychological aggression (in model 6: unstandardized coefficient (standardized coefficient) = 13.89 (.28), p = .07; in model 8: unstandardized coefficient (standardized coefficient) = 15.6 (.32), p = .05). Also, in models 6 and 8, male-to-female partner effects were detected. Male partners' outward expression of anger significantly predicted less positive change in their female partners' psychological aggression [model 6: unstandardized coefficient (standardized coefficient) = 25.12 (.35), p < .05; model 8: unstandardized coefficient

(standardized coefficient) = 24.77 (.34), p < .05]. Similar to the findings for hypothesis 1, no female-to-male partner effects were found for hypothesis 2.

The following three hypotheses are related to the main effects of therapist common factors on therapy outcomes:

Hypothesis 3: *Higher levels of therapist empathy will predict positive change in relationship satisfaction and psychological aggression.* This hypothesis was not supported. Models 1 (Figure 3), 2 (Figure 4), 5 (Figure 7), and 6 (Figure 8) tested the main effect of empathy on therapy outcomes. Only in model 1 the main effect was marginally significant. Higher levels of therapist empathy showed a non-significant trend toward predicting more positive change in females' relationship satisfaction [unstandardized coefficient (standardized coefficient) = 2.46 (.31), p = .07]. In the other models, the hypothesized associations between therapist empathy and changes in partners' relationship satisfaction were not significant.

Hypothesis 4: *Higher levels of therapist use of systemic techniques will predict positive change in relationship satisfaction and psychological aggression*. This hypothesis was partially supported. In model 3 (Figure 5), therapist use of systemic techniques significantly predicted more positive change in female relationship satisfaction (unstandardized coefficient (standardized coefficient) = 9.93 (.32), p < .05). However, in model 4 (Figure 6), therapist systemic techniques did not predict change in psychological aggression by either partner.

Hypothesis 5: *Higher levels of session structure will predict positive change in relationship* satisfaction and psychological aggression. This hypothesis was not supported. In model 7 (Figure 9) and model 8 (Figure 10), therapists' use of session structure did not predict change in partners' relationship satisfaction or psychological aggression.

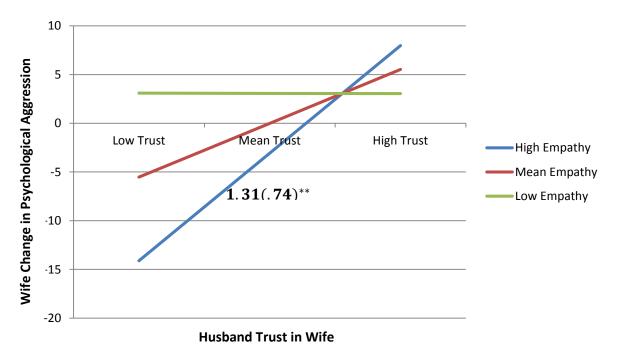
The following hypotheses relate to the interaction effect between client common factors and therapist common factors on treatment outcomes:

Hypothesis 6: For couples who work with the therapists showing higher levels of empathy, the association between low level of trust and less positive change in therapy outcomes for relationship satisfaction and psychological aggression will be weaker. This hypothesis was partially supported. In model 1 (Figure 3), there was no moderating effect of empathy on the association between trust and relationship satisfaction. In model 2 (Figure 4), there was a significant interaction effect between client dyadic trust and therapist empathy. Therapist empathy modified the effect of husbands' trust on the change in their wives' psychological aggression (unstandardized coefficient (standardized coefficient) = 1.23 (.32), p = < .05). Plotting of the interaction was performed to improve understanding of its meaning (Aiken & West, 1991). The original regression equation was restructured into the equation 1 below through simple algebra to state the regression of Y (wife change in psychological aggression) on X₁ (husband trust) at levels of X₂ (therapist empathy). The relationship between husband trust and wife psychological aggression was examined at three levels of therapist empathy: one standard deviation above the mean, the mean, and one standard deviation below the mean, as suggested by Cohen et al. (2003). Figure 11 shows that when working with therapists showing higher empathy (operationally defined as using reflective statements), wives whose husbands had reported lower trust in them showed greater decreases in their psychological aggression.

Following Aiken and West (1991), simple slope analysis was conducted. The simple slope for the regression of wife psychological aggression on husband trust at higher empathy (one standard deviation above the mean) was significantly different from zero (unstandardized coefficient (standardized coefficient) = 1.31 (.74), p < .01). That is, at higher empathy, lower

husband pretreatment trust in wife significantly predicted more positive change in wife psychological aggression. However, at lower empathy (one standard deviation below the mean)

Figure 11 Interaction effect of husband trust and therapist empathy on wife psychological aggression



husband trust in wife did not significantly predict change in wife-reported psychological aggression. Put another way, the partner effect of husband trust in their wife on wife psychological aggression was significant only when couples worked with therapists who showed a higher level of empathy.

The hypothesis 6 assumed a positive moderating role of higher empathy in the association between trust and change in outcome. The finding shown in Figure 11 partially supported the hypothesis in the sense that higher empathy modified the association between trust and change in psychological aggression in a positive direction, particularly for wives whose husbands reported lower levels of trust at pretreatment.

(Equation 1)
$$Y = (b_1 + b_3 X_2) X_1 + b_2 X_2$$

Hypothesis 7: For couples who work with therapists showing greater use of systemic techniques, the association between low level of trust and less positive change in therapy outcomes for relationship satisfaction and psychological aggression will be weaker. This hypothesis was not supported. In model 3 (Figure 5), an almost significant interaction effect between female trust and systemic technique on female relationship satisfaction was found (unstandardized coefficient (standardized coefficient) = -1.78 (-.28), p < .06). In model 4 (Figure 6), the interaction effect between husband trust and therapist use of systemic techniques on husband psychological aggression was close to significant [unstandardized coefficient (standardized coefficient) = -2.96 (-.28), p < .06]. Even though the interaction effects were marginally significant and thus did not support the hypothesis, the effects were explored further by plotting the interaction pattern. Simple slope analyses of model 3 indicated that only at a lower level of therapist use of systemic techniques, the slope was almost significantly different from zero (unstandardized coefficient (standardized coefficient) = .31 (.50), p < .06) (Figure 12). When working with therapists showing a lower level of use of systemically-based techniques, wives who had reported lower trust in their husbands benefitted from the treatment less than wives with higher trust in their husbands. However, such an association was not found when working with therapists with mean or higher levels of use of systemic techniques, which indicates a moderating effect of therapist use of systemic techniques.

Simple slope analyses of model 4 (Figure 13) showed that only when working with therapists showing lower use of systemic techniques, husbands with lower trust in their wives benefitted from the treatment more than husbands with higher trust in their wives in terms of psychological aggression(unstandardized coefficient (standardized coefficient) = .80 (.66), p < .01) (Figure 13). As shown in Figure 13, with lower use of systemic techniques, while lower

Figure 12. Interaction effect of wife trust and systemic technique on wife relationship satisfaction

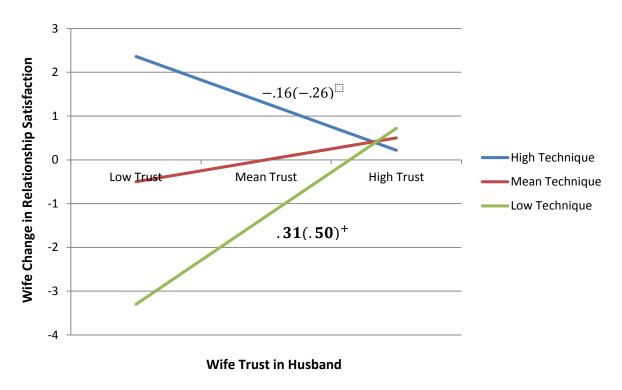
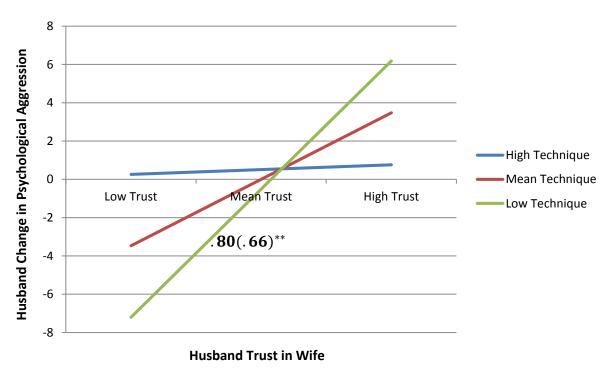


Figure 13. Interaction effect of husband trust and systemic technique on husband psychological aggression

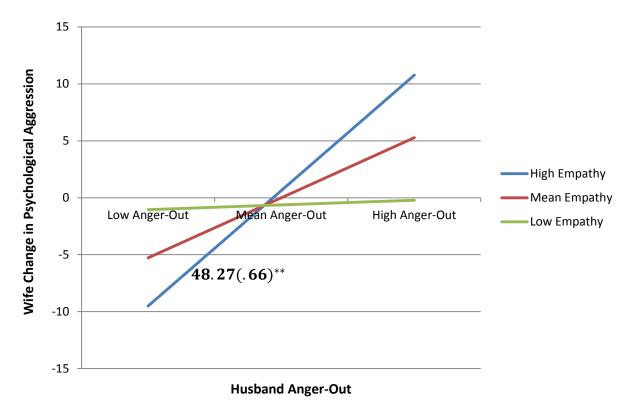


trust husbands benefit from the treatment more than their counterparts exposed to higher therapist use of systemic techniques, higher trust husbands benefit less than their counterparts from exposure to a higher level of systemic techniques.

The hypothesis 7 expected that systemic techniques would change the association between trust and outcome in a positive way. The findings did not support the hypothesis. **Hypothesis 8**: For couples who work with therapists showing higher levels of empathy, the association between greater venting of anger and less positive change in therapy outcomes for relationship satisfaction and psychological aggression will be weaker. This hypothesis was not supported. In model 6 (Figure 8), empathy modified the relationship of husbands' venting of anger to their wives' change in psychological aggression at the margin of significance (unstandardized coefficient (standardized coefficient) = 44.53 (.32), p < .06). However, in model 5 (Figure 7), a moderating effect of empathy was not detected. Simple slope analyses for model 6 (Figure 14) indicated that at a higher level of empathy the effect of husband anger-out on wife psychological aggression was significant (unstandardized coefficient (standard coefficient) = 48.27 (.66), p < .01). Higher therapist empathy intensified the harmful effect of husbands' higher anger-out on wives' psychological aggression. However, at the same time, higher empathy amplified the beneficial effect of husbands' lower anger-out on their wives' psychological aggression. That is, higher empathy operated in both positive and negative ways.

The hypothesis assumed a positive modifying role of higher empathy in the association between anger-out and change in psychological aggression. The findings did not support the hypothesis.

Figure 14. Interaction effect of husband anger-out and empathy on wife psychological aggression



Hypothesis 9: For couples who work with therapists using higher levels of session structure, the association between greater venting of anger and less positive change in the therapy outcomes for relationship satisfaction and psychological aggression will be weaker. This hypothesis was not supported. In both model 7 (Figure 9) and model 8 (Figure 10), session structure did not moderate between level of client anger-out and therapy outcomes (relationship satisfaction and psychological aggression).

Table 7 provides a summary regarding the findings of the hypotheses tests.

Table 7. Summary of hypotheses tests

Hypothesis	Type of Common Factors	Predictor of Outcome	Result		
1	Client	Trust	Not Supported		
2	Client	Anger-Out	Supported		
3	Therapist	Empathy	Not Supported		
4	Therapist	Systemic Techniques	Partially Supported		
5	Therapist	Session Structure	Not Supported		
6	Client x Therapist	Trust x Empathy	Partially Supported		
7	Client x Therapist	Trust x Systemic Techniques	Not Supported		
8	Client x Therapist	Anger-Out x Empathy	Not Supported		
9	Client x Therapist	Anger-Out x Session Structure	Not Supported		

Note. The outcome indices were change scores for relationship satisfaction and psychological aggression.

Chapter 5: Discussion

Descriptive Statistics and Overall Change in Outcome

Regarding predictors, wives showed significantly higher venting of anger than husbands at pretreatment assessment. This is consistent with Lafontaine and Lussier's (2005) study with a community sample, which used the same measure of anger expression as that of the present study (STAXI) and reported that women showed significantly higher scores than men on the anger-out subscale. Unlike anger-out, however, there was no gender difference in dyadic trust.

Regarding outcome variables, husbands reported higher relationship satisfaction than wives at pretreatment. This may mean that therapy may be initiated primarily by wives rather than husbands, which may reflect lower levels of initial motivation for therapy and expectations for benefits of therapy among men. However, although husbands reported higher levels of relationship satisfaction before treatment, they showed significantly less positive change in relationship satisfaction over the course of therapy than wives did. Accordingly, in the present study, it is important to identify factors that account for the less positive therapeutic change in male relationship satisfaction.

There were no significant gender differences in frequency of psychological aggression of both pretreatment and posttreatment. This shows that unlike intimate terrorism, psychological aggression is enacted by both genders to a similar degree, thus supporting conjoint couple therapy as an appropriate intervention modality for partner aggression.

There also were no gender differences in change in psychological aggression over the course of therapy, which is inconsistent with the gender differences detected in change in relationship satisfaction. However, given that different outcomes reflect different aspects of functioning in the couple relationship, such inconsistency is certainly possible. Therapy may

change some aspects, but not other aspects of couple relationships, and this is a reason why researchers use multiple outcome measures. In the present study, the inconsistency may indicate that partners' cognitive and affective evaluations of their relationships did not change as much as did their behavior, particularly for male partners. The standard 10 sessions may not have been a sufficient period for any behavior changes to extend to changes in the more global outcome of relationship satisfaction that involves both emotional and cognitive evaluations of the relationship.

The paired-samples *t* tests shown in Table 4 also demonstrated that females benefitted from therapy to a significant degree. However, males benefitted from therapy regarding improvement in psychological aggression to a lesser degree than females and did not benefit regarding relationship satisfaction, which is considered a more global and ultimate goal of couple therapy. Overall, research in individual psychotherapy has reported that both genders benefit from psychotherapy (Owen, Wong, and Rodolfa, 2009). However, the present study shows such benefit is not guaranteed in couple therapy for partner aggression. The gender differences indicate the importance of identifying gender-specific predictors of outcome.

However, note that in Evans' (2011) study that used exactly the same sample as used in the present study and assessed relationship satisfaction by using one item from the DAS, clients benefitted from therapy regardless of gender, in terms of relationship satisfaction. Thus, such gender differences in outcome should be considered with caution. However, despite the gender disparity in change in relationship satisfaction, the present study demonstrates that conjoint couple therapy evidently changes at least psychological aggression. Whether psychological aggression is assessed with the Multidimensional Measure of Emotional Abuse scale (Murphy & Hoover, 2001) in Evans's study (2011) or the CTS2 in the present study, the findings support

prior literature indicating that couple therapy has developed as a feasible treatment modality for partner aggression (Stith, McCollum, Amanor-Boadu, & Smith, 2012).

Therapists exhibited a higher level of empathy in session four. The mean was 3.28 on the scale having a maximum level of 4, meaning that therapists used reflective statements between *quite a bit* (3 point of 4) and *very much* (4 point of 4) (SD = .52). Therapists also used a moderate level of systemically-based techniques, with a mean of 2.72 between *moderately* (2) and *quite a bit* (3) (SD = .37). They also *moderately* to *quite a bit* structured session four (M = 2.77, SD = .52).

No instances of the possible minimum rating of zero on the scale (*not at all* displaying the behavior in session) and the relatively low standard deviations indicated that empathy, use of systemic techniques, and use of session structure do constitute observable therapist common factors as clinicians intervene in treating couples with partner aggression, regardless of the therapists' theoretical orientations. In particular, therapists' use of reflective statements was observed very frequently in sessions, which is surprising given that not all couple therapy models clearly articulate the importance of empathy in their theoretical conceptualizations.

Bivariate Associations among Variables

Although correlation coefficients cannot fully reflect actual relationships between variables in reality, because numerous intertwined factors simultaneously operate, bivariate correlations show a basic linear association between two variables. Here, some correlations that seem noteworthy among those presented in Table 5 are discussed.

First, the moderate correlation found between partners' levels of trust seems reasonable in that dyadic trust is conceptually reflective of the long-term quality of a couple relationship.

However, the moderate level of the correlation shows that partners' levels of trust are not

necessarily reciprocal. The two individuals may differ in their actual levels of trustworthy behavior, and the two partners may differ in their personal evaluations of each other's behavior as trustworthy.

The correlation between partners' levels of vented anger (anger-out) was not significant. This may reflect that anger-out has a dispositional quality, as it was originally conceptualized by Spielberger and his colleagues (Spielberger & Sydeman, 1994). Even among couples involved in partner aggression, partners do not necessarily have equivalent levels of a disposition to vent anger. Thus, therapists should not automatically assume that both partners have a personality issue with anger expression, or that they routinely reciprocate each other's venting. The couple's physical and/or psychological aggression may be attributed to destructive interactional cycles, rather than personal attributes.

Overall, partners' levels of trust were significantly correlated with their pretreatment relationship satisfaction, which is consistent with a previous study (Campbell et al., 2010). This reflects the status of trust as an integral factor in the couple relationship. The literature has indicated that trust operates at various levels in couples' lives, specifically, at cognitive (Rempel, Ross, & Holmes, 2001), emotional and physical (Schneider et al., 2011), and behavioral levels (Campbell et al., 2010). Such a global influence of trust on couple relationships may be responsible for the strong correlation found between relationship satisfaction and trust in this study.

Female partners' anger-out was correlated with their own but not their husbands' pretreatment marital satisfaction. Male partners' anger-out was not correlated with either their own or their wives' pretreatment relationship satisfaction. These findings are inconsistent with Wachs and Cordova's (2007) finding that anger-out was negatively associated with global

marital quality measured with the DAS. However, the sample for their study was community couples who on average were happily married; thus they are different from the sample used in the present study involving partner aggression.

Females' and males' trust was negatively associated with their own and their partners' pretreatment psychological aggression. The present study employed trust as a relevant client factor to be tested regarding its role in therapy process based on the theoretical assumption that partner aggression may damage dyadic trust between partners. Such an assumption was supported through the strong negative correlations between trust and the frequency of psychological aggression. However, the correlation between female trust and their psychological aggression (r = -.62) was higher than that between male trust and their psychological aggression (r = -.37). Also, the correlation between female trust and male pretreatment psychological aggression (r = -.56) was higher than that between male trust and female pretreatment psychological aggression (r = -.39). Furthermore, only female trust was correlated with male posttreatment psychological aggression. Overall, such correlations indicate that it is whether women trust their partners that is more related to the incidence of partner aggression enacted by both genders, which is inconsistent with Sanford's study (2005) that found that female partners' anger-inducing cognitions operate at a more specific-context level, whereas male partners' anger-inducing cognitions operate at a more global level. However, Sanford's study involved a community sample of married couples, whose characteristics may be different from the couples examined in the current study.

Female and male pretreatment psychological aggression was not significantly correlated with their own and their partners' pretreatment relationship satisfaction, which is not in agreement with findings from Sagrestano, Heavey, and Christensen's (1999) study that found a

significant correlation between male marital satisfaction assessed with the DAS and male verbal aggression measured with the CTS. This indicates that higher levels of frequency of psychological aggression do not necessarily reflect lower levels of relationship satisfaction.

However, the lack of such a relationship in the present study may be due to the characteristics of the sample. Because the present couples were distressed enough to seek professional help, their overall level of relationship satisfaction is assumed to be lower on average than that among community couples. Also, they experienced at least one instance of physical and/or psychological aggression during the previous four months. Thus, to them, who all have already been exposed to conflict involving aggressive behavior, relative differences in the frequency of aggression itself may not influence their overall evaluation of their relationship much.

Interestingly, only female, not male, venting of anger (anger-out) was correlated with their own pretreatment psychological aggression. Also, female and male anger-out was not associated with their partners' psychological aggression. The finding that anger-out was associated with psychological aggression only for female partners was previously reported in a study with a randomly selected community sample (Lafontaine & Lussier, 2005). However, such an unexpectedly moderate (women) or non-existent (men) relationship between venting of anger and perpetration of psychological aggression changed at posttreatment. Women's anger-out was strongly correlated with their own and their partners' posttreatment psychological aggression. Perhaps therapy removed the occurrence of psychological aggression attributable to reciprocal, negatively escalating interactions, not to partners' personal dispositions toward venting of anger. As seen in the low correlation, wives' anger-out and husbands' anger-out levels do not match. Thus, their similar level of psychological aggression indicated by the strong positive correlation between partners at both pretreatment and posttreament may be because of negative reciprocity,

a pattern in which one partner's negative action increases the probability that the other partner will respond negatively, which is a risk factor for partner aggression (Cordova et al., 1993). However, if couple therapy had changed the negative reciprocal interaction, only the psychological aggression that was caused by dispositional anger expression may have remained, finally showing a significant correlation between anger-out and posttreatment psychological aggression.

Female and male pretreatment relationship satisfaction was positively correlated with their own and their partners' posttreatment relationship satisfaction. That is, their initial relative levels of relationship satisfaction did not dramatically change during therapy. For example, if a female partner's relationship satisfaction was higher at pretreatment than another female partner's satisfaction, her posttreatment relationship satisfaction was also likely to be higher than the other female partner's posttreatment relationship satisfaction. Similarly, female and male pretreatment level of psychological aggression were positively associated with their own and their partners' posttreatment psychological aggression. However, among both females and males, and both relationship satisfaction and psychological aggression, pretreatment scores were strongly negatively correlated with their change on those variables. Specifically, if some partners showed relatively higher levels of relationship satisfaction at pretreatment, their change was relatively small. Similarly, if some partners showed relatively lower levels of psychological aggression at pretreatment, their change was relatively small.

Combining the positive relationships between pretreatment and posttreatment levels on the variables and the negative relationship between pretreatment and change through therapy, it may be suggested that even though those individuals who have relatively negative characteristics on the outcome measures at pretreatment benefitted more from the therapy, the change did not compensate for the initial *relative* levels of those characteristics among the couples. This suggests that higher levels of change over the course of couple therapy do not necessarily indicate high levels of posttreatment scores on outcome variables – therapy helps, but only to some extent.

Lastly, the correlation matrix shows significant correlations between partners on the variables, particularly for dyadic trust and change in psychological aggression, whereas for anger-out and change in relationship satisfaction the correlations between partners were not significant. Such interdependence between partners as indicated by significant correlations for trust and for change in psychological aggression provides support for the use of the APIM approach in the present study, which takes into account non-independence between partners.

Findings from the Hypothesis Tests

In the present study, nine hypotheses were examined through eight APIM models. Before providing a general discussion of the overall pattern of findings, those regarding the nine hypotheses are discussed.

Hypothesis 1. A common factors paradigm has proposed that clients' attributes are one important type of factor responsible for therapeutic change. Previous studies also have identified predictors of couple therapy outcomes among clients' characteristics. The present study targeted couples that had experienced partner aggression and tested the hypotheses that trust and venting of anger, both of which seem theoretically relevant to partner aggression, would be predictors of therapy outcomes, specifically, change in relationship satisfaction and psychological aggression.

Regarding trust, in model 2, there was a male actor effect. Male partners' lower levels of trust predicted more positive change in male psychological aggression. In models 2 and 4, there were male-to-female partner effects in which male partners' lower levels of trust in their female

partners predicted more positive change by their partners in psychological aggression. There also were female actor effects in models 2 and 4. Wives' lower levels of trust in their husbands predicted a greater decrease in their own psychological aggression. However, female-to-male partner effects were not found in either model 2 or model 4. Such results did not support hypothesis 1, which predicted that partners with lower levels of trust in their partners would responded to the therapy more negatively than their counterparts.

Such main effects may indicate that overall, therapists succeeded in dealing with negative effects of lower levels of trust that theoretically were expected. In model 1 and 3, one cannot find any adverse effect of lower levels of trust on change in relationship satisfaction. For whatever reasons, it seems that therapists eliminated such effects. More surprisingly, in terms of psychological aggression, therapy brought more positive change to the partners with lower levels of trust beyond simply deleting some adverse effect of lower levels of trust.

Because the present study did not include mediator variables in the conceptual model, it is difficult to identify why such changes occurred. Instead, several possible speculations are suggested. First, it is conceivable that therapists heightened dyadic trust, which in turn reduced individuals' psychological aggression. However, if this is true, the question arises as to why trust did not predict change in relationship satisfaction, whereas both variables were correlated at pretreatment. Also, even if therapists succeeded in increasing partners' trust, that does not provide a reasonable answer to the question of *how* they increased the initially lower levels of trust.

Second, it may be possible that even though therapists did not heighten trust, they succeeded in blocking the negative effect of lower levels of trust on the outcome variables. For example, they may have reduced lower-trust partners' tendency to hesitate to initiate positive

caring behaviors. However, this does not explain why the reduction of the negative effect of low trust did not contribute to a positive change in relationship satisfaction, and how therapists converted the negative effect of lower levels of trust into a positive effect on change in psychological aggression.

It also can be speculated that whether therapists increased dyadic trust, blocked the negative effect of low trust, or both, partners with higher levels of trust and accordingly higher levels of relationship satisfaction and lower levels of psychological aggression before treatment may not have had enough room on the outcome measures to reflect their changes. That is, a ceiling effect may have occurred (Kazdin, 2003). For example, one standard deviation below the mean on the measure of psychological aggression is approximately a value of 2 and 1 of 200, the maximum score of the measurement, for females and males, respectively, thus providing room for changes of 2 and 1 units, which is much lower than the potential change in units available for their counterparts with higher levels of psychological aggression, who had room for change of 44 and 40 units. Or, it may reflect regression to the mean, which means that individuals who initially have statistically extreme values on a variable are regressed to the mean in their scores for their next assessment. If this is the case, it may be that the treatment successfully handled problems of individuals with lower levels of trust, and thus, even partners with lower levels of trust also benefitted from the treatment. However, due to the limit of the amount of change that can be achieved, it consequently appeared that partners with lower initial levels of trust responded to the therapy better than partners with higher levels of trust.

However, compared to psychological aggression, for the measure of relationship satisfaction there was more room, if not much, for change in scores of individuals who initially had higher levels of relationship satisfaction; specifically, 7 and 5 units for females and males,

respectively. Thus, even partners with higher levels of pretreatment relationship satisfaction may have been able to reflect their positive changes over the course of therapy. However, such a conjecture is based on the assumption that partners with higher levels of trust showed higher levels of relationship satisfaction and lower levels of psychological aggression at pretreatment based on the significant correlations that were found. However, since the correlations were moderate in magnitude, that assumption should be considered cautiously.

Alternatively, some characteristics of lower levels of trust may have driven individuals' change in psychological aggression but not in relationship satisfaction. For example, partners with lower levels of trust in their partner may have been more careful with their behavior toward their partners during the period of therapy, since they tend to have a negative expectancy that their own negative behavior toward their partner may be reciprocated by the partners, perhaps in the form of aggressive responses. Also, compared to partners with higher levels of trust, they may be more likely to think that the stability of their couple relationship is at risk, such that continuous aggressive behavior between partners could lead to severe consequences such as divorce.

Rempel, Ross, and Homes (2001) reported that couples with low trust, compared to those with moderate trust, exhibited a level of positive interactions during couple discussions similar to the degree of positive interactions shown by couples with high trust. However, their self-reports regarding their attributions about their partners' behavior were more negative than their expressed behavior. Rempel et al. (2001) interpreted the finding as suggesting that the individuals with lower trust wanted to avoid the risk of negative interactions with their partner that had contributed to forming their low trust in the partner. Similarly, in the present study, partners with lower levels of trust may have controlled their behavior more, particularly their

aggressive behavior. Also, since low trust is associated with high concealment and low emotional disclosure in general (Finkenauer et al., 2009; Uysal et al., 2012; Vinkers et al., 2011), couples with lower levels of trust may not have communicated with each other at a deeper level as much as couples with higher levels of trust do. When truthful communication is inhibited, polite and rather superficial behaviors may have been exchanged between partners, particularly in the period of therapy when therapists consistently express disapproval of psychological aggression. Such politeness may result in trust not being predictive of relationship satisfaction. As mentioned above, the positive effect of lower levels of trust on change in psychological aggression did not occur as well in the models predicting change in relationship satisfaction as the outcome variable. The lack of a significant bivariate correlation between change in relationship satisfaction and change in psychological aggression also supports the explanation that the two outcomes are relatively distinct and have different predictors. Although partners with lower levels of trust changed their aggressive behavior, they may have discounted the genuineness of such behavioral change, which may have interfered with achieving as strong an effect on relationship satisfaction there was on psychological aggression.

Hypothesis 2. The overall negative impact of venting of anger (anger-out) on outcomes of couple therapy occurred primarily in a form of actor effects. Higher venting of anger by males and females predicted less positive change in their *own* relationship satisfaction in models 5 and 7. This finding is similar to Guerrero et al.'s (2008) finding that in a community sample of married couples, higher levels of experienced anger in marital life was linked to lower levels of marital satisfaction, mediated by assertive behavior and aggressive behavior for women and only by aggressive behavior for men. Also, the current study's finding is also consistent with Baucom et al.'s (2009) two-year outcome study. In that study, wives' higher levels of encoded emotional

arousal longitudinally predicted clinically significant change based on partners' averaged couple DAS scores when the couples received traditional behavioral couple therapy and when they were moderately distressed at intake. The present study contributes to the literature in that it shows that venting of anger also negatively affects treatment for couples who have experienced mild to moderate physical aggression and/or psychological aggression.

As theoretically expected, the negative role of anger-out in treatment may be because venting of anger interferes with the progress in the couple relationship both in sessions and at home. If partners experience anger and continue to express the anger during sessions, such negative experiences may contribute to a negative expectancy that unlike the expectation for positive change that initially brought them to therapy, actual experiences in therapy will result in negative experiences for them. Such a negative expectancy may decrease their active engagement in therapy. Also, if they fail to regulate their anger and vent it at home, they may develop an expectancy that therapy is not useful for changing their behavior. Also, as the term sentiment override notes, negative emotional arousal may bias partners' cognitive processes and corresponding behavior, worsening the couple relationship.

In models 6 and 8, only male-to-female partner effects were found. Specifically, only males' venting of anger (anger-out) predicted their own (models 6 and 8) and their partners' (model 8) change in psychological aggression. The male-to-female partner effect is not consistent with findings from Baron et al.'s (2010) study involving a community sample of married couples. In that longitudinal study, only wives' anger predicted husbands' and wives' marital adjustment. Also, the findings from the current study are not in agreement with those from Schoebi's (2008) study conducted in Switzerland with a community sample of married couples. The APIM model of the Schoebi's (2008) study exhibited that wives' experience of

anger predicted change in husbands' later anger. However, in Julkunen et al.'s (2009) study in a cancer patient sample, only husbands' anger-out longitudinally predicted wives' worsened mental health, and the wives' anger-out predicted husbands' better mental health. However, the previous studies that found mixed findings about the transfer of anger between partners did not involve psychotherapy, and thus, strictly speaking, are not comparable to the present study.

For the male-to-female partner effects showing that therapist behaviors did not influence the negative effect of men's venting of anger on their own and their wives' perpetration of psychological aggression, one previous study may offer some relevant information. In Carrere et al.'s (2005) study involving married couples, anger dysregulation was associated with worse mental health (depression symptoms) only for wives and worse physical health only for husbands, which suggests males' propensity for somatization. The finding indicates that women who have difficulties in regulating anger are more likely to suffer from depression symptoms that are a risk factor for psychological aggression (Beach, Dreifuss, Franklin, Kamen, & Gabriel, 2008; Taft et al., 2006). Because couple therapy has been demonstrated to decrease depression symptoms across various therapy approaches (Beach et al., 2008), perhaps couple therapy in the present study indirectly reduced the effect of female venting of anger to some degree via decreases in depression symptoms that were associated with venting. However, since the negative effects of women's anger-out were still found in models 5 and 7 where the outcome index was change in relationship satisfaction, that interpretation should be made with caution. Directly including partners' levels of depression symptoms in the conceptual models along with anger venting in predicting therapy outcomes would enhance our understanding of therapy process.

Overall, the present study shows that the tendency to vent anger is a very important client factor in conjoint couple therapy for partner aggression that can interfere with progress in both improving relationship satisfaction and psychological aggression. This may have been especially the case because not all therapy models used in the present study contain an anger-management component, and thus anger venting may have gone unchecked to a large degree for many of the treated couples. Although cognitive-behavioral couple therapy that was used for half of the clients in the present study includes an anger-management component, other couple and family therapy models usually do not include that component.

Instead of directly dealing with anger, therapy also can intervene with predictors of anger venting, because reduction of risk factors for venting may result in better anger management. However, neither do all therapy models include components that target predictors of anger venting found in the literature, such as childhood experience of family violence (Wolf & Foshee, 2003), perceived inequity in couple relationships (Guerrero, 1994), insecure attachment styles (Guerrero et al., 2009; Lafontaine & Lussier, 2005), and mindfulness (Cordova, 2007), which should be included in the future in therapy models when treating couples involved in partner aggression.

Also, studies of moderators of the association between anger and aggressive behavior have as yet been rare. Although Bodenmann et al. (2010) examined the moderating effect of coping strategies on the relationship between experienced anger and verbal aggression, they did not find such effect, but there has been little other research on potential moderators. Thus, at this point, research-based practitioners cannot know which factors they should control to modify the association between anger and partner aggression. Lastly, recently it was found that genetic factors are related to venting of anger (Richter et al., 2011). Such biological factors are much

harder for couple and family therapists to deal with. Given these limitations in current knowledge, the present study clearly points to the need for discovering therapeutic strategies with which therapists can reduce negative effects of anger venting in the therapy process. Hypothesis 3. Higher levels of therapist empathy did not significantly predict more positive responses of wives to therapy in terms of relationship satisfaction in model 1, which included trust, empathy, and their interactions as predictors of change in relationship satisfaction, but not in other models. Empathy is usually viewed in such intervention-centered approaches as cognitive-behavioral couple therapy as important because it creates a context for effective intervention. However, in some therapy approaches based on the experiential tradition, such as, EFT, empathy becomes a key focus for change rather than a general facilitative factor (Bohart, Elliott, Greenberg, & Watson, 2002). However, regardless of how therapy models view empathy, in general, empathy did not operate as a common factor contributing to outcomes of couple therapy for partner aggression. This finding is not consistent with Bohart et al.'s (2002) metaanalysis that found that in general, regardless of theoretical orientation, empathy is correlated with outcome, and even in cognitive-behavioral therapy in which empathy is not held to be a key change process, empathy actually was more important than in some other models, as indicated by higher correlations with outcome than for client-centered and psychodynamic therapy.

The importance of empathy has been demonstrated in some reviews or meta-analyses (Ackerman & Hilsenroth, 2003; Bohart et al., 2002; Duan & Hill, 1996) and in qualitative research (Littauer et al., 2005). However, those studies have been based on individual psychotherapy and some group therapy. The present study contributes to knowledge in that it addressed empathy in the couple and family therapy field, although the study did not find a

significant main effect for empathy. However, the main effect of empathy was marginally significant, and the test of the effect should be replicated in future studies.

The way that empathy was defined in the present study should be noted. Due to the complex, multidimensional nature of empathy, researchers have suggested that researchers should be clear about how they conceptually and operationally defined empathy. Regarding the conceptual definition in the present study, both feelings and thoughts of clients are objects of the therapist's empathy. However, the present study focused on the therapist's understanding of the client's feelings and thoughts, not feeling them. Specifically, empathy was operationally defined as the therapist's use of reflective statements in session, which were rated by independent observers. Other possible ways of expressing empathy, such as use of empathic questions and nonverbal behavior (i.e., empathic eye contact), were not rated. Such a narrow focus on a particular type of response may limit the present study, in that other conceptions of empathy such as an empathic attitude emphasized in client-centered therapy was not assessed, and therefore the variability of rated empathic behavior was reduced. However, this narrow focus also is useful, in that it clearly shows how a specific, distinctive form of therapist behavior operates in relation to therapy outcomes, and thus the present results can help therapists determine whether the specific behavior should be included in their practice or not. Also, if one uses only measures of client ratings of therapist empathy, even if those perceptions predict outcome, one cannot know what actual behaviors of the therapist yielded those perceptions of empathy. As reported in Bohart et al.'s (2002) the review, observer-rated empathy that usually measures empathic reflections predicts therapeutic outcome as much as client-rated empathy does.

Hypothesis 4. Higher levels of use of systemic techniques predicted more positive change in women's relationship satisfaction in model 3. In model 4, the main effect of use of systemic

techniques was not found. The examination of systemically-based techniques is important in the couple and family therapy field, because the field has been based on systems theory since its emergence. Viewing presenting problems with a lens of systems and intervening in repetitive interactions among family members in family systems made the field distinct from individual psychotherapy. Thus, responding to the common factors paradigm of individual psychotherapy, Sprenkle et al. (2009) suggested the systemic approach as involving common factors unique to couple and family therapy. The present study partially demonstrated that some portion of change in couple therapy for partner aggression comes from therapists' use of systemic techniques.

Effects of therapists' use of systemic techniques presumably come from changes in partners' conceptualization of their relationship problems, such that although they have attributed problems in their relationship to the other person, through the systemic lens they start to recognize that the problems have developed and been maintained through a process of mutual influence between partners, which of course includes some degree of their own responsibility. Once they realize the reciprocal cycle and comply with the therapist's efforts to disrupt the dysfunctional relational patterns, their interactions may change in a positive direction, which in turn may increase their satisfaction with relationship.

However, there was a gender difference. It was only female partners who were influenced by the use of systemic techniques. There are alternative explanations for this gender difference. First, according to Burnett's (1987) study of gender differences in relationship reflection, women were more likely to enjoy analyzing their personal relationship than were men. Also, Sullivan and Baucom (2005) reported that female partners processed information more frequently and skillfully in terms of dyadic patterns in their relationship than male partners did. If women care

about information regarding the relationship, they are more likely to heed, remember, and reflect such information from the therapist.

However, an alternative explanation is that because partners' higher levels of relational thinking are associated with the other partner's relationship satisfaction, not their own (Sullivan & Baucom, 2005), higher levels of therapist use of systemic techniques may have improved husbands' systemic thinking, which in turn may have increased their wives' relationship satisfaction. Furthermore, since women in general are more accustomed to think in relational terms than men, therapists' efforts to enhance systemic thinking may not have been as influential for women as for men.

Hypothesis 5. The present study found that there was no main effect of therapist use of session structure on either change in relationship satisfaction or psychological aggression. Even though session structure is not a common factor that has been examined frequently in relation to therapeutic change, a few studies, both quantitative and qualitative, reported a positive effect of appropriate structuring of session on therapist-client working alliance and therapy outcome (Ackerman & Hilsenroth, 2001; David & Piercy, 2007b; Green & Herget, 1991). However, the positive effect was not supported in the present study of couple therapy for partner aggression.

First, the finding may mean that session structure is not a necessary intervention to drive clients' change in outcome. Alternatively, it could be possible that novice therapists in the present study did not apply the skills in an effective way. Regarding session structure, it was the balance between *structure* and *flow* and the *context* of the structuring that master therapists are adept at maintaining (Davis & Piercy, 2007b). For example, Butler and Gardner (2003) suggested that structure is called for particularly when clients show inability to regulate their emotions. However, in some conditions deepening their inner emotions and helping them to

expressing strong hurt feelings may yield the other partner's constructive reactions (Lemay et al., 2012). In such a context where it is important to support the expression of emotions, if therapists disrupt the emotional reactions, although it may look effective to coders, in fact it may be not so. Particularly for the couples in the present sample who may have more difficulties in regulating their intensive emotion compared to non-aggressive couples, it may be how *effectively* therapists provide structure not how *frequently* they do it that is important in influencing progress in therapy.

Hypothesis 6. The hypothesis that high empathy will buffer the negative effect of low trust on outcomes was partially supported. In model 1, therapist empathy did not modify the association between trust and change in relationship satisfaction. That is, regardless of the degree of therapist empathy, trust did not predict change in relationship satisfaction. As discussed regarding hypothesis 1, the possible negative effect of lower levels of trust on change in relationship satisfaction seems to be removed by therapy through unknown mechanisms other than empathy, and couples with lower levels of trust benefitted from therapy as much as their counterparts with higher levels of trust. In model 1, empathy contributed to women's change in relationship satisfaction at a marginally significant level. Given the lack of an interaction effect, therapist empathy seemed to achieve such positive change by changing some other aspects of couple relationship other than dyadic trust.

In model 2, empathy changed the partner effect from male trust to female change in psychological aggression in a positive way. This might be because, as hypothesized, therapists' higher levels of empathic understanding of male partners with lower levels of trust may have corrected the male partners' negative expectancy that therapy will not be helpful because they

believed that wife would not change. As the male partners change their expectancy into a positive one that therapy may be helpful, they may actively participate in the therapy. Then, their female partners may also be motivated by the increased engagement of their husbands who initially did not want to visit the clinic. Especially, due to the lower levels of trust between partners, motivated female partners may become more alert with the incidence of psychological aggression, which may severely damage to their relationship given the past adverse experiences that contributed to form their lower levels of trust, thus consequently reducing their own psychological aggression. Overall, the finding of hypothesis 6 shows the positive role of empathy in the treatment process.

Hypothesis 7. The findings showed a marginally significant moderating effect of use of systemic techniques on the association between lower levels of trust and less positive change in relationship satisfaction. Through a systemic lens, perhaps wives have started to understand that their lower levels of trust are not a product of their husbands' unchangeable personality, but rather of reciprocal negative patterns between them, as evidenced in prior empirical studies (Miller, 2004; Shallcross & Simpson, 2012; Uysal et al., 2012). Such change in perspective may have formed new expectancy that change is possible by adjusting their interactional patterns, which in turn may have increased their involvement in therapy, finally leading to higher levels of change in relationship satisfaction.

However, systemic techniques function in a more complex way, particularly in model 4, in which outcome is measured in terms of change in psychological aggression. Perhaps when husbands slightly distrust in their wives and attribute such distrust to their wives' dispositional untrustworthiness instead of viewing it with a systems lens as a product of reciprocal negative interactions between partners, they may hold an expectancy that their selfish wives will respond

to them in an aggressive way, since their negativity is not changeable. Thus, they may want to avoid their interactions with their partners at home and/or may become more careful with their behavior in any interaction with their partners to minimize their wives' expected aggressive reactions, which may have reduced their psychological aggression. However, if they work with therapists who emphasize family systems concepts, they may have changed their views of their wives, such that it was the interactional cycles, not their wives' unchangeable personality, that have formed their distrust, and they also have contributed to the formation of the negative pattern. Then, they may have formed a more positive expectancy that positive change in interactions is possible if they themselves behave differently. This cognitive shift may have increased their engagement in couple conversations at home. However, due to some persistent risk factors, such as their tendency to vent anger, they sometimes might have failed to finish their conversation successfully, which may have led to less change in psychological aggression. If these conjectures are correct, the considerable decreases in psychological aggression among husbands with lower levels of trust may not mean much. In the long term, it may be possible that reduced psychological aggression that is not combined with a systemic perspective will regress. However, the present study did not provide follow-up data, and therefore the long-term effects cannot be examined.

A different phenomenon might have occurred among husbands who strongly trusted their wives. If they worked with therapists who *moderately* used systemic techniques (lower levels of systemic techniques), they may have attributed their trust in wife more to her stable personality than to their couple interactions. Since they trust in their wives and are dependent on them, they may have pursued their wives frequently. However, they may have often failed to change their habitual aggressive behavior towards their wives for some reasons, such as, their propensity of

personality, their mild aggressive behavior will not hurt their wives' caring for them. On the contrary, if they worked with therapists who used systemic techniques quite a bit (higher levels of systemic techniques) they may have begun to adopt the systemic thinking. Thus, they may have recognized well how much their behavior is important in determining the quality of couple interaction and relationship, which may have led them to be careful with their behavior in couple interactions at home, finally leading to more decreases in psychological aggression. Hypothesis 8. Out of four main effects tested for anger venting (anger-out) on the therapy outcomes, only one was marginally significantly modified by the level of therapist empathy. In model 6, empathy modified the association between male partners' anger vented outward and female partners' change in psychological aggression. However, the interaction effect was different from the hypothesis. At the higher level of empathy, the lower level of male anger venting predicted a greater decrease in their female partners' psychological aggression. But at the lower level of empathy, both the positive effect of the lower level of husbands' anger-out and the negative effect of their higher anger-out on their wives' change in psychological aggression that were found at the higher level of empathy were reduced.

venting of anger. Also, they may have had an expectancy that due to their wives' good

Possible explanations are as follows. When husbands who vent their anger between almost never and sometimes (the lower level) worked with therapists who showed a higher level of empathic understanding, they may have felt a sense of acceptance and positive regard, resulting in their engagement increasing. Then, the increased commitment of the husbands may also have motivated their wives' active engagement, finally reducing the wives' psychological aggression. However, when they worked with therapists with lower empathy, they may have engaged in therapy less than their counterparts who worked with highly empathic therapists.

However, if therapists with higher empathy worked with husbands who express higher anger outward, their frequent use of reflective statements may have been interpreted by partners as approving of the intense emotions and expression of them. In the very tolerant atmosphere of the session, the husbands may have told the therapists about aggressive interactions between partners, including their venting of anger, and the therapists even may have conveyed acceptance of such negative interactions by using empathy. Such "over-empathy" may have inadvertently reinforced the use of psychological aggression enacted by males, which, in turn, may have drawn their female partners' reciprocal aggressive responses. However, with lower empathy, anger and its aggressive expression by the husbands may not have been reinforced by the therapists. The finding that empathy does not always operate in a positive way is supported by some previous studies (Bohart et al., 2002). Overall, the findings suggest that therapists keep their empathy at higher level when working with husbands showing lower levels of venting of anger but keep their empathy at a moderate level and prevent over-empathy when working with husbands with higher levels of anger venting.

Hypothesis 9. Surprisingly, therapist degree of use of session-structure did not moderate the effect of anger venting on therapy outcomes. In other words, higher levels of venting of anger functioned negatively in relation to positive change in relationship satisfaction and psychological aggression regardless of how much therapists organized sessions to keep treatment constructive. Based on the findings, it is not clear whether therapists' controlling of overt conflict behaviors displayed by clients is interpreted by the clients as being effective or ineffective. For example, when clients express their anger in sessions, if therapists interrupt such behavior, the clients may interpret the therapists' behavior as intrusive and too controlling, rather than helpful. How clients

subjectively interpret the therapists' control of in-session-conflict may be clarified by qualitative studies.

Alternatively, the non-significant moderating effect of session structuring may be due to the variable being a composite variable that included behaviors other than control of conflict; namely, pacing and efficient use of time, opportunity for both members of couple to express concerns and goals, and therapist reinforcing of positive change, which do not seem to necessarily remove the negative effect of anger venting. If the control of conflict had been coded as a unique variable, the results for hypothesis 9 might have been different. However, in such case, because intensive display of conflict in sessions does not always occur within one session, coding only one session may be inappropriate for accurately assessing the control of conflict.

General Discussion

A few conjoint couple therapy models have proved to be efficacious in treating partner aggression (Heyman & Schlee, 2003; LaTaillade et al., 2006; Stith et al., 2004). However, little is known as to whether common factors also are involved in couple therapy process and outcome for partner aggression (Evans, 2011). The present study demonstrates that common factors as well as therapy models also contribute to therapeutic change, supporting studies of common factors in couple therapy for partner aggression.

Particularly, two client characteristics proved to be involved in therapy process. First, how much one partner trusts the other partner predicted change in psychological aggression. However, the direction differed from the hypothesis. Lower levels of trust predicted *higher* levels of change in psychological aggression. Also, only male-to-female partner effects were found. However, dyadic trust did not predict change in relationship satisfaction. Thus, the influence of trust on outcome is limited, given that relationship satisfaction is a more global,

eventual outcome, compared to psychological aggression. Secondly, higher levels of venting of anger predicted both lower levels of change in relationship satisfaction and psychological aggression, which shows notable negative roles of anger venting in couple therapy for partner aggression.

Surprisingly, only male-to-female partner effects occurred, which is theoretically and practically very important. Combined with the finding that male actor effects were detected several times, the results show that men's initial characteristics are more influential on therapy process in the treatment of partner aggression than are women's among couples that commonly exhibited mutual partner aggression. Female partners' change was dependent on their male partners' characteristics. However, male partners' therapeutic improvement did not rely on their female partners' attributes. Thus, modification of the influence of males' characteristics in a positive direction may be beneficial not only to males but also to their female partners. In contrast, male partners may not respond greatly to variation in women's characteristics.

The current study also shows that some types of therapist behaviors are commonly found in session regardless of therapists' theoretical conceptualizations. It seems self-evident that systemic techniques are found in the interventions of all of the therapists in this study, because the couple and family therapy field itself is based on systems theory. However, it is noteworthy that all of the therapists used empathy and session structure to varying degrees, given that not all theoretical orientations emphasize those types of behaviors. Although empathy originated from the client-centered therapy model, it now seems that empathy is understood as an essential general skill that therapists should commonly use regardless of their preferred models.

However, the present study indicated that the hypothesized positive effects of therapist common factors were limited. Only the use of systemic techniques was found to be helpful in

therapy outcome, particularly for women, whereas empathy and structuring of sessions did not predict therapy outcomes. The examination of main effects of therapist use of systemic techniques is particularly important in the field of couple and family therapy, because as mentioned above the field has developed based on systems theory. The finding showing some degree of positive influences of systemic techniques on couple therapy outcome empirically supports the usefulness of systems theory in treating couples. Also, in the tests of moderating effects, client common factors failed to modify the negative effects of client factors on therapy outcomes. Only therapist empathy significantly modified the negative effect of husbands' lower levels of trust on their wives' reduction in psychological aggression. Thus, it can be concluded that overall, client common factors were stronger predictors of therapy outcome compared to therapist common factors.

Additionally, the present study identified a number of predictors of female change in outcome, but few predictors of male change. For women, their own and their husbands' trust, their own and their husbands' anger-out, and therapist systemic techniques all predicted their change in outcome to varying degrees. However, for men, only their own trust and their own anger venting predicted their change in psychological aggression. Given that in general men, compared to women, benefitted less from the therapy particularly in terms of relationship satisfaction, it is important to identify factors that contribute to such outcomes, which turned out to be difficult in the present study. Some suggestions may come from predictors of women's change in relationship satisfaction. Therapist empathy and use of systemic techniques in general contributed only to women's, not men's, increases in relationship satisfaction. It is surprising that the therapist behaviors were not effective in increasing men's relationship satisfaction, given the important roles of those behaviors in psychotherapy, particularly in couple and family therapy.

The finding may suggest that couple and family therapy for partner aggression needs more strategies in order to have male partners also benefit from the therapy as much as do their female partners. However, it should be noted that most of the therapists in the current study were females. In Johnson and Caldwell's (2011) study, clients who were treated by therapists of the same gender indicated greater satisfaction with the therapeutic relationship. When considering the finding, gender match may become a possible factor explaining why women, compared to men, responded well to the therapy.

Lastly, the present study's findings suggest that social learning theory is a promising theoretical framework for understanding how common factors operate in the process of couple therapy. In particular, the present study focused on *expectancies*, one of the central concepts of the theory. The findings partially supported the concept of expectancy. For example, venting of anger was hypothesized to impede therapeutic process, because partners who vent anger or have been the target of vented anger from a partner during the period of therapy may learn from these distressing experiences that couple therapy that is intended to improve their relationship actually fails to be beneficial, or is even harmful. Such experiences may eventually decrease the individual's subsequent commitment to the therapy. Regarding the present findings, the tendency to vent anger predicted less positive therapeutic change, as hypothesized. However, because the current study did not directly measure changes in clients' expectancies, a more direct test of social learning theory will require further research assessing partners' expectancies regarding the likelihood that therapy will produce positive outcomes, and testing the degree to which change in expectancies mediates the relationship between client characteristics and therapy outcomes. Additionally, regarding learning through *modeling*, a core concept in social learning theory, not much is known about its role in couple therapy process. In the current study of couple therapy, it

is possible that clients may have learned through a modeling process over the course of therapy. For example, in the current study therapists' use of reflective statements was marginally significantly predictive of female partners' relationship satisfaction. It may be possible that when therapists modeled how to convey their understanding of partners in the form of reflective statements, the members of the couple may have learned how to use such behavior and reproduced it at home. However, the present study cannot examine the occurrence of modeling learning directly, as it was not assessed.

Clinical Implications

The current study has several clinical implications. First, when working with couples with mild to moderate physical aggression and/or psychological aggression, therapists need to consider not only their theoretical orientations but also common factors. Only referring to manuals/instructions of preferred theoretical approaches may lead therapists to fail to view the whole picture of the therapy process. Particularly, the present study suggests two client factors that should be assessed before treatment, namely, trust and a tendency to vent anger.

When partners show lower levels of trust, it provides therapists with the information that overall, the lower levels of trust may not do much harm to therapy process in terms of change in relationship satisfaction, presumably because some change mechanisms already existing in various couple and family therapy models prevent the negative effect of lower levels of trust.

It is useful to remember that partners with lower levels of trust may decrease their psychological aggression *more* than their counterparts. Therefore, in terms of change in psychological aggression, therapists might not be concerned about the negative effect of lower levels of trust. However, one note of caution tip needs to be considered. Although the present study indicated a positive main effect of husbands' lower initial levels of trust on their wives'

change in psychological aggression, that positive partner effect, as seen in Figure 11, occurred only when couples worked with therapists who exhibited higher levels of empathy. When couples worked with therapists who expressed lower levels of empathy, regardless of the level of husbands' trust, wives showed less reduction in psychological aggression. Therefore, if therapists are not adept at using reflective statements, they should improve their ability to properly understand and express clients' internal experiences. If they succeed in conveying such emotional and cognitive attunement, the positive partner effect of husbands' lower levels of trust on wives' greater improvement in psychological aggression is likely to occur.

Partners' levels of anger venting should be assessed at intake. Both men's and women's venting of anger may hinder therapeutic change in terms of both psychological aggression and relationship satisfaction. Since various couple and family therapy models seem to fail to completely prevent the negative effects of anger venting, therapists should adjust their treatment by including some components by which the tendency to vent anger can be handled. Therapists may intervene with several predictors of anger venting, such as childhood experiences of family violence (Wolf & Foshee, 2003), perceived inequity in the current couple relationship (Guerrero, 1994), insecure attachment styles (Guerrero et al., 2009; Lafontaine & Lussier, 2005), and mindfulness (Cordova, 2007). Particularly, because male partners' anger venting affects their female partners' outcome as well as their own, therapists need to devise some techniques to handle male partners' venting of anger.

One of the most important findings of the study was that only initial characteristics of the males predicted female partners' responses to the therapy, whereas female partners' characteristics did not influence male partners' responses to treatment. Hence, therapists who work with couples that are experiencing partner aggression should be sure to attend to husbands'

characteristics, at least their initial levels of trust and venting of anger. As described above, findings regarding interaction effects involving male-to-female partner effects have implications for guiding therapists' interventions. Specifically, therapists should adjust their level of empathy depending on male partners' initial levels of trust in order to facilitate female partners' reduction in psychological aggression via a male-to-female partner change process.

Lastly, therapists need to remember that male partners may benefit from couple therapy for partner aggression less than female partners do. Systemic techniques are less influential in producing males' therapeutic change than females' change, whereas empathy and structuring of sessions were unrelated to both male and female change. Thus, changing male partners' outcomes becomes particularly important, although at this point we do not know much about the factors that lead to males' changes. Therapists may need to make greater efforts to establish a good working alliance with male partners, presumably because they come to therapy with lower levels of motivation compared to their female partners, given that their initial relationship satisfaction is significantly higher than that of their partners.

The findings of this study also must be interpreted in the context of the composition of the therapeutic system that was examined, composed of four members – the two members of the couple and two co-therapists. In most cases, the system involved three females and one male, because most of the co-therapist teams consisted of two females. In that context, it is possible that when male partners with lower levels of motivation participated in the first session, they may have had a negative expectancy that they would not be understood by female therapists and will be isolated in therapy by the female majority group including their female partners and the two female therapists. This gender imbalance might have accounted for males being less influenced than females by their partners' characteristics. Consequently, it may be helpful if the

two female therapists directly address the issue of the gender imbalance during the first therapy session to reduce the likelihood that male partners will develop a negative expectancy regarding their needs being addressed in sessions. A good working alliance with male partners also may be beneficial in improving female partners' responses to the therapy, because female partners appear to be influenced by their male partners over the course of the therapy as seen in the male-to-female partner effects found in the current study.

Limitations of the Study

Several limitations of this study should be noted. First, although the current study applied a common factors paradigm to couple therapy, the study focused on a population of couples who have experienced psychological aggression and/or mild to moderate physical aggression and are committed to improving their relationships. Thus, the findings cannot be generalized to other generally distressed couples who have sought assistance at couple and family therapy clinics, nor to couples who have not sought treatment.

Second, therapist behaviors only were coded from session four of the ten sessions in the treatment protocol. Therapist behaviors that may have more influence on the level of clients' engagement by changing their expectancies about the usefulness of the therapy may be the ones that therapists use in the beginning period, that is, in sessions one and two. Given that therapist behaviors are not stable session by session as evidenced in a previous study (Gurman, 1973), behaviors observed in session four are not guaranteed to occur in other sessions. Thus, future studies need to consider coding therapist behaviors in multiple sessions.

Third, the present study was based on an assumption that those who enter therapy with higher levels of anger venting are likely to express their anger in session, which is not guaranteed. Also, items on the anger-out measure (STAXI) ask about behavioral tendencies in

general situations, not the situation specific to couple interactions. Thus, future studies may be able to adjust the measure items to fit the couple relationship and additionally use observational coding of clients' *in-session* venting of anger.

Fourth, the present study only used observer ratings of therapist behavior. Although observational coding techniques measure objective therapist behaviors, they cannot measure clients' perceptions of those therapist behaviors, which may be more influential influences on client change. Thus, future studies need to utilize both observer ratings and client ratings. Comparison of the two ratings also will be of interest.

Also, regarding therapist behavior, the ratings of therapist behavior were ratings of the co-therapists as a team, not of each therapist. Such coding approach cannot fully reflect behaviors of each co-therapist that at times, and the actions of the two therapists may be inconsistent to varying degrees. This is possibly one reason why there were fewer significant main effects for therapist common factors. Accordingly, future studies need to obtain ratings of each therapist and include the ratings in the analysis. Given that the therapists likely influence each other during sessions, their scores can be considered interdependent and could be analyzed within an APIM approach as well. However, the analysis would need to take into account the fact that most co-therapist pairs in this data set are same-sex and some are opposite-sex. Including the co-therapist dyad in the existing APIM model which already includes the couple dyad means that researchers would include two different types of dyads (couple dyad and therapist dyad) in a single model, which will be methodologically challenging, but theoretically and practically enlightening.

In addition, the present study did not include any mediator variables in the conceptual models, so that one cannot clarify the factors involved in the change process. For example, in

models 2 and 4, lower levels of trust predicted more positive change in psychological aggression. If the study had included change in trust as a mediator, it may have been clearer whether the change in psychological aggression was reflective of an actual change in dyadic trust. In this Discussion section, a variety of possible mediators were described, but at this point they are speculative. Accordingly, future studies need to employ some mediators, such as change in partners' expectancies about each other's behavior.

Furthermore, although the present study used *change* in criterion measures as the index of outcome, using posttreatment scores as the outcome indices is also possible, as used in other previous studies (e.g., Snyder et al., 1993). It may be useful to know when clients say, "we really benefitted from the therapy" what evidence they used to conclude so in general. Such processes may be scrutinized by qualitative studies. If clients believe that reaching a certain point is important when judging therapeutic success rather than how much they have changed, it may be useful to use posttreatment scores or the degree to which individuals' scores on measures move into the non-distressed range. Although most previous studies have used change in criterion variables as the outcome, and it is reasonable to use it as the outcome given that therapy is essentially about change, studies may use other indicators regarding outcome for a specific purpose. Clients' posttreatment satisfaction with therapy also may be a possible outcome.

Moreover, the present study analyzed each type of therapist behavior (e.g., empathy) as an independent variable. However, such an approach focuses solely on specific, different behaviors, rather than the therapist's overall intervention as a whole. Even if some therapists use a certain behavior frequently, they may not use other behaviors at all. Thus, future studies may use the total score by adding up the scores of the component behaviors as an indicator of therapist's overall intervention. The highest level of the total score may mean the therapist has

used all of the behaviors, namely, empathy, session structure, and systemic techniques, at higher levels.

The small sample size of 40 couples (80 individuals) also should be noted, since the small sample size leads to reduced statistical power. Accordingly, even though some hypotheses were actually correct, the present study may not have appropriately detect the significance. Although it is costly to gather multiple assessment dyadic data (pre- and posttreatment) and conducting observational coding, future studies need to involve more couples to enhance statistical confidence to detect actual significance of findings more sensitively.

Lastly, it is noteworthy that the current study showed several non-significant trends.

Although these trends have been reported both in the text and in figures, and more in-depth investigations were conducted for marginally significant interaction effects, such inclusion of non-significant trends is by nature explorative. Future studies should re-examined the marginally significant findings to determine their significance levels.

Conclusion

Overall, couple therapy has shown its effectiveness (Gurman & Fraenkel, 2004; Shadish & Baldwin, 2003). However, there also has been substantial variability in clients' responses to couple therapy (Christensen et al., 2004; Hahlweg & Klann, 1997; Jacobson et al., 1984). Thus, identifying predictors of clients' responses becomes an important task for practitioners.

Particularly for couples with partner aggression, while a few couple therapy models have proved their efficacy, little has been known in terms of roles of common factors. Thus, the present study investigated how the contextual factors commonly existing across models, that is, client factors and therapist factors, predict therapy outcomes.

Unexpectedly, a lower level of trust was advantageous in relation to decreases in psychological aggression. However, a general tendency toward anger venting, as expected, negatively influenced therapy outcomes. The latter finding suggests that therapists who work with couples with partner aggression be prepared for the negative effects of anger venting by adjusting their therapeutic interventions in order to minimize the negative effect.

The findings suggest that therapist factors are less important than client common factors in relation to couple therapy outcome. Only the use of systemic techniques in general operates in a positive way, particularly for female partners. However, empathy and session structure did not show significant main effects on therapy outcomes. Overall, therapists need to increase their frequency and appropriate use of systemic techniques, which seems reasonable given that couple therapies focus on systemic aspects of couples' relationships. It is surprising that structuring of sessions was not a predictor of therapy outcomes, because therapists who work with conflictual couples commonly need to control aversive exchanges between partners during sessions (Epstein & Baucom, 2002).

Regarding interaction effects, only empathy moderated the negative effect of husbands' lower levels of trust on wives' psychological aggression, whereas systemic techniques and session structure showed no moderating effect. Thus, despite the interaction effect detected in the present study, in general we do not know much about the moderators that can buffer the negative effects of client factors.

Although the present study had some limitations, it showed that the common factors paradigm can be applied to the couple and family therapy field by demonstrating the effect of client and therapist factors on outcome in treatment for partner aggression. Also, through the APIM analyses, the present study found several actor effects and a few male-to-female partner

effects of trust and venting of anger. The APIM approach seems to fit well particularly with couple therapy research, because it displays the dynamic between partners. Furthermore, the present study applied social learning theory as a promising explanation for therapy process. Supporting the theory, if not fully, some findings were as theoretically hypothesized. Furthermore, the current study included not only common factors generally found in individual psychotherapy but also ones unique to couple and family therapy, namely, the use of systemically-based techniques. The current study exhibited the usefulness of systemic techniques, partially supporting the status of systems theory in the couple and family therapy field. Lastly, observer ratings of therapist behaviors were used to reflect objective characteristics of therapist in-session behavior, which may be particularly useful for education for trainees. All these things considered, the present study contributes to the literature on couple therapy for partner aggression, in that it reveals how common factors actively operate in the therapy process regardless of therapy models.

Appendix A

The Dyadic Trust Scale

Directions: For each of the following statements, please answer each question according to the overall feeling you have of your relationship. Please indicate the extent to which you agree or disagree with the statement by placing the appropriate number to the left of the statement.

1 = Disagree Strongly 2 = Disagree Moderately 3 = Neither Agree nor Disagree 4 = Agree Moderately				
5 = Agree Strongly				
1. My partner is primarily interested in his or her own welfare.				
2. There are times when my partner cannot be trusted.				
3. My partner is perfectly honest and truthful with me.				
4. I feel that I can trust my partner completely.				
5. My partner is truly sincere in his or her promises.				
6. I feel that my partner does not show me enough consideration.				
7. My partner treats me fairly and justly.				
8. I feel that my partner can be counted on to help me.				

Appendix B

State-Trait Anger Expression Inventory (STAXI)

Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people use to describe their reactions when they feel **angry or furious**. Using the key below, read each statement and then circle the number which indicates **how often you generally react or behave** in the manner described when you are feeling angry or furious. Remember that there are no right or wrong answers. Do not spend too much time on any one statement.

Circle	e one: 1- Almost never 2- Sometimes 3- Of	ften	4- Almost always		3
When	n Angry or Furious				
1.	I control my temper	1	2	3	4
2.	I express my anger	1	2	3	4
3.	I keep things in	1	2	3	4
4.	I am patient with others	1	2	3	4
5.	I pout or sulk	1	2	3	4
6.	I withdraw from people	1	2	3	4
7.	I make sarcastic remarks to others	1	2	3	4
8.	I keep my cool	1	2	3	4
9.	I do things like slam doors	1	2	3	4
10.	I boil inside, but I don't show it	1	2	3	4
11.	I control my behavior	1	2	3	4
12.	I argue with others	1	2	3	4
13.	I tend to harbor grudges that I don't tell anyone about	1	2	3	4
14.	I strike out at whatever infuriates me	1	2	3	4
15.	I can stop myself from losing my temper	1	2	3	4
16.	I am secretly quite critical of others	1	2	3	4
17.	I am angrier than I am willing to admit	1	2	3	4
18.	I calm down faster than most other people	1	2	3	4
19.	I say nasty things	1	2	3	4
20.	I try to be tolerant and understanding	1	2	3	4
21.	I'm irritated a great deal more than people are aware of	1	2	3	4
22.	I lose my temper	1	2	3	4
23.	If someone annoys me, I'm apt to tell him or her how I feel	1	2	3	4
24.	I control my angry feelings	1	2	3	4

Anger-in: 3, 5, 6, 10, 13, 16, 17, 21 Anger-out: 2, 7, 9, 12, 14, 19, 22, 23 Anger-control: 1, 4, 8, 11, 15, 18, 20, 24

Appendix C

Ratings of Therapists' General Clinical Skills/Qualities Scale (TGCSQ)

Directions: Please rate the following items from 0-4 based on your observation of the therapists in the given videotaped session. Refer to the following value labels to record scores:

- 0 = Not at all
- 1 = A little
- 2 = Moderately
- 3 = Quite a bit
- 4 = Very much

	Relationship Factors	Item Score	Total Scale Score	Scale Score Average
	Use of humor to connect with clients: Therapist jokes with clients at appropriate times			
Warmth	Smiling: Therapist smiles when greeting clients, and at appropriate times during session			
	Voice tone: Therapist uses a supportive, calm tone			
Empathy	Reflective statements demonstrating empathic understanding of client thoughts and emotions (as evidenced by exchange b/n therapist and client) E.g.: Client – "I just feel like he ignores me, and doesn't listen to me" Therapist: "You don't feel heard or appreciated by your partner" Client: "Yes, that's it, I just don't feel appreciated by him"			

	Relationship Factors	Item Score	Total Scale Score	Scale Score Average
Validation	Agreement E.g. Client- "I think we are just really tired all the time, and that's why we're fighting" Therapist: "Yes, that could be." Affirming/legitimizing: Verbally conveying that the therapist takes			
	the clients' thoughts and feelings seriously E.g. Client- "I think we are just really tired all the time, and that's why we're fighting" Therapist: "Yes, that could be. It is more difficult to constructively deal with problems when we are tired."			
Therapist Presence	Asking personal questions, showing interest in clients' lives: Therapist asks questions about the clients in order to learn more about them as people Staying on topic: Therapist follows a clear line of questioning, follows up on client statements, and does not jump from topic to topic			
	Eye contact: Therapist makes eye contact with the clients when he or she is speaking, and when the clients are speaking Body language E.g. Posture oriented towards the clients, no physical barriers			
Therapist Collaboration	Asking clients for their opinions & preferences regarding interventions, tasks, and goals E.g.: Therapist - "We've discussed several ways the two of you could spend time together this week – which sounds best to you?" Collaborative language use displayed by the therapist such as "we" and "us" E.g.: Therapist: "I am confident that all of us are working hard and trying our best to make things a little better."			

	Technique Factors	Item Score	Total Scale Score	Scale Score Average
	Balance in attention to partners: Therapist involves both partners in session			
	by addressing each of them, and following up with each partner.			
	Noting cyclical patterns in couple interaction: therapist demonstrates a non-			
	blaming stance (does not blame either of the partners for their presenting problem)			
	E.g. Therapist -"So it really seems like when Partner A gets scared, Partner B			
	gets angry, and then both of you pull away from each other"			
Systemically-Based Technique	Circular questioning: Questions that encourage clients to think about mutual			
Therapist demonstrates working	influence between themselves, in dyadic terms			
in a systemic manner	E.g. "What have you noticed happens between the two of you that results in			
	your arguments escalating?"			
	Seeking information and/or creating interventions based on multiple			
	environmental levels including extended family, school, work, the economy			
	E.g. If the couple mentions that their child's behavior problems at school are			
	causing them stress. The therapist asks about what is happening at school			
	(environmental domain). The therapist could spend time discussing strategies			
	the couple could use to communicate with their child's school.			
	Control of conflict: controlling overt conflict behaviors displayed by clients			
	towards one another like partners blaming one another or making critical			
Session Structure Therapist structures session to make it constructive & productive	remarks			
	Pacing & efficient use of time: allowing flexibility and facilitating client discussion of important topics without allowing clients to go off on tangents			
	Opportunity for both members of couple to express concerns & goals, and			
	therapist summarizes those			
	Therapist reinforces positive change using positive feedback,			
	encouragement, etc. E.g. Client - "This week was rough, but we did have			
	really nice time on Saturday when we made breakfast together" Therapist - "I			
	think it's really great that you can find the good in the midst of the bad, and			
	believe that there are more good times like you had on Saturday ahead."			

Appendix D

Dyadic Adjustment Scale (DAS)

			All the time	Most of the time	More often than not	Occasi onally	Rarely	Neve
16.		n do you discuss or have you d divorce, separation or terminating ionship?						
18.	-	l, how often do you think that things you and your partner are going well?						
20.	Do you er together)	ver regret that you married (or lived?						
I	• Extremely Unhappy	Fairly A Little Happ Unhappy Unhappy	у	• Very Happy	your rela • Extrei Hap	nely	Perfect	
		e following statements best describes ho nent that best applies to you.	ow you fe	el about tl	he future	of your	relationsl	nip?
_	6.	I want desperately for my relationshi to see that it does.	_					
	5.	I want very much for my relationship does.	to succe	ed, and w	ıll do all	I can to	see that 11	-
_		I want very much for my relationship	to succe	ed, and w	ill do my	fair sha	re to see 1	hat
_	4.	it does.	, aaaadad	hut I oon	e do mu	ah mana 1	hot I om	
	3.	It would be nice if my relationship su doing now to help it succeed.	icceeded,	but I can	t do mu	en more i	nat I am	
		It would be nice if my relationship su		but I refu	se to do	any more	e than I a	m
_	2.	doing now to keep the relationship go	-				_	
	1.	My relationship can never succeed, a relationship going.	nd there i	s no more	that I ca	an do to l	keep the	

Appendix E

The Revised Conflict Tactics Scales (CTS2) - Physical aggression

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please circle how many times you did each of these things. **IN THE PAST 4 MONTHS**, and how many times your partner did them in the **IN THE PAST 4 MONTHS**. If you or your partner did not do one of these things in the past 4 months, but it happened before that, circle "0".

How often did this happen?

0 = Not in the past 4 months, but it did happen before. 1 = Once in the past 4 months 2 = Twice in the past 4 months 3 = 3-5 times in the past 4 months 4 = 6-10 times in the past 4 months 5 = 11-20 times in the past 4 months 6 = More than 20 times in the past 4 months 9 = This has never happened

7. I threw something at my partner that could hurt him/her	0	1	2	3	4	5	6	9
8. My partner did this to me		1	2	3	4	5	6	9
9. I twisted my partner's arm or hair		1	2	3	4	5	6	9
10. My partner did this to me	0	1	2	3	4	5	6	9
11. I had a sprain, bruise, or small cut because of a fight with my partner	0	1	2	3	4	5	6	9
12. My partner had a sprain, bruise, or small cut because of a fight with	0	1	2	3	4	5	6	9
me								
17. I pushed or shoved my partner	0	1	2	3	4	5	6	9
18. My partner did this to me	0	1	2	3	4	5	6	9
27. I punched or hit my partner with something that could hurt	0	1	2	3	4	5	6	9
28. My partner did this to me	0	1	2	3	4	5	6	9
33. I choked my partner	0	1	2	3	4	5	6	9
34. My partner did this to me	0	1	2	3	4	5	6	9
37. I slammed my partner against a wall	0	1	2	3	4	5	6	9
38. My partner did this to me		1	2	3	4	5	6	9
45. I grabbed my partner		1	2	3	4	5	6	9
46. My partner did this to me		1	2	3	4	5	6	9
53. I slapped my partner	0	1	2	3	4	5	6	9
54. My partner did this to me	0	1	2	3	4	5	6	9
71. I felt physical pain that still hurt the next day because of a fight with		1	2	3	4	5	6	9
my partner								
72. My partner still felt physical pain the next day because of a fight we		1	2	3	4	5	6	9
had.								
73. I kicked my partner		1	2	3	4	5	6	9
74. My partner did this to me		1	2	3	4	5	6	9

Appendix F

The Revised Conflict Tactics Scales (CTS2) - Psychological aggression

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please circle how many times you did each of these things. **IN THE PAST 4 MONTHS**, and how many times your partner did them in the **IN THE PAST 4 MONTHS**. If you or your partner did not do one of these things in the past 4 months, but it happened before that, circle "0".

How often did this happen?

0 = Not in the past 4 months, but it did happen before. 1 = Once in the past 4 months 2 = Twice in the past 4 months 4 = 6-10 times in the past 4 months 5 = 11-20 times in the past 4 months 6 = More than 20 times in the past 4 months

3 = 3-5 times in the past 4 months 9 =This has never happened

5. I insulted or swore at my partner	0	1	2	3	4	5	6	9
6. My partner did this to me		1	2	3	4	5	6	9
25. I called my partner fat or ugly	0	1	2	3	4	5	6	9
26. My partner did this to me		1	2	3	4	5	6	9
29. I destroyed something belonging to my partner		1	2	3	4	5	6	9
30. My partner did this to me	0	1	2	3	4	5	6	9
35. I shouted or yelled at my partner		1	2	3	4	5	6	9
36. My partner did this to me		1	2	3	4	5	6	9
49. I stomped out of the room or house or yard during a disagreement		1	2	3	4	5	6	9
50. My partner did this to me		1	2	3	4	5	6	9
65. I accused my partner of being a lousy lover		1	2	3	4	5	6	9
66. My partner accused me of this		1	2	3	4	5	6	9
67. I did something to spite my partner		1	2	3	4	5	6	9
68. My partner did this to me		1	2	3	4	5	6	9
69. I threatened to hit or throw something at my partner		1	2	3	4	5	6	9
70. My partner did this to me		1	2	3	4	5	6	9

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