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A Dyadic Analysis of the Between- and Within-System Alliances on Distress

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This study examines the relationship between the therapeutic alliance and distress using the couple rather than the individual as the unit of analysis. One hundred and seventy-three couples receiving treatment for relational distress at two university clinics participated in this study. The actor–partner interdependence model was used to analyze the relationship of each partner's between- and within-system alliance scores and distress at session four. Results provide support for actor effects on relational distress for both male and female partners and for actor effects on psychological distress for female partners. Limited support was found for partner effects on distress. Furthermore, results indicate that the alliance between partners is a stronger predictor of improvement in early sessions in comparison with the alliance between the individual and the therapist.

Keywords: Therapeutic Alliance; Couple Therapy; Dyadic Analysis

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Research on the therapeutic alliance in individual therapy has found a consistent robust relationship between the alliance and outcomes (Horvath, 2001; Martin, Garske, & Davis, 2000). Similarly, research on the alliance in couple therapy indicates that the alliance is a significant correlate of both dropout (Knobloch-Fedders, Pinsof, & Mann, 2004; Pinsof, Zinbarg, & Knobloch-Fedders, 2008; Raytek, McCrady, Epstein, & Hirshch, 1999) and change in marital satisfaction, with 5–22% of the variance in outcome attributable to the alliance (Bourgeois, Sabourin, & Wright, 1990; Johnson & Talitman, 1997; Knobloch-Fedders, Pinsof, & Mann, 2007). These and other authors, however, have failed to replicate the association between alliance and other outcomes in couple therapy such as marital happiness or individual psychological distress (Knobloch-Fedders et al., 2007; Raytek et al., 1999) or have found that the association is dependent on who is rating the alliance (Symonds & Horvath, 2004). It is

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difficult to gauge whether the failure to replicate previous findings is the result of differences in the clinical population, the sampling strategy used, the measure of the alliance being utilized, the way data are analyzed, or an accurate reflection of no relationship. What is clear, however, is that these inconsistencies point to the need for further research and theory development before we can understand how the alliance operates in couple therapy.

Unlike individual therapy where the principal healing relationship is the one between therapist and client, couple therapy is characterized by multiple alliances. In couple therapy, there are at least three important alliances: the alliance between the therapist and each partner as well as the alliance between partners. These alliances are referred to by Pinsof (1994), respectively, as the between-system alliances and the within-system alliance. Despite this expanded therapeutic alliance being a unique common factor in family therapy (Sprenkle & Blow, 2004), the majority of the existing alliance research has followed in the footsteps of individual therapy by focusing almost exclusively on the between-system alliance. While this focus has been invaluable in laying the groundwork for the importance of the alliance in couple therapy it has left the impact of the within-system alliance as well as the interplay among the various alliances largely unexplored.

There are good conceptual arguments for the importance of the within-system alliance. While the primary healing relationship in individual therapy is clearly the relationship between the therapist and client, the relationship between partners is the primary focus and vehicle of change in couple therapy. It would appear reasonable, then, that the agreement partners have about the goals and tasks of therapy, and the affective bond they bring to therapy may be more important to the success of treatment than the alliance formed with the therapist. Recent studies have provided preliminary evidence for the importance of the within-system alliance in predicting alleviation of symptoms, particularly among women (Knobloch-Fedders et al., 2007; Pinsof et al., 2008). In another study, Symonds and Horvath (2004) found that the between-system alliance was only associated with outcome when both clients shared a similar view of the alliance. In attempting to understand their results, they suggested that couples share an ongoing relationship with each other that may moderate the association between alliances and outcome. While they termed this relationship, the allegiance, it appears closely related to the concept of a within-system alliance. Studies from the alliance in the family therapy literature also highlight the importance of the within-system alliance. For example, in a qualitative analysis of three families, Beck, Friedlander, and Escudero (2006) noted that the within-system alliance appears to be particularly salient to clients, who referred to it more frequently and in more detail than the between-system alliance in their interviews.

While it will be important to further understand the within-system alliance, we must remember that the within-system alliance is just one of the multiple alliances involved in couple therapy. Pinsof (1994; Pinsof & Catherall, 1986) conceptualizes these multiple alliances as having reciprocal effects such that an alliance in any given subsystem (i.e., husband–therapist, wife–therapist, husband–wife) will impact the alliance and interaction of the other subsystems. Given these reciprocal effects, it is hypothesized that the alliance of one partner will be associated with not only her own level of distress but also the distress of her partner. Some evidence for this can be garnered from research on the possible moderating impact of gender on the relationship between alliance and outcome. There is early evidence to suggest that when male partners report higher alliances with

the therapist than their female partners do, there is a significant inverse relationship between alliance and the female partner's reported marital distress (Knobloch-Fedders et al., 2007; Symonds & Horvath, 2004).

The existence of multiple alliances leads to a number of clinically relevant questions. For example, when working with couples, should a therapist focus on establishing a strong therapeutic alliance with the partner who is most invested in therapy or the partner who is more distant? Do the within- system and between-system alliances impact the outcomes of therapy equally or are there differential effects? Does this pattern of effects change depending on whether the outcome is relational distress or individual psychological distress? The ability to answer such questions has been hampered by problems that arise when treating the couple rather than the individual as the unit of analysis. One of the primary assumptions of statistical analyses is that observations are independent. This poses a problem to the research on the alliance in couple therapy where each partner's rating of both the alliance as well as outcome measures such as marital satisfaction are nonindependent. Researchers studying the alliance in couple therapy have dealt with this nonindependence by either ignoring it and violating the assumptions of the analytical strategies they use, or acknowledging it and running analyses separately for male and female partners. This has severely limited the ability of researchers to examine the dyadic questions that are at the heart of the therapeutic alliance in couple therapy and differentiate this construct from the alliance in individual therapy.

In the past decade, there has been an effort on the part of methodologists to address issues of nonindependence in dyadic data. These efforts have resulted in analytical models that allow researchers to study couples, families, or other intimate groups using dyads rather than individuals as the unit of analysis (Kenny, Kashy, & Cook 2006). The actor–partner interdependence model (APIM) is particularly well suited for research in couple therapy. While a complete discussion of the APIM is beyond the scope of this paper (see Cook & Snyder, 2005, for an excellent discussion of the APIM in couple therapy), it will be helpful to include a brief explanation of this model. Two of the central parameters in the APIM are the actor and partner effects. Actor effects indicate the relationship between a client's characteristics and her own outcome. For example, a wife's rating of her alliance with the therapist is associated with her marital satisfaction. In the APIM, these actor effects are estimated separately for each partner while simultaneously controlling for partner effects. Partner effects indicate the relationship between a client's characteristics and the dependent variable of her partner. Continuing with the previous example, a partner effect would indicate that the wife's rating of her alliance with the therapist is associated with her *husband's* rating of marital satisfaction while controlling for the contribution of the husband's own alliance. Partner effects describe the influence each partner has on his or her spouse. In addition to examining partner effects, when this model is tested using structural equation modeling (SEM), it is possible to impose equality constraints to test specific hypotheses regarding the various paths. This allows us to directly examine questions such as, ''Is the relationship between the alliance and distress the same for husbands and wives?'' In short, this model allows researchers to examine many of the dyadic questions that are at the heart of the therapeutic alliance in couple therapy. The field of couple and family therapy, however, has been slow to adopt these new models in its research.

The purpose of this study is twofold. First, to contribute to the substantive literature on the alliance by taking the first steps in explicitly testing how the multiple

alliances that exist in couple therapy are associated with distress in the early stage of therapy. The second, methodological, purpose of this paper is to continue the work of Cook and Snyder (2005) in introducing the APIM (Kenny et al., 2006) to the study of couple therapy. The APIM will allow us examine the association between multiple alliances and psychological and relational distress using the couple, rather than the individual, as the unit of analysis. We will examine the following three research questions for both relational and psychological distress: (1) Is an individual's between- and within-systems alliance associated with her *own* level of distress at session 4? (actor effect). (2) Is an individual's between- and within-systems alliance associated with her *partner's* level of distress at session 4? (partner effect). (3) Does the association between within-system alliance and distress differ significantly from the relationship between the between-systems alliance and distress?

METHODS

Participants

Archival data from two graduate training clinics in the Southeast were used in this study. Both clinics offer services to their local communities on a sliding fee scale. The primary difference between the two clinics is the level of clinical experience of the student therapists, with one clinic housed within a Master's level program and the other within a doctoral program. All heterosexual couples that sought treatment for relational distress and completed at least four sessions of therapy were included in this study resulting in 173 couples. These couples were seen by 96 therapists. Therapists were primarily female (76%) with 81% of therapists enrolled in a terminal Master's degree program. Therapists provided treatment from a variety of different models. All cases were supervised by AAMFT approved supervisors using a combination of live, video, and case report supervision. Couples' income was normally distributed with 49% of couples reporting incomes between US$21,000 and US$40,000. Most couples were either married (68%) or in a committed adult relationship (21%). Participant's race was primarily White (78.6% of both men and women) with 15% of men and 16% of women reporting their race as Black. Couple's average length of relationship was 6.56 years with men (31.65 years) slightly older than their partners (30.42 years). The median number of sessions couples attended was eight (range 4–63). Emotional, physical, verbal, or sexual abuse was reported in the current families of 39% of the couples, with 57% of couples reporting one or more of these types of abuse in their family of origin. Over a quarter (27%) of couples reported substance abuse in their current family, and 11% said that they were facing legal problems.

Couples from the clinics did not differ on any demographic variable other than length of relationship, with couples at the Master's level clinic reporting relationships lasting approximately 2 years longer than clients at the doctoral clinic, $t(156) = 2.05$, $p = .04$.

Measures

Outcome Questionnaire 45.2 (OQ-45.2)

Measures the outcome and progress of therapy (Lambert et al., 1996; Lambert, Okiishi, Finch, & Johnson, 1998; Wells, Burlingame, Lambert, Hoag, & Hope, 1996). The OQ-45.2 has demonstrated construct validity as a measure of general

psychological distress and multiple forms of reliability (Doerfler, Addis, & Moran, 2002; Lambert et al., 1996; Mueller, Lambert, & Burlingame, 1998; Umphress, Lambert, Smart, Barlow, & Clouse, 1997; Vermeersch, Lambert, & Burlingame, 2000). The OQ-45.2 consists of three subscales: symptom distress (SD), interpersonal relations, and social roles.

Previous researchers have recommended using either the SD subscale or the total score as a measure of psychological distress (Umphress et al., 1997). The SD subscale was used in this study because it does not contain any questions regarding interpersonal relationships, thus avoiding any conceptual overlap between psychological and relational distress. The SD subscale consists of 25 items measuring common psychiatric symptoms relating to depressive or anxiety disorders (Lambert et al., 1996). Items are measured on a 5-point Likert-type scale with possible values of 0–4. Scores range from 0 to 100 with a score of 36 or greater differentiating between clinical and community populations (Lambert et al., 1996). Cronbach's α for this study ranged from .88 (male pretest) to .94 (female posttest).

Revised Dyadic Adjustment Scale (RDAS; Busby, Crane, Larson, & Christensen, 1995)

The RDAS is a 14-item self-report revision of the original 32-item Dyadic Adjustment Scale (Spanier, 1976), which has demonstrated adequate reliability and validity (Busby et al., 1995). The total score on the RDAS ranges from 0 to 69, with lower scores indicating greater relationship distress. Cronbach's α for this study for both male and female partners across rating periods ranged from .84 to .86. A cutoff score of 48 on the RDAS discriminates between distressed and nondistressed couples (Crane, Middleton, & Bean, 2000).

Couples Therapy Alliance Scale-Revised (CTAS-R; Pinsof, 1994)

The CTAS-R is a 40-item revision of Pinsof and Catherall's (1986) original 29-item scale. It measures the three content areas of the alliance; tasks, goals, and bonds; for each of the possible interpersonal subsystems in couple therapy: (a) self-therapist (self subscale), (b) partner–therapist (other subscale), (c) the alliance between the couple and the therapist (group subscale), and (d) the alliance between partners (within subscale). A recent factor analysis found lack of support for the independence of the content dimension of a shortened version of the CTAS-R and tested a three-factor model comprised of a collapsed self/group subscale, other, and within subscales (Pinsof et al., 2008). While relying on an expanded measure for this study, we have taken a similar approach, summing the 29 original scale items measuring the bonds, goals, and tasks across the three between systems levels of the alliance (self, other, and group) to create a between-system alliance score. To measure within-system alliance, 11 items measuring goals, bonds, and tasks across the within-system subscale were summed. Items are measured on a 7-point Likert-type scale resulting in possible scores ranging from 29 to 203 for the between-system alliance and 11–77 for the within-system alliance. Higher scores indicate a stronger alliance. The Cronbach's α of the between- and within-systems subscale for this sample were .96 and .89, respectively.

Procedure

As a part of the routine operations of both clinics, participants in this study completed the RDAS and OQ-45.2 as well as other clinically relevant measures before the

first session of therapy. These measures were administered again at the fourth session with the addition of the CTAS. Results from all questionnaires except the therapeutic alliance were provided to the therapists for use in the clinical assessment and treatment of the couple. In order to minimize bias in reports of the alliance, participants were informed that their responses to questions regarding the alliance would be kept confidential.

RESULTS

Preliminary Analyses

Preliminary analyses were conducted to examine variables associated with missing data at session 4 and to examine whether the assumptions of the analyses were met. All variables in the model were normally distributed with no excessive skew or kurtosis.

Of the 173 couples that completed at least four sessions of therapy and were therefore eligible to complete the fourth session assessments, 104 had valid data from both partners, 16 had valid data from only one partner, and 53 had no session 4 data. Pretest and demographic variables were used to examine covariates of missing data from one or both partners. In order to use full information maximum likelihood estimation to make use of all available data in the final analyses, data are assumed to be missing at random (MAR). The assumption of MAR is met when variables that covary with missingness are included as predictors in the model to be estimated (Little & Rubin, 1989). Results of these analyses are presented in Table 1. Only the location of clinic was associated with missingness, with clients at the doctoral clinic being significantly less likely to complete session 4 questionnaires (38.3% of total sample accounts for 43.5% of missing data). Because of the significant association of clinic with both missing data at session 4 and length of relationship at intake, the clinic at which treatment occurred was included in all subsequent analyses.

TABLE 1
Comparison of Cases With and Without Missing Data on Intake Variables

		%				
Variable	***n***	**All**	**No. missing**	**Missing**	χ^2	**Cramer's *V***
Current abuse	166	39.2	35.4	44.8	1.49	.10
FOO abuse	169	56.8	56.0	58.0	0.07	.02
Female partner White	168	78.6	81.0	75.0	0.87	.07
Male partner White	168	78.6	79.0	77.9	0.03	.01
Female partner college	152	66.4	65.6	67.7	0.08	.02
Male partner college	144	63.9	65.1	62.1	0.14	.03
Substance abuse – current family	167	26.9	25.3	29.4	0.35	.05
Legal problems – current family	167	11.4	11.1	11.8	0.02	.01
Pressured for therapy	173	28.9	29.8	27.5	0.75	.44
Family income <US$30,000	166	52.4	54.5	49.3	0.45	.05
Clients at Master's clinic	173	71.7	81.7	56.5	12.98*	.27

*$p < .01$.

The APIM was used to address the three primary research questions. An expanded version of the APIM is presented in Figure 1. The APIM can be tested using many different methods (e.g., pooled regression, multilevel modeling, and SEM). SEM software allows for a straightforward analysis and allows constraints to be placed on various paths in the model allowing for the direct testing of questions regarding the equivalence of the effects of alliance on outcome for the between- and within-systems alliances. This is accomplished by constraining various paths in the model. For

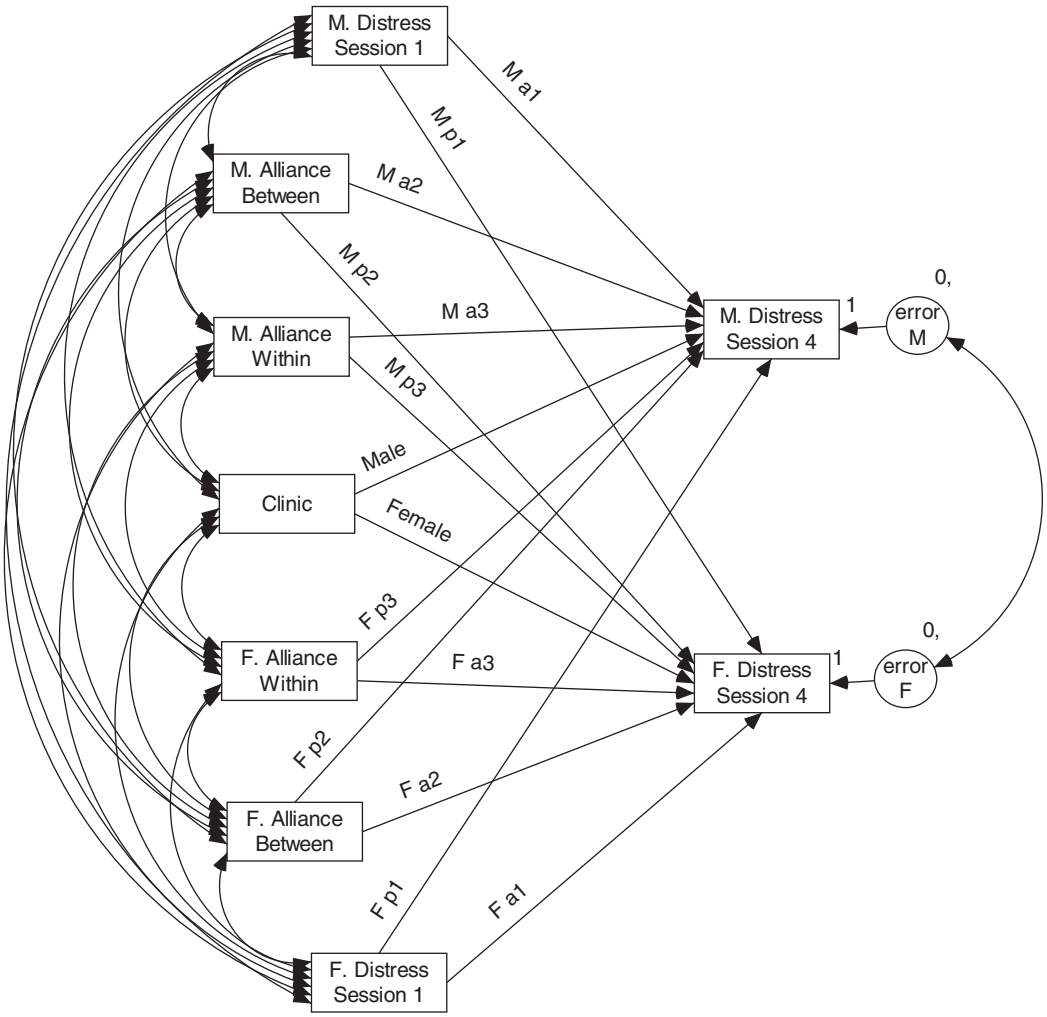

FIGURE 1. Actor Partner Interdependence Model examining the relative impact of the between- and within-systems alliances on distress. Ma1/Fa1 = male/female actor effect of pretreatment distress on session 4 distress; Ma2/Fa2 = male/female actor effect of between-system alliance on session 4 distress; Ma3/Fa3 = male/female actor effect of within-system alliance on session 4 distress; Mp1/Fp1 = male/female partner effect of pretreatment distress on partner's session 4 distress; Mp2/Fp2 = male/female partner effect of between-system alliance on partner's session 4 distress; Mp3/Fp3 = male/female partner effect of within-system alliance on partner's session 4 distress.

example, to test whether the strength of the relationship between the alliance and one's own distress (actor effect) is stronger for the within-system alliance compared with the between-system alliance, the paths Fa2 and Fa3 are constrained to be equal for female partners and Ma2 and Ma3 are constrained to be equal for male partners. This tests the null hypothesis that the relationship between within-system alliance and distress is the same as the relationship between the between-system alliance and distress. This constrained model is compared with the baseline model. Using a chi-square difference test, it is possible to examine whether the constraints that were imposed on the model significantly worsen the fit of the model to the data. If the model fit is significantly worsened, we can reject the null hypothesis of equality. The APIM illustrated in Figure 1 was tested using AMOS 6.0 (Arbuckle, 2005) with full information maximum likelihood estimation to account for missing data. Descriptive statistics and the correlation matrix for variables in the model are presented in Tables 2 and 3.

Typically, when SEM is used to test the APIM, the saturated or just-identified model is used. This model is equivalent to two-pooled regression analyses. Because all variables are manifest variables, the large sample sizes typically associated with SEM applications can be relaxed when using the APIM (Cook & Kenny, 2005; Kenny et al., 2006) and the rules of thumb associated with regression are applicable. Variables were group mean centered and unstandardized Betas are reported throughout as recommended by Kenny et al. (2006). In each model fourth session CTAS scores and pre-session distress scores (OQ-45.2 or RDAS) are used to predict fourth session distress as measured by the either OQ-45.2 or RDAS.

Individual Psychological Distress

Results of the APIM examining the association between the between- and within-systems alliance and individual distress are reported in Table 4. Of the four possible alliance actor effects illustrated as path Ma1, Ma2, Fa1, and Fa2, only the female partner's own level of between-system alliance was significantly associated with her own fourth session distress when controlling for the other variables in the model. Equating her between- and within-systems actor effects significantly worsened the fit of the model (Table 5), indicating that the impact of between-system alliance is particularly salient for decreases in female partners' individual distress. Two significant partner effects emerged in this model. Both the male partners' between- and within-system alliances were significantly associated with their female partners' fourth session level of psychological distress. These partner effects are particularly interesting. As the male partner's perceived alliance with the therapist increased, so did his female partner's level of individual distress. However, the opposite relationship held true for a male partner's within-system alliance and his partner distress. As the male partner's perceived alliance with his wife increased, there was an associated decrease in his female partner's psychological distress. When these two-partner effects were set equal, there was a significant decrease in model fit, indicating that the effects of the between- and within-systems alliances are significantly different.

Relational Distress

The model presented in Figure 1 was repeated using relational distress at session 4 as the outcome of interest. As shown in Table 6, when controlling for the pretest levels

TABLE 2

Correlation Matrix Used in Primary Analyses

	2	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1	−.31	.25**	−.19*	.77**	−.37**	−.28**	−.30**	.27**	−.41**	−.13	−.15
2		−.20*	.59**	−.17	.69**	.24*	.33**	−.16	.30**	−.03	.13
3			−.23**	.19	−.20	−.11	−.15	.66**	−.11	−.10	−.17
4				−.19	.45**	.18	.21*	−.02	.64**	.01	.20*
5					−.29**	−.23*	−.28**	.34**	−.36**	−.13	−.13
6						.48**	.62**	−.25*	.52**	.15	.29**
7							.84**	−.22*	.33**	.45**	.39**
8								−.31**	.32**	.39**	.40**
9									−.19	−.33**	−.24*
10										.33**	.51**
11											.79**

Notes. CTAS = Couples Therapy Alliance Scale-Revised; OQ = Outcome Questionnaire; RDAS = Revised Dyadic Adjustment Scale; 1 = male OQ symptom distress (pre); 2 = male RDAS (pre); 3 = female OQ symptom distress (pre); 4 = female RDAS (pre); 5 = male OQ symptom distress (4th); 6 = male RDAS (4th); 7 = male CTAS between (4th); 8 = male CTAS within (4th); 9 = female OQ symptom distress (); 10 = female RDAS (4th); 11 = female CTAS between (4th); 12 = female CTAS within (4th).

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

TABLE 3
Descriptive Statistics of Variables Used in Primary Analyses

	Male partner						Female partner					
	Pretest			Session 4			Pretest			Session 4		
Variable	***n***	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***
OQ-45.2 SD	149	31.0	10.8	108	27.8	12.5	162	38.1	15.9	109	34.3	15.3
RDAS	150	41.5	7.8	100	43.5	7.6	157	37.9	9.1	101	42.3	8.8
CTAS between				107	164.7	25.0				105	163.9	23.4
CTAS within				107	59.7	10.9				105	59.1	10.7

Notes. CTAS = Couples Therapy Alliance Scale-Revised; OQ-45.2 SD = Outcome Questionnaire; RDAS = Revised Dyadic Adjustment Scale.

of relational distress and other variables in the model, the within-system alliance exerted an actor effect for both male partners and female partners. There were no significant actor effects for the between-system alliance on relational distress for either partner. No significant partner effects were found for between- or within-systems alliance. In addition, when controlling for the effects of the other variables in the model, receiving couple therapy at the Master's level clinic was associated with an

TABLE 4
Effects of the Between- and Within-Systems Alliance on Individual Psychological Distress

Variable	***B***	***SE***	***t***
Actor effects (effect of variable on own distress)			
Male OQ-45.2 SD pretest	0.86	0.07	12.30**
Female OQ-45.2 SD pretest	0.65	0.06	10.82**
Male CTAS between	0.03	0.06	0.51
Female CTAS between	− 0.25	0.07	− 3.51**
Male CTAS within	− 0.08	0.13	− 0.58
Female CTAS within	0.19	0.15	1.27
Partner effects (effect of variables on partner's distress)			
Male OQ-45.2 SD pretest	0.12	0.09	1.33
Female OQ-45.2 SD pretest	− 0.05	0.05	− 1.00
Male CTAS between	0.17	0.08	2.21*
Female CTAS between	0.02	0.06	0.40
Male CTAS within	− 0.37	0.17	− 2.17*
Female CTAS within	− 0.08	0.12	− 0.64
Master's clinic (DV = male session 4 OQ-45.2 SD)	− 2.48	1.63	− 1.52
Master's clinic (DV = female session 4 OQ-45.2 SD)	− 3.22	2.07	− 1.56
Intercept (DV = male session 4 OQ-45.2 SD)	33.03	1.44	22.89**
Intercept (DV = female session 4 OQ-45.2 SD)	35.37	1.83	19.36**

Notes. CTAS = Couples Therapy Alliance Scale-Revised; OQ-45.2 SD = Outcome Questionnaire; RDAS = Revised Dyadic Adjustment Scale.
*$p < .05$, **$p < .01$.

TABLE 5

Impact of Equating Between- and Within-Actor and Partner Effects on Model Fit

Model	Δdf	$\chi^2_{diff.}$
Baseline model	—	—
Male between- and within-partner effects equated	1	5.22*
Male between- and within-actor effects equated	1	0.36
Female between- and within-partner effects equated	1	0.38
Female between- and within-actor effects equated	1	4.40*

Note. diff. = difference.
*$p < .05$.

increase of 3.25 points on the RDAS for females when compared with those receiving therapy at the Doctoral level clinic.

In order to test the relative contributions of the between- and within-systems alliances to relational distress, both partner and actor effects for the loci of the alliance on distress were set equal for both male and female partners. A summary of these constraints and the resulting change in chi-square is reported in Table 7. There were no significant differences in the partner effects of the between- and within-systems alliance for male or female partners. The actor effect of the within-system alliance on relational distress, however, was significantly different from the impact of the between-system alliance for both partners. This provides support for the hypothesis that nurturing the within-system alliance is associated with decreased relational distress.

TABLE 6

Effects of the Between- and Within-Systems Alliance on Relational Distress

Variable	*B*	*SE B*	*t*
Actor effects (effect of variable on own distress)			
Male partner RDAS pretest	0.58	0.08	7.08**
Female partner RDAS pretest	0.64	0.08	7.99**
Male partner CTAS between	− 0.02	0.04	− 0.55
Female partner CTAS between	− 0.04	0.04	− 0.82
Male partner CTAS within	0.24	0.08	2.92**
Female partner CTAS within	0.38	0.09	4.07**
Partner effects (effect of variables on partner's distress)			
Male partner RDAS pretest	− 0.08	.10	− 0.76
Female partner RDAS pretest	0.01	0.07	0.09
Male partner CTAS between	− 0.02	0.04	− 0.57
Female partner CTAS between	− 0.01	0.05	− 0.14
Male partner CTAS within	0.04	0.11	0.39
Female partner CTAS within	0.15	0.08	1.94
Master's clinic (DV = male session 4 RDAS)	0.64	1.04	0.61
Master's clinic (DV = female session 4 RDAS)	3.25	1.27	2.57**
Intercept (male session 4 RDAS)	42.22	0.88	47.79**
Intercept (female session 4 RDAS)	40.81	1.07	38.12**

Notes. CTAS = Couples Therapy Alliance Scale-Revised; RDAS = Revised Dyadic Adjustment Scale.
$p < .05$, **$p < .01$.

TABLE 7
Impact of Equating Between- and Within-Actor and Partner Effects on Model Fit

Model	Δdf	$\chi^2_{diff.}$
Baseline model	—	—
Male between- and within-partner effects equated	1	0.11
Male between- and within-actor effects equated	1	5.34*
Female between- and within-partner effects equated	1	2.16
Female between- and within-actor effects equated	1	8.99**
Male within-partner and female within-partner equated	1	1.05

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

DISCUSSION

Summary of Key Findings

The objective of this research was to examine the therapeutic alliance in couples therapy using an analytic strategy that permits the testing of hypotheses using the couple as the unit of analysis. Three questions were asked for each of the two outcomes of interest: distress in the couple relationship and individual psychological distress. The first of these questions explored the relationship between an individual's alliance and his own distress (actor effect). The second question examined the link between an individual's alliance and the distress of his partner (partner effect). The third question referred to the differential relationship between the within- and between-system alliances and distress. The primary findings will be discussed using these 3 questions as the guide.

Actor Effects of Alliance on Distress

Results provide support for the association between the within-systems alliance and relational distress in the fourth session of therapy. These actor effects were found for both male and female partners. In each case, increased alliances were associated with increased relational satisfaction. This was true controlling for location of the clinic, pretest levels of dyadic adjustment, as well as the other actor and partner effects of alliance in the model. These results are consistent with previous research that has demonstrated a connection between alliance and marital satisfaction (Bourgeois et al., 1990; Johnson & Talitman, 1997). The current study demonstrates that the association between alliance and relational functioning is active as early as the fourth session. This is consistent with recent research by Knobloch-Fedders et al. (2007), who found evidence for the impact of the alliance at the eighth session of therapy.

These results are notable for a number of reasons. First, unlike many previous studies, these actor effects of the alliance on outcome were found when controlling for pretreatment levels of distress. Most importantly, these effects emerged in the context of a dyadic analysis which controlled for not only the actor effects of an individual's pretreatment distress but also the association between his/her partner's level of distress and alliance on session 4 distress. As Cook and Kenny (2005) note, any model that posits a dyadic effect but does not include partner effects in the model is by default assuming that no partner effect exists. Partner effects are expected in a systemic model of the alliance. Actor effects in the context of couples should always control for

the effect of the partner (Cook & Kenny, 2005). The extent of the control in this study provides the strongest case in the literature to date that there is an actor effect for the alliance of both male and female partners on relational distress.

The association between the alliance and individual psychological distress was less consistent. The association between the between-system alliance and psychological distress was only significant for female partners. No actor effects were found for males' or females' within-system alliance on distress. Similar results were reported recently by Knobloch-Fedders et al. (2007) using differing instruments to measure individual and relational distress. Relational distress is a dyadic variable, with strong correlations between the distress of both partners. In order for a strong within-system alliance to develop, partners must agree on the goals of therapy, the tasks by which these goals will be accomplished, and must develop a working bond to accomplish these tasks. The development of such a relationship may provide hope for couples and act as a first step toward resolving difficulties in their relationship outside of the therapy room. Indeed, the work therapists do to help couples develop a within-system alliance may be isomorphic to the work that will lead to long-term gains in marital satisfaction.

This suggests that differing alliances may be required to ameliorate relationship distress and individual distress. This study offers early, tentative support for a model in which psychological distress for female partners is ameliorated in part by developing a strong therapeutic alliance with the therapist and relational distress is ameliorated through a strong alliance between partners. This model should be tested explicitly in future studies of the alliance in relationship therapy.

Partner Effects of Alliance on Distress

One of the primary contributions of this study is that it is the first to test the proposition that the alliance of one member of the couple is associated with the distress of his or her partner. While predicted in the literature, these partner effects only emerged when the correlate was psychological distress. As a male partner's alliance with the therapist increased so did his female partner's individual psychological distress. The opposite relationship was found in relation to the male partner's alliance with his partner. As the male partner reported an increased alliance with his partner, his partner's symptom distress was ameliorated. One possible explanation for this finding is that it is due to the formation of split alliances. In couples where the husband is forming an alliance with the therapist at the expense of his wife, her symptoms increase. In couples where the partners come together to form a strong within-system alliance, her distress diminishes. Another possibility is that when female partners who are in distressed relationships see their male partners developing an alliance with a young, typically female therapist, this is internalized and manifested through increased psychological distress. The same relationship does not hold when male partners and female partners demonstrate a strong within-system alliance. These are speculations, however, and were not explicitly tested in this study, as therapist data were not linked to client information in the dataset.

Differential Effects of the Between- and Within-Systems Alliances on Distress

Recently, many authors have pointed to the importance of the within-system alliance to success in couple therapy. Outside of the alliance literature, authors have argued that it is the ability to work with the couples' relationship in session that is at

the heart of couple therapy (Johnson, 1996). The results of this study suggest that both the between- and within-systems alliances are important for ameliorating distress and that the salience of each type of alliance may vary depending on whether the focus of treatment is ameliorating psychological symptoms or relational distress. The within-system alliance appears to be particularly salient when the focus of treatment is on relieving relational distress. For both partners, the within-system alliance is more strongly associated with improvement in the relationship than the between-system alliance.

The between-system alliance appears to be more salient for psychological distress. For female partners, the alliance formed with the therapist is more strongly associated with individual psychological distress than the alliance with her partner. Neither alliance was significantly associated with psychological distress for men. While the male partner's alliance may not be related with his own psychological distress, his perception of the within-system alliance is important to his partner's distress. As a male partner's within-system alliance increases, his partner's distress decreases. However, as a male partner's alliance with the therapist increases so does their partners' distress. This suggests that a particularly dangerous scenario in therapy is one in which the therapist aligns with the male partner at the expense of the alliance with the female partner and couple's within-system alliance during the initial stage of therapy.

Clinical Implications

As couple therapists work with their clients these results suggest the need to consider the therapeutic alliance. First, when the focus of treatment is a couple's relationship, clinicians should focus their efforts helping the couple develop a strong working alliance within the couple. Therapists can develop strong individual alliances with the members of the system as well, but these should be developed in the context of a strong within-system alliance. During the first sessions, therapists who are able to take the differing problem narratives and differing ideas on the goals and tasks of therapy of the individual partners and reframe these as goals and tasks that both partners can agree to may expect improvement for both partners.

These results also suggest that clinicians should consider carefully which alliance to focus on when it is not possible to forge a strong alliance with all partners. This situation is common in therapy with distressed couples. Clinical wisdom tells us to form a relationship with the individual who is least invested in the process, traditionally the male partner. The results of this study point to the complexities involved in this decision. Clinicians must weigh the possibility of the partner's psychological distress increasing as a result of forging a strong alliance. To navigate the complexities of this decision, therapists should carefully monitor each of the three alliances: the alliance between each partner and the therapist and the alliance between the partners.

Limitations

Caution is advised when interpreting these results as causality cannot be inferred from this study. Since the measure of alliance was completed at the same time as the measure of distress, the effect may be due to a halo effect rather than a causal relationship. It is also possible that the direction of influence has been misspecified or that the relationship between alliance and relational distress is spurious. It is plausible that a couple's level of relational satisfaction may lead to the couple's within-system

alliance. A replication of this study with alliance data collected at the first session would help to establish the direction of effects. The sample of this study should also be taken into account when interpreting the results of this study. Clients were treated by student therapists in two University-based training clinics. The results of this study may be unique to this population and not generalizable to more experienced clinicians or those working in nonacademic settings.

Despite these limitations, this study has made the first steps into studying the multiple alliances inherent in couples work by examining them in the context of couple rather than individual data. Future research on the alliance in couple therapy should continue to use methods that will allow us to examine the aspects of the alliance that are unique to couple therapy. This study has provided evidence for the importance of both the within- and the between-system alliances, suggesting that the importance of each alliance may vary depending on whether the focal symptoms are psychological or relational. More work is needed to articulate and test these pathways. The articulation of a conceptual model for the impact of the alliance on the outcome of therapy is an important next step for the furthering of the study of the alliance in couple therapy. In this and other research endeavors on the alliance, we must not lose sight of the multiple alliances that distinguish couples therapy from individual psychotherapy.

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