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Erica Leigh Delgado
Brigham Young University

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The Influence of Client General Anxiety and Attachment Anxiety on Alliance
Development in Couple Therapy

Erica Leigh Delgado

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirement for the degree of
Master of Science

Lee N. Johnson, Chair
Angela Bradford
Justin Dyer

School of Family Life
Brigham Young University

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ABSTRACT

The Influence of Client General Anxiety and Attachment Anxiety on Alliance Development in Couple Therapy

Erica Leigh Delgado
School of Family Life, BYU
Master of Science

This study examined the intake levels of client general anxiety and attachment anxiety and the relationship of these levels to changes in therapy alliance across the first four couple therapy sessions. Participants were 165 couples in a treatment-as-usual setting. Dyadic growth curve modeling was used to determine whether couple ratings of therapeutic alliance changed over time and explored the influence of general anxiety and attachment anxiety on therapeutic alliance development. Results showed that the alliance increased over the first four therapy sessions. Additionally, female alliance ratings across time were positively associated with female general anxiety and negatively associated with male attachment anxiety. Results also showed that male attachment anxiety was negatively associated with male alliance ratings across time.

Keywords: therapy alliance, general anxiety, attachment anxiety

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TABLE OF CONTENTS

The Influence of Client General Anxiety and Attachment Anxiety on Alliance Development in Couple Therapy	i
ABSTRACT	ii
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
Introduction	1
Therapy Alliance	4
Neuroception	6
General Anxiety	7
Attachment Anxiety	8
Hypotheses	8
Method	9
Participants	9
Procedures	9
Measures	10
Analysis Plan	11
Results	13
Alliance Over Time	13
Impact of Anxiety on Alliance	15

Discussion.....	16
<i>Clinical Implications</i>	18
<i>Limitations and Future Research</i>	19
Conclusion.....	20
References	21
Table 1 Correlations, Means, and SD of Study Variables.....	29
Figure 1 Therapy Alliance Dyadic Growth Model (N = 165 couples).....	30
Figure 2 Therapy Alliance Dyadic Growth Model (N = 165 couples).....	31

LIST OF TABLES

Table 1 Correlations, Means, and SD of Study Variables	27
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LIST OF FIGURES

Figure 1 Therapy Alliance Dyadic Growth Model (N = 165 couples)	28
Figure 2 Therapy Alliance Dyadic Growth Model (N = 165 couples)	28

The Influence of Client General Anxiety and Attachment Anxiety on Alliance Development in Couple Therapy

The therapeutic alliance is a mechanism of change in couple therapy (Bartle-Haring, Glebova, Gangamma, Grafsky, & Delaney, 2012; Johnson & Wright, 2002; Leon, Martinovich, Lutz, & Lyons, 2005), accounting for 5% of the variance for men and 17% of the variance for women for decreased marital distress (Knoblock-Fedders, Pinsof, & Mann, 2007). It is positively associated with a variety of therapeutic outcomes related to individual and couple functioning (Teng, 2013; Falkenstrom, Granstrom, & Homqvist, 2013; Johnson, Wright, & Ketring, 2002; Friedlander, Escudero, Heatherington, & Diamond, 2011), and is associated with improved retention rates in therapy (Knoblock-Fedders, Pinsof, & Mann, 2004). While the importance of the alliance is established, the developmental processes are less understood. Little is known about the ways in which the alliance changes throughout the course of therapy. More specifically, how the alliance is modified over the course of therapy is less understood. Attention needs to be given to client factors that impact alliance development, as an important step for improving therapeutic strategies related to alliance improvement.

Expanding our understanding of how the alliance develops across therapy requires supporting theories to evaluate this mechanism of change. Grounding our understanding of the alliance in theory will enable us to address gaps in the alliance literature, namely that the alliance is an effective mechanism of change, but we have relatively limited understanding of how the alliance changes over time. The goal of the current study is to draw upon Polyvagal theory (Porges, 2011), to evaluate the change of the therapy alliance from second to fourth sessions among a sample couple therapy participants. Polyvagal Theory provides an understanding of the physiological responses associated with detecting threat or safety, and can contribute to our

knowledge of client socio-emotional responses and alliance formation.

Humans have a complex nervous system that facilitates social interaction, particularly human attachment according to Polyvagal Theory. Attachment is developed when an individual's neural circuits are accurately interpreting another person as safe, allowing for a potentially strong therapeutic alliance (Porges, 2005). This complex system enables the establishment of mate selection and friendships necessary for survival. Research has found that human capacity to establish attachment carries with it the threat of separation and anxiety; the ways in which humans learn to attach to other humans is also the ways in which they learn to manage anxiety as it relates to closeness to others (Hill, 2009). While creating social networks is a high human priority, the focus on survival is the primary goal of the nervous system. When the survival response, or sympathetic nervous system, is triggered it takes precedence over other cognitive or emotional responses, like the parasympathetic nervous system. When threat is detected, an individual's parasympathetic nervous system will shut off, which ultimately puts the development of a strong attachment as less of a priority than surviving the threatening situation (Porges, 2005). Additionally, when the threat response is continuously activated it can impair attachment (Porges, 2001).

According to Polyvagal Theory, constant threat arousal with the accompanying anxiety inhibits interactive socio-emotional responses causing individuals to incorrectly identify situations as unsafe and interfere with attachment. Research has found that individuals who struggle to have secure attachments struggle to regulate these emotional responses, which is negatively associated with the therapeutic alliance (Owens, Haddock, & Berry, 2013). Thus neuroception, which is a largely subconscious system used to determine safety or threat, influences the ways in which individuals interact with other humans, namely the ways in which individuals will interact with a therapist. While many studies have investigated the impact of

client anxiety on the therapeutic alliance in individual therapy (Stratford, Lal, & Meara, 2012; Bachelor, Meunier, Laverdiere, & Gamache, 2010), little is known about the ways in which client anxiety impacts therapeutic alliance in couple therapy.

Therapy Alliance

Building a therapeutic alliance in couple therapy can be challenging because there are multiple alliances possible. These possible alliances include *between system alliances* (an alliance between the clients and therapist) and *within system alliances* (an alliance between the two partners; Anderson & Johnson, 2010). It is important that both the within and between alliance develop for productive outcomes (Friedlander, Escudero Heatherington Diamond, 2011; Pinsof & Catherall, 1986). In addition to the multiple alliance possibilities, there is conflicting research on whether or not alliance changes over time (Moore, 2004; Xu & Tracey, 2015; Zilch-Mano, Dinger, McCarthy, & Barber, 2014; Bachelor & Salame, 2000). Studies have found that alliance scores are stable across therapy duration with no significant change (Moore, 2004; Bachelor & Salame, 2000), while other studies have found that indeed therapy alliance does change over time (Xu & Tracey, 2015; Zilch-Mano, Dinger, McCarthy, & Barber, 2014). Research has also, found gender differences in alliance starting points and growth throughout therapy in terms of therapy outcome (Delaney, 2007). When men develop a strong therapeutic alliance early on in the therapeutic process, results found more positive therapy outcomes and a stronger therapy alliance towards the end of therapy than if more focus was placed on the development of alliance with the women (Delaney, 2007).

Hausner (2000) defined the therapeutic alliance as “a working relationship between patient and analyst” (p. 156). Research has found that each person in therapy varies considerably in the development of the therapeutic alliance (Friedlander, Escudero, Heatherington, &

Diamond, 2011). To better understand the differences, researchers have examined the difficulties in developing a strong therapeutic alliance and the factors that contribute to an alliance in couple therapy (Knobloch-Fedders, Pinsof, & Mann, 2004; Friedlander, Escudero, Heatherington, & Diamond, 2011). Couples who remain in therapy through their eighth session develop a stronger alliance than those clients who terminated therapy soon after the first session, indicating the importance of better understanding the growth of the alliance and the contributing modifying factors (Knobloch-Fedders, Pinsof, & Mann, 2004).

The significance of early versus later development of the alliance is also relevant to therapy outcomes with some reporting early alliance impacting outcomes, also implicating a need to further understand the growth of the alliance (Knobloch-Fedders, Pinsof, & Mann, 2004; Johnson & Talitman, 1997). However, others report both early (third session) and later (final session) alliance predicting individual and relational client outcomes (Anker, Owen, Duncan, & Sparks, 2010). Failure to form a good collaborative relationship within the triadic relationship between the couple and the therapist at the beginning of therapy often leads to premature termination of therapy within the first few sessions (Mamodhousen, Wright, Tremblay, & Wright, 2005; Knobloch-Fedders, Pinsof, Mann, 2004). On the other hand, a strong alliance formed early in therapy is associated with achieving clinically significant change (Anker, Own, Duncan, & Sparks, 2010; Knobloch-Fedders, Pinsof, Mann, 2004). Evidence does suggest that early formation of a strong alliance is important to achieving gains in therapy. What is less well known; however, is what factors contribute to alliance changes over time. Research has found that the strength of the therapeutic alliance varies throughout therapy (Anker, Owen, Duncan, & Sparks, 2010; Lambert, Skinner, & Friedlander, 2012). These studies provide valuable information on many aspects of alliance development but lack an explanation of alliance

development from the focus of how or why relationships form. However, looking at the alliance from the view of Polyvagal Theory and neuroception can provide valuable insights into alliance formation and development.

Neuroception

Polyvagal Theory (Porges, 2011) suggests that one's physiology and how active one's sympathetic nervous system has the strong potential of exacerbating highly reactive states, subsequently labeling potentially safe environments as inherently unsafe. Within Polyvagal Theory, neuroception is described as the process of automatic evaluation of risk in the environment without awareness and is viewed as an adaptive mechanism that dictates response in safe and unsafe situations (Geller & Porges, 2014). From a neuroception perspective, when clients and therapists feel mutually safe their physiological state focuses on forming a professional collaborative working relationship. Both client and therapist connect and engage in effective therapeutic work (Geller & Porges, 2014). Neuroception describes how neural circuits distinguish whether situations or people are first and foremost dangerous, or life threatening, then whether they are safe and friendly (Porges, 2011). Evaluation of a situation as safe enables an effective socio-emotional response, which is necessary for the development of the therapeutic alliance. Inaccurate neuroception or over-active fear response would push a client to engage subconsciously in protective behaviors that would make developing a therapeutic alliance challenging (Fox, 2002). The overactive fear response is one of the main contributing factors related to anxiety (Porges, 2011). Therefore, when an individual is experiencing high levels of anxiety and they have an overactive fear response, their sympathetic nervous system may activate more often than someone who is not experiencing high levels of anxiety (Porges, 2011) creating a challenge in engaging in socially acceptable ways as to develop a strong therapeutic

alliance.

General Anxiety

Anxiety negatively effects the therapeutic process potentially altering the change mechanism of the therapeutic alliance (Johnson, Ketring, Rohacs, & Brewer, 2006; Knobloch-Fedders, Pinsof, & Mann, 2004; Patterson, Anderson, & Wei, 2014; Stratford, Lal, & Meara, 2012). Research shows that early safe and unsafe childhood interaction patterns physiologically encode for future survival and social interactive purposes. Similar interactions in the future solidify the patterns, reinforcing the physiological processes. Research shows mixed results within conjoint couple therapy as to whether or not internalized symptoms, such as anxiety, affects the development of the therapeutic alliance (Knobloch-Fedders, Pinsof, & Mann, 2004). The amygdala is the part of the brain that has been shown to regulate the control of fear and anxiety and during times of high therapeutic alliance, the activity in the amygdala is reduced (Stratford, Lal, & Meara, 2012). The high therapeutic alliance and subsequently dampened amygdala activity, enables clients to engage socially and reprocess and re-experience anxieties from their early life to have a corrective experience with the therapist (Stratford, Lal, & Meara, 2012). While the manifestation of anxiety varies within each couple throughout therapy, Polyvagal Theory suggests that high physiological reactivity related to anxiety will impact the formation of an alliance.

High stress, for both husbands and wives, indicated a lower level of satisfaction upon beginning therapy; when the wife's level of stress was higher, the husband's level of dissatisfaction was higher (Knerr & Bartle-Haring, 2010). Interestingly, when wives' alliance scores were stronger there was a slower pace of change in relationship satisfaction, but when husbands' alliance scores were stronger there as a quicker pace for change in relationship

satisfaction. However, the news is not negative for higher wives' alliance: her stronger alliance with the therapist impacted the husbands positive change in satisfaction (Knerr & Bartle-Haring, 2010).

Attachment Anxiety

There is a difference between those who have a secure attachment and those who have an anxious attachment when forming new relationships, like the ones developed in the therapeutic process, and building alliances (Johnson, Ketring, Robacs, & Brewer, 2006). The range of alarm responses established through dangerous interactions and social cues responses formed by comforting exchanges establishes a complex formula of attachment for each person. Attachment style is, therefore, important in the therapeutic context because client physiological cues within social interactions affect the therapeutic alliance (Patterson, Anderson, & Wei, 2014).

Hypotheses

While it is clear that the formation and maintenance of an effective therapeutic alliance are critical in couple therapy, there are gaps in the research. First, little is known about the ways in which the alliance changes throughout the course of therapy. Also, more information is needed about the ways in which client anxiety is associated with the development of the therapeutic alliance in couple therapy. This exploratory study aims to examine the relationship between client anxiety and the development and trajectory of the therapeutic alliance by examining these hypotheses:

1. The therapeutic alliance positively changes over time for males and females in couple therapy.
2. Client general anxiety will be negatively associated with therapeutic alliance startingpoints and maintenance across therapy sessions.

3. Client attachment anxiety will be negatively associated with therapeutic alliance starting points and maintenance across therapy sessions.

Method

Participants

Participants in this study were 165 heterosexual couples attending weekly therapy sessions as a couple at a COAMFTE accredited program at an outpatient family therapy university clinic in the southeastern United States. Participants received services after calling into the clinic requesting couple therapy. Most participant couples were married (78.2%) and European-American (79.6%) with African-American (21.8%) being the next highest reported race. Participants reported graduating from high school (31.1%) or earning a Bachelor's degree (23.6%) as their highest level of education. Income levels exhibited good variability.

Procedures

Couples with a variety of individual and relational presenting problems received clinical services at a COAMFTE-accredited outpatient family therapy training clinic in a university setting. Therapists were master's students, who practiced under the supervision of faculty in the program. Therapists were not required to use any particular therapeutic model but provided help in a treatment-as-usual setting. Data for this study were gathered from the clinical assessment packets at intake and then at the beginning of sessions two, three, and four. Participants did not take the alliance measure before their first therapy session because they had not yet met their therapist, therefore, alliance could not be measured at intake. Participants were assigned therapists that were determined to be able to suit their needs the best. Weekly visits were typical, and the fees were based on a sliding scale for each participant. Participants understood that their therapist would not see the results of the measure indicating rating of alliance, therefore

reporting bias was a non-issue.

Measures

Experiences in Close Relationships-Short Form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007). The ECR-S measures attachment in adult relationships by examining attachment anxiety and avoidance. Both subscales contain six items, and responses are on a seven-point *Likert-type* scale with lower scores representing less of each construct. The authors provide evidence of reliability and validity (Wei et al., 2007). Since this study was looking at the effects of anxiety on alliance development, only items from the attachment anxiety subscale were used. Questions from this subscale include, “I worry that romantic partners won’t care about me as much as I care about them”, “My desire to be very close sometimes scares people away”, “I need a lot of reassurance that I am loved by my partner”. An average was calculated across items. Reliability coefficient for this sample were adequate (males $\alpha = .77$; females $\alpha = .75$).

Outcome Questionnaire-45.2 (OQ45.2; (Lambert et al., 1996)). The OQ-45.2 measures overall general functioning on a 5-point rating scale with responses ranging from 0 (never) to 4 (almost always). The OQ-45.2 has subscales: Social Roles, Interpersonal Relations, and Symptom Distress. The authors provide evidence of concurrent and criterion-related validity and reliability. The Symptom Distress subscale looks at symptoms related to anxiety and depression. Since this study is focusing on anxiety and alliance development the 12 items from the symptom distress subscale related to anxiety were used. To get an overall general anxiety score, the average across items was used and scores ranged from 0 to 4. Reliability coefficients for this sample was adequate for both males ($\alpha = .77$) and females ($\alpha = .82$).

Intersession Report (IR; Johnson, Ketring, Anderson, 2010). The IR is a nine-item questionnaire that is taken by clients before each therapy session to measure client progress. The

IR has three subscales for Functioning, Symptoms, and Alliance. The authors report evidence of internal consistency and convergent and discriminant validity. This validity was established through the correlation of the intersession report, outcome questionnaire-45.2, RDAS, and the subscales of the ECR. Since this study is examining the influence of anxiety on alliance development in couple therapy, the one item from the alliance scale that asks about the couple's overall alliance will be used: "I rate the relationship we as a couple or my whole family has with the therapist as". Scores on this item range from 1 to 7, with 1 representing low therapeutic alliance and 7 representing high therapeutic alliance. With this item, we are assessing the quality of alliance that the couple has with the therapist.

Analysis Plan

To best understand how alliance changes across sessions in couple therapy, dyadic growth modeling was used. This analysis strategy allows researchers to use the couple as the unit of analysis to account for the non-independence among couples (Miller & Johnson, 2014). This analysis strategy also allows the slopes and intercepts to vary across participants, to allow a determination of the variability around the average intercept and average slope, providing a more complete description of the data.

The first hypothesis is whether or not alliance changes over time for males and females in couple therapy. Dyadic growth curves also allow for an examination of the intercepts of alliance ratings for both males and females to determine whether or not males and females have an alliance starting point that is significantly different from zero. The slopes from these analyses were used to determine change over time in alliance scores.

The second and third hypotheses look at the influence of general anxiety and attachment anxiety on therapy alliance and change over time. A second dyadic growth curve was used to test

the relationship between general anxiety and attachment anxiety on starting level of alliance and alliance changes for males and females. The third hypothesis asks about the influence of attachment anxiety on alliance development. Change in alliance over time will also use the results from the second dyadic growth curve.

As with almost all clinical research across time, this study did have attrition issues with clients who dropped out of therapy and did not complete the therapy alliance measure at subsequent assessments. The data were analyzed and a pattern among the missing data was found in which these missing data increased as therapy progressed. The number of females who failed to complete the alliance measure at some time during the study were 22 at time 2 (13%), 48 at time 3 (29%), and 65 at time 4 (39%). Rates and percentages were similar for males, 35 at time 2 (24%), 40 at time 3 (21%), and 63 at time 4 (38%). To assess for any bias that may potentially influence the results, cases that were missing at any time point were compared with cases that were not missing data (Wilson, Houston-Barrett, & Stuchell, 2014). Results showed that there was not a significant difference in attachment anxiety and general anxiety for participants with missing data.

Additionally, a χ^2 was used in order to test for a relationship between categorical demographic variables and these missing data and throughout this process the decision was made to collapse the categories so as to meet the assumptions of the test. The test showed that there was no relationship between race, income, and missing data on the therapy alliance after the fourth session. In addition to the χ^2 , t -tests were used to test for missing data bias between continuous study variables and missing alliance data. The results from these t -tests revealed no significant differences in age, years together, RDAS scores, intake anxiety, or intake avoidance from having missing data at session 4. Thus, it can be assumed that data are missing at random

(MAR). For data that are MAR, it is recommended that full information maximum likelihood estimation be used (Enders, 2010; Enders & Bandalos, 2001).

Mplus version 7 was used. Multiple indices were used to determine model fit—RMSEA, CFI, and TLI. Estimates of less than .08 on the RMSEA were considered representative of good fit, with .06 representing excellent fit, and estimates of .95 or higher on the CFI and TLI representing a good fit, as suggested by Hu and Bentler (1998).

Results

Correlations, means and standard deviations can be found in table 1. Correlations are mostly in the expected direction, and all within person correlations are higher than between person correlations, nonetheless, between person alliance ratings are significant. Results of paired *t*-tests also show that males and females significantly differ in starting general anxiety ($t(160) = -3.11, p = .002$) starting attachment anxiety ($t(163) = -3.42, p < .001$) and starting therapy alliance ($t(118) = -2.55, p = .011$) with females reporting higher scores on each variable.

Alliance Over Time

For hypothesis one to determine the starting points for alliance and if alliance scores changed over the course of therapy, dyadic growth curve modeling was used (see Figure 1). Since there are three time points, the dyadic growth curve tested whether a linear rate of change was a good fit to the data. This model was a good fit to the data, $\chi^2(7) = 10.86, p = .15$; RMSEA = .06 (90% CI = .12); CFI = .99; TLI = .97. Examination of the slopes and intercepts indicate that male and female ratings of the alliance are different from zero and grow over time. The intercept, or starting point, for females, is 4.97 ($p < .001$), indicating that the starting point for females is significantly different than zero. Scores on the alliance measure range from 1-7, and an intercept

of 4.97 indicate a somewhat positive alliance early in therapy. The intercept for males is 4.65 ($p < .001$), indicating that the starting point for males is different than zero and also represents a somewhat positive alliance early in therapy. Next, the rate of change in alliance over time is examined. Analysis of the slopes suggests that both females' (female slope = .22, $p < .001$) and males' (male slope = .26, $p < .001$) alliance ratings do improve between sessions two through four.

Allison, (1999); and Johnson & Miller, (2014) have recommended that slopes that are significantly different from zero be applied to the target scale to determine the magnitude, or clinical utility, of the slope. The goal of this procedure is not to determine the true magnitude or directionality of change but is intended to provide an idea of how big or small the change is. For these results, a slope of approximately .20 (females) to .25 (males) suggests that participants would need four to five sessions of therapy to experience a one-point increase from the starting score on the alliance, which ranges from 1 to 7.

A dyadic growth curve also allows for the exploration of the influence of partners on each other. For this first model female and male intercepts are positively correlated ($r = .49$, $p < .01$) which indicates that there is a relationship among partners on alliance starting values. The only other relationship that is significant is between female intercept and slope ($r = -.68$, $p < .001$). This negative relationship shows that females with a lower starting intercept exhibit a larger positive slope.

Finally, another important finding from this first model is that the variance for female intercept and slope and male intercept are all significant (female intercept $\sigma = 1.82$, $p < .001$; female slope $\sigma = .22$, $p < .05$; male intercept $\sigma = .97$, $p < .05$). This finding indicates that there is significant variability in the starting points for males and females and variability of the slopes for

females (Duncan, Duncan, & Stryker, 2006). These significant variances also point to a need to further examine variables that may have an influence on the intercepts and slopes of the alliance of females.

Impact of Anxiety on Alliance

For hypotheses 2 and 3, a second dyadic growth curve model was used with the addition of general anxiety and attachment anxiety as predictors of intercepts and slopes (see Figure 2). This model was a very good fit to the data, $\chi^2(15) = 17.29, p = .30$; RMSEA = .03 (90% CI = .00 to .08); CFI = .99; TLI = .98.

Intercepts for males and females are examined to determine the association of anxiety on the initial alliance. First, the four predictor variables, male and female attachment anxiety and male and female general anxiety, are examined to determine if there is an effect on the intercept for the female alliance. The effects female general anxiety ($\gamma = -0.44, SE = .22, p = .054$), female attachment anxiety ($\gamma = -0.10, SE = .12, p = .42$), male general anxiety ($\gamma = 0.0, SE = .27, p = .99$), and male attachment anxiety ($\gamma = .08, SE = .11, p = .48$) are not significantly related to female alliance starting points.

The effect of the four predictor variables on the intercept for the male alliance were examined. Only male attachment anxiety was associated with male alliance intercept scores ($\gamma = -0.30, SE = .11, p = .006$). The effects of male general anxiety ($\gamma = .34, SE = .28, p = .23$), female general anxiety ($\gamma = 0.14, SE = .22, p = .52$), and female attachment anxiety ($\gamma = -0.18, SE = .12, p = .11$) are not significantly associated with male alliance starting points. Thus, for each point increase in male attachment anxiety, their starting alliance is .30 points lower. Thus, the findings on intercepts suggest that male attachment anxiety is negatively associated with male alliance scores.

The effect of the four predictor variables was also examined to determine if the presence of general or attachment anxiety is associated with the rate of change in alliance over time. There is a significant effect of male attachment anxiety ($\gamma = -0.09$, $SE = .04$, $p = .04$) on the rate of change (slope) of female alliance over time. This results indicate that higher levels of male attachment anxiety is associated with a small decrease in rate of change of female alliance over time. Male general anxiety ($\gamma = -0.05$, $SE = .10$, $p = .62$) and female attachment anxiety ($\gamma = .01$, $SE = .05$, $p = .83$), and female general anxiety ($\gamma = .17$, $SE = .09$, $p = .053$) are not significantly associated with female alliance slope.

For males, both male attachment anxiety ($\gamma = .01$, $SE = .04$, $p = .02$) and male general anxiety ($\gamma = -0.26$, $SE = .11$, $p = .01$) are significantly associated with male alliance trajectory. These results suggest that male attachment anxiety has a significant, but not very meaningful influence on the rate of change for males. However, male general anxiety has a significant and more meaningful influence on the slope of male alliance. For every point increase in male general anxiety scores, males experience a quarter point decrease in alliance changes. Neither female general anxiety ($\gamma = -.08$, $SE = .08$, $p = .35$) nor female attachment anxiety ($\gamma = 0.07$, $SE = .04$, $p = .20$) had an influence on male alliance slopes.

Discussion

The alliance has been shown to be an important factor in client change (Johnson & Ketring, 2006; Johnson, Ketring, Rohacs, & Brewer, 2006). This study sought to build on the research for alliance by examining if alliance in couple therapy changes over time and whether it would be associated with general or attachment anxiety. Results show that alliance does change over time for both females and males. Some research has shown that the alliance is thought to be established early in treatment and to be fairly stable over time (Gaston, Piper, Debbane,

Bienvenu, & Garant, 1994; Knobloch-Fedders, Pinsof, & Mann, 2007; Sexton, Hembre, & Kvarme, 1996). However, findings from this study show that, at least over the first few sessions, the alliance is changing. Reasons for the differences in findings between this study and the ones cited could include the analysis strategy used, with the previous studies not specifically modeling change across time or using both partners in the analyses. Another reason is the fact that a one item measure of the alliance is used so it is very possible that there is higher measurement error, which may account for change.

There is a significant amount of variability in growth rates for females while male growth rates were more consistent across participants. This finding provides additional evidence that the alliance in early couple therapy may be less consistent than reported in other studies. For females, while the average rate of change for all participants was positive, there are some females who experience a greater rate of change while others experience a much lesser rate of change. Males, on the other hand, reported more consistent rates of change. There was also significant variability in the starting alliance for both males and females. While it is important to know that the alliance changes across time, it is also important to know if there are variables that contribute to that alliance changing.

To further understand alliance development, the influence of attachment anxiety and general anxiety on alliance development was explored. Results support previous research showing that attachment (Mikulincer, Shaver, & Berant, 2013) and anxiety (Anderson & Johnson, 2010; Parker, Johnson, & Ketring, 2012) have an effect on alliance. For males, anxiety within relationships contributes to a lower initial alliance. The ability to form therapeutic relationships within the first session seems to be impeded by interpersonal attachment anxiety of males.

For males, general anxiety contributed to a lower rate of change in the alliance. This can be attributed to the fact that the increased physiological arousal may impact the ability for higher order functioning within the cortex to take effect for males in order to engage the therapeutic relationship and effectively engage in alliance behaviors. This would explain why the male took longer to adapt to the therapy process when they present with attachment anxiety. There were also some significant cross partner effects from male anxiety variables to female slopes. However, this finding was so small as to not be clinically useful. However, since this was a significant finding, future research should examine this relationship.

Due to the difficulty that female clients have in developing a strong relationship to the therapist when their male partner has high levels of attachment anxiety, it can be implied that the female client is preoccupied with their partners' inability to develop a healthy attachment to the therapist, distracting her from the work in forming that strong relationship to the therapist herself. Another possibility is that the male client's attachment anxiety leads the female client to be preoccupied with his inability to attach affectively to her, which then distracts her from the work in forming a strong relationship to the therapist herself. Due to the results that high levels of client general anxiety early in the therapy process does not drastically impact therapy alliance over time indicates that client general anxiety is not a barrier to a healthy therapeutic alliance. What we do not know that needs to be addressed by future research is if and how each therapist addressed the anxiety present and how that may influence the alliance.

Clinical Implications

Since the results of this study indicate a negative association between attachment anxiety and the development and maintenance of the therapeutic alliance, it is important to focus on and treat this variable. Research has found that often, couples experiencing insecure attachment

levels in their relationship are the couples seeking help through therapy (Johnson et. al., 2015). Providing clients with psychoeducation on the different attachment styles and the ways in which their own styles are representing themselves in their relationship can help clients to change their perception of experiences they have had, which have led to their insecure attachment (Hill, 2009).

Research has shown that implementing step-by-step guidelines that teach clients how to allow dialogue about pain in the therapy room aids in productive attachment work (Paivio & Pascual, 2010). An exploration of fears and anxieties in the relationship is possible (Paivio & Pascual, 2010) by re-processing attachment injuries and having corrective experiences in order to work towards a secure attachment.

Limitations and Future Research

There were several limitations to the current study. First, while the sample size was a respectable 165 couples, participants were only seen at one clinic in one area of the country. Thus, caution should be exercised in generalizing these findings to other settings. However, the fact that participants were seen in a treatment-as-usual setting, improves the generalizability of the current findings. Future research should replicate this research in additional settings to further establish the external validity of the results. Another limitation is that participants were only seen by student therapists. Therefore, results should be considered with caution in terms of generalizability to clinics or private practices with licensed therapists.

Measurement issues often contribute to construct validity threats. The measure for general anxiety, while part of an established measure, did not constitute an established anxiety questionnaire. Only an assessment of content validity was possible.

Finally, in addition to external and construct validity threats, there were also threats to

conclusion validity. While this study did find that the alliance does change over time, there were not enough data points to test additional non-linear models. There is the possibility that as treatment progresses and as both types of anxiety are reduced that it could have a non-linear influence on the growth of the alliance.

Conclusion

This study examined the growth of the alliance in a couple therapy setting and found that the couple alliance demonstrated positive changes over time. This study also examined the influence of attachment anxiety and general anxiety on alliance growth and found that male attachment anxiety, male general anxiety and female general anxiety were related to alliance starting points and alliance growth. While additional research is necessary, the relationship between anxiety and therapy alliance is potentially important for couple therapists.

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Table 1 Correlations, Means, and SD of Study Variables

<i>Variables</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
1. Male Attachment Anxiety	--									
2. Male Clinical Anxiety	.40 ^{***}	--								
3. 2 nd Session Male Alliance	-.19 [*]	-.03	--							
4. 3 rd Session Male Alliance	-.16	-.21 [*]	.55 ^{***}	--						
5. 4 th Session Male Alliance	-.10	-.30 ^{**}	.63 ^{***}	.79 ^{**}	--					
6. Female Attachment Anxiety	-.02	.10	-.06	-.12	-.04	--				
7. Female Clinical Anxiety	.06	.24 ^{**}	-.02	-.11	-.11	.28 ^{***}	--			
8. 2 nd Session Female Alliance	.01	-.05	.35 ^{***}	.37 ^{***}	.39 ^{***}	-.18 [*]	-.22 ^{**}	--		
9. 3 rd Session Female Alliance	-.18	-.09	.28 ^{**}	.43 ^{***}	.47 ^{***}	-.03	-.11	.67 ^{***}	--	
10. 4 th Session Female Alliance	-.26 ^{**}	-.19	.34 ^{**}	.42 ^{***}	.42 ^{***}	-.14	-.02	.63 ^{***}	.76 ^{***}	--
Mean	3.52	1.53	4.90	5.30	5.46	4.04	1.71	5.21	5.42	5.63
<i>SD</i>	1.35	0.55	1.28	1.21	1.15	1.26	0.65	1.20	1.24	1.15
<i>n</i>	163	163	130	125	102	165	162	133	117	100

Figure 1 Therapy Alliance Dyadic Growth Model (N = 165 couples)

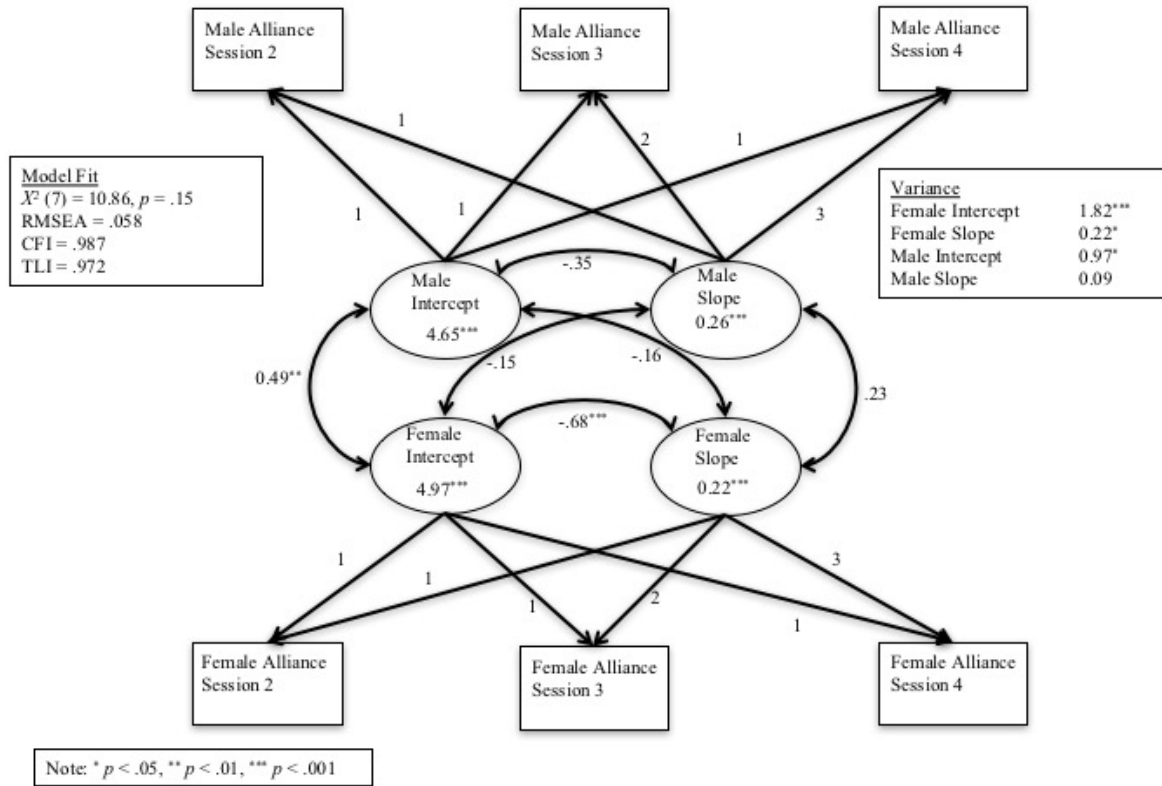


Figure 2 Therapy Alliance Dyadic Growth Model (N = 165 couples)

