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Coding Rupture Indicators in Couple Therapy (CRICT):  
An Observational Coding Scheme

AnnaLisa Ward Carr

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

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## ABSTRACT

### Coding Rupture Indicators in Couple Therapy (CRICT): An Observational Coding Scheme

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The therapeutic alliance, a construct representing agreement and collaboration on therapy goals, therapy tasks, and the emotional bond between client(s) and therapist, is a robust predictor of therapy outcomes in individual, couple, and family therapy. One way to track the therapeutic alliance is through ruptures and repairs. Ruptures are breaks, tensions, or tears in the therapeutic alliance. Ruptures and repairs influence the therapeutic alliance and consequently therapeutic outcomes. Currently, there is a lack of research addressing ruptures and repairs in couple therapy. The first step in researching alliance ruptures is to have a reliable way to assess alliance ruptures. This study will describe the development of the Coding Rupture Indicators in Couples Therapy (CRICT). The CRICT is an observational coding scheme that measures ruptures in couple therapy. The CRICT was developed through collaboration with researchers in marriage and family therapy, creation of items, adaptation of items from established coding schemes from individual therapy, and input and feedback as the CRICT was used and tested by undergraduates in a coding class. This paper will review foundational research of ruptures and repairs as well as the construction and use of the CRICT coding scheme.

Keywords: therapeutic alliance, ruptures, repairs, couple therapy, observational coding

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Coding Rupture Indicators in Couple Therapy (CRICT):  
An Observational Coding Scheme

The therapeutic alliance is a well-studied and robust predictor for therapeutic outcomes, including completion of treatment and improvement in problematic symptoms (Anker, Duncan, Owen, & Sparks, 2010; Eubanks-Carter, Muran, & Safran, 2010; Westra, Constantion, & Aviram, 2011). In the majority of studies on the alliance, the therapeutic alliance is conceptualized using Bordin's (1979) three domains, which are: agreement on and investment in therapy goals, agreement of therapy processes and tasks, and the emotional bond (e.g., respect, trust, care) between client(s) and therapist (Johnson & Wright, 2002; Pinsof, 1994). Research has shown the therapeutic alliance directly influences therapeutic outcomes in individual, couple, and family therapy (Anker et al., 2010; Bartle-Haring et al., 2012; Horvath, Del Re, Flückiger, & Symonds, 2011; Friedlander, Escudero, Welmers–van de Poll, & Heatherington, 2018; Johnson & Wright, 2002; Larsson, Falkenström, Andresson, & Holmqvist, 2018). Because the therapeutic alliance is such a robust predictor for outcomes, understanding factors that help create a strong therapeutic alliance are important. One way to understand indicators of therapy alliance strength is through studying alliance ruptures and repairs.

A rupture in the therapeutic alliance has been defined as a tear or decline in the alliance through lack of collaboration on tasks or goals, or a strain in the emotional bond between the client(s) and therapist and are common in therapy (Eubanks-Carter et al., 2010; Eubanks-Carter, Muran, & Safran, 2015; Goldsmith, 2012; Safran, Crocker, McMain, & Murray, 1990) Ruptures tend to detract, at least temporarily, from positive and strong alliances. Ruptures are not inherently bad; having a rupture may be necessary in therapy to accomplish therapeutic goals (Kline et al., 2018) as experiencing ruptures with a resolution can lead to better alliances, and

hence, better outcomes when compared to having unrepaired ruptures or no ruptures (Goldsmith, 2012; Larsson et al., 2018).

Repairs, or resolutions, occur when the alliance between the therapist and client either returns to normal, or when the alliance between the therapist and client becomes stronger than it was before the rupture occurred (Larsson et al., 2018). Ruptures and repairs in therapeutic contexts deserve careful attention and further study, as most therapeutic relationships will experience at least one rupture in the alliance throughout treatment (Colli, Gentile, Condino, & Lingiardi, 2019; Goldsmith, 2012; Safran et al., 1990).

Most research examining ruptures and repairs focuses exclusively on individual therapy (Goldsmith, 2012). Studies from individual therapy have found that unresolved ruptures affect therapy outcomes (Eubanks-Carter et al., 2010; Colli et al., 2019; Colli & Lingiardi, 2009; Horvath et al., 2011; Larsson et al., 2018). The small amount of research on couple therapy ruptures and repairs show that rupture and repair patterns in therapy impact therapeutic outcomes (Goldsmith, 2012). Due to the complex nature of couple therapy, alliance ruptures and repairs become increasingly convoluted as the therapist must assess and balance more than one client, and therefore multiple alliances, simultaneously (Benson, McGinn, & Christensen, 2012; Hardy, Sabey, & Anderson, in press; Pinsof, 1994). Thus, further research addressing ruptures and repairs in couple therapy is needed.

One main reason for the lack of research addressing ruptures and repairs in couple therapy, is a lack of measurement tools. Currently there are established coding schemes to assess ruptures and repairs in individual therapy, but there are no existing coding schemes to measure ruptures and repairs in couple therapy (Colli et al., 2019; Eubanks-Carter et al., 2015). The addition of another client in the therapy room brings additional alliances and relationships that

are not captured in individual rupture and repair coding schemes. Therefore, in order to better understand the impact of ruptures and repairs in couple therapy, it is imperative to have an established rupture and repair coding scheme for couple therapy. Due to the complexity and time involved in developing an observational coding scheme, this study will focus solely on the measurement of alliance ruptures.

### **Literature Review**

As mentioned above, due to the complicated nature of developing an observational coding scheme of ruptures and repairs, only the observational measurement of ruptures in couple therapy will be addressed at this time. Therefore, for the remainder of this paper only ruptures will be addressed and discussed in greater detail.

To better understand how ruptures will be measured this section will review literature on the therapeutic alliance, including: theory, importance in individual and couple therapy, and types. While there is a lot known about the therapeutic alliance, less is known about ruptures and repairs, especially in a couple therapy contexts. Therefore, literature on alliance ruptures and measurement will then be addressed along with intensity and duration of ruptures in therapy sessions. Understanding the therapeutic alliance, ruptures, and measurement of ruptures will help set the stage for the overall purpose of this paper – development and reliability testing of the Coding Rupture Indicators in Couples Therapy (CRICT), an observational coding scheme of ruptures in couple therapy.

### **Therapeutic Alliance**

One of the earliest researchers to address the therapeutic alliance was Bordin (1979), who suggested the alliance contains three domains: agreement on tasks, agreement on goals, and the emotional bond between therapist and client. Since then, studies have, and have continued to,

address the therapeutic alliance in individual, couple, and family therapy (Bartle-Haring et al., 2012; Johnson & Wright, 2002). The therapeutic alliance has been studied extensively for many years, with findings showing the therapeutic alliance as a strong predictor of therapy outcomes, such as retention of clients, increased client implementation of therapist's suggestions outside of session, and resolution of presenting problems (Anker et al., 2010; Bartle-Haring et al., 2012; Bordin, 1979; Eubanks-Carter et al., 2010; Friedlander et al., 2018; Quirk, Smith, & Owen, 2018; Roussos, Gomez Penedo, & Muiños, 2018; Westra et al., 2011).

While the therapeutic alliance is predictive of outcomes for individual, couple, and family therapy, couple therapy requires particular consideration. Research findings suggest that individuals starting therapy and couples starting therapy report their perceptions of the therapeutic alliances a bit differently (Bartle-Haring et al., 2012). In a study examining the alliance between individuals and couples in therapy Bartle-Haring et al. (2012) found that couples initially have higher agreement on tasks and goals and lower emotional bond compared to individuals starting therapy. If this is the case, that there are differences in the alliance between couples and individuals, then it is imperative the couple alliance is considered either outside of or in greater depth than the individual therapy alliance when looking at couple therapy alliance outcomes.

### **Couple Alliance**

The therapeutic alliance in couple therapy becomes increasingly complex in comparison to individual therapy; each client has his or her own relationship with the therapist as well as a relationship with his or her partner (Bartle-Haring et al., 2012; Davis, Lebow, & Sprenkle, 2012; De La Peña, Friedlander, & Escudero, 2009; Friedlander et al., 2018; Pinosof, 1994). These multiple relationships in couple therapy add multiple therapeutic alliances that all impact

treatment outcomes to some extent (Pinsof, 1994). When examining factors that impact the therapeutic alliance in couple therapy, all of the alliances involved in couple therapy need to be understood. The types of alliances can be broken down into three categories: between system alliances, split alliances, and the within system alliance (Pinsof, 1994; Johnson & Wright, 2002).

**Between system alliance.** The between system alliance, or between alliance, consists of three systems: self-therapist, other-therapist, and group-therapist (Pinsof, 1994). The self-therapist is the alliance typically measured in individual therapy; it is the alliance between the individual client and the therapist (Pinsof, 1994). The self-therapist alliance captures agreement between therapist and client on goals and tasks of therapy as well as the strength of the emotional bond between therapist and client. In couple and family therapy, each client's self-reported alliance with the therapist, self-therapist alliance, is positively correlated to their partner and/or family member's outcomes (Anker et al., 2010; De La Peña et al., 2009). In other words, in couple therapy each partner's self-therapist alliance is related to his or her partner's therapy outcomes. This finding suggests that in couple therapy the individual's alliance with the therapist matter *and* his or her partner's alliance with the therapist predict each individual client's therapy outcomes (Anderson & Johnson, 2010; Anker et al., 2010; De La Peña et al., 2009).

In couple therapy the other-therapist alliance addresses the alliance (i.e., goals, tasks, and bond) between the client's partner and the therapist (Pinsof, 1994). For example, "my partner and the therapist agree/disagree on the goals of therapy" could be partly measuring the other-therapist alliance. In a study addressing the therapeutic alliance in heterosexual couples in therapy by Anderson and Johnson (2010), the male partner's between alliance was significantly related to the female partner's psychological distress. While the between alliance in this study was measured as a whole variable, without breaking up the self-therapist, other-therapist, and

group-therapist components, these results suggest that client outcomes may be impacted by how they view their partner's alliance with the therapist (i.e., the other-therapist alliance; Anderson & Johnson, 2010). The last component of the between alliance is the group-therapist alliance (Pinsof, 1994).

The group-therapist alliance addresses the therapeutic alliance between all members in therapy and the therapist (Pinsof, 1994). For example, "we (my partner and I in couples therapy) agree/disagree with the therapist about the tasks of therapy" or "the therapist cares about my relationships" could measure aspects of the group-therapist alliance (Pinsof, 1994). Another type of alliance that impacts outcomes in couple therapy are split alliances.

**Split alliance.** Split alliances occur when there is a notable difference between client's between alliances (Bridges, 2015; Pinsof, 1994). For example, in couple therapy one client has a positive alliance with the therapist and his or her partner has a negative alliance with the therapist (Escudero, Boogmans, Loots, & Friedlander, 2012; Pinsof, 1994). Split alliances occur frequently in family and couple therapy (Escudero et al., 2012) and could be a form of an alliance rupture. For example, in couple therapy if partner one has a positive alliance with the therapist and partner two has a negative alliance with the therapist than there might be disagreement or a rupture occurring in the within system alliance. If, however, partner one and two both have a positive alliance with the therapist at varying levels, there might not be a within system alliance rupture. The impact of the split alliance on therapeutic outcomes is somewhat dependent on the strength of the split, how polarized the client's between alliances are, and the power each client holds; for instance, if one partner has more say in how often therapy sessions occur, his or her between alliance could have a stronger impact on therapeutic outcomes (Pinsof, 1994).

Split alliances are correlated with premature dropout of therapy (De La Peña et al., 2009). This finding highlights the need to measure the between alliance and to further understand what contributes to positive and negative between therapeutic alliances in couple therapy. The last type of alliance addressed in this paper is the within alliance.

**Within system alliance.** The within system alliance, or within alliance, addresses the alliance of subsystems in therapy, in this study the within alliance is the alliance betwixt the two clients in the couple subsystem (Pinsof, 1994). The within alliance of the couple captures the agreement and engagement each client in the relationship has surrounding therapeutic goals and tasks, a shared sense of purpose around treatment, and the emotional bond, or connection, the couple brings to therapy (Anderson & Johnson, 2010; Escudero et al., 2012; Goldsmith, 2012; Johnson & Wright, 2002; Pinsof, 1994). The within alliance, the therapeutic alliance between the couple attending therapy, has been shown to be the most predictive of therapeutic outcomes among the various alliances (i.e., between and split alliances) in couple therapy; this finding is interesting because most experienced therapists tend to overlook the within alliance (Anderson & Johnson, 2010; Friedlander et al., 2018; Hardy et al., in press). Thus, the importance of the within alliance in predicting therapeutic outcomes, is one reason why having a measurement of ruptures and repairs specifically designed for couple therapy, and not individual therapy, is important.

Current established measurements and coding schemes of ruptures and repairs are solely focused on individual therapy. As mentioned above, the therapeutic alliance is different when comparing and contrasting individual therapy and couple therapy. As such, measuring ruptures and repairs with measurement systems tested and designed for individual therapy, and individual therapy alliances, are going to be less than optimal for couple therapy use. To capture these

differences, in the alliances within couple therapy, measurement tools need to be created for and validated on couples attending therapy.

**CRICT alliances.** The CRICT will only focus on the self-therapist, hereafter referred to simply as between alliance, and within alliances. The other-therapist and group-therapist alliances overlap enough with these alliances, self-therapist/between and within, and will not be focused on in the CRICT.

In couple therapy the other-therapist between alliance could be seen as either very similar to self-therapist between alliance or the within alliance (discussed further below). For example, if one client complains or expresses concerns about how the therapist is handling things (e.g., their partner's thoughts, goals, etc.) this would appear as a strain in the self-therapist alliance. On the other hand, if the client does not care how the therapist is treating his or her partner the client may not have a problem with strength of the partner's alliance with the therapist (other-therapist alliance). If this is the case, the client does not care how the therapist agrees/treats his or her partner, strain would likely appear in the within alliance

The within alliance and self-therapist alliance overlap somewhat with the group-therapist between alliance. One study looking at family and couple therapy alliances, cited by Goldsmith (2012), found the group-therapist alliance was not distinguishable from each client's self-therapist alliance. For this reason, the group-therapist alliance not being distinguishable and the overlap of the group-therapist alliance in other alliances, the group-therapist alliance will not be considered further in this paper.

These types of alliances, between and within, impact overall treatment outcomes (Pinsof, 1994). Research has suggested the therapist may be unaware of signs in therapy that suggest a poor between or within therapeutic alliances (De La Peña et al., 2009). Regardless of how aware

the therapist is about the strength of the various types of alliances, the therapeutic alliance in couple therapy is still a strong predictor of therapy outcomes (Anker et al., 2010). Measuring and assessing the therapeutic alliance in these situations is important. One way to begin assessing the strength of the therapeutic alliance is through tracking ruptures.

### **Ruptures**

Ruptures are common in therapy; some research findings suggest ruptures are inevitable and occur in every therapy session (Chen, Atzil-Slonim, Bar-Kalifa, Hasson-Chayon, & Refaeli, 2018; Colli & Lingardi, 2009; Goldsmith, 2012). Ruptures are defined as relational events that occur in therapy; these ruptures appear as deterioration, strain, weakening, or tension in the relationship between therapist and client or, in couple therapy, between client and client (Chen et al., 2018; Colli & Lingardi, 2009; Lansford, 1986; Safran, Muran, & Eubanks-Carter, 2011; Escudero et al., 2012). When the rupture has been addressed in the therapeutic context a repair has occurred.

The majority of research addressing ruptures focus solely on individual therapy (Goldsmith, 2012; Hardy et al., in press). Using individual therapy rupture research and measurement with couple therapy is a limitation in that only the between alliance is being addressed (Hardy et al., in press). In an unpublished dissertation, Goldsmith (2012) found that ruptures occurred frequently in couple therapy and that repaired ruptures were related to better client progress compared to un-repaired ruptures. However, Goldsmith (2012) used client self-reports of the therapeutic alliance to measure rupture occurrence, defining ruptures as a statistically abnormal drop in the self-reported alliance score. While this is a good measurement for some cases, some rupture and repair information may be lost and multiple ruptures that occurred throughout the session may not be identified when using a measure that is not

developed with the purpose of identifying ruptures and repairs in couple therapy. Research has identified two types of ruptures: confrontation ruptures and withdrawal ruptures (Safran et al., 2011). The following section will describe confrontation and withdrawal ruptures in greater detail.

### **Confrontation Ruptures**

Confrontation ruptures, also known as direct ruptures, are typically displayed through aggression, hostility, or anger and tend to be rated with higher intensity compared to withdrawal ruptures (Colli & Lingardi, 2009; Eubanks-Carter et al., 2010; Escudero et al., 2012; Safran et al., 2011). Because confrontation ruptures tend to be more aggressive, intense, and hostile in nature, it is more common for therapists to recognize confrontation ruptures as opposed to withdrawal ruptures (Kline et al., 2018). These, confrontation ruptures, are a form of moving *against* someone or something (Eubanks-Carter et al., 2015). In couple therapy, the movement of going against someone or something is generally either directed toward the therapist, a client, one's partner in therapy, or the therapy itself. Confrontation ruptures can occur in between and within alliances.

In the between alliance in couple therapy, ruptures can occur between one individual client and the therapist with ruptures occurring in both directions. Some examples of between alliance confrontation ruptures, in the direction of the client to the therapist, could be things such as: complaints or concerns about the therapist, efforts to control or pressure the therapist, or complaints or concerns about the progress of therapy (Eubanks-Carter et al., 2015). Examples of between alliance confrontation ruptures in the direction of the therapist to the client are: therapist is hostile or sarcastic towards the client, therapist defines goals of therapy without collaborating

with the client(s), and therapist shames how client did or did not do a task of therapy (Friedlander et al., 2005).

Confrontation ruptures also occur in the within alliance, which captures the degree of agreement, investment, and shared sense of purpose the couple brings into the therapy room (Johnson & Wright, 2002). Within alliance confrontation ruptures, in the direction of client to their partner could be things such as: client tries to align the therapist against his or her partner, client disagrees with their partner in a hostile way about the value or purpose of therapy, or client shames partner and constantly tries to bring their partner down in therapy. The other type of rupture commonly discussed in research is called a withdrawal rupture.

### **Withdrawal Ruptures**

Withdrawal ruptures are more difficult to identify and occur more frequently, in individual therapy, than confrontation ruptures (Colli et al., 2019; Kline et al., 2018). One reason withdrawal ruptures are so difficult to identify is because of the nature of disengagement that commonly accompanies a withdrawal rupture (Colli & Lingardi, 2009). This disengagement could happen when the client or therapist disengages from his or her own emotions or internal experience, from the client/therapist, from therapeutic tasks, or from his or her partner in therapy (Safran et al., 2011). Instead of moving *against* something or someone, a withdrawal rupture is typically a movement *away* from something or someone (Eubanks-Carter et al., 2015).

Examples of between self-therapist alliance withdrawal ruptures, displayed by the client towards the therapist are: long silences, changing the subject, denial, or vague language (Colli & Lingardi, 2009; Eubanks-Carter et al., 2015). Examples of between self-therapist alliance withdrawal ruptures in the other direction, of the therapist to the client, are: therapist gives an intervention that is either confusing to the clients or is not related to the clients' goals of therapy,

therapist uses technical jargon to keep client(s) at a distance, or therapist disengages in the therapeutic process (Friedlander et al., 2005).

Within alliance withdrawal ruptures from one partner to the other could be displayed by: client trying to change the topic whenever his or her partner brings up the goals of therapy, client disengages and stops listening when their partner is talking in therapy, or client is consistently appeasing to his or her partner about the tasks of therapy and not sharing honest opinions, therefore keeping a distance between them and their partner. Beyond alliance types, intensity and duration are other important factors that could influence rupture impact of therapy outcomes.

**Inclusion of intensity and duration.** Ruptures vary in intensity and duration (Friedlander et al., 2018). Unresolved high intensity ruptures lead to early therapy dropout and poorer outcomes compared to unresolved low intensity ruptures (Safran et al., 2011). Some ruptures can last for a few seconds while others may last the entire session. Therefore, considering the intensity and duration of ruptures are important.

In self-report measures of ruptures, clients and therapists may remember long duration ruptures, because the rupture lasted most of the session, or high intensity ruptures more than short or low intensity ruptures. The problem with only remembering some of the ruptures is that information goes unrecognized that could be important in predicting therapeutic outcomes. For instance, perhaps a long duration low intensity rupture that occurs most of every session slowly leads to poor outcomes. Or, a short duration high intensity rupture is looked over because it happened so quickly but left unrepaired, could lead to premature termination of therapy. Recognizing all ruptures is important so studies and experiments can be conducted to determine which types of ruptures are most impactful in therapy.

**Recognition of ruptures.** Ruptures can be beneficial; however, a rupture being beneficial depends on the therapist, or researcher, first recognizing the rupture (Chen et al., 2018). In a study by Chen et al. (2018) there was a significant relationship between therapists not recognizing that a rupture had occurred and a decrease in client report of functioning in individual therapy, additionally when the therapist recognized and acknowledged the rupture there was an increase in the alliance, self-reported by client, in the following therapy session.

Recognizing strains on the therapeutic alliance is difficult, even for experienced therapists (Escudero et al., 2012). One study explored by Escudero et al. (2012) found that 65% of clients reported avoiding certain topics in therapy; however, only in 45% of these cases the therapist was aware that his or her client(s) was hiding negative feelings. Though there is difficulty in recognizing ruptures, knowing when ruptures occur can positively impact therapy.

A few positive impacts, of realizing a rupture occurred, include encouraged collaboration between therapist and client(s) and opportunity to repair the rupture (Kline et al., 2018). One study stated the negative impact of the rupture could be positively moderated by therapist recognition of rupture occurrence (Kline et al., 2018). Other researchers suggest rupture and repair cycles could be corrective emotional experiences for the client(s) as the therapist is helping the client(s) work through real life problems by modeling a healthy way to address and solve conflict in relationships; therefore, ruptures could be seen as mechanisms of change itself (Goldsmith, 2012; Miller-Bottome, Talia, Safran, & Muran, 2018). In summary, not only is recognition of ruptures by therapist important in determining client outcomes, but recognizing ruptures could also lead to helpful interventions in the therapy room (Chen et al., 2018; Eubanks-Carter, 2010; Goldsmith, 2012; Kline et al., 2018; Strauss et al., 2006).

One way to increase recognition of ruptures is by being able to measure ruptures in therapy as they occur. Currently there are no rupture measures for use in couple therapy. Adding the within alliance and addressing ruptures that occur between the couple attending therapy could be impactful in determining therapeutic outcomes. Therefore, it is important that a couple therapy specific measure be created to capture both the between alliance, with more than one client attending therapy, and the within alliance. The purpose of this study is to establish an observational coding scheme for couple therapy to be able to reliably code alliance ruptures and to begin the process of examining the construct validity of assessing alliance ruptures. In creating the Coding Rupture Indicators in Couple Therapy (CRICT) items were copied and adapted from established rupture and therapeutic alliance measures, and new items were developed from watching couple therapy to best capture the idea of a rupture in couple therapy. The next section of this paper will address each of these measures.

### **Measurement of Ruptures**

Ruptures in therapy have generally been measured in three different ways. One method is to ask clients and therapists to self-report any ruptures occurring in therapy sessions (Safran et al., 2011). This method has limitations as the questions are being asked of clients and the therapist after the session, which is not a real time measure of alliance ruptures. Some clients may forget what happened in session or underreport ruptures if they do not understand what a rupture is or fail to take note of it, especially if the intensity of the rupture is low (Colli & Lingardi, 2009). These limitations significantly impact the results of self-reported ruptures.

A second method commonly used to measure ruptures is to look at self-reported scores of the alliance over time by the therapist and client (Safran et al., 2011; Strauss et al., 2006; Westra et al., 2011). When the alliance scores drop, it is presumed a rupture has occurred

between the therapist and client (Strauss et al., 2006). This method has similar limitations of self-reporting, in that clients may be inaccurately reporting the alliance due to forgetting incidents of ruptures, lack of awareness of conflicts with the therapist, or by subjective definitions of what the client thinks a rupture is or is not (Colli & Lingardi, 2009; Johnson & Wright, 2002). It is also likely that withdrawal ruptures are unnoticed and therefore not considered when client and therapist are self-reported about the therapeutic alliance.

Self-report measures of ruptures generally capture ruptures between sessions rather than ruptures within the session. A lot of information, dealing with ruptures, gets lost when only using self-report measures after the session has finished (Colli et al., 2019; Colli & Lingardi, 2009). Research has suggested that clinician's might miss ruptures when working with multiple clients at a time (e.g., family or couple therapy) especially if one client is quieter than the others (De La Peña et al., 2009). Due to these limitations—missing ruptures if one client is quieter and missing rupture information within sessions, it is important to develop more immediate measures when observing ruptures in couple therapy. Having a more immediate measure will benefit researchers and clinicians. This tool, an immediate measure of ruptures in couple therapy, will benefit researchers by giving data of when the rupture occurred in the session and will benefit clinicians in recognition of ruptures within sessions. Observational coding is one way to address these limitations.

In observational coding, trained coders watch recorded sessions or read session transcriptions and report when a rupture has occurred (Colli & Lingardi, 2009; Lansford, 1986; Safran et al., 2011). Ruptures identified through observation are reported with greater frequency than ruptures reported through client self-report (Larsson et al., 2018; Safran et al., 2011). Though there is a chance observational coding lends to over-identification of ruptures, thus,

ruptures being reported in higher frequency observationally as opposed to self-report, could lend evidence to the aforementioned limitations of self-reporting, suggesting that clients either do not know what a rupture looks like or have forgotten that a rupture occurred because reporting of ruptures occurs after the therapy session has finished.

There are three observational measures of ruptures and/or the therapeutic alliance that have been referenced in creating this coding scheme, the Rupture Resolution Rating (3RS) (Eubanks-Carter et al., 2015), the System for Observing Family Therapy Alliances observation (SOFTA-o; Friedlander et al., 2005), and the Collaborative Interactions Scale – revised (CIS; Colli et al., 2019).

### **Rupture Resolution Rating (3RS)**

The 3RS is an observational coding scheme measuring ruptures and repairs in individual therapy (Eubanks-Carter et al., 2015). Due to the fact that we are focusing solely on ruptures, only the rupture aspect of the 3RS will be referenced (see Eubanks-Carter et al. (2015) for more information concerning coding repairs). Eubanks-Carter et al. (2015) break down ruptures into the two types, confrontation and withdrawal ruptures. In the 3RS, confrontation ruptures move *against* therapy or the therapist and withdrawal ruptures move *away* from therapy or the therapist. Eubanks-Carter et al. (2015) view most ruptures stemming from clients. If the coder sees the therapist causing or exacerbating ruptures, he or she will indicate that on the final scoring sheet. Other than that option, indicating the therapist created ruptures on the final sheet, all codes for ruptures are given to clients when he or she displays specific behaviors. This is problematic as therapists are likely initiating ruptures in therapy sessions that may be underreported with this coding scheme.

The 3RS has three different options for coding sessions; 1) coding the entire session, 2) coding by talk turn, or 3) coding five minute segments (Eubanks-Carter et al., 2015).

Transcriptions can be used along with video but transcripts cannot replace the video. Examples of rupture codes are: client uses “avoidant stories and/or shifting topic” or “complaints/concerns about the therapist” (Eubanks-Carter et al., 2015, pp.13 and 18). After the session has been coded, the coder gives a global score for each type of rupture observed depending on the impact of the rupture on the therapeutic relationship. These global scores range from one (no significance) to five (high significance).

### **System for Observing Family Therapy Alliances – Observation (SOFTA-o)**

The SOFTA-o is an observational coding scheme measuring the therapeutic alliance in family therapy (Friedlander et al., 2005). There are four dimensions of the SOFTA-o that coders are watching when viewing therapy sessions via tape: 1) engagement in the therapeutic process, 2) emotional connection to the therapist, 3) safety within the therapeutic system, and 4) shared sense of purpose within the family. Similar to Eubanks-Carter et al. (2015) 3RS coding scheme, the coder for the SOFTA-o gives a global score to each of the four dimensions mentioned above (Friedlander et al., 2005). These seven scores range from negative three (extremely problematic) to three (extremely strong) with zero representing unremarkable or neutral.

In the SOFTA-o, examples of client behaviors that indicate problematic and/or strong alliances are measured within the four dimensions (i.e., engagement in the therapeutic process, emotional connection to the therapist, safety within the therapeutic system, and shared sense of purpose within the family). Examples are: “client shows vulnerability” and “family members devalue each other’s opinions” (Friedlander et al., 2005, pp. 18 and 23). Coders are also to record therapist behaviors that contribute to the four dimensions mentioned above. Examples are:

“therapist expresses confidence, trust, or belief in the client(s)” and “therapist does not attend to overt expressions of client vulnerability” (Friedlander et al., 2005, pp. 29 and 36).

### **The Collaborative Interactions Scale – Revised (CIS)**

The CIS is another observational coding scheme measuring ruptures and repairs in individual therapy (Colli et al., 2019). As opposed to breaking up ruptures into the groups of confrontation and withdrawal, the CIS uses indirect rupture markers (IRM) and direct rupture makers (DRM) (Colli et al., 2019). DRM and IRM could be compared to confrontation and withdrawal ruptures respectively. Unlike the 3RS, the CIS views both therapist and client behaviors as potentially causing ruptures in the therapeutic alliance. Similar to the 3RS, the CIS has a coder observe the therapy session and record when ruptures occur from therapist to client and from client to therapist (Colli et al., 2019).

While these measures, the 3RS, SOFTA-o, and CIS, are beneficial to clinicians and researchers, the field is, as mentioned above, lacking when it comes to observing ruptures in couple therapy (Colli et al., 2019; Eubanks-Carter et al., 2015; Friedlander et al., 2005). Based on the limitations of the 3RS, SOFTA-o, and CIS, the CRICT was developed to measure ruptures in couple therapy. The CRICT will include: codes copied and adapted from established measures (i.e., the 3RS, SOFTA-o, and CIS), rupture codes for both clients and therapist and rupture codes specifically addressing the within alliance. The CRICT was presented at marriage and family research conferences and reviewed by various researchers. Trained coders then used the CRICT on taped therapy sessions. As previously mentioned, there are no measures that examine in session alliance ruptures in couple therapy (Colli & Lingiardi, 2009). In order to fill these gaps, the CRICT was created. The CRICT is an observational coding scheme to measure ruptures in couple therapy. Below is a description of how this coding scheme was created. The purpose of

this project is to create an observational coding scheme for assessing alliance ruptures in couple therapy.

## **Method**

### **Procedures**

After researching various coding schemes that address ruptures in individual therapy and the therapeutic alliance in family therapy, items were copied and adjusted to fit the CRICT. Items were taken from the: CIS, 3RS, and SOFTA-o (Colli et al., 2019; Eubanks-Carter et al., 2015; Friedlander et al., 2005). With the items selected from these established coding schemes, the CIS, 3RS, and SOFTA-o, adjustments were made to include client to partner and therapist to client ruptures. Many of the ruptures from these established measures only include client to therapist ruptures, which could be a limitation in using these coding schemes in couple therapy. For example, the 3RS includes a withdrawal rupture marker of being self-critical and/or hopeless, the CRICT includes this rupture indicator client to therapist, therapist to client, and client to partner (Eubanks-Carter et al., 2015). Adjusted wording for therapist to client is as follows, “Self-criticism/hopelessness (therapist withdraws from the client and the work of therapy by becoming absorbed in a process of self-criticism and/or hopelessness that seems to shut out the client).” Adjusted wording for client to partner is as follows, “Client displays criticism and or/hopelessness towards/about partner” and “Client displays criticism and or/hopelessness towards/about partner around therapeutic goals, tasks, and/or the therapeutic relationship.” Phrases for other confrontation and withdrawal ruptures were adjusted similarly to the example above (Carr & Johnson, 2019).

In choosing codes from the CIS, 3RS, and SOFTA-o for the CRICT, all items were first taken from the 3RS and adjusted (as mentioned above). Then, any items from the CIS that were

different from items on the 3RS were taken and adjusted in the same manner. Finally, the SOFTA-o was explored. Themes and possible rupture indicators that were not covered by the CIS or 3RS were copied, adjusted, and added to the CRICT (Colli et al., 2019; Eubanks-Carter et al., 2015; Friedlander et al., 2005). There are items on the CRICT that are unique to the CRICT, in collaborating with other researchers themes were suggested for rupture indicators that were not covered by the CIS, 3RS, or SOFTA-o (Colli et al., 2019; Eubanks-Carter et al., 2015; Friedlander et al., 2005).

### **Professionals and Researchers**

Following replicating items from established measures and creating items for the CRICT, feedback was given from Dr. Lee Johnson and Dr. Norm Epstein. The CRICT was then presented at four research conferences: Process Research Network conference (PRN), North American Society for Psychotherapy Research (NASPR), Utah Association for Marriage and Family Therapy (UAMFT), and American Association for Marriage and Family Therapy (AAMFT). At these conferences, PRN, NASPR, UAMFT, and AAMFT, both trained professionals and marriage and family therapist researchers gave feedback. Some feedback that was implemented to improve the CRICT included: looking at various research articles and coding schemes addressing ruptures and the therapeutic alliance, adding an intensity modifier to each rupture recorded, and recording duration of each rupture through a start and stop method. Attending these conferences allowed us to improve our coding scheme and establish face and content validity before conducting reliability and validity testing on the CRICT.

### **Coders**

Coders were chosen via a convenience sample, information was sent out about the coding class to students taking classes in the social science department at university via email and flyers.

Five students ended up taking the class. Five undergraduate coders were trained to implement our coding manual for this study. Coders included three males and two females. Average age was 22.8 years old ( $SD = 1.64$ ; range: 21 - 25). Of the coders 80% were White ( $n = 4$ ) and 20% were Asian ( $n = 1$ ). Four of the coders were studying Family Studies and one was studying Psychology.

**Coder procedures.** Each coder participant took a two-semester course. During the first semester coders read articles and participated in class discussions about the therapeutic alliance, couple therapy, and ruptures. Coders were trained on the coding manual and practiced using the coding manual in class with taped therapy sessions while providing feedback on understandability of the codes. Coders were given feedback on their coding and discussions were centered on why specific events in therapy were/were not considered a rupture.

During the second semester coders used the CRICT coding scheme on taped therapy videos. Coders gave feedback on the CRICT pertaining to the best way to capture rupture events in therapy. Coders would take turns leading class discussions on ruptures they coded and were given feedback from coders and instructors and correction, when needed, from the instructors.

### **Therapists and Participants**

Participants in the videos coded were collected via a convenience sample. Participants were recruited when they called in requesting therapy. If the couple was interested in participating in the study and met all the inclusion criteria, they were included in the study. In order to participate in the study, participants had to: (a) speak English, (b) be married for at least one year, (c) have no substance use problems or severe mental disorders, (e) be safe to complete a Functional Magnetic Resonance Image (fMRI) scan (e.g., no metal in body, not pregnant), and (f) at least one partner had to score 13.5 or lower on the Couple Satisfaction Index (CSI-4),

scores of 13.5 and lower on the CIS-4 indicate clinical distress in romantic relationship (Funk & Rogge, 2007). Participants were compensated 200 dollars for completion of study, along with receiving a picture of their brain.

This study comes from a larger study currently being conducted at Brigham Young University, the Changing Hearts and Minds in relationships (CHAMPS) project; therefore, some of the procedures and criteria for participants were not applicable to our study (e.g., fMRI safe) but were for the larger project of CHAMPS. Twenty-two couples completed the study. All couples were in a married heterosexual relationship. Half of the participants were male ( $n = 22$ ) and half were female ( $n = 22$ ). Average age of participants is 29.24 ( $SD = 4.4$ ; range = 22-38). The sample was 85.71% White ( $n = 36$ ), 2.38% Black ( $n = 1$ ), 7.14% Asian/Pacific Islander ( $n = 3$ ), and 4.76% Hispanic ( $n = 2$ ).

Therapists included 13 individuals. Average age of therapists was 25.3 years ( $SD = 2.46$ ; range 22-30). Most therapists were female, 84.62% ( $n = 11$ ), and 15.38% ( $n = 2$ ) were male. Therapists identified as predominantly white (69.23%;  $n = 9$ ) with one identifying as Asian (7.69%;  $n = 1$ ) and three as biracial (23.08%;  $n = 3$ ). All therapists were students in a Masters or Ph.D. marriage and family therapy program. Because the purpose of the study is not concerned with outcomes based on different models of therapy, therapists were not limited in the model they choose to use.

**Therapist and client procedures.** Permission to conduct this study has been received from the university Institutional Review Board (IRB). Upon giving consent to participate in the study, participants were assigned to a therapist for treatment. Participants completed four sessions of therapy; each appointment lasted approximately two hours, the therapy session lasted 50 minutes. For the duration of the appointment participants completed surveys and baseline

measures for the overall CHAMPS project. Upon completion of their involvement in the study, participants were given the opportunity to continue therapy at the comprehensive clinic.

## **Results**

The results section of this paper primarily consists of the CRICT itself. The protocol for the CRICT will be discussed followed by inter-rater reliability of coders and frequency and correlations of rupture codes.

### **Ruptures in Couple Therapy Coding Scheme (CRICT)**

The CRICT is used to measure ruptures in couple therapy via video recorded therapy sessions. When coders first started using the CRICT the protocol was to focus on one person (i.e., either therapist, client/partner one, or client/partner two) and the ruptures he or she initiates/gives the other two people in session. However, it was soon discovered that ruptures in couple therapy are relational and build off and impact each other. Therefore, the protocol switched to focusing on one dyad at one time. Meaning, each coder is assigned one dyad (i.e., therapist and partner one, therapist and partner two, or partner one and partner two) each time a section of therapy session is coded, this method was preferred over focusing on one person as ruptures go back and forth and are impacted by responses of the receiver and giver for each individual rupture. This way, having each coder focus on one specific dyad, a systemic perspective is being addressed and the impact of the rupture(s) are taken into account as they occur back and forth within the relationship.

At the beginning of coding with the CRICT sessions were broken up into three segments. This was decided in hopes of avoiding coder fatigue; however, after a few months of coding the procedure was switched to coding the entire session because ruptures vary in duration. If therapy sessions are split up in sections, some information about continuing ruptures (from one section of

the session to another) might be missed. Each therapy session was coded up to six times, with two coders focusing on one of the three possible dyads. Each coder watched the video three times, they could code along the way or take notes and wait to code ruptures on the final, third, watch of the video.

Ruptures in the CRICT are divided into two main categories, between (self-therapist) and within. Within these two categories, between and within, fall confrontation and withdrawal ruptures. Under confrontation and withdrawal ruptures falls each of the specific ruptures codes. In the between, therapist to client, section are 19 ruptures, 14 withdrawal and five confrontation. The between, client to therapist, has 18 ruptures, 11 withdrawal and seven confrontation. The within category, client/partner to client/partner is composed of 34 ruptures, 20 withdrawal and 14 confrontation (Carr & Johnson, 2019). It is suspected some rupture codes will be combined, in the future as further data is gathered to examine if coders are constantly debating between two specific codes for similar rupture events, and dropped, if the rupture code never occurs.

As mentioned above, ruptures vary in duration and intensity. Throughout implementation of the CRICT it was discovered that some ruptures last for long periods of time (e.g., not engaging in therapy through a large portion of the session) while others tended to be brief in nature (e.g., telling the therapist to back off). For this reason, start and stop codes are used. Each time a coder identifies a rupture they 'start' the code, once the rupture has ended the coder will 'stop' the code. If the rupture does not end and continues throughout therapy there will still be a 'stop' code given as the CRICT is only concerned with in session ruptures.

Each rupture observed will be given an intensity score from negative one to negative five. Intensity refers to emotional intensity of the rupture. Research on naïve coding has found no significant differences between naïve coders and trained coders when coding emotionally

intensity (K. Baucom, B. Baucom, & Christensen, 2012). Based on this research it was decided to use naïve coding for emotional intensity. Coders were instructed to select intensity ratings based on their reaction and any response of the receiver or target of the specific rupture. Intensity ratings are as follows: (-1) = minimal intensity, (-2), (-3) = moderate intensity, (-4), and (-5) = severe intensity.

Each time a rupture is observed it will be assigned five digits to identify the rupture. The first digit is numerical and corresponds to the giver of the rupture (0 = therapist, 1 = client/partner 1, and 2 = client/partner 2). The second digit is numerical and identifies the target or receiver of the rupture. Target or receiver of rupture is: (0) = therapist, (1) = client/partner 1, and (2) = client/partner 2. If it is unclear who the giver of the rupture was, the person with the most obvious associated behavior to the event will be assigned as the giver of the rupture.

The third digit is a letter (W = withdrawal rupture; C = confrontation rupture). The fourth digit is a letter and corresponds to the specific type of rupture within withdrawal or confrontation (e.g., client complains about the progress of therapy or therapist only addresses one client/partner's concerns). The fifth digit is a negative number, -1, -2, -3, -4, -5 and identifies the intensity of the rupture. Thus, a code of 12Wa-1 identifies a between alliance rupture (from the therapist to client/partner one), the rupture is a withdrawal, the specific rupture is: therapist abruptly changes the conversation topic, and has a minimal intensity rating.

### **Frequency**

Twenty-six videos were coded; of all the videos coded there was a total of 439 observations, or rupture codes given. Each observation includes a start code and a stop code. Of the observations, 233 were between alliance ruptures (53.01%) and 206 were within alliance ruptures (46.99%). Two hundred and seventy-two observations were withdrawal ruptures

(61.96%) and 167 were confrontation ruptures (38.04%). The therapist was the initiator of the ruptures 15.95% of the time ( $n = 70$ ), the husband/partner one initiated the rupture 28.25% of the time ( $n = 124$ ), and the wife/partner two initiated the rupture 55.81% of the time ( $n = 245$ ).

The therapist was on the receiving end of the rupture 37.36% of the time ( $n = 164$ ), the husband/partner one 41.23% of the time ( $n = 181$ ), and the wife/partner two 21.41% of the time ( $n = 94$ ). Of the intensity ratings minimal intensity, -1, was the most common, occurring 40.32% of the time ( $n = 177$ ), -2 intensity occurred 38.04% of the time ( $n = 167$ ), moderate intensity, -3, was reported 17.77% of the time ( $n = 78$ ), -4 intensity was 3.64% of the time ( $n = 16$ ), and severe intensity, -5, occurred once (0.23%). Duration for the observations/ruptures ranged from zero seconds, which was the most common, to 1066.11 seconds (17.77 minutes). The mean for duration was 16.97 seconds ( $SD = 53.92$  seconds) and the median was 0.17 seconds.

### **Reliability**

The 439 observations were given a lag window time of three seconds, meaning if the second coder also coded a rupture within three seconds of the start time of the first coder than a unique observation was recorded. Due to the lack of established guidelines about choosing lag time windows for rupture observance, three seconds was chosen for a couple of reasons. A two second lag window seemed too short and more than three seconds might interfere with multiple ruptures being recorded during the lag window time. The problem with multiple ruptures occurring in the same lag window is that ruptures may not be matched up with the correct pair. For example, if the first coder observed three ruptures beginning within the lag window time and the second coder only observed one rupture beginning there is not an easy way to determine which, if any, of the ruptures are the same event. Thirty-two of the 439 ruptures had a rupture recorded by both coders, equally a total of 407 unique observations coded. Reliability was poor,

kappa = .043 ( $p = .000$ ), with only 7.86% agreement of ruptures occurring out of all the times at least one coder marked a rupture occurrence. Ideas and suggestions to increase reliability will be explored in the discussion section of this paper. When examining the 32 agreed upon observations kappa = .563 ( $p = .000$ ), moderate strength.

Within the 32 agreed rupture occurrences, the two coders were in agreement 100% of the time in determining the initiator of the rupture, the receiver of the rupture and if the rupture was a withdrawal or confrontation rupture type. The exact rupture type was agreed on 65.63% of the time ( $n = 21$ ) in the 32 cases. Intensity was exactly agreed upon 34.38% of the time ( $n = 11$ ) and was within one unit of intensity 50% of the time ( $n = 16$ ). Correlations of the two coders intensity and duration, of the 32 cases were both positively significantly correlated,  $r(32) = .416$  ( $p = .018$ ) and  $r(32) = .405$  ( $p = .022$ ) respectively.

### Discussion

This is the first coding scheme specifically designed to address ruptures in couple therapy. Inter-rater reliability for the first training and implementation of the CRICT was poor. Coders are still disagreeing on whether or not a rupture occurs. When coders were able to reliably code rupture occurrence, the general type of rupture (i.e., confrontation or withdrawal), the specific rupture type, the initiator and receiver of the rupture, and the intensity of the rupture demonstrated moderate reliability.

Findings from implementation of the CRICT suggest that ruptures do occur in couple therapy. Ruptures were recorded within each dyad in session, meaning that ruptures occur in each subsystem relationship in couple therapy. This, ruptures occurring within each subsystem in therapy, is important as each of these relationships might impact treatment outcomes. Almost

half of the ruptures recorded happened in the within alliance. This suggests the within alliance at least needs to be addressed and further examined when ruptures are measured in couple therapy.

Some rupture coding measures view the therapist as rarely initiating ruptures and do not have specific guidelines or codes for therapist ruptures towards client. Findings from the CRICT suggest the therapist initiated the rupture in almost 16% of the rupture cases. This percentage is enough to validate further examination of therapist rupture causing behaviors. Withdrawal ruptures were coded more often than confrontation ruptures, this finding is similar to results of rupture type occurrence in individual therapy (Colli et al., 2019; Kline et al., 2018). Since lack of reliability is a concern for the CRICT, ideas about why reliability was low and how to increase reliability will now be explored.

### **CRICT Reliability**

The CRICT coding scheme might be too complex, which could decrease inter-rater reliability. Other possible explanations for low reliability include using undergraduate coders not trained in therapy, having each coder code the entire 50 minute session, having a long list of rupture codes for coders to keep in mind and attempt to identify while coding, and having multiple ruptures coded for one rupture event that may be better represented with only one rupture code.

Using undergraduate coders not trained in therapy may lower reliability. Research suggests ruptures can be difficult for therapists to recognize, having undergraduates, who have not been trained in therapy, may be a limitation even though the undergraduates are trained in rupture recognition prior to coding (Escudero et al., 2012). Another potential problem is coder fatigue.

Each coder was told to watch the therapy session three times; the therapy session was, on average, 50 minutes long. Coders were encouraged to take as many breaks as they would like and had a whole week to code the video; however, coders did have the option to code the 150 minutes in one sitting if desired. Watching and coding for 150 minutes straight could lead to coder fatigue and may have lowered reliability. Another complexity of the CRICT involves all the long list of possible rupture codes.

Because the CRICT is the first rupture-coding scheme for couple therapy, all possible rupture codes were left in the scheme to avoid missing important rupture topics. As time goes on, it is likely some codes will either be deleted or combined with other codes to better fit what occurs in couple therapy. Having a long list of codes to choose from may have added to the complexity of rupture coding and decreased inter-rater reliability. Finally, multiple ruptures may have been coded for one rupture event.

Some rupture indicating behaviors may have been small segments of one larger rupture. This could impact reliability if one coder believes there are several different ruptures occurring in a small time frame and the other coder sees one big rupture evident through multiple behaviors. These are some possible reasons for the low reported inter-rater reliability. Addressing these concerns may improve reliability results.

### **Increasing Reliability**

One-way to address increasing reliability is through focusing on reducing the complexity of the CRICT, making it easier for coders to implement. This can be accomplished through a variety of different ways. One option is by having a hierarchy of codes via a decision tree. Having a decision tree could help coders identify the same rupture types for observed rupture events through a guided hierarchy. A second option is through having multiple teams focus on

different aspects of the rupture code. One team would focus solely on whether a rupture occurred or not. Another team would then code the specific type of rupture, and another would determine intensity and so on. With this method, having teams focus on one aspect of a rupture code, coders will channel their energy in looking for one thing. An alternative method, to having teams focus on different aspects of the rupture code, is to have different teams assigned to look for smaller lists of ruptures. For example, one team would focus only on identifying the first five types of ruptures and another team would solely focus on the second five types of ruptures, and so on. These ideas, looking for one thing and/or only focusing on some of the ruptures, might help increase coder reliability.

An alternative method to increasing coder reliability is to have coders code in teams of two and have two teams, each a team of two coders, code each therapy session. When a coder was able to talk through his or her thoughts about rupture occurrence consensus was generally reached quickly. Having a team member to collaborate with when determining rupture occurrence, teams would be randomly assigned and switched for each video, could increase reliability and recognition of ruptures.

Additional options to increase reliability include using trained therapists as coders as opposed to undergraduates with no therapy experience. Recognition of ruptures might be easier for a trained therapist who understands the therapeutic process. A different approach with using therapist coders is to compare each undergraduate coder with two therapist coders, who have reached acceptable reliability, and only each coder when acceptable reliability with the therapist coders has been reached.

Lastly, increasing the time lag window and condensing codes could be explored with to see the impact these methods have on reliability. Future research and development on the CRICT will explore these and other options to increase inter-rater reliability.

### **Implications**

The main implication from the CRICT is that ruptures do occur in couple therapy. These ruptures happen in the between and within alliances. Therapists do initiate ruptures and therefore therapist behaviors should be included in the coding scheme. Clinicians could benefit by knowing what types of ruptures are happening in therapy so they can do something about it.

As mentioned above, recognizing ruptures in therapy is difficult even for experienced clinicians (Escudero et al., 2012). However, ruptures do impact therapeutic outcomes and ruptures are less likely to be addressed when the clinician is unaware of the rupture occurrence (Chen et al., 2018). The CRICT could be a beneficial tool for clinicians in helping recognize ruptures and rupture patterns specific to their therapeutic style. The CRICT also have potential to be a useful tool for researchers.

While the therapeutic alliance is a robust predictor for therapeutic outcomes, understanding alliance ruptures in couple therapy and various pathways that predict specific therapeutic outcomes could be beneficial. Use of the CRICT may provide additional information about the therapeutic alliance, especially in couple therapy. Understanding multiple pathways to successful therapeutic outcomes, if such multiple pathways exist, could deepen current understanding of the therapeutic relationship.

### **Future Research**

This is the first study on coding ruptures to look at intensity and duration, more research needs to look at these two factors and how they are related to ruptures. Future research

addressing ways to increase reliability for the CRICT needs to be addressed. In summary, increasing reliability could be increased by assigning coding teams to focus on one aspect of a rupture or by establishing two teams of two to code each video and compare findings. Once acceptable reliability has been researched, repairs or resolutions need to be added in the coding scheme for couple therapy.

### **Limitations**

Videos were coded in a training clinic and coders were undergraduates – while this may be beneficial, undergraduates not trained in therapy may avoid over thinking ruptures, research with graduate or therapist coders to compare would be beneficial. Another limitation, as mentioned above, with the CRICT is reliability and construct validity. The CRICT has established face and content validity; this was accomplished by reaching out to professionals and researchers in the field of marriage and family therapy as well as presenting research findings of the CRICT at various research conferences. Feedback and suggestions were given and adapted into the CRICT to improve face and content validity. While this is a strength of the CRICT, strong face and content validity, the lack of reliability and construct validity is indeed a limitation to be addressed in future research.

### **Conclusion**

In conclusion, the CRICT is a great start to observing and measuring ruptures in couple therapy. Ruptures do occur in couple therapy and therefore should be studied. Ruptures in couple therapy occur in both the between and within alliance, the addition of the within alliance highlights the importance of a rupture coding scheme designed specifically for couple therapy as individual therapy only has the between alliance relationship in session. Future research and reliability tests on the CRICT will be beneficial to the field of marriage and family therapy.

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