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Moderators of Congruent Alliance Between Therapists and Clients: A Realistic Accuracy Model

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Congruence between therapists' and their clients' alliance ratings was found to be beneficial to therapeutic processes and outcomes. To date, however, less is known about the possible moderators of such congruence. The current study adapted Funder's (1995) realistic accuracy model to identify a judge characteristic (therapists' affiliative tendencies), a target characteristic (clients' affiliative tendencies), information (time elapsed in therapy), and traits (bond vs. task/goal aspects of the alliance) that may moderate this congruence. These were examined using the innovative truth-and-bias model (West & Kenny, 2011), which allows the simultaneous estimation of two different congruence indices within repeatedly measured data: therapist/client temporal congruence (i.e., the correlation over time between therapists' and their clients' alliance ratings) and directional discrepancy (i.e., the average difference between therapists' and their clients' alliance ratings across sessions). Clients (n = 109) and therapists (n = 62) at a university-based clinic rated their affiliation tendencies at the beginning of treatment and rated their alliance perception after each session. Time elapsed in therapy, as well as therapists' (but not clients') affiliative tendencies were linked to higher therapist/client temporal congruence and to lower therapist directional discrepancy. In addition, congruence was higher for the bond aspect of the therapeutic alliance than for goals/tasks. Consistent with Funder's model, multiple factors (including judge, information, and trait) were associated with therapist/client congruence in alliance.

Public Significance Statement

Therapists appear to be more congruent with their clients in their assessment of the bond component of alliance, as opposed to their assessment of the therapy's goals or tasks. These findings highlight the need for greater communication regarding goals and tasks. In addition, the finding that therapists' affiliative tendencies are related to their ability to be congruent with their clients' alliance perceptions points to the importance of attending to therapists' personalities and their influence on therapy processes.

Keywords: alliance, congruence, truth-and-bias model, realistic accuracy model

The therapeutic alliance has long been considered a powerful predictor of treatment outcomes across many forms of psychotherapy and in the treatment of a variety of client disorders (e.g.,

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Castonguay, Constantino, McAleavey, & Goldfried, 2010; Flückiger, Del Re, Wampold, Symonds, & Horvath, 2012). The alliance is a dyadic state, but clients and therapists often have their own distinctive perspective on it. Although the clients' perspective on the alliance may have a somewhat stronger association with treatment outcomes, both clients' and therapists' perspectives matter (Horvath, Del Re, Flückiger, & Symonds, 2011). Importantly, these perspectives may or may not be congruent with each other.

Theoretically, congruence between the therapist's and client's views of the alliance is important when the alliance is either strong or weak. When alliance is strong, high congruence is likely to mean that the client and the therapist are in agreement regarding the therapeutic goals, and that the client experiences the therapy as well-suited to his or her needs (Horvath et al., 2011). When alliance is weak or ruptured, high congruence is likely to lead to

more rapid recognition of the rupture on the therapist's part, which could contribute to faster repair (e.g., Chen, Atzil-Slonim, Bar-Kalifa, Hasson-Ohayon, & Refaeli, 2016; Safran & Muran, 2002).

Empirically, early research regarding the association between therapist/client congruence and therapy outcomes yielded mixed results, which were likely due to conceptual and psychometric problems in the operationalization of congruence. For example, as Marmarosh and Kivlighan (2012) noted in a review of this early literature, its studies relied on absolute difference scores (which obscure important directional differences) or on profile similarity correlations (which suffer from low reliability and are ambiguous to interpret). In contrast, recent studies using methodological and statistical innovations have yielded support for the association between therapist/client congruence and adaptive therapy processes and outcomes (e.g., Fjermestad et al., 2015; Marmarosh & Kivlighan, 2012; Zilcha-Mano, Snyder, & Silberschatz, 2017).

To date, most studies exploring therapist/client congruence (e.g., those meta-analyzed by Tryon, Blackwell, & Hammel, 2007) provided evidence that on average, clients' and therapists' alliance ratings tend to be only moderately correlated across dyads, and therapists tend to estimate the alliance as somewhat lower than their clients. Only recently have studies started to explore congruence as it unfolds over time—that is, with repeatedly measured psychotherapy data (Compare, Tasca, Lo Coco, & Kivlighan, 2016; Marmarosh & Kivlighan, 2012; Zilcha-Mano et al., 2017). The use of such data calls attention to two aspects of congruence: within-dyad directional discrepancy (i.e., the average difference over time between therapists' and their clients' alliance ratings) and within-dyad temporal congruence (i.e., the correlation over time between therapists' and their clients' alliance ratings) as two indicators of a given therapeutic dyad's congruence.

The two components (directional discrepancy and temporal congruence) reflect orthogonal aspects of therapist/client congruence, and thus may be differentially associated with therapeutic outcome (e.g., Bar-Kalifa et al., 2016; Marmarosh & Kivlighan, 2012). To explore these two aspects simultaneously, we followed the lead of recent psychotherapy studies (e.g., Atzil-Slonim et al., 2015; Kivlighan & Marmarosh, 2016), which have adapted the innovative truth and bias model (T&B; West & Kenny, 2011) to study congruence. ¹

Moreover, the adapted T&B model also offers an approach to examining possible moderators of congruence. Such examination of moderators has been suggested as an important next step in congruence research (e.g., Atzil-Slonim et al., 2015; Kivlighan & Marmarosh, 2016), as less is known about the factors that contribute to therapist/client congruence. This examination is the primary objective of the current study.

In doing so, it builds on recent suggestions by Kivlighan and Marmarosh (2016) and uses Funder's (1995) realistic accuracy model (RAM) as a theoretical framework for investigating these moderators. The RAM framework (Funder, 1995) argues that good (i.e., accurate) judgments rely on a combination of the following: (a) a good judge (i.e., one possessing personal qualities or traits that foster accurate judgments); (b) a good target (i.e., one whose personal qualities allow him or her to be easier to judge); (c) good information (i.e., sufficient information about the target that is available to the judge); and lastly (d) a good trait, (i.e., traits or characteristics that are sufficiently visible or detectable and thus easier to judge).

The RAM framework originated in personality judgment research. Much like the T&B model, it was developed for investigating the accuracy of judgments but found to be well-suited for the exploration of other kinds of dyadic congruence. For example, various combinations of *judges, targets, information, and traits* have been investigated in dyadic congruence research (Hodges, Lewis, & Ickes, 2015) and in the study of therapist/client congruence (Kivlighan & Marmarosh, 2016). Thus, as Kivlighan and Marmarosh have suggested, we adapt the RAM framework to guide our search and organize our understanding of possible moderators of therapist/client congruence in alliance. In the following sections, we review findings on each of the RAM framework components as they apply to psychotherapeutic alliance judgments.

The Good Judge

Repurpose Funder's (1995) RAM and West and Kenny's T&B model (2011) from their original purpose (i.e., the study of accuracy) to our current use (i.e., the study of congruence) requires some decision making. In accuracy research, it is very clear who are the judges and the targets. In contrast, in studying congruence in alliance, we rely on measures which simply assess two perspectives on the alliance—the client's and the therapist's. Still, we see compelling reasons to define the therapists as "judges" for the sake of these analyses.

As Atzil-Slonim et al. (2015) recently argued, it is therapists' job to understand, relate, and track their clients' alliance perspective. In that sense, congruence in alliance is often the result of therapists' attempts to accurately perceive their clients' alliance ratings. Some support for this conception was found in a study that showed an extremely high (r = .95) association between therapists' view of the alliance and their estimation of their clients' alliance perception (Creed & Kendall, 2005). This finding lends support to the suggestion that therapists' perception of the therapeutic alliance may well represent how therapists think their clients perceive the alliance. Building on this conception of congruence, Kivlighan and Marmarosh (2016), who were the first to adapt the RAM model to investigate therapist/client congruence, suggested that the therapists be referred to as judges. Consequently, the current study also addresses therapists as judges² (and consequently, addresses clients as targets).

In recent work, Atzil-Slonim et al. (2015) found significant between-therapist variability in therapist/client congruence, which suggests that therapists' (i.e., judges) differ in how congruent they were with their clients' alliance ratings. Specific therapists' characteristics may moderate this congruence and explain some of its variability. One set of influential traits has already been identified by Kivlighan and Marmarosh (2016). They found that therapists'

¹ The T&B (West & Kenny, 2011) model was developed originally to examine the accuracy of judgments (i.e., how accurate is one person's judgment about another's state or trait). Though we use the model's statistical insight, we replace the terms *truth* and *bias* (which are more suited to investigating accuracy of judgments) with the terms *temporal congruence* and *directional discrepancy*.

²Of course, an inverse linking of roles (i.e., therapist–target, client–judge) is certainly possible and may be applicable under certain circumstances.

attachment security (particularly low attachment anxiety) was related to greater therapist/client congruence in alliance ratings.

Kivlighan and Marmarosh's (2016) findings regarding attachment security suggest that an interpersonal characteristic, which reflects individuals' ability to be in close caring relationships with others, may help therapists be more attuned to their clients' alliance experience, and thus, achieve greater therapist/client congruence. Another such characteristic may be therapists' affiliative tendencies.

The interpersonal circumplex model uses affiliation (along with dominance) as key axes to map the space of interpersonal interactions. This two-dimensional model has received a great deal of attention in studies on interpersonal behavior (e.g., Kiesler, 1983; Leary, 1957). The *affiliation axis* refers to one's ability (or wish) to be in loving, warm, cooperative, close, and intimate interaction with others (Floyd & Voloudakis, 1999). Affiliative tendencies were found to be correlated with secure attachment style; much like secure attachment, they also predict couples' relationship quality (Noftle & Shaver, 2006). Outside of psychotherapy research, affiliation (specifically, maternal affiliation) was found to be associated with maternal–infant behavioral synchrony, which showed a significant association to developmental qualities later in life, such as the capacity for empathy and social adaptation (see Feldman, 2012).

With regards to psychotherapy, therapist self-rated affiliation, but not dominance, has been linked to higher client-rated alliance (e.g., Dinger, Strack, Leichsenring, & Henning, 2007; Hersoug, Høglend, Havik, von der Lippe, & Monsen, 2009; Hersoug, Høglend, Monsen, & Havik, 2001). This association may be driven by the ability or motivation of high-affiliation therapists to be more congruent with their clients' alliance perspective. For example, affiliative therapists may be more comfortable with interpersonal closeness, and thus more open to discussing ups-and-downs in the therapeutic relationship (Hersoug et al., 2009). In addition, because of their motivation to engage closely with their clients and to maintain the closeness, affiliative therapists may be more sensitive to their clients' verbal and nonverbal cues, and thus more congruent in judging the alliance. Thus, we predict that affiliative tendencies (but not dominance tendencies) will be tied to therapist/ client congruence.

The Good Target

An earlier study documenting therapist variability in therapist/client congruence (Atzil-Slonim et al., 2015) also found such variability among clients, thus supporting the notion that some clients' characteristics may also relate to therapist/client congruence. Nevertheless, there are only few studies that have explored what are those characteristics that make some clients "good targets." In their meta-analysis, Tryon and colleagues (2007) found that substance abuse was associated with lower congruence. More recently, Atzil-Slonim and colleagues (2015) reported that (contrary to expectations) pretreatment symptoms were not related to congruence levels.

In the present study, we wanted to shed more light on client factors, which may moderate therapist/client congruence. In particular, we wanted to investigate broader clients' characteristics such as personality traits (instead of symptomatology), as a large portion of clients who seek therapy may not necessarily meet diagnostic criteria. Specifically, we reasoned that, much like the therapists' affiliative tendencies, clients' affiliation may be a good candidate moderator to evaluate.

Previous research has found client affiliation to be associated with positive alliance ratings (Dinger, Zilcha-Mano, McCarthy, & Barrett, 2013; Dinger et al., 2007; Hersoug et al., 2009; Renner et al., 2012). It may also be related to greater congruence. Specifically, affiliative clients (like affiliative therapists) are likely to be more comfortable with closeness, and thus more willing to engage in frank and open discussions about the therapeutic relationship. Moreover, because of complementarity processes (e.g., Carson, 1969; Kiesler, 1983; Leary, 1957; Markey, Funder, & Ozer, 2003), affiliative client behavior is likely to invite affiliative therapist behavior (Hersoug et al., 2009), further increasing the chances for better therapists attunement.

Good Information

In the RAM framework, Funder (1995) suggested that a judge's growing acquaintance with a target may (at times) provide better or more abundant information and thus facilitate more accurate judgment. The same is likely to apply to therapists' acquaintance with their clients in that as the acquaintance deepens, so may the *therapists*' congruence with their clients. To date, however, studies examining this effect have yielded mixed results. Whereas some found that the time elapsed in therapy moderated the directional discrepancy between clients' and therapists' alliance ratings (e.g., Kivlighan & Shaughnessy, 1995; for review, see Tryon et al., 2007), others have not (e.g., Fitzpatrick, Iwakabe, & Stalikas, 2005).

Importantly, most therapist/client congruence studies have not availed themselves of session-by-session data to fully examine this construct. One recent study (Atzil-Slonim et al., 2015) which did make use of such data found that the duration of therapy moderated the directional discrepancy but was not associated with the temporal congruence between the two parties. One possible explanation for these findings is that the association between treatment duration and therapist/client congruence may not necessarily be linear. Indeed, alliance itself can develop in a log-linear manner (e.g., Stiles et al., 2004) thus making it quite possible that the same is true for congruence in alliance. This pattern could come about if therapists' acquaintance with their clients provides declining marginal value (i.e., less novel information) as time goes by. Thus, the current study explored both linear and log-linear patterns in the association between acquaintance and congruence.

Good Traits

The final component of Funder's (1995) RAM framework addresses the identity of traits as a possible moderator of accuracy (or in our case, congruence). "Good" traits are ones regarding which judges have access to ample, available, and relevant information. In the present work, which focuses specifically on the therapist/client congruence in alliance, the alliance judgments actually comprise multiple components, which may differ in their "goodness." In particular, a common definition of (working) alliance, as developed by Bordin (1979) and used in our current work, suggests that this construct consists of the client—therapist interpersonal bond, as well as their agreement about the treatment goals and about the tasks of therapy that will help attain these goals.

The three aspects of alliance may differ in the level of therapist/ client congruence they engender. Specifically, the bond may be the most readily accessible or available to both therapists and clients, as it is strongly associated with what has been termed "the real relationship" (Gelso et al., 2005; Kelley, Gelso, Fuertes, Marmarosh, & Lanier, 2010); that is, with the extent to which both the therapist and the client are genuine and experience the other in a realistic way. Judgments about real relationships are universal and thus are likely to occur almost effortlessly and with greater congruence (Gelso, 2014), even among novice therapists; that is, ones who have less experience in assessing the goal and task. In this respect, bond judgments rely on information, which in some ways is more similar in that it is available equally or almost equally to both parties.

In contrast, goal and task judgments often require greater professional knowledge in the sense of familiarity with the theories and techniques of psychotherapy. Typically, unless these topics are addressed explicitly in therapy, they are likely to be less accessible to clients than to therapists and thus clients' judgments may rely on idiosyncratic ideas about the goals and tasks in therapy. For these reasons, we expected the congruence in bond judgments to exceed the congruence regarding goals and tasks.

The Present Study

The present study used rich session-by-session data to investigate possible moderators of therapist/client congruence. We adapted Funder's (1995) RAM framework and examined the qualities of the judges, the targets, the information, and the specific traits that may moderate two indices of therapist/client congruence (i.e., directional discrepancy and temporal congruence) in alliance judgments. In particular, we were guided by the following hypotheses:

- Good judge: Given the evidence that one dimension of therapists' interpersonal tendencies (affiliation) is related to alliance, whereas its orthogonal dimension (dominance) is not, we predicted that high-affiliation (but not high-dominance) therapists would be more congruent with their clients in judging the alliance (i.e., would show higher temporal congruence as well as less negative directional discrepancy).
- Good target: Based on similar reasoning, we expected greater therapist/client congruence when clients were high on affiliation.
- 3. Good information: The duration of therapy can serve as a proxy for the depth of acquaintance between therapists and their clients, but the evidence regarding its association with therapist/client congruence in alliance is mixed. We explored the possibility that this association would be present though not necessarily linear. For that purpose, we examined both the linear and the log-linear association between acquaintance and alliance congruence.
- 4. Good trait: We reasoned that clients' and therapists' bond judgments rely on information which would be more similar than that leading to judgments about goals or tasks. Consequently, we expected that the congruence

regarding the bond aspect of alliance would be higher than the counterpart congruence regarding goals or tasks.

Method

Clients

The participants were adults who had undergone psychotherapy at a major university outpatient clinic between August 2014 and August 2015. Of the 167 clients who sought treatment and agreed to participate in the study, 112 (67%) began treatment. Of these, six (5.5%) had four (or less) sessions and were excluded from the analyses (to ensure sufficient within-client observations). All remaining clients were at least 18 years old ($M_{\rm age}=40.80$ years, SD=13.65, age range = 18–79 years). The majority were female (60.4%). In the sample, 53.8% of the clients were single, divorced, or widowed, and 46.2% were married or in a permanent relationship. In addition, 44% had at least a bachelor's degree, and 80.4% were employed full- or part-time.

Clients' diagnoses were established based on the Mini International Neuropsychiatric Diagnostic Interview for Axis I *DSM–IV* diagnoses (MINI 5.0; Sheehan et al., 1998). A sizable group of clients (42.5%) reported relationship concerns, academic/occupational stress, or other problems but did not meet criteria for Axis I diagnosis. Among those who did meet criteria, the most common diagnoses were comorbid anxiety and affective disorders³ (28.3%), followed by affective disorders (10.4%), anxiety disorders (9.4%), other comorbid disorders (6.6%), obsessive—compulsive disorder (1.9%), and PTSD (.9%).

Therapists

Participating clients were assigned to therapists in an ecologically valid manner based on real-world issues such as therapist availability and caseload. The clients were treated by 62 trainee therapists with different training levels. Thirty-one therapists treated one client each, 25 treated two clients each, three treated three clients each, and three treated between four and seven clients each. Seven of the therapists (10.6%) did not complete the pretreatment questionnaires. The therapists were blind to the study hypotheses. Each therapist received 1 hr of individual supervision and 4 hr of group supervision on a weekly basis. All therapy sessions were audiotaped for use in supervision with senior clinicians. The individual and group supervision focused heavily on the review of audiotaped case material.

Treatment

Individual psychotherapy consisted of once- or twice-weekly sessions of primarily psychodynamic psychotherapy, which was organized, aided, and informed (but not prescribed) by a short-term psychodynamic psychotherapy treatment model (Blagys & Hilsenroth, 2000; Shedler, 2010). The key features of this model

³ The following *DSM–IV* diagnoses were subsumed under the affective disorders cluster: major depressive disorder, dysthymia and bipolar disorder. The following *DSM–IV* diagnoses were subsumed under the anxiety disorders cluster: panic disorder, agoraphobia, generalized anxiety disorder and social anxiety disorder.

include (a) a focus on affect and the experience and expression of emotions, (b) exploration of attempts to avoid distressing thoughts and feelings, (c) identification of recurring themes and patterns, (d) emphasis on past experiences, (e) focus on interpersonal experiences, (f) emphasis on the therapeutic relationship, and (g) exploration of wishes, dreams, or fantasies. Treatments were considered open-ended in length; however, given the constraints of the university-based outpatient community clinic, which operates on an academic schedule, this length was often limited to 9-12 months. The mean treatment length was 22.1 sessions (SD=8.5, range = 7-47). A total of 2,320 sessions were available for analysis.

Measures

Inventory of Interpersonal Problems-32. Therapists' and clients' affiliation and dominance tendencies were assessed using the Inventory of Interpersonal Problems-32 (IIP; Horowitz, Alden, Wiggins, & Pincus, 2000), completed before the beginning of treatment. The IIP consists of 32 items that depict interpersonal problems on eight four-item scales arranged in a circumplex structure that can be summarized using the dimensions of dominance and affiliation. The IIP comprises two types of items: one half beginning with the phrase "it is hard for me to . . ." and the other half addressing "things that I do too much." Each item is rated on 5-point Likert scale ranging from 0 (not at all) to 4 (extremely). For the current sample, the Cronbach alphas for the eight scales ranged from 0.75 to 0.85 for therapists and 0.87 to 0.9 for clients. Unlike previous studies (e.g., Dinger et al., 2007) that used each of the different octants separately, we followed recent recommendations and combined the eight octants into two orthogonal dimensions of affiliation and dominance by using appropriate weights dictated by the circumplex structure (for extensive explanation, see Wright, Pincus, Conroy, & Hilsenroth, 2009).

Working Alliance Inventory. At the end of each session, the Working Alliance Inventory (WAI-SR; Tracey & Kokotovic, 1989) was administered to both clients (client version) and therapists (therapist version). The 12-item short form of the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) is based on Bordin's (1979) conceptualization of the client-therapist relationship, which includes the development of an affective bond between the client and therapist, as well as client-therapist agreement on treatment goals and on the tasks used to achieve the goals. Participants were asked to use a 7-point Likert scale to rate how accurately each item described their current therapy experience. The current study used Cranford et al.'s (2006) method of estimating the between- and within- person reliabilities for repeated within-person measures; these were high for both clients ($R_C = 0.90$, $R_{KF} = 0.96$) and therapists ($R_C =$ $0.86, R_{KF} = 0.87$).

Previous research (e.g., Falkenström, Hatcher, Skjulsvik, Larsson, & Holmqvist, 2015) has shown that the goals and tasks scales of the WAI may be hard to separate. In the current study we witnessed high correlation between these subscales, r = .85, p < .001, and thus combined them by creating an average index of goals/tasks which was found to be correlated with the bond scale, r = .77, p < .001.

Statistical Analysis

We used multilevel models to test our hypotheses as our data had hierarchical structure in which sessions were nested within clients, and clients were nested within therapists. For several reasons, we opted to use two-level models rather than three-level models. We adapted a multivariate version of West and Kenny's (2011) T&B model. The therapist alliance reports constituted the outcome. This outcome was predicted by the clients' alliance reports. The slope coefficient represented the therapist/client temporal congruence in alliance ratings. As West and Kenny (2011) suggested, we mean-centered both the therapists' (i.e., judges) reports and the clients' (i.e., targets) reports on each client's mean rating score across sessions. That way, the intercept represented the directional discrepancy between the therapist's and the client's alliance ratings. Adapting the multivariate T&B model allowed us to estimate between-dyad differences in the two congruence indices (i.e., temporal congruence & directional discrepancy) for both alliance aspect. It also allowed us to compare the strength of congruence in each of the alliance aspects.

To keep our models parsimonious, we opted to estimate a different model for each of the four RAM components we posited as moderators of the therapist/client congruence. The basic (i.e., unmoderated) model on which we built all subsequent models was:

Therapists' alliance_{sd} = $\beta_{0d} + \beta_{1d} \times \text{Clients'}$ alliance_{sd} + e_{sd} (1)

Level 2:

$$\beta_{0d} = \gamma_{00} + u_{0d}; \quad \beta_1 = \gamma_{10} + u_{1d}$$
 (2)

The Level 1 equation modeled the therapist's alliance judgment for session s of dyad d as a function of the directional discrepancy (i.e., the intercept β_{0d}), temporal congruence (i.e., the slope β_{Id}), and a Level 1 residual term (i.e., e_{sd}). At Level 2, the two congruence indices were modeled using both the sample's average directional discrepancy/temporal congruence (i.e., γ_{0o}/γ_{1o} , respectively) which represented fixed effects, and the dyad's deviation from these averages (i.e., u_{0d}/u_{1d}) which represented random effects. Finally, first-order autoregressive structure was imposed on the covariance matrix for the within-person residuals.

To test Hypotheses 1 and 2, regarding therapists' (or clients') affiliation and dominance as possible moderators of directional discrepancy and temporal congruence, we estimated the following cross-level interaction model (computed separately with therapists' IIP scores or with the clients' scores):

Level 1

Therapists' alliance_{sd} = $\beta_{0d} + \beta_{1d} \times \text{Clients'}$ alliance_{sd} + e_{sd} (3)

Level 2

$$\beta_{0d} = \gamma_{00} + \gamma_{01} \times \text{Affiliation}_d + \gamma_{02} \times \text{Dominance}_d + \mathbf{u}_{0d};$$
 (4)

$$\beta_1 = \gamma_{10} + \gamma_{11} \times \text{Affiliation}_d + \gamma_{12} \times \text{Dominance}_d + u_{1d}$$
 (5)

⁴ Recent findings have shown that small numbers of clients per therapist (up to 10 clients per therapist) might lead to inflation of the third level effects (Schiefele et al., 2016). In the current study, adding the third level did not improve the model fit, $\chi^2(1) = 2.6$, ns. The Level 3 variance of the clients' alliance ratings was not significant (Z = 0.89, ns).

To test Hypothesis 3 regarding time-elapsed in therapy as a possible moderator of directional discrepancy and temporal congruence, we used the following model:

Level 1:

Therapists' alliance
$$_{sd} = \beta_{0d} + \beta_{1d} \times \text{Clients' alliance}_{sd}$$

 $+ \beta_{2d} \times \text{Time}_{sd}$
 $+ \beta_{3d} \times \text{Clients'alliance}_{sd} \times \text{Time}_{sd} + e_{sd}$ (6)

Level 2:

$$\beta_{0d} = \gamma_{00} + u_{0d}; \quad \beta_{1} = \gamma_{1d} + u_{1d}; \quad \beta_{2} = \gamma_{2d} + u_{2d}; \quad \beta_{3} = \gamma_{3d}$$
 (7)

This model was estimated twice: once with the mean-centered session number as the index of acquaintance (to examine its linear effect), and separately with the square root of the session number as the index of acquaintance (to test its log-linear effect). In both cases, we included random effects for the temporal congruence and the acquaintance terms, but not for their interaction. This is because the Level 2 interaction variance was not significant (Z = 0.77, p = ns), did not correlate with any of the other parameters' variance, and did not improve the model fit of the linear model, $\chi^2(4) = 3$, ns, as well as the log-linear model, $\chi^2(4) = 2$, ns.

Last, we set up a final model to examine our Hypothesis 4, which addressed the divergence between the different aspects of alliance (bond and goals/tasks). Specifically, we estimated a mixed multivariate-multilevel model (Baldwin, Imel, Braithwaite, & Atkins, 2014) in which the two aspects were combined into a single outcome variable termed therapist alliance m_{msd} where m indexes the alliance aspects, s indexes the session, and d indexes the dyad. We also created two indicator variables (bond, and goals/tasks, m). Each of these was set to 1, and the other was set to 0, when the relevant aspect was examined:

Level 1:

Therapists' alliance
$$_{msd} = \text{Bond}_m \times (\beta_{1d} + \beta_{2d} \times \text{Clients' alliance}_{sd} + e_{msd})$$

+ Goals/Task $_m \times$
 $(\beta_{3d} + \beta_{4d^-} \times \text{Clients' alliance}_{sd} + e_{msd})$ (8)

Level 2:

$$\beta_{1d} = \gamma_{10} + u_{1d}; \, \beta_{2d} = \gamma_{20} + u_{2d}; \, \beta_{3d} = \gamma_{30} + u_{3d}; \, \beta_{4d} = \gamma_{40} + u_{4d} \quad (9)$$

The Level 1 equation modeled the therapist's alliance judgment for the alliance aspect m in session s of dyad d as a function of the directional discrepancy (i.e., the intercepts β_{Id} and β_{3d}), temporal congruence (i.e., the slopes β_{2d} and β_{4d}) and a Level 1 residual terms (i.e., the two e_{msd} terms). For Level 2, we modeled the directional discrepancies and the temporal congruence slopes on the sample's average directional discrepancy (i.e., γ_{IO} and γ_{3O}) or temporal congruence estimates (i.e., γ_{2O} and γ_{4O}); that is, their fixed effects, while taking into consideration each dyad's deviation from these estimates (i.e., $u_{Id} - u_{4d}$); that is, their random effects. Finally, a first-order autoregressive structure was estimated for the Level 1 random effects, and they were allowed to correlate with each other, that is, we controlled for the intercorrelation between the alliance aspects.

Results

To obtain descriptive statistics regarding our judge and target predictors (i.e., the two dimensions derived from the IIP; Horowitz et al., 2000), we first used circular statistics (Wright et al., 2009) to identify both therapists' and clients' interpersonal tendencies. Circular statistics yield both an average angular location within the circumplex as well as a circular standard deviation, reflecting the dispersion around the average angle where different angle represents different interpersonal tendencies (0° represents affiliative, 90° represents dominance, 180° represents detached, and 270° represents submissive tendencies). Preliminary results showed that our therapists' interpersonal tendencies were mostly affiliative and (to a lesser extent) also dominant ($\theta_M = 27^{\circ}$, 95% CI = 21°). Moreover, our clients' interpersonal tendencies were affiliative and somewhat submissive ($\theta_{\rm M}=305^{\circ},\,95\%$ CI = 17°). As can be seen by the groups' confidence intervals, the therapist sample was significantly different from the client sample in its interpersonal tendencies.

We also computed descriptive statistics based on the clients' and therapists' WAI responses. The average therapist-rated alliance was 55 (SD=7) for the general scale, 21 (SD=3.5) for the bond scale, and 17 (SD=2.5) for the goals/tasks scale. The average client-rated alliance was 70 (SD=11) for the general scale, 24 (SD=3.5) for the bond scale, and 22 (SD=4) for the goals/tasks scale.

The results of our first model, which examined Hypothesis 1 (addressing the judges' interpersonal characteristics), are shown in Table 1. This model exhibited better fit than the basic (unmoderated) model, $\chi^2(4) = 160$, p < .001. As predicted, the therapists' affiliation level (but not their dominance level) moderated both the therapists' directional discrepancy and their temporal congruence in therapist/client alliance ratings.

To examine this moderation, we used Preacher, Curran, and Bauer's (2006) computational tool for probing interaction effects in multilevel modeling analyses. As can be seen in Figure 1, the temporal congruence levels (i.e., slopes) were higher for high affiliation therapists (b=0.31, SE=0.04, p<.001) than for average affiliation (b=0.22, SE=0.02, p<.001) or low affiliation therapists (b=0.13, SE=0.04, p<.05). Similarly, the directional discrepancy levels (i.e., intercepts) were lower (i.e., less negative, indicating greater therapist/client congruence) for high affiliation therapists (b=-10.88, SE=1.8, p<.001) than for average affiliation therapists (b=-13.94, SE=0.9, p<.001) and low affiliation therapists (b=-17.00, SE=1.8, p<.001).

The results of our second model, which examined Hypothesis 2 (addressing targets' interpersonal characteristics) failed to reveal any significant moderation effect for clients' affiliation (or dominance) on either the therapist/client congruence levels or the therapists' directional discrepancies (see Table 1).

The results of our third and fourth models, which examined Hypothesis 3 (addressing duration as a proxy for acquaintance or available information), are shown in Table 2. Both the linear, $\chi^2(5) = 108$, p < .001, and the log-linear, $\chi^2(5) = 128$, p < .001, models had better fit compared to the basic model. As predicted, the linear model of time in therapy moderated both the directional discrepancy and the temporal congruence in alliance ratings (with the latter approaching significance: p = .06). Our results also showed that the log-linear model might be more suitable for the

Hypotheses I and 2: Temporal Congruence and Directional Discrepancy in Alliance Ratings as a Function of Therapist and Client's IIP Scores

	The	Therapist's IIP ratings as moderators	ators		Client's IIP ratings as moderators	
Fixed effects	Estimate	CI (95%)	Effect size	Estimate	CI (95%)	Effect size
Directional discrepancy (intercept)	-13.94***	[-15.85, -12.09]	-1.3	-14,44***	[-16.25, -12.63]	-1.4
× Dominance	-0.00	[-0.17, 0.17]	-0.00	0.40	[-2.98, 3.78]	0.03
× Affiliation	3.06*	[0.02, 6.10]	0.29	-1.9	[-5.20, 1.40]	-0.17
Temporal congruence (slope)	0.22***	[0.17, 0.27]	0.14	0.22***	[0.17, 0.27]	0.14
× Dominance	-0.06	[-0.14, 0.02]	90.0	-0.01	[-0.10, 0.06]	-0.01
\times Affiliation	*60.0	[0.01, 0.17]	-0.3	-0.02	[-0.10, 0.07]	-0.00
Covariance estimates of lev	el-2 (below the diagonal), v	variance estimates of level-2 ((diagonal), as well as their l	evel-1 residual and aut	Covariance estimates of level-2 (below the diagonal), variance estimates of level-2 (diagonal), as well as their level-1 residual and auto-regressive estimates (bottom rows):	ws):
		1	2		-	2
1. Directional discrepancy		82 (12.8)***			77.5 (11.8)***	
 Temporal congruence Variances 		-0.36~(0.23), ns	0.01 (0.00), ns		-0.19 (0.22), ns	0.014 (0.00)*
Level 1 residual	27.2 (1.2)***			28.2 (1.3)***		
Autoregressive (1)	$0.43 (0.02)^{***}$			$0.43 (0.02)^{***}$		

IIP = Inventory of Interpersonal Problems-32; 95% CI = 95% confidence interval. Effect size for the directional bias were calculated by dividing the unstandardized estimates by the pooled 2012). Effect size for the temporal congruence were calculated standardized betas (see Baldwin, Imel, Braithwaite, & Atkins, SDs of the therapists' and clients' alliance judgments, and thus can be regarded as an approximation of Cohen's Ds. Effect size (see Nezlek, as an approximation of raw variables and rerunning the models, .001. by standardizing the

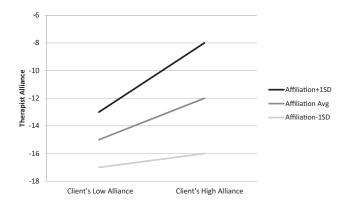


Figure 1. Temporal congruence and directional discrepancy in alliance ratings as a function of therapist–affiliation index.

current sample (than the linear model): when using this model, time significantly moderated both directional discrepancy and temporal congruence, and the model as a whole had a better fit.

For this reason, we proceeded to probe only the log-linear model, again using Preacher et al.'s (2006) computational tool. As can be seen in Figure 2, temporal congruence levels (i.e., slopes) were higher for later sessions (b = 0.25, SE = 0.04, p < .001) than for sessions midway (b = 0.18, SE = 0.03, p < .001) or early in therapy (b = 0.10, SE = 0.03, p < .001). Similarly, directional discrepancy levels (i.e., intercepts) were lower (i.e., less negative, indicating greater therapist/client congruence) for later sessions (b = -12.25, SE = 1, p < .001) than for one's midway (b = -14.26, SE = 0.8, p < .001) or early in the therapy (b = -16.00, SE = 0.9, p < .001).

Last, the results of our fifth model, which examined Hypotheses 4 (addressing the *traits*), are shown in Table 3. They indicated significant therapist/client temporal congruence as well as negative therapists' directional discrepancy across alliance aspects. As predicted, we found that therapist/client temporal congruence was higher for bond judgments than for goal/task judgments (estimated difference: b = 0.07, SE = 0.02, p < .001)⁵ and the same was true for the directional discrepancy estimates (estimated difference: b = 2.06, SE = 0.26, p < .001). That is, therapists showed less directional discrepancy when judging the bond aspect of the alliance than when judging the goal/task aspect.

Discussion

We adapted Funder's (1995) theoretical RAM framework to investigate possible moderators of therapist/client congruence in alliance ratings. In particular, we extended previous work by

⁵ We see a benefit of using standardized coefficients but have opted to retain the b's rather than standardized coefficients for two reasons. First, the bond and the goals/tasks scores are on the same scale and have the same theoretical range (0–28), even if they do differ in their empirical range and variance. More importantly, using standardized coefficients precludes our ability to examine directional discrepancies. It removes the (substantive) difference in these discrepancies, which are a key outcome in our study. This problem does not affect temporal congruence and indeed, a formal test of the differences between estimates using the standardized coefficients for slopes yielded the same results (estimated difference: $\beta = 0.05$, SE = 0.02, p < 0.05).

Hypothesis 3: Temporal Congruence and Directional Discrepancy in Alliance Ratings as Function of Time Elapsed in Therapy

		Linear model			Quadratic model	
Fixed effects	Estimate	CI (95%)	Effect size	Estimate	CI (95%)	Effect size
Directional discrepancy (Intercept) × Time remporal Congruence (Slope) × Time	-14.49^{***} 0.21^{***} 0.16^{***} $0.004, p = .06$	[-16.24, -12.74] [0.15, 0.23] [0.12, 0.20] [-0.00, 0.00]	-1.4 0.15 0.11 0.02	-18.98**** 1.36**** 0.02, ns 0.04***	[-21.38, -16.59] [0.87, 1.85] [-0.07, 0.12] [0.01, 0.06]	-1.8 0.16 0.11 0.04

Covariance estimates of	Covariance estimates of Level 2 (below the diagonal), variance estimates of Level 2 (diagonal), as well as their Level 1 residual and auto-regressive estimates (bottom rows): 2 3 3 3 3 1 3 3 3 1 1 3 3 3 1 1 3 3 3 3	, variance estimates of Le 2	3 well 2 (magollal), as well		2	ottom 10ws). 3
Directional discrepancy Temporal congruence Time	78.9 (11.3)**** -0.07 (0.19) -0.22 (0.3)	0.01 (0.00)*	0.06 (0.01)**	$79.79 (11.45)^{****}$ $-0.08 (0.20)$ $-13.22 (3.7)^{****}$	$0.01 (0.006)^* -0.13 (0.06)$	3.58 (0.90)***
riances Level 1 Residual Autoregressive (1)	21.1 (1)*** 0.28 (0.02)***			25.03 (1)*** 0.36 (0.02)***		

alliance judgments, and thus can be regarded as an approximation of Cohen's Ds. Effect size (see Nezlek, 2012). Effect size for the temporal congruence were calculated by standardizing the raw 95% CI = 95% confidence interval. Effect size for the directional bias were calculated by dividing the unstandardized estimates by the pooled standard deviations of the therapists' and clients' variables and re-running the models, and thus can be regarded as an approximation of standardized betas (see Baldwin et al.,

-9 -10 -11 -12 Therapist Alliance -13 Late Sessions Mid-way Sessions -14 Early Sessions -15 -16 -17 -18 Client's Low Alliance Client's High Alliance

Figure 2. Temporal congruence and directional discrepancy in alliance ratings as a function of time elapsed in therapy—log-linear model.

considering therapist (i.e., judge) interpersonal characteristics as well as client (i.e., target) interpersonal characteristics as possible moderators; we examined time-in-therapy (as a proxy for growing acquaintance or information); finally, we distinguished between aspects of alliance (bond vs. goals/tasks) to determine whether these traits differ in congruence. These moderators were explored in a dataset of session-by-session client and therapist reports obtained in a naturalistic treatment setting. Below, we discuss our findings with regard to each moderator in light of Funder's framework.

Therapists as Judges

In a general sense, our results replicate previous findings (e.g., Atzil-Slonim et al., 2015; Tryon et al., 2007) by showing that, on average, therapists tend to rate the alliance as less strong than their clients, while also being temporally congruent with their clients in these alliance ratings. Consistent with our first hypothesis, we found that therapists' affiliation tendencies moderated these general effects. Specifically, high-affiliation therapists showed a less pronounced negative directional discrepancy and had higher temporal congruence with their clients' alliance ratings across sessions. These findings extend those of Kivlighan and Marmarosh (2016), who showed that therapists' attachment security moderated both directional discrepancy and temporal congruence. Taken together, the two studies suggest that therapists' interpersonal characteristics (affiliative tendencies and attachment security) play an important role in their ability to assess the alliance, which is an interpersonal variable itself (Horvath, 2000; Horvath & Bedi, 2002), in a manner that is congruent with their clients.

Previous studies have shown that therapists' affiliation tendencies are related to higher client alliance ratings (Ackerman & Hilsenroth, 2003; Dinger et al., 2007; Hersoug et al., 2001, 2009). The findings here suggest one possible mechanism for this association. High-affiliation therapists, who are better at understanding or relating to their clients' experience in therapy may be more adept at using this as a means toward a beneficial end. For example, because of their own interpersonal qualities, they may feel more comfortable discussing their and their clients' alliance perceptions, which may lead to increases in therapist/client congruence and in turn, to higher client alliance perception. To test this idea, future research could examine actual interventions and

Table 3
Hypotheses 4a and 4b: Temporal Congruence and Directional Discrepancy in Different Aspects of Alliance Ratings

2.2 (0.10)***

Fixed effects	Estimate	C	I (95%)	Effect siz
Bond				
Directional discrepancy (intercept)	-3.51***	[-4.2	[25, -2.78]	-1
Temporal congruence (slope)	0.19***	[0.14	, 0.24]	0.20
Goals/tasks				
Directional discrepancy (intercept)	-5.58***	[-6.3	[15, -5.01]	-1.8
Temporal congruence (slope)	0.11***	[0.09	, 0.14]	0.14
	1		Level 2 (diagonal):	4
	es of Level 2 (below the diagonal) and variance estimates of	Level 2 (diagonal):	
	1	2	E Level 2 (diagonal):	4
Directional discrepancy (bond)	1 14 (2.01)***	2	Level 2 (diagonal):	4
Directional discrepancy (bond) Temporal congruence (bond)	1 14 (2.01)*** -0.032 (0.10)	2 0.02 (0.01)*	3	4
Directional discrepancy (bond) Temporal congruence (bond) Directional discrepancy (goals/tasks)	1 14 (2.01)*** -0.032 (0.10) 7.7 (1.3)***	2 0.02 (0.01)* -0.07 (0.08)	8.4 (1.22)***	·
Directional discrepancy (bond) Temporal congruence (bond)	1 14 (2.01)*** -0.032 (0.10)	2 0.02 (0.01)*	3	·
Directional discrepancy (bond) Temporal congruence (bond) Directional discrepancy (goals/tasks)	1 14 (2.01)*** -0.032 (0.10) 7.7 (1.3)***	2 0.02 (0.01)* -0.07 (0.08)	8.4 (1.22)***	·
Directional discrepancy (bond) Temporal congruence (bond) Directional discrepancy (goals/tasks) Temporal congruence (goals/tasks)	1 14 (2.01)*** -0.032 (0.10) 7.7 (1.3)***	2 0.02 (0.01)* -0.07 (0.08) 0.003 (0.0)	8.4 (1.22)**** 0.01 (0.04)	·
Directional discrepancy (bond) Temporal congruence (bond) Directional discrepancy (goals/tasks) Temporal congruence (goals/tasks)	1 14 (2.01)*** -0.032 (0.10) 7.7 (1.3)*** -0.004 (0.04)	2 0.02 (0.01)* -0.07 (0.08) 0.003 (0.0)	8.4 (1.22)**** 0.01 (0.04)	0.002 (0.0)

Autoregressive (1)

Note. 95% CI = 95% confidence interval. Effect size for the directional biases were calculated by dividing the unstandardized estimates by the pooled SDs of the therapists' and clients' alliance judgments, and thus can be regarded as an approximation of Cohen's Ds. Effect size (see Nezlek, 2012). Effect size for the temporal congruences were calculated by standardizing the raw variables and re-running the models, and thus can be regarded as an approximation of standardized betas (see Baldwin et al., 2014).

3.36 (0.12)***

 $p^* = 0.05.$ *** p < .001.

2. Goals/tasks

in-session behaviors of securely attached or high-affiliation therapists; in addition, it would be worthwhile exploring the links between therapist affiliative tendencies and behaviors, therapist/client congruence in alliance, and the actual development of alliance

Clients as Targets

Contrary to our second hypothesis, and unlike the effect of therapists' affiliative tendencies, clients' affiliative tendencies did not moderate therapist/client congruence. Thus, in the current sample, affiliation was a characteristic of good judges but not of good targets. We expected that clients' affiliation would lead to complementarity processes (e.g., Carson, 1969; Kiesler, 1983; Leary, 1957; Markey et al., 2003). When such processes are at work, affiliative tendencies and behaviors from one party (e.g., clients) are expected to lead to affiliative behaviors from the other party (e.g., therapists). If present, this cycle should eventually lead to more open and honest discussions regarding the state of the alliance, and thus, to higher therapist/client congruence in alliance ratings. We also reasoned that, much like therapists, the positive association between clients' affiliative tendencies and their alliance ratings (e.g., Dinger et al., 2007, 2013; Hersoug et al., 2009; Renner et al., 2012) would culminate in higher therapist/client congruence.

Our expectations were not borne out. Instead, this study echoes earlier work (Atzil-Slonim et al., 2015) in showing that client pretreatment characteristics (including personality disorder diagnoses, pretreatment symptomatic distress) are not associated with therapist/client congruence in alliance ratings. One plausible explanation is that the interpersonal complementarity assumption is

more applicable to the beginning of therapy (Kiesler & Watkins, 1989) rather to the therapy process as a whole. In fact, several researchers have suggested that to create a facilitative therapeutic environment, therapists should "break" their clients' complementarity patterns as therapy progresses (e.g., Kiesler & Goldston, 1988). Thus, it may be fruitful to examine target effects separately in early versus later phases of psychotherapy.

In a similar manner, some authors (e.g., Zilcha-Mano, 2017) have argued that therapists should nourish and promote their clients' affiliation capabilities across treatment, especially when these are low. If therapists adopt these suggestions and are successful in implementing them, we should expect to see a positive change in clients' affiliative tendencies (e.g., Crits-Christoph, Gibbons, Narducci, Schamberger, & Gallop, 2005), which may lessen the effect of clients' pretreatment affiliative tendencies on therapist/client congruence. That said, we hope future research will continue to explore pretreatment characteristics that may account for therapist/client congruence in alliance since certain characteristics have been shown to account for a sizable portion of the variance in alliance ratings themselves (e.g., Dinger et al., 2007, 2013; Hersoug et al., 2009; Mikulincer, Shaver, & Berant, 2013; Renner et al., 2012).

Acquaintance Time as Increased Information

Our third hypothesis examined the possibility that congruence would increase with good information, which we equated with acquaintance (i.e., the time elapsed in treatment). As expected, we found that as treatment progressed, temporal congruence increased and directional discrepancy lessened (i.e., became less negative). These findings are in line with previous research on the therapist/

client congruence in alliance, which found that with time, the divergence between clients' and therapists' alliance ratings decreased (e.g., Atzil-Slonim et al., 2015; Kivlighan & Shaughnessy, 1995; Tryon et al., 2007). We see this as consistent with the idea that time (i.e., acquaintance) provides therapists with increased opportunities to understand their clients' alliance perception. In particular, more numerous opportunities to discuss the alliance give both partners the space to seek and provide feedback.

To further explore the role of time in therapy, we went beyond previous research by comparing models with linear and nonlinear associations between time and therapist/client alliance congruence. With log-linear transformations, time showed a stronger moderating effect on both temporal congruence and directional discrepancy than without such transformation. This finding suggests that the added marginal value of time (or acquaintance) diminishes as therapy progresses, which may account for some of the mixed results obtained in earlier studies focused on the effects of time (e.g., Atzil-Slonim et al., 2015; Fitzpatrick et al., 2005).

Aspects of Alliance as Traits

Our final hypothesis (Hypothesis 4) addressed the divergence and similarity between the congruence indices computed for different aspects of alliance. As expected, we found positive significant temporal congruence across alliance aspects; importantly, we also found that judgments regarding the bond aspect yielded higher therapist/client temporal congruence and lower directional discrepancy (i.e., higher therapist/client congruence) than did judgments regarding the goals/tasks aspects.

These findings suggest that when therapists and clients assess their bond with each other they might possess similar information about the construct. In contrast, when they assess the therapy's goals or tasks, they may have different access to theoretical and professional knowledge about the specific interventions delivered during the therapeutic hour. More generally, these findings may reflect a common feature of interpersonal interactions, one that is not specific to therapy. Specifically, it is possible that in any interpersonal relationship, the emotional bond is a more intuitive target of assessment, with relationships' goals or means being harder to define (and thus, to agree upon). This possibility notwithstanding, the finding that therapists are less congruent with their clients regarding goal-oriented aspects of the alliance points to the idea that therapists may wish to discuss the tasks and goals of therapy more explicitly. This explicit discussion may narrow the gap between therapists' and clients' viewpoints.

Limitations

Several limitations of this study should be noted. First, this study was designed as a naturalistic field exploration. This strengthens the external validity of our results, as they are likely to reflect the reality of clinical work with clients in other public training clinics (Ablon, Levy, & Katzenstein, 2006; Bond & Perry, 2004). However, it limits the internal validity of the results. Future studies in more controlled settings (e.g., in clinics focused on more standardized treatment) could help address this limitation.

Relatedly, our reliance on trainee therapists limits the generalizability of the findings to therapies implemented by more experienced clinicians. Although Tryon and colleagues (2007) did not

find any differences between novice and experienced therapists with regard to the therapist/client divergence in alliance ratings, it is possible that differences would become apparent if different aspects of alliance were assessed. Specifically, experienced therapists may be able to pick-and-choose therapy tasks to better suit their clients' needs and thus to be more congruence with them regarding this aspect.

The therapies conducted in our clinic are psychodynamic in nature. This too may limit the generalizability of our results, especially with regard to the divergence between alliance aspects. For example, it is likely that therapists applying cognitive therapies may have more explicit conversations with their clients regarding therapy tasks; moreover, because this therapy makes frequent use of psycho-education interventions, cognitive therapists and their clients may have more similar information about these tasks and the way they lead to wished for goals. Consequently, future research should investigate not only different psychotherapy modalities but also specific interventions (such as psycho-education), which may promote higher therapist/client congruence in different alliance aspects.

We adapted the RAM (Funder, 1995) framework and the T&B model which was originally developed to assess the accuracy of judgments, for our use—that is, to study congruence of judgments. Our results are therefore informative with regard to congruence. Research addressing therapist accuracy regarding their clients' alliance ratings would need to make use of differently worded alliance measures. As it is, the currently used instrument (the WAI) is not optimally suited for the investigation of therapists' accuracy. Specifically, the WAI's therapist version asks therapists to report their own perspective about alliance, and not to infer their clients' perspective. Of course, it would be interesting to apply the RAM framework and the T&B model to data in which the therapists' ratings explicitly involve inferences regarding the clients' alliance perceptions. Doing so may call for using strictly parallel scales, such as the helping alliance questionnaires (Luborsky et al., 1996).

The affiliation index for the current investigation was drawn from the IIP (Horowitz et al., 2000). This instrument is likely to suffer from the usual disadvantages of self-report instruments (e.g., self-presentation, reduced variability). To fully investigate therapists' and clients' affiliative tendencies (alongside dominance tendencies or other traits), future studies could benefit from the use of alternative measures (e.g., objective raters' reports). One example of an objectively rated index is the Facilitative Interpersonal Skills measure, which assesses therapists' empathy, verbal skills, warmth, persuasiveness, emotional expression, verbal fluency, and so forth (e.g., Anderson, McClintock, Himawan, Song, & Patterson, 2016). Indeed, some of these constructs are quite strongly related to therapists' affiliation and dominance tendencies, and others may predict congruence in their own right.

These limitations notwithstanding, the present study extends the investigation of different sources of therapist/client congruence in alliance ratings across treatment. Our results have several possible clinical implications. First, they highlight therapists' interpersonal tendencies as a meaningful factor affecting therapy processes which should be attended to in supervision. Second, they suggest that therapists and clients may have to work harder to attain mutual agreement and understanding with regards to the goals and tasks of treatment, to allow these to be on par with the (more easily

assessed) bond aspect. Finally, they lead to the conclusion that therapists could (and maybe should) obtain feedback from their clients regarding their alliance experience. Such feedback could be delivered as part of routine treatment monitoring systems but could also come directly from frank and open conversations with clients.

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