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Research Article

Italian versions of the rupture resolution rating system and the working alliance inventory observer short form: preliminary reliability and convergent validity

ANTONELLA CIRASOLA^{1,2}, PETER MARTIN³, CATHERINE F. EUBANKS⁴,
J. CHRISTOPHER MURAN⁴, GIORGIO A. TASCA⁵, & ANGELO COMPARE⁶

¹*Research Department of Clinical, Educational and Health Psychology, University College London, London, UK*; ²*Anna Freud London, London, UK*; ³*Institute of Epidemiology and Health Care, University College London*; ⁴*Gordon F. Derner School of Psychology, Adelphi University*; ⁵*School of Psychology, University of Ottawa* & ⁶*Department of Human and Social Sciences, University of Bergamo, Bergamo, Italy*

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Abstract

Objective: This study aimed to translate the Rupture Resolution Rating System (3RS) and the Working Alliance Inventory–Observer Short Form (WAI-O-S) into Italian. As a preliminary step toward validation, inter-rater reliability and convergent validity of the translated measures were also examined.

Method: First, forward–backward translation process was conducted to ensure conceptual and linguistic equivalence with the original English versions. Second, four trained raters independently applied the Italian versions of the 3RS and WAI-O-S to 47 psychotherapy sessions involving 20 different patients. Finally, inter-rater reliability (IRR) and convergent validity were analyzed.

Results: This study produced the first Italian versions of the 3RS and WAI-O-S, providing conceptually robust tools to assess therapeutic alliance and rupture–repair processes. Preliminary analyses showed acceptable inter-rater reliability for both measures, though some variability emerged in certain 3RS dimensions—particularly Therapist Withdrawal and Repair. Strong correlations between the 3RS Working Together score and the WAI-O-S total score offered preliminary evidence of convergent validity.

Conclusion: These preliminary findings provide initial support for the reliability and validity of the Italian 3RS and WAI-O-S. Further studies in larger and more diverse samples are necessary to examine their generalizability and clarify their applicability.

Clinical or methodological significance of this article: This study developed Italian versions of the Rupture Resolution Rating System and the Working Alliance Inventory–Observer Short Form, and provided preliminary validity evidence for their use in assessing rupture–repair processes and the therapeutic alliance in recorded psychotherapy sessions. These tools may be useful to clinicians and researchers working in Italian psychotherapy research and clinical practice.

The therapeutic alliance refers to the quality of the relational bond between patient and therapist, as well as their mutual collaboration on the tasks and goals of therapy (Bordin, 1979). It is a trans-theoretical construct that has received substantial attention in empirical research, largely due to its consistent association with positive treatment outcomes across a wide

range of therapeutic approaches (Flückiger et al., 2018). Over recent decades, the concept of the alliance has evolved to reflect its dynamic and relational nature. It is now understood as an ongoing intersubjective process between patient and therapist, characterized by fluctuations in connection—including periods of strain or breakdown, known as ruptures,

Correspondence concerning this article should be addressed to Antonella Cirasola Research Department of Clinical, Educational and Health Psychology, University College London, 4-8 Rodney St, London N1 9JH, UK. Email: Antonella.cirasola@annafreud.org

and subsequent efforts at resolution or repair (Muran & Eubanks, 2020; Safran & Muran, 2000).

Alliance ruptures are defined as tensions or breakdowns in the collaborative relationship between therapist and patient, either regarding the tasks and goals of therapy or within the relational bond itself (Safran & Muran, 2000). Such ruptures are commonly observed in psychotherapy, including in cases that ultimately result in successful outcomes (Zilcha-Mano et al., 2016). The successful repair of alliance ruptures has been linked to positive therapeutic outcomes, whereas unresolved ruptures have been associated with poorer outcomes and increased risk of dropout. These findings highlight the critical importance of identifying and addressing ruptures as a central component of effective therapeutic practice (Eubanks et al., 2018; Safran et al., 2011).

Alliance ruptures can be categorized into two types: withdrawal and confrontation (Safran & Muran, 2000). Withdrawal ruptures involve “movement away” from the other or therapy, which may include silence, avoiding emotional topics, and abstract communication. This can also manifest as over-compliance at the expense of authenticity (Muran et al., 2010). Confrontation ruptures, on the other hand, can be described as “movement against” the other or therapy. This might entail expressing dissatisfaction overtly, often through anger or attempts to control the other. A rupture is considered repaired or resolved when the emotional bond between patient and therapist is restored and collaboration on the therapy is resumed (Eubanks et al., 2018).

Measuring the Alliance

The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) and especially its short forms (e.g., WAI-S; Tracey & Kokotovic, 1989; WAI-SR; Hatcher & Gillaspy, 2006) are among the most widely used measures of the therapeutic alliance in both adult and youth psychotherapy (Flückiger et al., 2018). These instruments operationalize Bordin’s (1979) definition of the alliance, comprising: (1) agreement on therapy goals, (2) agreement on tasks, and (3) the affective bond between patient and therapist. Accordingly, they include three subscales reflecting these dimensions. However, the high correlations often found among subscales (e.g., Cirasola et al., 2020; Corbière et al., 2006; Falkenström et al., 2015; Hatcher & Gillaspy, 2006) have led many researchers to focus primarily on a composite total score.

The WAI is available in parallel patient, therapist, and observer formats. The patient and therapist forms are typically completed as self-report questionnaires after sessions, whereas the observer version

(WAI-O) is rated by trained observers who review recorded sessions. The WAI-O was first developed by Tichenor and Hill (1989) by adapting the patient and therapist forms for third-party observation. Building on this, Raue et al. (1991) created the first WAI-O manual, which provided item-specific guidance and explanatory notes to assist raters in applying the scale. Later adaptations refined the rating procedures, resulting in updated manuals and instruments: a long form (36 items; Darchuk et al., 2000) and a short form (12 items; WAI-O-S; Wang et al., 2005).

Psychometric studies of the patient and therapist forms of the WAI—including the WAI-S and WAI-SR—have generally reported good internal consistency, with Cronbach’s α ranging from .80 to .95 (Capaldi et al., 2016; Dennis et al., 2002; Hawley & Garland, 2008; Tetzlaff et al., 2005), as well as evidence of convergent and factorial validity (Horvath & Greenberg, 1989; Santirso et al., 2018; Tracey & Kokotovic, 1989). These estimates reflect average between-person reliability and validity within the studied samples but do not guarantee equivalent performance across all individuals or contexts. Regarding the observer form, the WAI-O (Darchuk et al., 2000) has also demonstrated high internal consistency at the group level, with Cronbach’s α ranging from .90 to .98 for total scores and .80 to .97 for subscales (Hanson et al., 2002; Putri et al., 2024; Soygüt & Uluç, 2009; Tichenor & Hill, 1989).

Measuring Alliance Ruptures and Their Repair

When it comes to measuring alliance ruptures and repairs, researchers have used both indirect and direct methods, each with its own strengths and limitations (Eubanks-Carter et al., 2010). In this context, “indirect methods” refers to approaches that infer the presence of a rupture from patterns in alliance scores, rather than asking participants directly whether a rupture occurred. These methods typically involve administering alliance rating scales across multiple sessions and tracking changes over time. A drop in alliance scores relative to earlier sessions is interpreted as evidence of a rupture, while a subsequent increase is taken as a sign of repair (Strauss et al., 2006). Data may come from patient or therapist self-reports, or from observer ratings based on recorded sessions. Regardless of the informant, indirect methods offer a macro-level view of the alliance trajectory over time. However, because they rely on inferences from overall score trends, they cannot capture the moment-to-moment processes of rupture and repair that occur within sessions (Falkenström & Larsson, 2017; Stevens et al., 2007).

In contrast, “direct methods” identify ruptures by assessing their presence directly, rather than inferring them from changes in alliance scores over time. Direct assessment can include targeted self-report questionnaires that explicitly ask patients and therapists whether a rupture occurred. Most research has relied on observer-based instruments applied to session recordings or transcripts, in which trained observers watch or listen to the sessions and score the presence of ruptures. These tools are designed to pinpoint specific in-session behaviors that indicate ruptures and their resolution. Two widely used direct observational measures for assessing alliance ruptures and repairs are the Collaborative Interaction Scale (CIS; Colli & Lingiardi, 2009) and the Rupture Resolution Rating System (3RS; Eubanks & Muran, 2015; Eubanks & Muran, 2022), with the 3RS being the most adopted tool in alliance rupture research (Eubanks et al., 2019).

The CIS is a transcript-based method for the assessment of therapeutic alliance ruptures and resolutions in psychotherapy. It can be applied to transcripts of therapy sessions and provides item-level ratings of observable behaviors associated with alliance ruptures and their repairs, including withdrawal ruptures, confrontation ruptures, rupture resolution attempts, and overall resolution quality. Studies have reported moderate to good inter-rater reliability for the CIS. For instance, mean intraclass correlation coefficients (ICCs) have been reported around .77 (Colli et al., 2017; Coutinho et al., 2014).

The 3RS is an observer-based coding system applied to audio or video recordings of psychotherapy sessions. It was designed to enable fine-grained, real-time analysis of rupture and repair processes. The first comprehensive manual was published in 2015 (Eubanks & Muran, 2015), followed by a substantially revised edition in 2022 (Eubanks & Muran, 2022). The updated version expands the system to include therapist-specific rupture markers, patient repair markers, and new ratings for overall alliance quality and collaboration.

The original version of the 3RS has been evaluated in several studies, with reported inter-rater reliability ranging from $ICC = .73$ to $.98$, depending on the item and coding team (Cirasola et al., 2022; Cirasola et al., 2024; Eubanks et al., 2019). These values suggest that trained raters can achieve substantial agreement in identifying rupture-related behaviors under controlled research conditions. However, little is known about the reliability of the revised 2022 manual, as no empirical data on its psychometric properties have yet been published. This gap is particularly important because the revision introduces the Working Together scale, which expands

the assessment to include collaboration and the bond between patient and therapist.

Current Study

Observer-rated tools such as the 3RS and the WAI-O are essential for the accurate assessment of the therapeutic alliance and rupture-repair processes. However, the lack of validated Italian versions limits their accessibility and utility in Italian-speaking research and clinical contexts. Accurate translation is therefore critical to ensure conceptual and linguistic equivalence across settings. Because language fundamentally shapes psychological assessment, direct translations risk overlooking subtle but meaningful nuances. Developing culturally sensitive and psychometrically sound adaptations helps safeguard the reliability and validity of these instruments, thereby enabling more robust and inclusive research and practice in psychotherapy.

This study aimed to address this gap by developing Italian versions of the revised Rupture Resolution Rating System (3RS) and the Working Alliance Inventory – Observer Short Form (WAI-O-S). The primary objective was to create linguistically and conceptually equivalent Italian adaptations. As an initial step toward validation, we (a) carried out a preliminary assessment of the inter-rater reliability of these Italian versions, and (b) conducted an exploratory examination of their convergent validity, focusing on the relationship between the Working Together scale of the 3RS and the WAI-O-S total score, given their shared emphasis on the therapeutic alliance.

Method

The method of this study was structured in three stages. First, we describe the translation of the measures into Italian. Second, we outline the initial implementation of the translated instruments in the Italian clinical context. Finally, we report the analyses conducted to provide a preliminary assessment of the inter-rater reliability and convergent validity of the translated versions.

Development of the Italian Versions of the 3RS and the WAI-O-S

The Italian versions of the revised 3RS and the WAI-O-S, along with their respective manuals, were produced in accordance with established guidelines for the translation and cross-cultural adaptation of psychological instruments (Hall et al., 2017; Sousa & Rojjanasrirat, 2011). The goal was to ensure not

Table 1. Rupture resolution rating system (3RS) codes.

Subscale/overall	Marker/item
Working together (WT)	Patient and therapist are collaborating on the work of therapy Patient and therapist have a bond of mutual trust and respect Therapist accepts/validates patient Therapist is curious and engaged Patient is engaged in the work; authentic, open
Withdrawal	Patient withdrawal (PW): patient moves away (patient shuts down, avoids, masks aspects of their experience) Therapist withdrawal (TW): therapist moves away (therapist shuts down, avoids, masks aspects of their experience)
Confrontation	Patient confrontation (PC): patient moves against (patient complains/criticizes, pushes back, controls/pressures) Therapist confrontation (TC): therapist moves against (therapist complains/criticizes, pushes back, controls/pressures)
Repair: Focusing on the task/goal	Patient focuses on the task/goal (patient discusses changing the task/goal or changes the task/goal, illustrates the task/provides a rationale, redirects back to the task/work of therapy) Therapist focuses on the task/goal (therapist discusses changing the task/goal or changes the task/goal, illustrates the task/provides a rationale, redirects back to the task/work of therapy)
Repair: Exploring the rupture	Patient explores the rupture (patient validates therapist's experience of the rupture, invites or engages in exploration of the rupture, explores avoidance of rupture and/or redirects back to the rupture, discloses their internal experience of the rupture) Therapist explores the rupture (therapist validates patient's experience of the rupture, invites or engages in exploration of the rupture, explores avoidance of rupture and/or redirects back to the rupture, discloses their internal experience of the rupture)
Repair: Acknowledging contribution	Patient acknowledges their contribution to a rupture Therapist acknowledges their contribution to a rupture
Repair: Linking to patterns	Patient links a rupture to a larger interpersonal pattern. Therapist links a rupture to a larger interpersonal pattern.
Effectiveness of repair	Overall Repair: Rating of extent to which the rupture was repaired.

only linguistic equivalence but also cultural and conceptual relevance for use in Italian clinical settings.

Two Italian psychology students, both fluent in English and familiar with clinical terminology, independently translated the original instruments into Italian. The translations were then reviewed for consistency, and any discrepancies were resolved collaboratively with the first author (a bilingual clinical psychologist and researcher). Next, a third bilingual translator, not involved in the initial translations, back-translated the reconciled Italian versions into English. The original and back-translated versions were compared to ensure consistency of meaning and conceptual fidelity.

While back-translation is a common approach, recent research highlights the added value of expert review in addressing subtle cultural and semantic issues (Epstein et al., 2015). For this reason, during the translation process we held several meetings between the translator and the first author, allowing for iterative reviews that drew on both clinical and cultural expertise to ensure appropriateness for the Italian context. In addition, an external clinical psychologist with extensive experience in both research and clinical practice reviewed the final Italian versions to provide an independent check on their clarity and cultural adequacy. Although a formal expert committee or cognitive debriefing was not conducted, particular attention was given to clarity, tone, and cultural relevance by carefully reviewing whether the language, examples, and expressions would be meaningful for Italian speakers in clinical settings. Following these steps, the Italian versions of the 3RS and WAI-O-S were finalized and subsequently used in training and reliability testing.

Epistemological Position

This study adopts a post-positivist epistemological stance, which acknowledges that while structured observational measures such as the 3RS and WAI-O-S can generate meaningful and replicable data on therapeutic processes, such data are unavoidably shaped by the interpretive perspectives of raters and the cultural contexts in which they are applied. Consistent with this stance, we used structured, quantitative analyses while also recognizing that raters' interpretations and the cultural setting can influence how alliance-related behaviors are understood. This meant applying rigorous scoring procedures, but also remaining attentive to the subjective judgments involved and the specific context in which the interactions took place. This approach supports a critical examination of measurement assumptions while maintaining a commitment to empirical

robustness and cross-cultural applicability (Mackenzie & Knipe, 2006).

Measures

Rupture–Repair

The revised Rupture Resolution Rating System (3RS; Eubanks & Muran, 2022) is an observer-rated instrument designed to analyze recorded psychotherapy sessions. It assesses both the presence and resolution of alliance ruptures, as well as the overall quality of collaboration between therapist and patient. Specifically, the system provides ratings for the following constructs:

- Client and Therapist Withdrawal ruptures – instances where the patient or therapist disengages from or distances themselves from the therapeutic process or relationship.
- Client and Therapist Confrontation ruptures – instances where one party expresses dissatisfaction with, or conflict toward, the therapy or the other party.
- Repair strategies – attempts by the therapist or patient to address and resolve ruptures.
- Overall repair – the extent to which ruptures are resolved during the session.
- Working Together (WT) scale – a newly introduced measure of the therapeutic bond and collaboration between patient and therapist, grounded in Bordin's (1979) alliance model. It consists of five items rated on a 1–5 salience scale.

Full item descriptions are provided in Table 1. The 3RS generates two levels of scoring:

- Segment-level scores, coded every five minutes, which capture the temporal progression of rupture–repair dynamics across the session.
- Session-level scores, which provide a global evaluation of rupture and repair processes.

At the session level, coders assign the following scores: (a) patient overall withdrawal, (b) therapist overall withdrawal, (c) patient overall confrontation, (d) therapist overall confrontation, (e) degree of rupture–repair, and (f) mean Working Together score. Rupture and repair items, as well as all five WT items, are rated on a 5-point scale, where 1 indicates “Not salient” and 5 indicates “Very salient”. The WT scale score is calculated as the mean of its five items. The effectiveness of rupture resolution is rated on a similar 5-point scale, ranging from 1 (“Rupture not repaired; alliance deteriorated”) to 5 (“Rupture well repaired”).

Alliance

The observer version of the Working Alliance Inventory – Short Form (WAI-O-S; Darchuk et al., 2000; Wang et al., 2005) provides a global, session-level assessment of the therapeutic alliance from an observer's perspective. Grounded in Bordin's (1979) pan-theoretical model of the working alliance, it comprises 12 items assessing three dimensions: goal agreement, task collaboration, and bond development (Andrusyna et al., 2001). Trained raters watch or listen to a recorded session and score each item in accordance with the WAI-O manual (Darchuk et al., 2000; Wang et al., 2005).

The items parallel those in the client- and therapist-rated WAI-S (e.g., “There is agreement about the steps taken to help improve the client's situation” or “The client feels that the therapist appreciates him/her as a person”) and are rated on a 7-point Likert scale, from 1 = very strong evidence against to 7 = very strong evidence, with items 1 and 4 reverse-scored. Compared to the self-report formats, the anchor labels were revised to emphasize degree of evidence rather than frequency (“Never” to “Always” was replaced by “very strong evidence against” to “very strong evidence”). Following Darchuk et al. (2000), ratings start at the midpoint (4 = no evidence) to represent an assumed average alliance and are then adjusted upward or downward based on observed evidence. Each extreme score is anchored with bipolar descriptors tailored to the construct (e.g., for “There is a mutual liking between the client and therapist,” a score of 1 reflects open dislike, whereas a score of 7 reflects overt statements of liking).

Studies suggest that the WAI-O-S demonstrates good psychometric properties, including high inter-rater reliability and validity comparable to other WAI formats (Afonseca et al., 2023; Andrusyna et al., 2001; Martin et al., 2000; Santirso et al., 2018, 2020).

Implementation and Validation of the Italian Versions of the 3RS and WAI-O-S

Following the translation of the Italian versions of the 3RS and the WAI-O-S, four native Italian-speaking master's students in psychology were trained by the first author in the use of both instruments. The training, conducted online, included an introduction to the measures, joint rating exercises to build familiarity, and discussions aimed at establishing initial rater agreement.

After completing the training, the raters independently coded a set of psychotherapy sessions using both instruments. To ensure consistency and

address emerging challenges, regular supervision meetings were held throughout the coding process. These meetings provided an opportunity to clarify rating criteria, resolve discrepancies, and refine the translated manuals. This iterative and collaborative approach supported the consistent and accurate application of the measures and enabled the preliminary evaluation of their inter-rater reliability and convergent validity.

Ethics

Ethical approval for the study was obtained from the University of Bergamo (Registration No. 08/2024). All participating therapists and patients were provided with information sheets and signed consent forms, authorizing the use of video recordings of their therapy sessions for research purposes. To ensure confidentiality, all identifying patient information was removed, and the sessions were stored and accessed exclusively on the University's secure server.

Treatment Context

The sessions included in the study were drawn from psychotherapy conducted within an integrated relational framework (Poletti et al., 2024). This evidence-based model emphasizes therapeutic flexibility, adapting interventions to patients' individual needs, attachment orientations, and stage of therapy. The approach prioritizes common therapeutic factors, particularly the development and maintenance of a strong therapeutic alliance. Therapy sessions were held weekly, lasted 50 min, and the treatment was not time-limited.

Session Selection

Sessions were randomly selected from a pool of 20 patients and the three therapists who consented to

Table 2. Demographic characteristics of patients and therapists.

	Patients (n = 20)		Therapists (n = 3)	
	N	%	N	%
Gender				
Male	9	45	1	33.33
Female	11	55	2	66.67
Ethnicity				
White European	20	100	3	100
	Mean	SD	Mean	SD
Age	38.5	8.96	43	5.72

participate in the study. Selection included sessions from different phases of treatment: early (sessions 1–4), middle (sessions 5–10), and late (sessions 11–17), allowing for the examination of alliance dynamics over time. The randomization process was conducted using random.org, a widely used tool for generating random sequences in research contexts.

In total, 47 sessions were selected across the 20 patients and three therapists, forming the dataset used to evaluate the inter-rater reliability and convergent validity of the Italian versions of the 3RS and WAI-O-S.

Participants Demographic

All participating therapists completed a four-year postgraduate training program in psychotherapy, as required by Italian regulations, and were licensed psychotherapists registered with the Italian Order of Psychologists. As part of their professional training, they received targeted instruction on the therapeutic alliance, including the identification and repair of alliance ruptures, to enhance their clinical responsiveness and effectiveness in practice.

Demographic information for therapists and patients is presented in Table 2. The patient sample consisted of 20 individuals, with a near-equal gender distribution (45% male, 55% female) and a mean age of 38.5 years (SD = 8.96). All patients identified as White European and had voluntarily sought treatment, presenting with mild to moderate psychological difficulties, primarily related to low mood and anxiety. These presentations are typical of outpatient psychotherapy and considered appropriate for alliance-focused interventions.

The therapist sample included three professionals, two of whom were female. Their mean age was 43 years (SD = 5.72), and all identified as White European.

Data Analysis

We first conducted descriptive analyses of key session-level scores for the Italian versions of both the 3RS and the Working Together (WT) scale. For the 3RS, descriptive statistics were computed for the overall scores of Patient Withdrawal (PW), Therapist Withdrawal (TW), Patient Confrontation (PC), Therapist Confrontation (TC), and Overall Repair (R). Given that this was the first application of the WT scale, each item was also examined individually, and an overall score was calculated by averaging the item ratings. Descriptive statistics were also reported for the total score of the WAI-O-S.

To assess inter-rater reliability, we estimated intraclass correlation coefficients (ICCs) using a random-effects model, corresponding to ICC(A,1), Case 2, as described by McGraw and Wong (1996). This model estimates absolute agreement rather than consistency alone and provides reliability estimates for single-rater scores. ICCs were calculated for all 3RS overall scores, each of the five individual WT items, and the WT mean score. An ICC was computed for a given item only if at least four distinct score values were used across the sample of raters. Since it is not clear in our small sample whether parametric inference is appropriate, we present two sets of 95% confidence intervals for the ICCs, using (a) the normal approximation and (b) non-parametric percentile bootstrap based on 500 bootstrap samples.

Both the WAI-O-S and the WT scale of the 3RS are grounded in Bordin's (1979) definition of the working alliance. To provide a preliminary, exploratory assessment of convergent validity, we examined correlations between the WT overall score from the revised 3RS (Eubanks & Muran, 2022) and the total score from the WAI-O-S. Both Pearson and Spearman correlations were calculated separately for each rater. We present two sets of confidence intervals. 95% confidence intervals were estimated using both the normal approximation (via Fisher's Z-transformation) and percentile bootstrap with 500 bootstrap samples for the Pearson correlations and the Spearman correlations. We used scatterplots to visually investigate the linearity of the relationship for each of the four raters and to identify potentially influential observations (outliers).

As the WT scale is a newly developed component of the 3RS and has not yet been empirically

Table 3. Estimated intraclass correlation coefficients for 3RS overall scores and WAI-O-S total score.

Score	ICC	CI: Normal	CI: Bootstrap
3RS patient withdrawal	0.71	(0.59, 0.81)	(0.56, 0.80)
3RS patient confrontation	0.77	(0.68, 0.85)	(0.37, 0.91)
3RS therapist confrontation	0.89	(0.84, 0.93)	(0.00, 0.97)
3RS repair	0.62	(0.49, 0.75)	(0.33, 0.76)
3RS WT overall	0.84	(0.76, 0.90)	(0.58, 0.91)
WAI-O-S overall	0.92	(0.88, 0.95)	(0.70, 0.96)

Note: WT: 3RS Working Together scale. ICC: intraclass correlation coefficient (ICC(A,1), Case 2 in McGraw & Wong, 1996). The ICC for 3RS Therapist Withdrawal was not calculated due to low variability of ratings. CI: Normal: 95% confidence interval based on normal approximation. CI: Bootstrap: 95% confidence interval based on percentile bootstrap with 500 bootstrap samples. The lower bound for the bootstrap CI for "3RS Therapist Confrontation" is zero because of the low variability in ratings, such that more than 2.5% of bootstrap samples have no variation and hence have an ICC of zero.

evaluated, this analysis served as an initial test of whether it captures similar alliance constructs to those measured by the WAI-O-S, thereby informing future validation work. All analyses were conducted using R software, version 4.4.1 (R Core Team, 2024).

Results

Descriptive Statistics

Descriptive statistics for all overall 3RS scores—including patient and therapist rupture markers, the overall resolution score—and for each item of the Working Together (WT) scale, along with its total score, are reported in Tables S1–S2 (Supplementary Material). In this sample, raters did not fully utilize the entire response scale for rupture items. For instance, only ratings of 1 and 2 were used for Therapist Withdrawal, and the highest rating (score of 5) was never applied to Patient Confrontation, Therapist Confrontation, or Therapist Withdrawal. WT scale ratings also showed limited variability, with consistently high scores reflecting strong perceived alliance.

Table S3 (Supplementary Material) presents the distribution of WAI-O-S scores. The total WAI-O-S score exhibited a negatively skewed distribution, with most ratings clustered at the higher end and relatively few low scores.

Inter-rater Reliability

Table 3 presents estimates of the intraclass correlation coefficients (ICCs) for 5 of the 3RS overall scores and the WAI-O-S total score, reflecting inter-rater agreement in assessing rupture, repair, and alliance dimensions. The ICC for Overall Therapist Withdrawal score was not calculated due to limited score variability (i.e., fewer than four distinct values across sessions). Item-level ICCs for the WT scale and the WAI-O-S are provided in Supplementary Table S6.

Point estimates for the inter-rater reliability range from 0.62–0.89. Therapist Confrontation had the highest point estimate (ICC = 0.89), followed by Patient Confrontation (ICC = 0.77) and Patient Withdrawal (ICC = 0.71). The Repair score yielded a ICC of 0.62, indicating less agreement between raters. Confidence intervals were wider for scales with lower variance, and all scales' bootstrap confidence intervals were considerably wider than those based on the normal approximation. The WT scale's overall score (mean of five items) yielded an

ICC of 0.84, and the WAI-O-S total score had an ICC of 0.92.

Correlation Between the WAI-O-S and the 3RS Working Together Scale

Table 4 presents Pearson and Spearman correlations between the total scores of the WAI-O-S and the 3RS WT scale, calculated separately for each of the four raters ($N = 47$ per rater). The results show a moderate to strong positive association between the two measures, with Pearson correlation coefficients ranging from 0.65–0.83. Spearman correlation coefficients were considerably lower, ranging from 0.41–0.65. Inspection of scatterplots (see appendix Figure S1) revealed no obvious departure from linearity, but did reveal two influential observations for each rater, representing two sessions that received much lower scores on both scales than the rest of the sample, across all four raters. In the supplementary information, we show Pearson correlations after removal of the two outliers. After removal of outliers, the Pearson correlations range from 0.33–0.54.

Discussion

A central contribution of this study is the rigorous translation and cultural adaptation into Italian of two key observer-based instruments: the WAI-O-S, an observer-rated measure of the therapeutic alliance, and the revised 3RS, an observer measure of alliance rupture and repair that includes an additional scale assessing collaboration and bond. This process followed established best practices for cross-cultural validation, including forward–backward translation and iterative expert review (Sousa & Rojjanasrirat, 2011). By making these tools available in Italian, the study expands the methodological and training resources for psychotherapy research and clinical practice in Italian-speaking contexts.

This contribution is particularly timely and relevant given the growing use of observational measures in therapist training and supervision. The 3RS, in particular, has gained recognition as a practical and accessible tool for helping clinicians recognize and respond to alliance ruptures in real time. The revised version introduces several key enhancements, including (a) therapist-specific rupture markers, (b) patient-specific repair markers, and (c) the Working Together (WT) scale—a global indicator of the emotional bond and collaborative quality of the therapeutic relationship. These additions align with contemporary relational models of the alliance, emphasizing the mutual

contributions of both therapist and patient to rupture–repair processes (Eubanks & Muran, 2022).

Furthermore, recent studies highlight the applied value of the 3RS across diverse settings. For example, Tewes et al. (2025) found that incorporating the 3RS into therapist training significantly improved trainees' ability to detect and address alliance ruptures. Similarly, Sherlow-Levin et al. (2024) adapted the 3RS for use in couple therapy, demonstrating its relevance in more complex relational dynamics.

Preliminary Reliability Findings

The findings of this study offer tentative support for the reliability and construct validity of the Italian versions of the revised 3RS and WAI-O-S. In our sample, both instruments showed promising inter-rater reliability across most overall scores, indicating their potential utility for observational research on the therapeutic alliance. However, there was high uncertainty in our very preliminary estimates due to the small sample and the limited variability of ratings.

The WAI-O-S total score demonstrated good inter-rater reliability, consistent with prior studies using the original English version (Afonseca et al., 2023; Andrusyna et al., 2001; Martin et al., 2000; Santirso et al., 2018, 2020). The Italian 3RS similarly showed good inter-rater reliability for key patient-related markers—particularly Patient Confrontation and Patient Withdrawal—as well as for the WT scale, supporting their use in identifying rupture–repair processes and collaborative dynamics.

However, the Overall Repair marker showed the lowest inter-rater agreement. This result is consistent with prior concerns regarding the interpretive nature of repair coding and the challenges of establishing consistent criteria (Eubanks et al., 2018). Variability in rupture identification likely affects repair ratings, as the assessment of a repair episode is contingent on raters' prior recognition and interpretation of a rupture. Future use of the 3RS might benefit from clearer operational definitions, improved rating anchors, and/or enhanced rater training to reduce these inconsistencies.

Limited variability was also observed in the newly introduced therapist-related markers (Therapist Withdrawal and Confrontation), with most sessions receiving low scores. While this may reflect a genuine absence of such behaviors, it may also indicate difficulty detecting subtler forms of therapist-initiated ruptures. This is plausible given that the sample involved experienced therapists, working with voluntary patients with mild to moderate symptoms, in completed treatments without dropouts.

Table 4. Pearson and Spearman correlations between the WT scale and WAI-O-S total scores by rater (N = 47 per rater).

Rater	Pearson's r	CI: Fisher	CI: bootstrap	Spearman's rho	CI: bootstrap
1	0.83	(0.71, 0.90)	(0.43, 0.93)	0.59	(0.36, 0.77)
2	0.65	(0.44, 0.79)	(0.22, 0.83)	0.41	(0.13, 0.64)
3	0.80	(0.66, 0.88)	(0.45, 0.91)	0.65	(0.45, 0.82)
4	0.81	(0.68, 0.89)	(0.36, 0.91)	0.52	(0.26, 0.71)

Z-transformation. Notes: CI: 95% confidence interval. Fisher: Normal approximation based on Fisher's Z-transformation. Bootstrap: percentile bootstrap based on 500 bootstrap samples.

These factors likely contributed to high alliance quality and low levels of overt rupture. Notably, the homogeneity of the sample—both in terms of therapist training and patient clinical presentation—should also be considered when interpreting these findings. The restricted range of rupture-related behaviors may have either artificially inflated or deflated reliability estimates.

Cultural Considerations

Cultural factors may help explain the lower reliability observed for certain markers in this study. Although the Italian versions of the 3RS and WAI-O-S were carefully adapted for linguistic and conceptual equivalence, communication norms differ meaningfully between Italian and U.S. psychotherapy contexts. Behaviors such as overlapping speech, heightened emotional expression, or animated gestures—often seen as engaging or affiliative in Italian interactions—might be interpreted as signs of rupture in other cultural settings. Similarly, the strong reliance on nonverbal cues in Italian communication (e.g., facial expressions, vocal tone, posture) might complicate coding, particularly when observers are trained to focus on verbal or content-based indicators. Without adequate cultural attunement, raters may interpret the same behaviors differently, leading to inconsistent assessments.

These findings underscore the importance of developing culturally sensitive observer training and suggest that coding manuals may require adaptation to reflect cultural norms in alliance behavior. This challenge reflects a broader issue in psychotherapy process research: the need for measurement tools that are not only linguistically accurate but also culturally and contextually appropriate. Instruments developed in one cultural setting may lose meaning or psychometric coherence when applied elsewhere (van de Vijver & Tanzer, 2004). This is particularly relevant in alliance research, where concepts like rupture, repair, and collaboration are deeply embedded in cultural norms and relational styles. As Chu and Leino (2017) emphasize, culturally adapted measures are essential for capturing

patients' lived experiences and ensuring that alliance processes are interpreted with cultural sensitivity. Sue et al. (2012) similarly argue that culturally competent psychotherapy must be supported by tools that reflect the communicative and relational realities of diverse populations. In this context, our study contributes to the growing movement toward internationalizing psychotherapy process research by providing culturally adapted Italian versions of two widely used observational measures.

Preliminary Construct Validity

As a preliminary step in evaluating construct validity, this study examined the association between the newly introduced Working Together (WT) scale of the revised 3RS (Eubanks & Muran, 2022) and the WAI-O-S. The WT scale was designed to capture the overall quality of collaboration and emotional bond between therapist and patient, building on Bordin's (1979) foundational definition of the alliance—also the basis for the WAI. Although both instruments share this conceptual lineage, the WT scale is a new addition to the 3RS and had not been empirically tested prior to this study.

Our findings revealed moderate to strong positive correlations between the WT and WAI-O-S total scores, offering tentative support for the WT scale's convergent validity. Again, the low variability of ratings in our sample poses a methodological limitation here. All but two of the sessions were rated at the high end of both scales by all raters. When removing the only two low-scoring sessions from the sample, correlation estimates were much lower. It is not clear which of the two sets of correlation estimates are better reflections of the observed interactions, and so further research is needed before firm conclusions about convergent validity can be drawn.

Strengths and Limitations

This study presents several key contributions alongside important limitations. A primary limitation is

the small number of participating therapists ($N = 3$), all of whom practiced within the same therapeutic modality. In addition, sessions were drawn exclusively from completed treatments with no dropouts, likely resulting in relatively smooth therapeutic trajectories and fewer observable rupture events. As a result, the current data may not adequately reflect the full range of alliance difficulties—especially those seen in early-phase or high-conflict sessions. Unrepaired ruptures, for example, are more common in dropout cases (Eubanks et al., 2018) and may be underrepresented here. Future studies should aim to capture a broader range of clinical contexts and therapeutic relationships.

Despite its limitations, this study provides the first validated Italian versions of the revised 3RS and the WAI-O-S, created through a rigorous cross-cultural adaptation process. It also reports the first inter-rater reliability estimates for the WT scale and revised therapist and repair markers. These contributions lay important groundwork for future alliance research and training in Italian-speaking settings.

Conclusion

This study introduces the first Italian translations of the 3RS and WAI-O-S, providing conceptually robust tools for assessing the therapeutic alliance and rupture-repair processes. Preliminary findings support their reliability and construct validity, marking their initial application in an Italian-speaking context. These translations expand the resources available for alliance research, training, and supervision in Italy. While further validation in more diverse clinical settings is needed, this work highlights the growing importance of culturally and contextually adapted tools—particularly in today's psychotherapy landscape, where sensitivity to language, culture, and setting is increasingly recognized as essential to effective clinical practice and research.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

References

Afonseca, M., Sousa, D., Vaz, A., Santos, J. M., & Batista, A. (2023). Psychotherapist's persuasiveness in anxiety: Scale development and relation to the working alliance. *Journal of Psychotherapy Integration*, 33(2), 169–184. <https://doi.org/10.1037/int0000288>

Andrusyna, T. P., Tang, T. Z., DeRubeis, R. J., & Luborsky, L. (2001). The factor structure of the working alliance inventory in cognitive-behavioral therapy. *The Journal of Psychotherapy Practice and Research*, 10(3), 173–178.

Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252–260. <https://doi.org/10.1037/h0085885>

Capaldi, S., Asnaani, A., Zandberg, L. J., Carpenter, J. K., & Foa, E. B. (2016). Therapeutic alliance during prolonged exposure versus client-centered therapy for adolescent posttraumatic stress disorder. *Journal of Clinical Psychology*, 72(10), 1026–1036. <https://doi.org/10.1002/jclp.22303>

Chu, J. P., & Leino, A. (2017). Advancement in the maturing science of cultural adaptations of evidence-based interventions. *Journal of Consulting and Clinical Psychology*, 85(1), 45–57. <https://doi.org/10.1037/ccp0000145>

Cirasola, A., Martin, P., Fonagy, P., Eubanks, C., Muran, J. C., & Midgley, N. (2022). Alliance ruptures and resolutions in short-term psychoanalytic psychotherapy for adolescent depression: An empirical case study. *Psychotherapy Research*, 32(7), 951–968. <https://doi.org/10.1080/10503307.2022.2061314>

Cirasola, A., Midgley, N., Fonagy, P., & Martin, P. (2020). The factor structure of the working alliance inventory short-form in youth psychotherapy: An empirical investigation. *Psychotherapy Research*, 31(4), 535–547. <https://doi.org/10.1080/10503307.2020.1765041>

Cirasola, A., Midgley, N., Muran, J. C., Eubanks, C. F., Hunter, E. B., & Fonagy, P. (2024). Repairing alliance ruptures in psychodynamic psychotherapy with young people: The development of a rational-empirical model to support youth therapists. *Psychotherapy Theory, Research, Practice, Training*, 61(1), 68–81. <https://doi.org/10.1037/pst0000514>

Colli, A., Gentile, D., Condino, V., & Lingiardi, V. (2017). Assessing alliance ruptures and resolutions: Reliability and validity of the collaborative interactions scale-revised version. *Psychotherapy Research*, 29(3), 279–292. <https://doi.org/10.1080/10503307.2017.1414331>

Colli, A., & Lingiardi, V. (2009). The collaborative interactions scale: A new transcript-based method for the assessment of therapeutic alliance ruptures and resolutions in psychotherapy. *Psychotherapy Research*, 19(6), 718–734. <https://doi.org/10.1080/10503300903121098>

Corbière, M., Bisson, J., Lauzon, S., & Ricard, N. (2006). Factorial validation of a French short-form of the working alliance inventory. *International Journal of Methods in Psychiatric Research*, 15(1), 36–45. <https://doi.org/10.1002/mpr.27>

Coutinho, J., Ribeiro, E., Fernandes, C., Sousa, I., & Safran, J. D. (2014). The development of the therapeutic alliance and the emergence of alliance ruptures. [El desarrollo de la alianza terapéutica y la aparición de rupturas en la alianza]. *Anales de Psicología*, 30(3), 985–994. <https://doi.org/10.6018/analesps.30.3.168911>

Darchuk, A., Wang, V., Weibel, D., Fende, J., Anderson, T., & Horvath, A. O. (2000). *Manual for the working alliance inventory – observer form (WAI-O): revision IV*. Ohio University.

Dennis, M. L., Titus, J. C., Diamond, G. S., Donaldson, J., Godley, S. H., Tims, F. M., ... Scott, C. K. (2002). The cannabis youth treatment (CYT) experiment: Rationale, study design and analysis plans. *Addiction*, 97, 16–34.

Epstein, J., Osborne, R. H., Elsworth, G. R., Beaton, D. E., & Guillemin, F. (2015). Cross-cultural adaptation of the health education impact questionnaire: Experimental study showed expert committee, not back-translation, added value. *Journal of Clinical Epidemiology*, 68(4), 360–369. <https://doi.org/10.1016/j.jclinepi.2013.07.013>

Eubanks, C. F., Lubitz, J., Muran, J. C., & Safran, J. D. (2019). Rupture resolution rating system (3RS): development and validation. *Psychotherapy Research*, 29(3), 306–319. <https://doi.org/10.1080/10503307.2018.1552034>

Eubanks, C. F., Muran, J. C., & Safran, J. D. (2018). Alliance rupture repair: A meta-analysis. *Psychotherapy*, 55(4), 508–519. <https://doi.org/10.1037/pst0000185>

Eubanks, C., & Muran, J. C. (2015). Rupture resolution rating system (3RS): MANUAL. <https://doi.org/10.13140/2.1.1666.8488>.

Eubanks, C., & Muran, J. C. (2022). Rupture Resolution Rating SYSTEM (3RS): Manual Version 2022. <https://doi.org/10.13140/RG.2.2.29780.17282>.

Eubanks-Carter, C., Muran, J. C., & Safran, J. D. (2010). Alliance ruptures and resolution. In J. C. Muran, & J. P. Barber (Eds.), *The therapeutic alliance: An evidence-based guide to practice* (pp. 74–94). The Guilford Press.

Falkenström, F., Hatcher, R. L., & Holmqvist, R. (2015). Confirmatory factor analysis of the patient version of the working alliance inventory—short form revised. *Assessment*, 22(5), 581–593. <https://doi.org/10.1177/1073191114552472>

Falkenström, F., & Larsson, M. H. (2017). The working alliance: From global outcome prediction to micro-analyses of within-session fluctuations. *Psychoanalytic Inquiry*, 37(3), 167–178. <https://doi.org/10.1080/07351690.2017.1285186>

Flückiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2018). The alliance in adult psychotherapy: A meta-analytic synthesis. *Psychotherapy*, 55(4), 316–340. <https://doi.org/10.1037/pst0000172>

Hall, D. A., Zaragoza Domingo, S., Hamdache, L. Z., Manchaiah, V., Thammaiah, S., Evans, C., Wong, L. L. N., & On behalf of the International Collegeum of Rehabilitative Audiology and TINnitus Research NETwork. (2017). A good practice guide for translating and adapting hearing-related questionnaires for different languages and cultures. *International Journal of Audiology*, 57(3), 161–175. <https://doi.org/10.1080/14992027.2017.1393565>

Hanson, W. E., Curry, K. T., & Bandalos, D. L. (2002). Reliability generalization of working alliance inventory scale scores. *Educational and Psychological Measurement*, 62(4), 659–673. <https://doi.org/10.1177/0013164402062004008>

Hatcher, R. L., & Gillaspy, J. A. (2006). Development and validation of a revised short version of the working alliance inventory. *Psychotherapy Research*, 16(1), 12–25. <https://doi.org/10.1080/10503300500352500>

Hawley, K. M., & Garland, A. F. (2008). Working alliance in adolescent outpatient therapy: Youth, parent and therapist reports and associations with therapy outcomes. *Child and Youth Care Forum*, 37(2), 59–74. <https://doi.org/10.1007/s10566-008-9050-x>

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology*, 36(2), 223–233. <https://doi.org/10.1037/0022-0167.36.2.223>

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, 16(2), 193–205.

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438–450. <https://doi.org/10.1037/0022-006X.68.3.438>

McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. *Psychological Methods*, 1(1), 30.

Muran, J. C., & Eubanks, C. F. (2020). *Therapist performance under pressure: Negotiating emotion, difference, and rupture*. American Psychological Association. <https://doi.org/10.1037/0000182-000>

Muran, J. C., Safran, J. D., & Eubanks-Carter, C. (2010). Developing therapist abilities to negotiate alliance ruptures. In J. C. Muran, & J. P. Barber (Eds.), *The therapeutic alliance: An evidence-based guide to practice* (pp. 320–340). The Guilford Press.

Poletti, B., Tasca, G., Pievani, L., & Compare, A. (2024). *Training in integrated relational psychotherapy*. An Evidence-Based Approach. Springer.

Putri, L. A., Elvira, S. D., Agiananda, F., & Lukman, P. R. (2024). Reliability and preliminary insights of adapting the working alliance inventory observer form for bahasa Indonesia psychotherapy settings. *Asia Pacific Journal of Counselling and Psychotherapy*, 15(1), 51–68. <https://doi.org/10.1080/21507686.2024.2375230>

R Core Team. (2024). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>.

Raue, P. J., Castonguay, L. G., Newman, M., Gaus Binkley, V., Shearer, D., & Goldfried, M. R. (1991). *Guidelines for the working alliance inventory—observer form (WAI-O)*. unpublished manuscript. State University of New York at Stony Brook.

Safran, J. D., & Muran, J. C. (2000). *Negotiating the therapeutic alliance: A relational treatment guide*. Guilford Press.

Safran, J. D., Muran, J. C., & Eubanks-Carter, C. (2011). Repairing alliance ruptures. *Psychotherapy*, 48(1), 80–87. <https://doi.org/10.1037/a0022140>

Santirso, F. A., Lila, M., & Gracia, E. (2020). Motivational strategies, working alliance, and protherapeutic behaviors in batterer intervention programs: A randomized controlled trial. *The European Journal of Psychology Applied to Legal Context*, 12(2), 77–84. <https://doi.org/10.5093/ejpalc2020a7>

Santirso, F. A., Martín-Fernández, M., Lila, M., Gracia, E., & Terreros, E. (2018). Validation of the working alliance inventory—observer short version with male intimate partner violence offenders. *International Journal of Clinical and Health Psychology*, 18(2), 152–161. <https://doi.org/10.1016/j.ijchp.2018.02.003>

Sherlow-Levin, A., Shahar, B., Goldman, R., & Bar-Kalifa, E. (2024). Applying the rupture resolution rating system to emotion-focused couple therapy. *Journal of Marital and Family Therapy*, 50(4), 801–820. <https://doi.org/10.1111/jmft.12723>

Sousa, V. D., & Rojjanasrirat, W. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: A clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, 17(2), 268–274. <https://doi.org/10.1111/j.1365-2753.2010.01434.x>

Soygüt, G., & Uluç, S. (2009). Psychometric properties of the turkish working alliance inventory-observer form. *Turk Psikiyatri Dergisi*, 20(4), 1–6.

Stevens, C. L., Muran, J. C., Safran, J. D., Gorman, B. S., & Winston, A. (2007). Levels and patterns of the therapeutic alliance in brief psychotherapy. *American Journal of Psychotherapy*, 61(2), 109–129. <https://doi.org/10.1176/appi.psychotherapy.2007.61.2.109>

Strauss, J. L., Hayes, A. M., Johnson, S. L., Newman, C. F., Brown, G. K., Barber, J. P., Laurenceau, J.-P., & Beck, A. T. (2006). Early alliance, alliance ruptures, and symptom change in a nonrandomized trial of cognitive therapy for avoidant and obsessive-compulsive personality disorders. *Journal of Consulting and Clinical Psychology*, 74(2), 337–345. <https://doi.org/10.1037/0022-006X.74.2.337>

Sue, S., Cheng, J. K. Y., Saad, C. S., & Chu, J. P. (2012). Asian American mental health: A call to action. *American Psychologist*, 67(7), 532–544. <https://doi.org/10.1037/a0028900>

Tetzlaff, B. T., Kahn, J. H., Godley, S. H., Godley, M. D., Diamond, G. S., & Funk, R. R. (2005). Working alliance, treatment satisfaction, and patterns of posttreatment Use Among adolescent substance users. *Psychology of Addictive Behaviors*, 19(2), 199–207. <https://doi.org/10.1037/0893-164X.19.2.199>

Tewes, M., Waller, E.-L., Kaiser, T., & Brakemeier, E.-L. (2025). Mehr als ein forschungsinstrument: Einsatz des rupture resolution rating systems (3RS). in der Berufsqualifizierenden Tätigkeit. *PPmP - Psychotherapie · Psychosomatik · Medizinische*

Psychologie, 75(5), 204–211. <https://doi.org/10.1055/a-2520-3604>

Tichenor, V., & Hill, C. E. (1989). A comparison of six measures of working alliance. *Psychotherapy: Theory, Research, Practice, Training*, 26(2), 195–199. <https://doi.org/10.1037/h0085419>

Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(3), 207–210. <https://doi.org/10.1037/1040-3590.1.3.207>

Van de Vijver, F., & Tanzer, N. K. (2004). Bias and equivalence in cross-cultural assessment: An overview. *European Review of Applied Psychology*, 54(2), 119–135. <https://doi.org/10.1016/j.erap.2003.12.004>

Wang, V., Darchuk, A., & Jveark, F. (2005). *Manuel for the working alliance inventory-observer form, short form*. Unpublished instrument. Ohio University Department of Psychology.

Zilcha-Mano, S., Muran, J. C., Hungr, C., Eubanks, C. F., Safran, J. D., & Winston, A. (2016). The relationship between alliance and outcome: Analysis of a two-person perspective on alliance and session outcome. *Journal of Consulting and Clinical Psychology*, 84(6), 484. <https://doi.org/10.1037/ccp0000058>