The Session Rating Scale: Preliminary Psychometric Properties of a “Working” Alliance Measure

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Over 1,000 research findings (Orlinsky, Rønnestad, & Willutzki, 2004) demonstrate that a positive alliance is one of the best predictors of outcome. Paradoxically, despite the robust connection between the alliance and outcome, no alliance measures have been developed specifically as clinical tools for therapists to use on a day-to-day basis with their clients. This article describes the development and validation of an ultra-brief alliance measure, the Session Rating Scale Version 3 (SRS). The instrument’s psychometric properties are examined and reported. Based on experience with the instrument at the various sites in the study, the feasibility of the scale is also considered. Results indicate that the SRS, a clinical rather than research tool, represents a balanced tradeoff between the reliability and validity of the longer research measures, and the feasibility of this brief scale. Results and implications for clinical practice and future research are discussed.
Over 1,000 research findings, and counting (Orlinsky, Grawe, & Park, 1994; Orlinsky, Ronnestad, & Willutzki, 2004), demonstrate that a positive alliance is one of the best predictors of outcome. Horvath and Symonds (1991), summarizing 24 studies, showed that the average effect size of the correlation between the alliance and outcome was conservatively estimated at $r = 0.26$. Krupnick and colleagues (1996) analyzed data from the landmark NIMH depression study that compared cognitive behavioral, interpersonal, and antidepressant therapies with a placebo condition, and found that the alliance was predictive of success for all conditions—the treatment models were equally efficacious and did not predict outcome.

In another large study of diverse therapies for alcoholism, the alliance was also significantly predictive of success (sobriety), even at 1-year follow-up (Connors, DiClemente, Carroll, Longabaugh, & Donovan, 1997), when none of the models under study could be differentiated from one another. Furthermore, in a meta-analysis of alliance research, Wampold (2001) portioned 54% of the variance of the impact of therapy to the alliance. Putting this into perspective, the amount of change attributable to the alliance is about seven times that of a specific model or technique.

Moreover, client ratings of the alliance are far better predictors of outcome than therapist ratings (Bachelor & Horvath, 1999). Therapists, then, cannot assume that their evaluation of the quality of the therapy climate corresponds to their clients’ perceptions. Clearly, then, it is critical for therapists to attend closely to the alliance developed with their clients, and regularly monitor its quality. Influencing the client’s perceptions of the alliance represents the most direct impact that mental health professionals can have on change (Duncan, Miller, & Sparks, 2004).

Despite the robust connection between the alliance and outcome, no alliance measure has been developed specifically as a clinical tool for day-to-day use. Description and measurement of the therapeutic alliance has been a major focus of theoretical and empirical studies in the last two decades. Presently, a variety of approaches exist for evaluating the alliance. While these multi-dimensional assessments of the alliance are valid and reliable, they were developed largely for research purposes and are not intended to be used as everyday clinical tools. Consequently, their complexity and length of administration often render them infeasible for many service providers and settings. The average therapist’s caseload is already overloaded with paperwork or other non-direct service related activities (e.g., phone calls, team meetings, treatment planning, progress notes, etc.). Brown, Dreis, and Nace (1999) found that the majority of clinicians did not consider any measure or combination of measures that took more than five minutes to complete, score, and interpret practical.

An example of the resistance of therapists to longer research-based alliance instruments can be found in the study of Whipple and colleagues (2003). Through e-mails, therapists were continually reminded that a 19-item alliance measure and other clinical support tools were available for those clients at risk of negative or null outcomes. Moreover, supervisors and clinicians presented several cases in which the measures had clearly assisted therapists in turning around the treatment of at-risk clients. Nevertheless, therapists used such measures only 40% of the time with at-risk clients. This level of use is surprising in view of the fact that Whipple and colleagues (2003) found clients of therapists who had access to outcome and alliance information were less likely to deteriorate, more likely to stay longer, and twice as likely to achieve a clinically significant change. These findings make a strong argument for developing not only a reliable and valid alliance measure, but one that is feasible in therapists’ minds for routine clinical use.

The purpose of this article is to describe the development and validation of an ultra-brief alliance measure, the Session Rating Scale Version 3.0 (SRS [Johnson, Miller, & Duncan, 2000] see Appendix), a “working” alliance measure designed specifically for everyday clinical use. The SRS’s psychometric properties are examined and its relationship to a widely used measure of the alliance, the Revised Helping Alliance Questionnaire (HAQ-II) (Luborsky et al., 1996) is reported. This article also considers the scale’s feasibility based on
experience with the instrument at the various sites in the study. Results and implications for clinical practice and future research are discussed.

**DEVELOPMENT OF THE SESSION RATING SCALE**

Recognizing that different therapies achieved similar results and that the therapeutic alliance seemed paramount, Johnson created the Session Rating Scale in the early 1990s to help track his own progress with clients (see Johnson, 1995). The SRS was specifically designed to be a clinical tool, not a research instrument. Several measures influenced its construction: The Working Alliance Inventory (Horvath & Greenberg, 1989), which directly translates Bordin's (1979) description of the alliance (see below); the Session Evaluation Questionnaire (Stiles & Snow, 1984), which assesses the depth and smoothness of the session; and finally, the Empathy Scale (Burns & Nolen-Hoeksema, 1992), which specifically addresses the relationship, and is perhaps the only other scale assessing any part of the alliance that is intended for regular clinical use.

The SRS combined elements of each measure into a 10-item, Likert-scaled instrument. This original version of the SRS was examined with 39 clients in a brief psychotherapy clinic in the western United States (Stanford, 1999). Item analysis of the SRS provided a Cronbach’s alpha reliability coefficient of .89. The first six items measuring therapeutic alliance also returned a high alpha of .86, while items 7, 9, and 10, measuring session impact, provided an alpha of .75. Concurrent validity was not addressed.

The first two authors were familiar with the SRS, having used it in their own practices as well as in consultation with numerous mental health agencies and a number of third-party payers. Despite the fact that the SRS was only 10 items, in virtually all instances, complaints regarding the time needed to complete the SRS were quick to surface among clinicians and clients (mainly clinicians). Similar difficulties were experienced implementing the 12-item WAI, making the 19-item HAQ II infeasible as well. Because of the unequivocal link between the alliance and outcome, the SRS V.3 was developed as a brief alternative to longer research oriented alliance measures to address the complaints of clinicians and to encourage routine conversation with clients about the alliance.

The SRS is a four-item visual analogue instrument designed from several influences. Bordin (1979) classically defined the alliance with three interacting elements: (a) a relational bond between the therapist and client; (b) agreement on the goals of therapy; and (c) agreement on the tasks of therapy. A slightly different perspective is provided by Gaston (1990) who reiterates the major alliance themes, but also emphasizes that the congruence between the client's and the therapist's beliefs about how people change in therapy is essential for a strong alliance. The SRS was adapted from the classical definition of the alliance by Bordin, with a focus on the client's theory of change (Duncan & Miller, 2000) as suggested by Gaston.

The fourth item reflects guidance received from a factor analysis of the major alliance scales in use (i.e., the HAQ, the WAI, and the California Psychotherapy Alliance Scales [Gaston, 1991]). Hatcher and Barends (1996) discovered that in addition to the general factor measured by all alliance scales (i.e., strength of the alliance), two other factors were predictive: confident collaboration and the expression of negative feelings. Confident collaboration speaks to the level of confidence that the client has that therapy and the therapist will be helpful. Although overlapping with question three on the SRS (the fit of the therapist's approach), the fourth scale of the revised SRS directly addresses this factor, and measures the client's view of the session ranging from “There was something missing in the session today” to “Overall, today's session was right for me.”

The other factor predictive beyond the general strength of the alliance is the client's freedom to voice negative feelings and reactions to the therapist. This factor suggests that clients who express even low levels of disagreement with their therapists report better progress (Hatcher & Barends, 1996). The entire SRS is based on encouraging clients to identify
alliance problems and eliciting client disagreements about the therapeutic process so that the clinician may change to better fit client expectations. Research had long identified these factors as important, but until Johnson’s pioneering work, no clinical measure had proactively provided alliance feedback to the therapist in real time so that problems may be addressed.

The SRS simply translated these theoretical ideas into four 10-cm visual analog scales, with instructions to place a hash mark on a line with negative responses depicted on the left and positive responses indicated on the right (see Appendix). First, a relationship scale rates the session on a continuum from “I did not feel heard, understood, and respected” to “I felt heard, understood, and respected.” Second is a goals and topics scale that rates the session on a continuum from “We did not work or talk about what I wanted to work on or talk about” to “We worked on or talked about what I wanted to work on or talk about.” Third is an approach or method scale requiring the client to rate the session on a continuum from “The therapist’s approach is not a good fit for me” to “The therapist’s approach is a good fit for me.” Finally, and reiterating, the fourth scale looks at how the client perceives the session in total along the continuum: “There was something missing in the session today” to “Overall, today’s session was right for me.”

The SRS is scored by simply summing the marks made by the client measured to the nearest centimeter on each of the four lines. Based on a total possible score of 40, any score lower than 36 overall, or 9 on any scale, could be a source of concern and therefore prudent to invite the client to comment. Clients tend to score all alliance measures highly, so the therapist should address any suggestion of a problem.

To explain the basic components of the measure and the alliance to students and line therapists, an analogy to a three-legged stool is employed (see Figure 1). Set against a backdrop of client strengths and resources, each leg of the stool stood for one of the core ingredients of the therapeutic alliance (a) shared goals; (b) consensus on means, methods, or tasks of treatment; and (c) an emotional bond (Bordin, 1979). Holding everything together was the client’s theory of change, the other alliance component suggested by Gaston (1991). Consistent with this stool metaphor, goals, methods, and a bond that were congruent with the client’s theory were likely to keep people comfortably seated (i.e., engaged) in treatment. Similarly, any disagreement between various components destabilized the alliance either making the stool uncomfortable or toppling it completely.

Research has demonstrated the reliability and validity of ultra-brief visual analog scales in several areas including: assessment and management of pain (Ger, Ho, Sun, Wang, & Cleeland, 1999; Zalon, 1999), perceived quality of care (Arneill & Devlin, 2002), psychoeducation (Dannon, Iancu, & Grunhaus, 2002), the assessment of change in response to medical treatments (Grunhaus, Dolberg, Polak, & Dannon, 2002), and with psychotherapy outcome (Miller, Duncan, Brown, Sparks, & Claud, 2003). In addition to their ease of administration and scoring, such scales enjoy face validity typically missing from longer and more technical measures that seem distant from the client’s experience.

**METHODS**

**Participants**

Participants in this study were recruited from three clinical sites:

**Group One.** Eighty-one participants were randomly selected from an outpatient mental health counseling agency to study the reliability and concurrent validity of the SRS. These agency clients requested traditional individual, couple, or family therapy services and presented with a variety of presenting complaints and goals for treatment. All of the therapy sessions were conducted in the typical clinical office setting. The age range of the client sample was between 18 and 74. Court-mandated clients were omitted from the sample, leaving only those clients who were self-referred for therapy.
Group Two. One hundred participants were randomly selected from cases closed from January 2003 through August 2003 in a community family service agency (CFS) to study the construct validity of the SRS. CFS clients were enrolled in traditional office-based counseling and came to the agency presenting a typical range of initial difficulties. Clients from the agency's substance abuse recovery program were excluded. Since substance abuse clients, in general, were mandated, outcome measurements might reflect concerns other than actual progress in counseling (e.g., referral issues), or clients might not be motivated to accurately rate their psychological states (see Lambert et al., 1996), thereby confounding any relationship between the SRS and outcome. A total sample of 1368 adults between the ages of 18 and 83 were available for the random selection of closed cases for analysis.

Group Three. To assess the feasibility of the SRS, participants were recruited from two different settings using two different measures. The first setting was a home-based intervention program at CFS, and included all the closed cases from January 2003 to October 2003 (50 cases). In that program, use of the SRS was mandatory. Participants were also obtained from closed cases of a previous study conducted at Family Therapy Associates (FTA) at Nova Southeastern University from June 1998 to May 1999 (106 cases). FTA is a community mental health agency similar in nature and scope to CFS. Like the CFS participants, the FTA therapists were mandated to use the Working Alliance Inventory (WAI).

Measures

The Helping Alliance Questionnaire II. The HAQ-II (Luborsky et al., 1996) is a widely used 19-item questionnaire that measures the strength of the client therapist alliance. Each item is rated on a 6-point Likert scale (1 = I strongly feel it is not true to 6 = I strongly feel it is true); negatively worded items are reversed scored.

The Outcome Rating Scale. The Outcome Rating Scale (Miller et al., 2003) is a 4-item visual analogue self-report outcome measure designed for tracking client progress in every
session. Each item requires the client to make a mark on a 10-cm line where marks to the left indicate more difficulties in the particular domain and marks to the right depict less problems.

**The Working Alliance Inventory.** The WAI (Horvath & Greenberg, 1989) is a widely used 12-item questionnaire that measures the strength of the therapeutic alliance. Each item is rated on a 7-point Likert scale (1 = Does not correspond at all; 7 = Corresponds exactly).

**Procedure**

**Group One.** Eighty-one participants received six concurrent administrations of the SRS and HAQ-II measures over a period of time ranging from 4 weeks to 3 months, dependent on the frequency that each client was seen for therapy. The participants’ therapists were responsible for administering the measures at the conclusion of each session and delivered them immediately to the agency’s clinical supervisor. The therapists’ degrees, training, and professional experience varied. The supervisor then scored and entered the data onto a spreadsheet. Only clients’ scores who completed all six administrations were included in the database; 70 of the original 81 clients (86%) who began this study completed the six SRS and HAQ-II measures. Reasons for not completing the measures included terminating therapy, moving, or relapsing and reentering a substance abuse facility or inpatient treatment program.

**Group Two.** The random selection of the 100 cases was based on the following criteria: pre-and post-Outcome Rating Scale (ORS) scores, and either a second or third session SRS score. Given that the use of the SRS was not mandated at this time, many cases were discarded before the 100 cases were accumulated; if a selected case did not have an SRS completed in session two or three, then the next case was pulled for examination. The therapists’ degrees, training, and professional experience varied. Session two or three SRS scores were paired with endpoint outcome scores on the ORS from the existing database and entered on a spreadsheet for analysis.

**Group Three.** Feasibility was retrospectively assessed by looking at utilization data from two similar clinical sites with similar mandates administering two different alliance measures. In the CFS sample of 50 closed cases, the therapists were trained in the use of the measure (SRS) and received ongoing supervisory encouragement. The FTA sample of 106 closed cases came from a pilot study examining the incorporation of client feedback in therapy using the WAI. The FTA therapists were part of an ongoing research team and compliance was expected. Therapists were masters and doctoral students with close supervision and support provided throughout the research project. Utilization was simply computed by determining the percentage use of the measures across cases.

**Results**

**Reliability of the SRS**

Both test-retest and internal consistency reliability were evaluated using group one (N = 70). Cronbach's coefficient alpha was calculated as the estimate of internal consistency. The coefficient alpha for all administrations (N = 420) was .88. The coefficient alpha for the SRS compared favorably with that reported for the HAQ II (.90). As a rule, one would expect a measure with only four items to have a lower reliability than a measure of containing 19 items. This high degree of internal consistency reflects the fact that the four items correlate quite highly with one another, indicating that the measure can perhaps best be thought of as a global measure of the alliance, much like all of the other alliance measures that load on a general strength of the alliance factor.

An estimate of test-retest reliability was computed by calculating the Pearson product-moment correlations between the test scores at each administration (with the exception of the last) with the score at the subsequent administration. Since each of the 70 clients had a total
of six administrations, the pairing of test scores from each administration with those of the subsequent administration produced a total of 350 paired administrations for both the SRS and the HAQ II. It would be expected that an ultra brief measure would possess lower restretest reliability than a longer measure. However, the overall test-retest reliability (Pearson’s $r$) for the SRS was .64, while the HAQ-II was .63 ($p < .01$). If the test-retest estimate is limited to the first and second administrations, a Pearson’s $r$ of .70 is obtained for the SRS and .75 for the HAQ-II ($p < .01$). Measures of the alliance tend to change over time, so the fact that lower test-retest reliability occurred over multiple administrations is not surprising.

Validity of the SRS

**Concurrent Validity.** Concurrent validity was computed using Pearson product-moment correlations between the SRS total score and HAQ II total score. The data from all six administrations were combined to create a sample of 420 paired administrations for the 70 subjects. The correlation between the two measures is .48 ($p < .01$), providing evidence of concurrent validity for the SRS. Correlations were also performed between each of the individual SRS items and the HAQ II score at each administration. All correlations between SRS items and total HAQ-II scores were within a range of .39 to .44. These correlations provide evidence that the SRS items are assessing the same construct as the HAQ-II and that the SRS is an ultra brief alternative for assessing global strength of the alliance similar to that measured by other longer, research oriented alliance measures.

**Relationship to Outcome.** The SRS, if valid, would correlate with outcome similar to other research oriented alliance scales. Research has established a robust relationship between early ratings of the alliance and treatment outcome. If the SRS demonstrated a relationship to outcome similar to other established alliance measures, it would be an indication of construct validity. Therefore, it was expected that SRS scores in the random sample of 100 clients in group two would positively correlate with outcome on the ORS. And indeed that was the case. The analysis revealed a correlation of .29 ($p < .01$) between the second or third session SRS scores and the final session ORS scores, indicating that the SRS functions in much the same way as other alliance measures.

**Feasibility of the SRS.** Feasibility of an alliance instrument involves the likelihood that the instrument will, in fact, be used. If an alliance measure that is expected to be used as a clinical tool does not meet the time demands of actual clinical practice, it will be met with resistance by staff and clients alike. Comparing the utilization or compliance rates on all the completed cases in two clinical sites using different alliance measure was used to assess the feasibility of the SRS. The two samples had markedly different results. The SRS enjoyed a 96% (48 of 50 cases) compliance rate while the WAI was used only 29% (31 of 106 cases) of the time.

**DISCUSSION**

Virtually all alliance measures were designed for research and theoretical purposes, not for everyday use for mental health professionals working in the trenches. This article reports on the development of an ultra-brief alliance scale that is meant to be used on a session by session basis—a “working” alliance measure. The SRS was designed for use by clinicians to assess the therapeutic alliance during therapy so that changes in the approach or style of the therapist can be implemented if a negative experience is reported by the client. Although a short measure can’t be expected to achieve the same precision or depth of information as a longer measure like the HAQ II, this study found that the SRS has solid reliability, adequate validity, and high feasibility.

The results demonstrate that the SRS possesses moderate stability as reflected by the test-retest coefficients. The internal consistency was very high for the overall SRS as well as the subscale scores. The high intercorrelations among the subscale scores suggest a single
underlying factor, not unlike the single underlying factor of “strength of the alliance” associated with the HAQ-II and other alliance measures.

Although not as strong as hoped, the overall correlation with the HAQ-II demonstrates that the SRS is moderately related to this gold standard of alliance self-report scales. Given that 19 items were reduced to 4, a correlation of .48 indicates concurrent validity meets expectations. Further, the SRS is found to be related to outcome similar to other alliance measures.

Obviously, no matter how reliable and valid a measure is, if it is not used, the benefits of alliance monitoring will not be realized, and the benefits are considerable as evidenced by research results over the years demonstrating that as much 25% to 45% of outcome variance can be attributed to the alliance. More specifically, Miller, Duncan, Brown, Sorrell, and Chalk (in press) found that clients of therapists who opted out of completing the SRS were twice as likely to drop out of treatment and three to four times more likely to have a negative or null outcome.

Gains in feasibility offset losses in reliability and validity. Higher compliance rates were observed for the SRS in a comparison with the longer WAI. Many therapists see any measurement as an encumbrance to forming alliances with clients. In such settings, measures that are easy to integrate encourage a partnership between the client and therapist for monitoring the alliance. The alliance becomes a truly joint endeavor, integral to positive outcome, rather than simply more paperwork.

Limitations of this study include those inherent to self-report measures (Boulet & Boss, 1991) as well as the relatively small samples used for analyses. Research with larger and more diverse clinical samples is under way and should further identify the strengths and weakness of the SRS, as well as its predictive ability of outcome.

NOTES
1. A working copy of the instrument may be downloaded and used for free at: www.talkingcure.com/measures.htm.
3. The Center for Family Services of Palm Beach County, Inc. is a not-for-profit family services agency serving Palm Beach County of South Florida. The agency provides an array of services including individual and family counseling, substance abuse treatment, sexual abuse and domestic violence treatment, EAP services, homeless assistance/shelter, and a school readiness program.

REFERENCES


### APPENDIX

#### Session Rating Scale (SRS V.3.0)

| Name ________________________ | Age (Yrs): ___ |
| ID# _________________________ | Sex: M / F |
| Session # ____ | Date: ________________________ |

Please rate today's session by placing a hash mark on the line nearest to the description that best fits your experience.

- **Relationship**
  - I
  - I
  - I

- **Goals and Topics**
  - I
  - I
  - I

- **Approach or Method**
  - I
  - I
  - I

- **Overall**
  - I
  - I
  - I

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