

## Alliance in Individual Psychotherapy

Adam O. Horvath  
Simon Fraser University

A. C. Del Re  
University of Wisconsin–Madison

Christoph Flückiger  
Universität Bern and University of Wisconsin–Madison

Dianne Symonds  
Kwantlen Polytechnic University

This article reports on a research synthesis of the relation between alliance and the outcomes of individual psychotherapy. Included were over 200 research reports based on 190 independent data sources, covering more than 14,000 treatments. Research involving 5 or more adult participants receiving genuine (as opposed to analogue) treatments, where the author(s) referred to one of the independent variables as “alliance,” “therapeutic alliance,” “helping alliance,” or “working alliance” were the inclusion criteria. All analyses were done using the assumptions of a random model. The overall aggregate relation between the alliance and treatment outcome (adjusted for sample size and non independence of outcome measures) was  $r = .275$  ( $k = 190$ ); the 95% confidence interval for this value was .25–.30. The statistical probability associated with the aggregated relation between alliance and outcome is  $p < .0001$ . The data collected for this meta-analysis were quite variable (heterogeneous). Potential variables such as assessment perspectives (client, therapist, observer), publication source, types of assessment methods and time of assessment were explored.

*Keywords:* therapeutic alliance, psychotherapy relationship, working alliance, meta-analysis, psychotherapy outcome

The concept of the alliance is currently one of the most intensely researched subjects in the psychotherapy research literature. A search of the electronic databases in 2009 has yielded over 7000 items using the key words: alliance, helping alliance, working alliance, and/or therapeutic alliance. The popularity of the alliance concept in the research community can be traced back, in part, to the interest generated by the meta-analyses published in the 1970s (e.g., Luborsky, Singer, & Luborsky, 1975; Smith & Glass, 1977; Stiles, Shapiro, & Elliot, 1986). These studies reached the general conclusion that diverse therapies provided similar beneficial ef-

fects to psychotherapy clients. This finding has strongly encouraged the research community to search for the common factors shared by different psychotherapies. The relationship between therapist and client was an obvious candidate for such generic factor.

Another important source of the growing interest in the therapy relationship was the work of Rogers and his colleagues (Rogers & Wood, 1974). By applying rigorous empirical methods to the examination of the role of the therapist-offered facilitative conditions in person-centered treatment, they moved the concept of the therapeutic relationship to the center of the research agenda.

A third important precursor can be traced back to the 1930s: A growing curiosity and interest in the integration of diverse theories of psychotherapies (Frank & Frank, 1991; Rosenzweig, 1936). The desire to reconcile some conflicting therapeutic methods and their underlying theories eventually led to the founding of the Society for the Exploration of Psychotherapy Integration (SEPI) in 1983. Consistent with this trend, many psychotherapists in North America started to reject the strict boundaries of classical theories and became increasingly interested in utilizing a variety of effective methods, irrespective of the theories from which these strategies originated from. The field was moving from theoretical monism to an eclectic pragmatism. The value of aspects of therapist-client relationship (e.g., alliance) found ready acceptance among those committed to psychotherapy integration (Goldfried, 1980). But perhaps the most potent force responsible for the sustained growth of interest in the alliance was the consistent finding of a moderate but robust relationship between the alliance and treatment outcome across a broad spectrum of treatments in a variety of client/

---

Adam O. Horvath, Faculty of Education and Department of Psychology, Simon Fraser University, Burnaby, British Columbia, Canada; A. C. Del Re, Department of Counseling Psychology, University of Wisconsin–Madison; Christoph Flückiger, Department of Clinical Psychology and Psychotherapy, University of Bern, Switzerland, and Department of Counseling Psychology, University of Wisconsin–Madison; and Dianne Symonds, Department of Nursing Science, Kwantlen Polytechnic University, Vancouver, British Columbia, Canada.

This article is adapted, by special permission of Oxford University Press, from a chapter of the same title by the same authors in J. C. Norcross (Ed.), 2011, *Psychotherapy relationships that work* (2nd ed.). New York: Oxford University Press. The book project was cosponsored by the APA Division of Psychotherapy.

We acknowledge the contribution of F. Groenewold, PhD and our research assistants V. Velasco, J. Wells, S. Nand, and R. Yacoub. We also wish to express our thanks for the statistical advice of B. Wampold, Ph.D.

Correspondence concerning this article should be addressed to Adam O. Horvath, Simon Fraser University, 8888 University Way, Burnaby, BC V5A 1S6, Canada. E-mail: horvath@sfu.ca

problem contexts (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000; Horvath & Bedi, 2002).

In this paper, we present a new research synthesis of the relation between the alliance and psychotherapy outcome in individual therapy. Using the accumulated research data we also explore the role of several potential moderators that could impact this relationship.

## Definitions and Measures

### History and Definitions

The concept of the alliance (but not the term itself) dates back to the middle period of Freud's writings during which he reconsidered and elaborated the role and function of transference in psychotherapy. In some of his writings (Freud, 1912/1958; 1913), he noted the apparent paradoxical situation patients find themselves in the beginning of treatment; the therapy process itself activates the client's defenses which should make the patient flee the therapeutic situation, yet, in successful treatments, clients persist to collaborate with the therapist in unearthing disturbing material. As a solution to this contradiction, he proposed the presence of a positive or "unobjectionable" transference which binds the client to the person of the therapist and assists the patient to remain in treatment despite the increased level of anxieties. This concept was subsequently further elaborated by Sterba (1934), Zetzel (1956), and Greenson (1965). The term alliance was coined by Zetzel (1956) and conscious aspects of the concept of the alliance was emphasized and elaborated by Greenson (1967).

During the 1970s efforts were made to extrapolate and extend the concept of the alliance from its psychodynamic roots to encompass the collaborative relational elements in all helping endeavors: Luborsky (1976) proposed an extension of Zetzel's (1956) and Stone's (1961) concept of the alliance. He suggested that the alliance between therapist and client developed in two phases: The first phase, involved the client's belief in the therapist as a potent source of help, and the therapist providing a warm, supporting, and caring relationship. This level of alliance results in a secure holding relationship within which the work of the therapy can begin. The second phase, Type II alliance, involved the client's investment and faith in the therapeutic process itself, a commitment to the core concepts undergirding the therapy (e.g., nature of the problem, value of the exploratory process) as well as a willing investment of her or himself to share the ownership for the therapy process.

Bordin (1975, 1989, 1994) proposed a somewhat different pan-theoretical alliance concept. He named it the *working alliance*. His concept of the alliance were based on Greenson's (1965) ideas, but departed from the psychodynamic premises even more clearly than Luborsky's did. For Bordin, the alliance was centrally the achievement of a collaborative stance in therapy and its development was fostered by three processes: agreements on the therapeutic goals; consensus on the tasks that make up therapy; and a bond between the client and the therapist. He predicted that different therapies would emphasize different aspects of the alliance. Bordin (1994) also proposed that, as therapy progresses, the strength of the working alliance would build and ebb in the normal course of events, and that the repair of these stresses in the alliance offers

potent therapeutic possibilities and make a direct contribution to clients' change.

The most distinguishing feature of the modern pan-theoretical reconceptualization of the alliance is its emphasis on collaboration and consensus (Bordin, 1980; Hatcher, Barends, Hansel, & Gutfreund, 1995; Luborsky, 1976). In contrast to previous formulations that emphasized either the therapist's contributions to the relationship (i.e., Rogers & Wood, 1974) or the unconscious distortions of the relation between therapist and client (i.e., Freud, 1912), the "new" alliance concept emphasized the conscious aspects of the relationship (as opposed to unconscious processes) and the achievement of collaborative, "work together" aspects of the relationship.

However, neither of these early advocates of the pan-theoretical alliance construct chose to offer a concise definition of the term. This lack of a precise consensual definition has, on one hand, made it easier for researchers and clinicians of diverse theoretical frameworks to embrace the term and integrate it within their specific conceptualization of the therapy process. But on the other hand, this "creative ambiguity" led to some problematic developments in the research literature. The most immediate and direct consequence was that a number of alliance measures that were developed in parallel between 1978 and 1986 did not share a clear common point of reference. In the absence of a shared definition these—and subsequent— alliance measures de facto define what the researcher means by the term "alliance." While there are some important shared aspects across many of the alliance measures (e.g., Bordin, 1980, 1989; Gaston et al., 1995; Hatcher & Barends, 2006; Horvath & Luborsky, 1993), there are also nontrivial differences among authors about the meaning of the term *alliance* (e.g., *Psychotherapy: Therapy, Research, Practice, Training*, 2006, 43[3]). In terms of the research synthesis we present in this report, it is important to emphasize that what we know about the alliance and its relation to outcome and other therapy variables has been gleaned from studies which, in practice, define the alliance by the diverse instruments used to measure it.

### Alliance Measures

In the remainder of this article we refer to the alliance in the singular. However within the 201 studies in our collection of data, over 30 different alliance measures were used—not counting different versions of the same instruments. Similar to previous reports, the four "core measures": California Psychotherapy Alliance Scale, (CALPAS), Helping Alliance Questionnaires (HAq), Vanderbilt Psychotherapy Process Scale (VPPS), and Working Alliance Inventory (WAI) accounted for approximately 2/3 of the data. In research on the shared factor structure of the WAI, CALPAS and HAq, the concept of "confident collaborative relationship" was identified as the central common theme (Hatcher & Barends, 1996; Hatcher et al., 1995). Each of these four instruments has been in use for over 20 years and has demonstrated an acceptable level of internal consistency (Martin et al., 2000). However, the shared variance, even among these "core" measures, has been shown to be less than 50% (Horvath, 2009).

Fifty-four of the research reports in our data set used less well validated instruments or assessment procedures; the relation of most of these measures to the core instruments, or to each other, are not well documented, and sometimes nonexistent. Later in this

paper, when we report on the analysis of potential moderators, the less often used measures (*n of use* ≤ 3) are merged into one category: “Other.” In this “Other” category are some newer alliance measures with relatively few administrations; measures developed for the specific investigation; and instruments originally developed for relationship constructs other than the alliance. Adding to the diversity of assessment perspectives is the fact that the four core instruments currently exist in a number of different forms (e.g., short versions, observer versions, versions specific to context and/or application, translations). The relation of these modified instruments to the original versions is not always well documented. As we noted, the diversity in the “de facto” definition of the alliance that has emerged via the use of a variety of assessment measures has become an important source of variability across studies. The consequences of this diversity will be discussed in more detail in the moderator section of this report.

### Clinical Examples

The alliance represents an emergent quality of partnership and mutual collaboration between therapist and client. As such, it is not the outcome of a particular or typical intervention. Its development can take different forms and maybe achieved quickly or nurtured over a longer period of time depending on the kind of therapy and the stage of treatment (Bordin, 1994). The following is an excerpt intended to provide a flavor of therapist-client interactions that likely contribute to the development of the alliance.

Client (C), therapist (T), taken from the 5th session, 20 min into the interview

C: Well aren't you going to ask me what this reminds me of?

T: You think I should?

C: You do; always.

T: Because we agreed that looking at connection between past relationship patterns and how you and [name] are getting on is . . .

C: {voice over} Yes, unfinished business . . . and all that.

T: It may be that there is a pattern here, which would be useful to explore and understand better. Once we understand it, we can recognize it, and perhaps prevent a replay of the same old grooves . . . [pause10 sec]

T: I said that “we agreed” that this is the way to go, but I get the sense that you may not be convinced that's so . . . it is such a good idea.

C: Look, I mean . . . you are the therapist and I keep fucking up with my “old lady”. So I guess I better start thinking & talking about these patterns . . . I wish there was a pill or electric shock therapy to . . ., it would be faster. [sigh]

T: Maybe we better take a step back. I am a therapist, but I can't give you a pill or shock you to fix you. And looking for these unfinished patterns don't seem to make an awful lot of

sense to you . . . right now. But I hear you are willing to be a “good client”.

C: But this not what it is about, about me being good, I mean, right?

T: What would you say if you were not a “good patient”? Would you rebel?

C: I guess I might . . . It's crazy you know, before I got married I was a pretty wild dog . . . long hair, motorcycles, some pretty crazy stuff.

T: So, What happened? Where did the “crazy you” go? What did you do with him?

C: Married, good job, slick house, nice kids, you know . . .

T: You think I might meet this character? He seems to have been shut up but not forgotten . . . He might have something interesting to say . . .

C: I might be a little afraid of my old self . . . But [with different voice]: Doc, I'm trash, my old man was trash, but he put his money in good booze; not in psychiatrists' pockets!

T: He did not have much faith in this therapy business

C: Yeah, of course you should not let him write the check for the session; it would for sure bounce . . . [both laugh]

In the above excerpt the therapist starts off defending his idea of what is useful to do in therapy, but when he becomes aware of the client's ambivalent feelings about dealing with the past—and possibly about being in therapy—he drops his previous agenda and demonstrates his commitment to find a way of working collaboratively with his patient. We did not include the material on how the issue of dealing with past relationship patterns was resolved. What is important from the perspective of the building of the alliance is that the therapist stepped back from pursuing his original agenda and prioritized the negotiation of a collaborative therapy relationship. We believe that the therapist response builds the alliance on two levels. In the near term, it leads to the selection of a method of intervention that is congruent with the client's resources and expectations. On the longer term, the therapist makes the “metapoint” that successful treatment needs the client's full participation and collaboration and that he, the therapist, is prepared to be responsive and adopt his method of treatment in order to achieve a high level of mutuality. This brief excerpt also illustrates that the concept of the alliance unites the notions of interventions/strategies and the development of the relationship in therapy. Alliance is built by doing the work of therapy collaboratively.

### Meta-Analytic Review

#### Sources of Data

This research synthesis is a fourth meta-analysis published since 1991 summarizing the relation of the alliance to psychotherapy

outcome. For identifying studies published between 1973 and 2000, we relied on data from previous analyses (Horvath & Symonds, 1991; Martin et al., 2000; Horvath & Bedi, 2002) but the effect sizes (ES) were recalculated (using more up-to-date methods) for all but 10 of the oldest unpublished studies which were no longer available.

To locate data from the years 2000 to 2009, we first searched the electronic databases (PsycINFO/EBSCO) using the same keywords as the Horvath and Bedi (2002) analysis. Next we cross-referenced the bibliography of studies included in the analysis. The criteria for inclusion in this report were: (1) the study author referred to the therapy process variable as “*alliance*” (including variants of the term); (2) the research was based on clinical as opposed to analogue data; (3) five or more adult patients participated in the study, and; (4) the data reported were such that we could extract or estimate a value indicating the relation between alliance and outcome.

In contrast to previous meta-analyses, the literature search was extended to material available in Italian, German, or French, as well as English. To accomplish this, a search was conducted of the German language database (PSYINDEX) using the same inclusion criteria as the English language searches. Seventeen German language manuscripts contained usable alliance-outcome data and were included in the analysis. For the French and Italian literature, we searched in PsycINFO with the additional keywords French OR Francais OR Italian OR Italiano This search yielded two usable items. Twenty-six Italian manuscripts were located; of these 14 were published in English journals, none of the Italian-only papers had usable data. In total, 19 research reports unavailable in English were included in the analysis.

The data on which our analysis is based include both published (158) and unpublished (53) research. The published research appeared overwhelmingly (153) in peer-reviewed journals, 5 studies came from book chapters, while 43 items came from unpublished (mostly dissertations) sources. The later represent a significant increase in the proportion of unpublished research in the current data compared to previous meta-analyses. In total the data in this meta-analysis captured information based on over 14,000 treatments.

Of the 201 research reports in this meta-analysis, 39 manuscripts were based on a shared data sets; that is, two or more reports provided alliance-outcome information derived from common pool of clients. As a result some of these reported effect sizes were not independent. In addition, 10 research publications reported multiple alliance outcome relations based on two or more independent samples. As a first step, we computed the ESs associated with each of the 201 *manuscripts*, but the aggregated effect sizes, and all of the calculations presented below, were adjusted for shared (non independent) data, and are based on the 190 independent effects sizes.

The number of studies in the current study is roughly double the size of the data available for the previous (Horvath & Bedi, 2002) meta-analysis. The growth in the literature over the past decade means that not only that there are more studies available for analysis, but also that there is a significant increase in the types of therapies, treatment contexts, client problems, and research designs captured by this meta-analysis. Given that we have also included studies only available in languages other than English<sup>1</sup> it

seems fair to claim that the data is a reasonable representation of the research on the alliance outcome relation to date.

## Methods of Analysis

All numerical estimates were calculated using restricted maximum likelihood (random-effects) model (Viechtbauer, 2005). The reasons for this were twofold: First, using the alternative (fixed effects) model we would have had to “. . . assume homogeneity of underlying treatment effects across studies [and this would have] lead to substantial understatement of uncertainty” (National Research Council, 1991, p. 187). Second, the random-effects model, apart from requiring fewer assumptions, yields a more conservative estimate, hence leads to safer, more trustworthy, conclusions (Cooper, Hedges, & Valentine, 2009; Hunter & Schmidt, 2004). Using a random effects model we assumed that the studies in our data set are drawn from a population of studies and thus the results of our analyses are generalizable to the larger universe of studies.

In many studies, there were a number of different outcome measures. In order to account for the dependencies among outcome measures, due to multiple within-study ESs, we used Hunter and Schmidt’s (2004) aggregation procedures to obtain one correlation effect size per study. These procedures take into account the correlation among within-study outcome measures, and thus yield a more precise estimate of the population parameter. In cases where the studies did not provide actual correlations among outcome measures, the estimate of between outcome measure correlation was set to .50 (Wampold et al., 1997).

To correct for the non-normality of the distribution of the correlation coefficients, for categorical and continuous moderator analyses, all correlations were transformed to a Fisher’s *z* (Fisher, 1924) and then transformed back to *r* for interpretive purposes. In cases where the primary study reported more than one level of a categorical variable (e.g., reporting both early, mid, and late alliance and outcome correlations), dependencies at the moderator level were accounted for by randomly selecting one within-study level per study. All computations for this meta-analysis were conducted using the MAC (Del Re, 2010) and RcmdrPlugin.MAC (Del Re & Hoyt, 2010) meta-analysis packages for the R statistical software program (R Development Core Team, 2009).

## Results

The aggregate effect size (ES), for the 190 independent alliance/outcome relations was  $r = .275$ . The 95% confidence interval of this averaged ES ranged from .249 to .301. This aggregated value is adjusted for sample size, as well as the intercorrelation among outcome measures. The magnitude of the relationship we found in the current meta-analysis is a little larger but similar to the values reported in previous research (Horvath & Symonds, 1991  $r = .26$ ,  $k = 26$ ; Martin et al., 2000,  $r = .22$ ,  $k = 79$ ; Horvath & Bedi, 2002,  $r = .21$ ,  $k = 100$ ). The median effect size of ESs of the current data set was .28 (not adjusted for sample size) suggesting that the group of effect sizes we collected was not strongly skewed. The overall effect size of .275 is statistically significant at  $p <$

<sup>1</sup> Notwithstanding this extended effort, the coverage is not fully comprehensive. We did not have the resources to search the Asian languages, nor the European literature beyond English, German, Italian, and French.

.0001 level indicating a moderate but highly reliable relation between alliance and psychotherapy outcome.

### Threats to Validity

The estimate of an aggregated effect size in a meta-analysis is potentially vulnerable to systematic publication bias; the databases we searched may be missing research reports that were not published because these investigators failed to find a statistically significant relation between the alliance and outcome. This is the “file drawer problem” (Sutton, 2009). While it is not possible to locate the unpublished studies that languish in the authors’ file drawer, it is possible to compute a failsafe number, that is, an estimate of the number of studies with an  $ES = 0.0$  that would have to be out there but missing from our data in order make the aggregate effect size of this meta-analysis statistically not significant ( $p > .05$ ). The fail-safe value (Rosenthal, 1979) for this study indicates that there would have to be over 1,000 such hidden studies with outcome-alliance relation  $r = .0$  before the aggregate ES for the overall alliance-outcome relation would cease to be statistically significant. (A highly unlikely scenario).

Another way to explore the possibility of a systematic bias in the data is by inspecting the funnel plot. A funnel plot is a diagram of standard error on the vertical axis as a function of effect size on the horizontal axis. In the presence of bias, one would expect the plot to show a higher concentration of studies on one side of the mean than the other. Typically, smaller sample size studies (having larger standard errors) are more likely to be published if they have larger than average effects. In the absence of publication bias we would expect the studies to be distributed relatively symmetrical around the aggregated ES. The plot of our data did not indicate a strong bias.

Two other possible sources of systematic trends were investigated: 1) Date of publication: Did the study ES, on the average, change in magnitude over time? and 2) Study sample size: Were the effect sizes related to the number of participants in the study?

There was a small and statistically nonsignificant negative time-trend observed ( $p = .082$ ). Over time (1972–2009) researchers were reporting slightly decreasing ESs. This makes intuitive sense because recent studies use more sophisticated methods for controlling for pre and in-therapy effects such as problem severity, early symptom reduction, and so forth. These variables share some of the variance with the relation between alliance and outcome. Statistically controlling for these factors would remove variance in outcome that earlier investigators did not partial out. Thus, using these procedures likely exerts a downward pressure on the correlation between alliance and outcome.

More surprisingly, we found a significant relation between sample size and ES ( $r = -.25, p < .01$ ). The best fitting regression line for this puzzling association is nonlinear; the studies with sample sizes between 100 and 200 appear to report lower ESs compared to studies with both smaller and larger sample sizes. This effect may be an artifact of some sort, but will require further investigation.

In sum, the overall relation between alliance and outcome in individual psychotherapy is robust, not effected by the file drawer problem, and accounts for approximately 7.5% of the variance in treatment outcomes.

### Variability of Effect Sizes

Similar to what was found in the previous meta-analysis (Horvath & Bedi, 2002), the alliance-outcome relations in this data set were not homogenous ( $Q = 498.42, df 189, p < .00001$ ). We computed the  $I^2$  statistic which provides an estimate of the percentage of variance of ESs over and above the amount of variability that can be accounted for by random (chance) variation. The  $I^2$  of .56 we obtained indicates that the variability in alliance outcome correlations among the collection of research we gathered is approximately 56% greater than one would expect if all the studies were measuring the same concept. This finding, in itself, is not surprising. The research we were analyzing covered a wide range of treatments, a broad cross section of client problems, we had process (alliance) and outcome measures that came from different sources (therapist, client, or observers), and outcomes were measured from a variety of perspectives, at different times; sometimes immediately after treatments, at other times at follow-up points. Each of these factors could act as a moderator of the relation between alliance and outcome and explain the excess variability among the ES. We then proceeded to investigate the effect of some of these potential moderators.

### Moderator Analyses

We investigated the impact of six categorical variables that have the potential of moderating the relation between alliance and outcome: alliance measure (CALPAS, VPPS, HAq, WAI, and Other); alliance rater (client, therapist, observer); time of alliance assessment (Early, Mid, Late, Averaged); outcome measure (BDI, SCL, Dropout); type of treatment (CBT, IPT, Psychodynamic, Substance Abuse); and publication source (journal, books/chapters, unpublished/thesis). Table 1 provides a summary of the results of these analyses. Each of the analyses were done using independent data; when a researcher provided more than one result related to the moderator only one ES, randomly chosen, was used in the contrast. The only exception to this rule was in the case of “time of alliance assessment.” In this analysis, the data are independent, but rather than choosing randomly among the available ES, we choose to include early alliance measure, if it was available, because of the clinical importance of this level of the variable.

There are several noteworthy features that apply to all of these results: All of the aggregate alliance-outcome correlations in each category are statistically significant beyond  $p < .001$ . This result strongly supports the claim the impact of the alliance on therapy outcome is ubiquitous irrespective of how the alliance is measured, from whose perspective it is evaluated, when it is assessed, the way the outcome is evaluated, and the type of therapy involved. The quality of the alliance *matters*.

The next most common feature is the finding that, with very few exceptions, within each of these subsets of data, the ES are very diverse in magnitude. We noted earlier that heterogeneity of the ESs in a large-scale meta-analysis is not unusual. However, these results indicate that the high degree of variability remains practically unchanged within each level of these potential moderators. One of the consequences of such large variances within the levels of these variables was, that while the aggregate ES between the levels of these potential moderators did show some of the patterns we would

Table 1  
*Categorical Moderators of the Alliance-Outcome Relation (Based on Independent Samples)*

Moderator	Categories (k)	ES ( <i>r</i> )	<i>p</i> within category	I <sup>2</sup>	<i>p</i> between categories
Alliance measure	Other (57)	.27	<i>p</i> < .000	.59	NS
	CALPAS (28)	.23	<i>p</i> < .000	.25	
	HAq (31)	.29	<i>p</i> < .000	.75	
	VPPS (5)	.29	<i>p</i> < .000	.0	
	WAI (80)	.28	<i>p</i> < .000	.51	
Alliance rater	Client (112)	.28	<i>p</i> < .000	.64	NS
	Therapist (23)	.20	<i>p</i> < .000	.57	
	Observer (40)	.29	<i>p</i> < .000	.04	
Time of assessment	Early (113)	.25	<i>p</i> < .000	.52	<i>p</i> < .001
	Mid (33)	.25	<i>p</i> < .000	.39	
	Late (36)	.39	<i>p</i> < .000	.71	
	Averaged (52)	.31	<i>p</i> < .000	.56	
Outcome Measure	*BDI (27)	.42	<i>p</i> < .000	.56	<i>p</i> < .001
	SCL (44)	.27	<i>p</i> < .000	.55	
	*Dropout (19)	.18	<i>p</i> < .000	.14	
Type of treatment	CBT (28)	.35	<i>p</i> < .000	.64	NS
	IPT (9)	.39	<i>p</i> < .000	.39	
	Psychodynamic (44)	.29	<i>p</i> < .000	.57	
	Substance Abuse (17)	.23	<i>p</i> < .000	.80	
Publication source	Journal (141)	.29	<i>p</i> < .000	.61	NS
	Unpublished (Thesis) (21)	.28	<i>p</i> < .000	.55	
	Chapter (16)	.22	<i>p</i> < .000	.43	

\* Post hoc contrast (Tukey) of difference between these values is significant  $p < .05$ .

expect (e.g., the closer the alliance was assessed to termination the higher the correlation between alliance and outcome became, etc.) only the contrast between the outcome measures BDI and dropout was statistically reliable. All the other differences failed to reach statistical significance due the high levels of variances within each category of moderators.

### The Halo Effect

We revisited a question raised in earlier meta-analyses: Are the alliance-outcome relations researchers report inflated by a “halo effect”? That is, did the common practice of sourcing both process (alliance) and outcome data from the same individual artificially inflate the magnitude of the relation between alliance and outcome? To evaluate this question we contrasted the aggregate ES derived from studies using the same source (raters) with the aggregate ES derived from studies where the alliance and outcome data came from different sources. The aggregate ES for alliance-outcome correlations generated by the same source for both rating is  $r = .29$  (based on 94 ES), the value for the ES based on different raters is  $r = .25$  (based on 96 ES). The difference between these values is *not* statistically significant  $Q_b = 3.09$   $df = 1$ ,  $p = .078$ . However it may be too early to close the door on this question; the heterogeneity within each of these categories was 54% greater than expected by chance. As noted before, such excess of variance significantly dampens the possibility of finding statistically significant differences in contrasts. In addition, there may be a trend over time; the ES from alliance outcome relations derived from different

sources has been less than the same source correlation each time this question was examined, and with each subsequent test of this hypothesis, the gap between these values has crept closer to statistically significant levels (Horvath & Bedi, 2002; Horvath & Symonds, 1991).

### Limitations of the Research

This report is based on a numerical synthesis of all the research results currently available that met our inclusion criteria. By including all research in which the authors refer to the process variable as *alliance*, we might have collected and summarized a number of different kinds of things. This is a serious concern, especially in light of the fact that the ESs in this data set are quite diverse. A practical response to this conceptual problem is to conclude that this meta-analysis reports the results of alliance-outcome relation *as it is researched at this time*.

There are also some technical constraints effecting these analyses. We chose to use independent data whenever possible. To achieve this, on many occasions we needed to randomly discard some data (ES) in order to make sure that only one result from a particular research report was used in each analysis. As a result, we lost some power to detect differences in a number of analyses. In the long run, the use of independent data is statistically well justified, but the resulting constraints on the computations are also important for the reader to consider.

## Therapeutic Practices

The positive relation between the quality of the alliance and diverse outcomes for many different types of psychological therapies is confirmed in this meta-analysis. While the overall ES of  $r = .275$  accounts for a relatively modest proportion of the total variance in treatment outcome, the magnitude of this correlation, along with therapist effects, is one of the strongest and most robust predictors of treatment success empirical research has been able to document (Wampold, 2001). The practice recommendations presented below are based on important studies of the alliance, but not necessarily grounded in the kinds of statistical procedures we used in our meta-analysis:

◆ The development and fostering of the alliance is not separate from the interventions therapist implement to help their clients; it is influenced by and is an essential and inseparable part of everything that happens in therapy. In this sense, the therapist does not “build alliance” but rather he or she does the work of treatment in such a way that the process forges an alliance with the client. The quality of the alliance is an index of the level of mutual and collaborative commitment to the “business of therapy” by therapist and client. Its distinguishing feature is the focus on therapy as a collaborative enterprise. Another way to grasp the concept is that it is a measure of how well the therapist and client *work together*.

◆ The development of a “good enough” alliance early in therapy is vital for therapy success: On one hand, establishing a good alliance prevents clients dropping out and, on the other hand, the sense of collaboration creates a “working space,” with room to introduce new ways of addressing the clients concerns.

◆ In the early phases of therapy, modulating the methods of therapy (tasks) to suit the specific client’s needs, expectations and capacities is important in building the alliance. The therapist and client need to find the level of collaboration suited to achieve the work of therapy taking into account not only the clients’ problems, but also the resources, capacities, and expectations they bring to therapy. Bridging the client’s expectations and personal resources and what the therapist believes to be the most appropriate intervention is an important and delicate task. Alliance emerges, in part, as a result of the smooth coordination of these elements.

◆ Therapist and client perceptions of the alliance, particularly early in treatment, do not necessarily match. Misjudging the client’s felt experience of the alliance (i.e., believing that it is in “good shape” when the client does not share this perception) could render therapeutic interventions less effective. Active monitoring the clients’ alliance throughout treatment is a recommended practice.

◆ The strength of the alliance, within or between sessions, often fluctuates in response to a variety of in-therapy factors, such as therapists challenging clients to grapple with difficult issues, misunderstandings, transference, and so forth. These “normal” variations—as long as they are attended to and resolved—are associated with good treatment outcomes.

◆ Therapists’ nondefensive responses to client negativity or hostility are critical for maintaining a good alliance. Therapists have to develop the ability to neither internalize nor to ignore clients’ negative responses.

◆ Recent studies suggest that therapists’ contributions to the quality of the alliance are critical. Therapists who are good at building a strong alliance tend to have better alliances with most of their clients. The reverse is also true. This finding suggests that

alliance development is a skill and/or capacity that therapist can and should be trained to develop just as they are trained to attend to other aspects of their practice.

## References

- A reference list of the 201 studies in used in the meta analysis is available from the first author and will be published in the chapter by the same authors: “Alliance in Individual Therapy” in J. C. Norcross (Ed.), 2011, *Psychotherapy relationships that work* (2nd ed.). New York: Oxford University Press.
- Bordin, E. S. (1975, September). *The working alliance: Basis for a general theory of psychotherapy*. Paper presented at the Society for Psychotherapy Research, Washington, DC.
- Bordin, E. S. (1980, June). Of human bonds that bind or free. Paper presented at the Society for Psychotherapy Research, Pacific Grove, CA.
- Bordin, E. S. (1989, June). *Building therapeutic alliances: The base for integration*. Paper presented at the Society for Psychotherapy Research, Berkeley, CA.
- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 13–37). New York: Wiley.
- Cooper, H., Hedges, L. V., & Valentine, J. C. (2009). *The handbook of research synthesis and meta-analysis* (2nd ed.). New York: Russell Sage Foundation.
- Del Re. A. C. (2010). RcmdrPlugin. MAC: Meta-Analysis with Correlations (MAC) Rcmdr Plug-in. R package version 1.0.5. [Computer software] Available from <http://CRAN.Rproject.org/package=RcmdrPlugin.MAC>
- Del Re. A. C., & Hoyt, W. T. (2010). MAC: Meta-analysis with correlations. R package version 1.0.5. [Computer software] Available from <http://CRAN.R-project.org/package=MAC>
- Fisher, R. A. (1924). On a distribution yielding the error functions of several well known statistics. *Proceedings of the International Congress of Mathematics, Toronto, 2*, 805–813.
- Frank, J. D., & Frank, J. B. (1991). *Persuasion and healing: A comparative study of psychotherapy* (3rd ed.). Baltimore, MD: Johns Hopkins University Press.
- Freud, S. (1912/1958). The dynamics of transference [Zur Dynamik der Übertragung]. (J. Starchey, Trans.). In J. Starchey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud* (vol. 12, pp. 99–108). London: Hogarth Press.
- Freud, S. (1913). On the beginning of treatment: Further recommendations on the technique of psychoanalysis [Zur Einleitung der Behandlung – Weitere Ratschläge zur Technik der Psychoanalyse]. In J. Starchey (Ed.), *Standard edition of the complete psychological works of Sigmund Freud* (vol. 12, pp. 122–144). London: Hogarth.
- Gaston, L., Goldfried, M. R., Greenberg, L. S., Horvath, A. O., Raue, P. J., & Watson, J. (1995). The therapeutic alliance in psychodynamic, cognitive-behavioral and experiential therapies. *Journal of Psychotherapy Integration, 15*, 1–26.
- Goldfried, M. R. (1980/2009). Toward the delineation of therapeutic change principles. *Applied and Preventive Psychology, 13*, 3–4.
- Greenson, R. R. (1965). The working alliance and the transference neuroses. *Psychoanalysis Quarterly, 34*, 155–181.
- Hatcher, R. L., & Barends, A. W. (1996). Patients’ view of the alliance of psychotherapy: Exploratory factor analysis of three alliance measures. *Journal of Consulting and Clinical Psychology, 64*, 1326–1336.
- Hatcher, R. L., & Barends, A. W. (2006). Thinking about the alliance in practice. *Psychotherapy, Therapy, Research, Practice, Training, 41*, 7–10.
- Hatcher, R. L., Barends, A., Hansell, J., & Gutfreund, M. J. (1995). Patient’s and therapist’s shared and unique views of the therapeutic

- alliance: An investigation using confirmatory factor analysis in a nested design. *Psychoanalysis Quarterly*, 63, 636–643.
- Horvath, A. O. (2009, October). Conceptual and methodological challenges in alliance research Is it time for a change? Paper presented at the Society for Psychotherapy Research European Division, Bolzano, Italy.
- Horvath, A. O., & Bedi, R. P. (2002). The alliance. In J. C. Norcross (Ed.), *Psychotherapy relationships that work*. New York: Oxford University Press.
- Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. B. (2011). Alliance in individual psychotherapy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (2nd ed.). New York: Oxford University Press.
- Horvath, A. O., Gaston, L., & Luborsky, L. (1993). The role of alliance in psychotherapy. In N. Miller, L. Luborsky, J. Barber, & J. P. Docherty (Eds.), *Psychodynamic treatment research: A handbook for clinical practice* (pp. 247–274). New York: Basic Books.
- Horvath, A. O., & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology*, 61, 561–573.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38, 139–149.
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Luborsky, L. (1976). Helping alliances in psychotherapy. In J. L. Cleghorn (Ed.), *Successful psychotherapy* (pp. 92–116). New York: Brunner/Mazel.
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies; “Is it true that everybody has won and all must have prizes”? *Archives of General Psychiatry*, 32, 995–1008.
- Marmar, C. R., Horowitz, M. J., Weiss, D. S., & Marziali, E. (1986). The development of the therapeutic alliance rating system. In L. S. Greenberg & W. M. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 367–390). New York: Guilford Press.
- Martin, D. J., Garske, J. P., & Davis, K. M. (2000). Relation of the Therapeutic alliance with outcome and other variables: A meta analytic review. *Journal of Clinical and Consulting Psychology*, 68, 438–450.
- National Research Council. (1992). *Combining information: Statistical issues and opportunities for research*. Washington DC: National Academy Press.
- R Development Core Team. (2009). R: A language and environment for statistical computing. [Computer software]. R Foundation for Statistical Computing, Vienna. ISBN 3–900051–07–0. Retrieved from <http://www.R-project.org>
- Rogers, C. R., & Wood, J. K. (1974). Client-centered theory: Carl R. Rogers. In A. Burton (Ed.), *Operational theories of personality* (pp. 211–258.). New York: Bruner/Mazel.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86, 638–641.
- Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry*, 6, 412–415.
- Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist*, 32, 752–760.
- Sterba, R. F. (1934). The fate of the ego in analytic therapy. *International Journal of Psychoanalysis*, 115, 117–126.
- Stiles, W. B., Shapiro, D., & Elliot, R. (1986). Are all psychotherapies equivalent? *American Psychologist*, 41, 165–180.
- Stone, L. (1961). *The psychoanalytic situation: An examination of its development and essential nature*. New York: International Universities Press.
- Sutton, A. J. (2009). Publication bias. In H. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (2nd ed.). New York: Russell Sage Foundation.
- Viechtbauer, W. (2005). Bias and efficiency of meta-analytic estimators in the random-effects model. *Journal of Education and Behavioral Statistics*, 30, 261–293.
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah: Erlbaum.
- Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, “all must have prizes.” *Psychological Bulletin*, 122, 203–215.
- Zetzel, E. R. (1956). Current concepts of transference. *International Journal of Psychoanalysis*, 37, 369–376.

Received August 9, 2010

Revision received September 27, 2010

Accepted September 27, 2010 ■

### E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at <http://notify.apa.org/> and you will be notified by e-mail when issues of interest to you become available!