University of Groningen

The Therapeutic Alliance in Rehabilitation

Paap, Davy

DOI:
[10.33612/diss.144151915](https://doi.org/10.33612/diss.144151915)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Paap, D. (2020). *The Therapeutic Alliance in Rehabilitation*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.144151915>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

CHAPTER

1

General Introduction

GENERAL INTRODUCTION

This thesis concerns an exploration of the therapeutic alliance in rehabilitation. In this introduction first the role of common factors on treatments and treatment effects will be outlined, where it becomes clear that the therapeutic alliance is judged as the most relevant common factor. Thereafter, the role of the therapeutic alliance in rehabilitation will be discussed. The construct of the therapeutic alliance has its origin in psychotherapy, but in this thesis the role of therapeutic alliance in rehabilitation will be explored. Since the therapeutic alliance is the most relevant common factor, it is relevant to be able measure the strength of therapeutic alliance. Therefore, measuring of the therapeutic alliance will be discussed in detail. Next, ruptures in and repair of the therapeutic alliance will be described and why they are important for the development of the therapeutic alliance. Finally, this issues above will be address the rationale of this thesis and results in two general aims of this thesis.

COMMON FACTORS AND TREATMENT EFFECTS

In 1936, Rosenzweig wondered if different types of treatment within psychotherapy, with theoretically contrasting approaches, rationale or mechanisms of treatment, are equally effective; isn't the treatment approach a winner as well (Rosenzweig, 1936)? He postulated that some implicit common factors such as catharsis, personality of the healthcare professional, and strength and consistency of the therapeutic rationale may (partially) explain the treatment effects. The importance of these common factors has been illustrated by him using a phrase from *Alice in Wonderland* (Carroll, 1865): "At last the Dodo said, 'everybody has won, and all must have prizes'." More than 65 years after that initial publication, it was shown in meta-analytic research that within psychotherapy, no single approach (or rationale or mechanism of treatment) is consistently more effective than other approaches (Luborsky et al., 2006; Wampold, 2015).

The "common factors model" implicitly supposes that every treatment includes, besides eventual specific factors, also common factors resulting in common therapeutic effects (Crow et al., 1999). These common therapeutic effects should not be considered aspecific, in the sense of being unintended effects of treatment (Mulder, Murray, & Rucklidge, 2017), because these factors may have an important treatment effect by themselves (Laska, Gurman, & Wampold, 2014; Wampold, 2015). Within psychotherapy, results of a systematic review show that between 30% and 70% of the variation in treatment outcomes can be explained by common factors (Imel & Wampold, 2008). However, it must be noted that specific factors and common factors act together in treatments and cannot be disentangled easily (Sprenkle & Blow, 2004), moreover, specific factors and common factors are correlated well (de Felice et al., 2019). Textbox 1 summarizes common factors within psychotherapy.

Textbox 1 | Summary of common factors within psychotherapy.

- An emotionally charged bond between the person in treatment and healthcare professional;
- Collaboration between the person in treatment and healthcare professional to achieve agreement on goals of the treatment;
- A confiding healing setting in which treatment takes place;
- A healthcare professional who provides a psychologically derived and culturally embedded explanation for emotional distress;
- An explanation that is adaptive and is accepted by the person in treatment;
- A set of procedures or rituals engaged by the person in treatment and healthcare professional that leads the person in treatment to enact change that is positive, helpful, or adaptive.

Adapted from Laska et al., 2014 and by Mulder et al., 2017.

Within psychotherapy-research several meta-analyses have shown positive associations between the quality of the therapeutic alliance and treatment outcomes across a broad spectrum of treatments and domains (effect sizes ≈ 0.26) (Flückiger, Del Re, Wampold, & Horvath, 2018; Horvath, Del Re, Flückiger, & Symonds, 2011; Martin, Garske, & Davis, 2000). Therefore, the therapeutic alliance was judged from all common factors the most relevant, due to the stable positive association between therapeutic alliance and treatment outcomes (Flückiger, Del Re, Wampold, Symonds, & Horvath, 2012; Horvath et al., 2011; Imel & Wampold, 2008; Wampold, 2015). A growing number of studies suggests that the association between therapeutic alliance and outcomes of treatment also exists within rehabilitation (Babatunde, MacDermid, & MacIntyre, 2017; Hall, Ferreira, Maher, Latimer, & Ferreira, 2010).

Within rehabilitation, results of meta-analyses also suggest that no specific treatment is superior to another, and furthermore all have only small to moderate treatment effects (Fransen, McConnell, Hernandez-Molina, & Reichenbach, 2010; Keller, Hayden, Bombardier, & Van Tulder, 2007; Menta et al., 2015). Therefore, it has been emphasized that improving the effectiveness of treatments for rehabilitation is important and should not only focus on condition-specific treatments, but also on common mediators of treatment effects, such as common factors, for instance communication-aspects or psychological interactions between the person in treatment and the healthcare professionals (Babatunde et al., 2017).

THE ROLE OF THE THERAPEUTIC ALLIANCE

Over the last 40 years the number of publications per year regarding the therapeutic relationship, especially the therapeutic alliance, has increased considerably (Figure 1), (Flückiger et al., 2018). The therapeutic alliance is commonly referred to in literature as “alliance”, “helping alliance” or “working alliance” (Martin et al., 2000).

Figure 1 | Therapeutic Alliance: Results by year (Source Pubmed).

Research into the therapeutic alliance has not only been conducted within psychotherapy, but also in other fields such as medicine, rehabilitation, physiotherapy, education, nursing, social work, psychology and forensic science, etc. (Flückiger et al., 2018). The therapeutic alliance has been defined as: “the degree of collaboration regarding the tasks and goals of the treatment as well as the quality of the personal bond between the person in treatment and healthcare professional” (Bordin, 1979). Bordin’s conceptualization of the construct therapeutic alliance has its origin in the psychoanalytic theory, but in his original article he suggests that this definition is generalizable to all types of disciplines and treatment relationships (Bordin, 1979; Flückiger et al., 2018). His conceptualization of the construct therapeutic alliance were rooted on ideas of Freud (1913), Sterba (1934), Zetzel (1956), Menninger (1958), and more recently Greenson (1965).

Generally, within rehabilitation there is a high level of interactions between the person in treatment and the healthcare professional(s). However, compared to psychotherapy there are differences between characteristics of the people in treatment, as well as the interventions (Hall et al., 2010). Therefore, it is unknown if the associations between therapeutic alliance and outcome, seen in psychotherapy, are generalisable to rehabilitation. It is also unknown, if one type of therapeutic alliance is needed in rehabilitation or different therapeutic alliances are needed across different types of rehabilitation (for example: pain rehabilitation, neurological

rehabilitation, cardiac rehabilitation, etc.). One of the first publications within rehabilitation considering the role of the therapeutic alliance, was from Forman in 1990. In his study several significant positive associations were found between the therapeutic alliance score and treatment outcomes. However, the study lacked details about measurement tools, type of outcomes measures and statistical analysis. Later, more than 130 studies have been published regarding therapeutic alliance in rehabilitation (Babatunde et al., 2017). However, despite the growing number of studies supporting the importance of the quality of the therapeutic alliance in rehabilitation treatments, a validated instrument for measuring therapeutic alliance in rehabilitation is lacking. Moreover, studies concerning the conceptualization of therapeutic alliance in rehabilitation, as well as understandable definitions of terms in the view of the broad complexity of therapeutic alliance, are generally lacking (Babatunde et al., 2017).

MEASUREMENT OF THE THERAPEUTIC ALLIANCE

An issue of crucial importance in research concerning the (assumed) role of the common factors, i.e. the role of the therapeutic alliance, in helping professionals relationships such as rehabilitation care, is the current state of scientific definition and measurement of the therapeutic alliance. To date, more than 70 instrument exist to measure therapeutic alliance (Flückiger et al., 2018). Frequently used questionnaires in research to measuring therapeutic alliance are: the Revised Helping Alliance Questionnaire (Luborsky et al., 1996), the Session Rating Scale (Duncan et al., 2003), California Psychotherapy Alliance Scale (Marmar, Weiss, & Gaston, 1989), Barrett-Lennard Relationship Inventory (Barrett-Lennard, 1986) and Vanderbilt Psychotherapy Process Scales (Gomes-Schwartz, 1978). It appeared quite clear that, during three decades, the Working Alliance Inventory (WAI) has been the most widely used within psychotherapy(-research), as well as rehabilitation(-research) to measure the perceived quality, as well as efficacy of the therapeutic alliance (Babatunde et al., 2017; Elvins & Green, 2008; Hall et al., 2010; Horvath et al., 2011; Horvath & Greenberg, 1989). The construction of the originally 36-item questionnaire was theoretically based on, and developed according to Bordin's theory (Bordin, 1979). The items of the WAI were constructed, based on the three theoretically proposed alliance dimensions; agreement on goals, agreement on tasks and quality of the bond between the person in treatment and her or his healthcare professional.

Later, a measurement property study was conducted to confirm the theoretical proposed structure (the three proposed dimensions) of the WAI; from this study a much shorter version, the WAI-S (WAI-short form, 12 items) was proposed, based on factor analysis (Tracey & Kokotovic, 1989), which, besides, resulted in more ease of administration. However, the WAI-S lacked an adequate confirmatory fit (Hatcher & Gillaspay, 2006). Therefore, in a replication study the WAI-SR (WAI-short revised form, 12 items) was developed (Hatcher & Gillaspay, 2006). Compared to the 36-item-WAI and the WAI-S, the novel WAI-SR showed, based on factor analysis, a clearer representation of the three theoretically proposed dimensions regarding goals, tasks and bond (Hatcher & Gillaspay, 2006).

Based on measurement properties studies, the WAI seemed to be appropriate for measuring therapeutic alliance in clinical practice and research (Elvins & Green, 2008). Therefore, we included this questionnaire in the overall draft of our studies, to measure therapeutic alliance. However, this questionnaire was developed within psychotherapy and therefore the measurement properties may not be generalizable to rehabilitation (Hall et al., 2010; Kayes & McPherson, 2012). Therefore, there is a need to adapt and validate the WAI for use in rehabilitation.

RUPTURE AND REPAIR THEORY

From the definition of the therapeutic alliance it might be concluded that agreement between the person in treatment and the healthcare professional on goals of and tasks in the treatment-procedure, as well as the perceived quality of the bond, are the centre of concern. Due to this, another important, but underestimated (clinically as well as scientifically) issue in the evaluation of the quality of the therapeutic alliance, is the ability to recognise, thematize, and repair strains and ruptures in the therapeutic alliance (Doran, Safran, Waizmann, Bolger, & Muran, 2012). Also, Bordin postulated the importance of the ability to repair a strained therapeutic alliance, in relation with his theory, in a later publication (Bordin, 1994).

[...] “I [Bordin] have emphasized that the building of a strong therapeutic alliance is a major feature of the change process and that the amount of change which results will, perhaps, be more a function of the strength than the form of that collaboration... But this would be settling on an oversimplification. I believe that the amount of change is based on the building and repair of strong alliances” (Bordin, 1994).

As mentioned before, a the therapeutic alliance includes three domains: 1) level of agreement on goals, 2) level of agreements tasks and 3) the bond between the person in treatment and the healthcare professional (Bordin, 1979). However, strains in any of these domains are very common and may result in (smaller or larger) ruptures in therapeutic alliance (Safran, Newhill, & Muran, 2003). A rupture in the therapeutic alliance has been defined as: “Deterioration or tension in the alliance, manifested by a disagreement between the person in the treatment and healthcare professional on the goals of treatment, lack of collaboration on task, or strain in the emotional bond” (Eubanks, Burckell, & Goldfried, 2018). Ruptures in therapeutic alliance may vary in frequency, duration and intensity. The intensity of the rupture in the therapeutic alliance may range from minor tension or strain to a major breakdown in collaboration (Miller-Bottomo, Talia, Eubanks, Safran, & Muran, 2019).

A strain or rupture in the therapeutic relationship can be expressed explicitly, implicitly or non-verbally (Safran et al., 2003). Two types of rupture markers are distinguished, *withdrawal* rupture markers and *confrontational* rupture markers (Eubanks, Lubitz, Muran, & Safran, 2019). Textbox 2 illustrate two theoretical examples of each rupture markers. Such markers indicate that the person in treatment perceives a problem in the therapeutic relationship, but

does not feel comfortable or safe in expressing her or his feelings clearly. Some persons in treatment may avoid the rupture by subtly dissociating their internal experience, showing reduced involvement in the relationship, or being overly accommodating (withdrawal rupture markers) (Miller-Bottome et al., 2019). Other persons in treatment may make confronting or negative comments, which oppose the health professional or treatment (confrontational rupture markers). Avoiding the expression of feelings or thoughts may be a natural response of persons in treatment, rather than openly conveying experiences of strains or ruptures in the relationship (Miller-Bottome, Talia, Safran, & Muran, 2018).

Although it has been suggested that the construct therapeutic alliance is applicable to many therapeutic approaches, it still remains unclear whether Bordin's construct of therapeutic alliance, including the rupture and repair theory, is generalizable to the context of rehabilitation treatment (Babatunde et al., 2017). Also, Bordin already emphasized that different types of problems and treatment processes may emphasize different aspects of the therapeutic alliance, because different treatments emphasize different tasks and goals (Bordin, 1994). Therefore, there is a need for studies concerning the conceptualization of therapeutic alliance in rehabilitation, especially specific issues concerning the goals, the tasks and role of the bond in rehabilitation treatment, that need attention.

Textbox 2 | Illustration of *withdrawal rupture makers* and *confrontational rupture markers*.

<i>Withdrawal rupture makers</i>	
<i>Example (1) denial</i>	
A person in treatment denies a feeling state that is clearly shows by her or his affect or nonverbal behaviours	H (Healthcare professional): "You look upset..." P (Person in treatment): "No, I'm not, can we talk about something else?"
<i>Example (2) overly compliant</i>	
The person in treatment withdraws by submitting to the healthcare professional in an overly compliant or deferential manner	H: "Something about our consult wasn't so helpful to you." P: "I mean it's not your fault! This is part of your process, you know better than me, I'm just a slow learner."
<i>Confrontational rupture markers</i>	
<i>Example (1) complaints about treatment</i>	
A person in treatment expressed dissatisfaction or doubt about the progress that can be made or has been made in treatment	P: "I've been coming here for weeks now and I haven't seen any changes. I thought this treatment was supposed to help, but I guess I was wrong."
<i>Example (2) complaints about treatment activities</i>	
Person in treatment expresses dissatisfaction or doubts about the activities of the treatment	P: "What does this (pain) education, do with my problems? I don't get what is has anything to do with my problems."

Adapted from (Eubanks, Lubitz, Muran, & Safran, 2019).

AIMS AND OUTLINE OF THE THESIS

The first aim of the thesis was to develop a questionnaire to measure the therapeutic alliance in rehabilitation. This aim is elaborated upon in Part 1, “The Working Alliance Inventory for use in rehabilitation” and has been operationalized in three studies, in the **Chapters 3-5**.

However, during the quantitative studies we performed in Part 1 we increasingly realized that in order to be able to measure the therapeutic alliance in rehabilitation, we actually were in need of a more precise conceptualisation of the construct therapeutic alliance within rehabilitation. The second aim of this thesis was to provide a better understanding of the construct of therapeutic alliance in rehabilitation. This aim is elaborated upon in Part 2, “Therapeutic alliance in rehabilitation; contextual and perspective view” and has been operationalized in three qualitative studies in three different domains of rehabilitation in **Chapters 6-8**.

PART 1.

The Working Alliance Inventory for use in rehabilitation

In **Chapter 2** a short appraisal of the measurement properties of the WAI is provided. The aim of this appraisal was to briefly summarize the measurements properties of the WAI and discuss use of the WAI in physiotherapy and rehabilitation.

In **Chapter 3** the WAI was adapted for use in rehabilitation and tested for measurement properties. The aim of that study was to determine the face and content validity, internal consistency and construct validity (including structural validity) of the Working Alliance Inventory Rehabilitation Dutch Version (WAI-ReD).

In **Chapter 4** quantitative research is presented to investigate methods to reduce ceiling effects of the WAI-ReD found in Chapter 3. The aim of that study was twofold: to modify the WAI-ReD response scales by changing labels, utilizing VAS, and to analyse the ceiling effects of three versions of the WAI-ReD.

In **Chapter 5** a systematic review of the measurement properties of the WAI is presented, because despite 30 years of research concern measurement properties of the WAI, no systematic review of measurements properties has been conducted. A systematic review will show strengths and limitations of the measurements studies and may show gaps in research. The aim of that study was to systematically review the measurement properties of the WAI and its adapted versions of the WAI.

PART 2.

The therapeutic alliance in rehabilitation; perspective from a contextual view

In **Chapter 6** qualitative research is presented that combines three data sources to acquire a better understanding of skills or techniques hand therapists use to establish and/or strengthen the therapeutic alliance. The aim of that study was to identify the types of communication hand therapist apply during treatment, which types of communication are judged by hand therapists to be important for developing a strong therapeutic alliance and how patients rate their therapeutic alliance with their hand therapists.

In **Chapter 7** a phenomenological qualitative study is presented that explores and explains the concept of the therapeutic alliance in pediatric physiotherapy to meet the needs of children and their parents. The aim of that study was to explore the opinions, perceptions, and preferences of children, parents, and physical therapists regarding the therapeutic alliance in pediatric physiotherapy in a rehabilitation setting.

In **Chapter 8** a grounded theory study is presented that provides more understanding of the construct therapeutic alliance in the multidisciplinary setting of a pain rehabilitation program. The aim of that study was to explore factors influencing participants' perceptions of, and participation in, the therapeutic alliance with healthcare professionals, as well as their commitment to treatment in pain rehabilitation.

In **Chapter 9** the general discussion, summary of the findings, implications, and recommendations for further research of this thesis are discussed.

REFERENCES

- Babatunde, F., MacDermid, J., & MacIntyre, N. (2017). Characteristics of therapeutic alliance in musculoskeletal physiotherapy and occupational therapy practice: a scoping review of the literature. *BMC Health Services Research*, 17(1), 375. <https://doi.org/10.1186/s12913-017-2311-3>.
- Barrett-Lennard, G. T. (1986). The relationship inventory now: Issues and advances in theory, method and use. In *The psychotherapeutic process: A research handbook* (pp. 439–476). New York: Guilford Press.
- 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>.
- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. *The working alliance Theory, Research, and Practice* (Vol. 173). New York: John Wiley, Inc.
- Carroll, L. (1865). *Alice's Adventures in Wonderland*. New York: Macmillan.
- Crow, R., Gage, H., Hampson, S., Hart, J., Kimber, A., & Thomas, H. (1999). The role of expectancies in the placebo effect and their use in the delivery of health care: a systematic review. *Health Technology Assessment*, 3(3), 1–96. <https://doi.org/10.3310/hta3030>.
- de Felice, G., Giuliani, A., Halfon, S., Andreassi, S., Paoloni, G., & Orsucci, F. F. (2019). The misleading Dodo Bird verdict. How much of the outcome variance is explained by common and specific factors? *New Ideas in Psychology*, 54, 50–55. <https://doi.org/10.1016/j.newideapsych.2019.01.006>.
- Doran, J. M., Safran, J. D., Waizmann, V., Bolger, K., & Muran, J. C. (2012). The Alliance Negotiation Scale: Psychometric construction and preliminary reliability and validity analysis. *Psychotherapy Research*, 22(6), 710–719. <https://doi.org/10.1080/10503307.2012.709326>.
- Duncan, B. L., Miller, S. D., Sparks, J. A., Claud, D. A., Reynolds, L. R., Brown, J., & Johnson, L. D. (2003). The Session Rating Scale: Preliminary psychometric properties of a “working” alliance measure. *Journal of Brief Therapy*, 3(1), 3–12.
- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review*, 28(7), 1167–1187. <https://doi.org/10.1016/j.cpr.2008.04.002>.
- Eubanks, C. F., Burckell, L. A., & Goldfried, M. R. (2018). Clinical consensus strategies to repair ruptures in the therapeutic alliance. *Journal of Psychotherapy Integration*, 28(1), 60–76. <https://doi.org/10.1037/int0000097>.
- 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>.
- 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>.
- Flückiger, C., Del Re, A. C., Wampold, B. E., Symonds, D., & Horvath, A. O. (2012). How central is the alliance in psychotherapy? A multilevel longitudinal meta-analysis. *Journal of Counseling Psychology*, 59(1), 10–17. <https://doi.org/10.1037/a0025749>.
- Forman, N. W. (1990). *The nature of trait empathy in clients with chronic pain and their counselors and its impact on the development of the working alliance and outcome*. Doctoral dissertation, the Ohio State University.
- Fransen, M., McConnell, S., Hernandez-Molina, G., & Reichenbach, S. (2010). Does land-based exercise reduce pain and disability associated with hip osteoarthritis? A meta-analysis of randomized controlled trials. *Osteoarthritis and Cartilage*, 18(5), 613–620. <https://doi.org/10.1016/j.joca.2010.01.003>.
- Freud, S. (1913). On beginning the treatment (further recommendations on the technique of psycho-analysis I). The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XII (1911–1913): The Case of Schreber, Papers on Technique and Other Works. *Internationale Zeitschrift Für Psychoanalyse*, 1(1), 139–146.
- Gomes-Schwartz, B. (1978). Effective ingredients in psychotherapy: Prediction of outcome from process variables. *Journal of Consulting and Clinical Psychology*, 46(5), 1023–1035. <https://doi.org/10.1037/0022-006X.46.5.1023>.
- Greenson, R. R. (1965). The Working Alliance and the Transference Neurosis. *The Psychoanalytic Quarterly*, 34(2), 155–181. <https://doi.org/10.1080/21674086.1965.11926343>.

- Hall, A. M., Ferreira, P. H., Maher, C. G., Latimer, J., & Ferreira, M. L. (2010). The Influence of the Therapist-Patient Relationship on Treatment Outcome in Physical Rehabilitation: A Systematic Review. *Physical Therapy*, 90(8), 1099–1110. <https://doi.org/10.2522/ptj.20090245>.
- Hatcher, R. L., & Gillaspie, 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>.
- Horvath, A. O., Del Re, A. C., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. *Psychotherapy*, 48(1), 9–16. <https://doi.org/10.1037/a0022186>.
- 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>.
- Imel, Z. E., & Wampold, B. E. (2008). The importance of treatment and the science of common factors in psychotherapy. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (Vol. 4, pp. 249–266). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Kayes, N. M., & McPherson, K. M. (2012). Human technologies in rehabilitation: ‘Who’ and ‘How’ we are with our clients. *Disability and Rehabilitation*, 34(22), 1907–1911. <https://doi.org/10.3109/09638288.2012.670044>.
- Keller, A., Hayden, J., Bombardier, C., & Van Tulder, M. (2007). Effect sizes of non-surgical treatments of non-specific low-back pain. *European Spine Journal*, 16(11), 1776–1788.
- Laska, K. M., Gurman, A. S., & Wampold, B. E. (2014). Expanding the lens of evidence-based practice in psychotherapy: A common factors perspective. *Psychotherapy*, 51(4), 467–481. <https://doi.org/10.1037/a0034332>.
- Luborsky, L., Barber, J. P., Siqueland, L., Johnson, S., Najavits, L. M., Frank, A., & Daley, D. (1996). The revised helping alliance questionnaire (HAQ-II): psychometric properties. *The Journal of Psychotherapy Practice and Research*, 5(3), 260–271.
- Luborsky, L., Rosenthal, R., Diguer, L., Andrusyna, T. P., Berman, J. S., Levitt, J. T., ... Krause, E. D. (2006). The Dodo Bird Verdict Is Alive and Well-Mostly. *Clinical Psychology: Science and Practice*, 9(1), 2–12. <https://doi.org/10.1093/clipsy.9.1.2>.
- Marmar, C. R., Weiss, D. S., & Gaston, L. (1989). Toward the validation of the California Therapeutic Alliance Rating System. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(1), 46–52. <https://doi.org/10.1037/1040-3590.1.1.46>.
- 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>.
- Menninger, K. (1958). *Theory of psychoanalytic technique*. <https://doi.org/10.1037/10843-000>.
- Menta, R., Randhawa, K., Côté, P., Wong, J. J., Yu, H., Sutton, D., Taylor-Vaisey, A. (2015). The Effectiveness of Exercise for the Management of Musculoskeletal Disorders and Injuries of the Elbow, Forearm, Wrist, and Hand: A Systematic Review by the Ontario Protocol for Traffic Injury Management (OPTIMA) Collaboration. *Journal of Manipulative and Physiological Therapeutics*, 38(7), 507–520. <https://doi.org/10.1016/j.jmpt.2015.06.002>.
- Miller-Bottome, M., Talia, A., Eubanks, C. F., Safran, J. D., & Muran, J. C. (2019). Secure in-session attachment predicts rupture resolution: Negotiating a secure base. *Psychoanalytic Psychology*, 36(2), 132–138. <https://doi.org/10.1037/pap0000232>.
- Miller-Bottome, M., Talia, A., Safran, J. D., & Muran, J. C. (2018). Resolving alliance ruptures from an attachment-informed perspective. *Psychoanalytic Psychology*, 35(2), 175–183. <https://doi.org/10.1037/pap0000152>.
- Mulder, R., Murray, G., & Rucklidge, J. (2017). Common versus specific factors in psychotherapy: opening the black box. *The Lancet Psychiatry*, 4(12), 953–962. [https://doi.org/10.1016/S2215-0366\(17\)30100-1](https://doi.org/10.1016/S2215-0366(17)30100-1).
- Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry*, 6(3), 412–415. <https://doi.org/10.1111/j.1939-0025.1936.tb05248.x>.
- Safran, J. D., Newhill, C. E., & Muran, J. C. (2003). *Negotiating the therapeutic alliance: A relational treatment guide*. New York: Guilford Press.
- Sprengle, D. H., & Blow, A. J. (2004). Common factors are not islands—they work through models: A response to Sexton, Ridley, and Kleiner. *Journal of Marital and Family Therapy*, 30(2), 151–157. <https://doi.org/10.1111/j.1752-0606.2004.tb01230.x>.
- Sterba, R. (1934). The fate of the ego in analytic therapy. *International Journal of Psychoanalysis*, 15, 117–126.

- 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>.
- Wampold, B. E. (2015). How important are the common factors in psychotherapy? An update. *World Psychiatry*, 14(3), 270–277. <https://doi.org/10.1002/wps.20238>.
- Zetzel, E. R. (1956). Current concepts of transference. *International Journal of Psychoanalysis*, 37, 369–376.

PART

1

The Working Alliance Inventory for use in
rehabilitation