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Psychodynamic Psychotherapy Research

Evidence-Based Practice and Practice-Based Evidence

Foreword by Robert J. Waldinger



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To my mother and father and others who have helped me live with passion and conviction.

Raymond A. Levy

To my mom and dad who have helped so many.

I hope this book helps preserve what you value so dearly

J. Stuart Ablon

I would like to dedicate this book to Helmut Thomä, born on May 6, 1921, on the occasion of his 90th birthday. His 40-year long mentorship in matters of psychoanalysis enabled me to fuse theoretical aspirations, down-to-earth research, and satisfaction in clinical work.

Horst Kächele

Foreword

This book helps put to rest a dangerous myth. The myth is that psychodynamic psychotherapy does not work – or, at best, that there is no way to demonstrate its efficacy in treating mental illness. The danger is that this powerful form of treatment could be swept aside in current debates about which forms of mental health care are evidence based and therefore worth making available to those in need. Insurance companies, government agencies, and the pharmaceutical industry all push for mental health care that is brief, intermittent, and focused on quick fixes, despite the fact that many people struggle with emotional difficulties that can only be addressed over time using special psychodynamic skills. Modern psychodynamic therapy provides relief to people who are crippled with fear, haunted by past traumas, caught in repetitive patterns of unhappy relationships, and desperate to end lives of unbearable depression. It is often the only form of mental health care that gets people "unstuck" when other treatments have failed.

The science behind this clinical truth is elegantly displayed in this book edited by Dr. Levy, Dr. Ablon, and Dr. Kächele. A broad and rich compendium, *Psychodynamic Psychotherapy Research: Evidence-Based Practice and Practice-Based Evidence* brings the reader up to date on the latest developments in research while setting the agenda for further empirical work for decades to come. The chapters in this book, authored by international leaders in the field, provide an overview of our current understanding of how and for whom dynamic psychotherapy works. They also preview cutting-edge methods of studying behavioral and neural responses to psychodynamic interventions that promise to yield fresh and novel understandings of how dynamic treatments bring about therapeutic change.

This volume begins appropriately with two major reviews of the evidence base for dynamic psychotherapy. Shedler's chapter, from the original publication in the *American Psychologist*, is a rigorous overview of existing research and a critique of the myth that dynamic psychotherapy is not an evidence-based treatment. The chapter by Rabung and Leichsenring – a major update of their 2008 publication in the *Journal of the American Medical Association* – subjects their original work to stringent follow-up testing and expands upon their rigorous meta-analysis. The fact that these areas were originally discussed in highly prestigious journals at the center of academic discourse in medicine and psychology demonstrates the growing recognition of psychodynamic psychotherapies as empirically supported.

An essential question regarding treatment is whether psychodynamic therapy is effective for specific disorders. The book presents chapters that provide evidence for the efficacy of dynamic psychotherapy in treating the particular categories of mental illness that are most prevalent in the population – depression (Huber et al. Taylor) and anxiety (Slavin-Mulford and Hilsenroth) – as well as that most costly of illnesses, borderline personality disorder (Levy et al.). Far from the stereotype that psychodynamic treatments are appropriate only for the "worried well," a growing body of evidence points to their efficacy in dealing with the most pressing mental health problems of our time. Moreover, this book includes documentation of evidence that psychodynamic therapies foster enduring change that may decrease vulnerability to relapse.

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New methods allow us to investigate questions that were never dreamed of when psychodynamic treatments were developed or were at best only the subject of speculation. Chapters in this volume provide clear, accessible, and erudite discussions of tools in the domains of neuroimaging, brain chemistry, and cognitive science that are furthering our understanding of how the human mind processes thoughts and emotions in both adaptive and maladaptive ways. Although in its infancy, social neuroscience has begun to shed new light on such core aspects of psychodynamic theory as the unconscious and transference. Moreover, psychodynamic theory informs creative uses of these new technologies to study concepts such as empathy and attachment.

The most interesting question in the field is no longer *whether* dynamic psychotherapy works but *how* it works. The search for mechanisms or "active ingredients" that bring about therapeutic change has led investigators down a variety of creative and fruitful paths. Process research, once the province of single-case studies, can now be carried out on larger numbers of patients and treatment sessions using sophisticated methods that have been part of the research conversation for more than a quarter century. In this volume, Smith-Hansen and colleagues review this work and chart new avenues for future research. Other chapters focus on the particular roles of transference interpretation, attachment, the therapeutic alliance, and defense interpretation in fostering therapeutic change.

The very foundations of psychotherapy research are called into question in a provocative chapter by Luyten et al. They point out that many of the assumptions of prior psychotherapy studies are borrowed from drug trials and do not adequately address issues specific to talking therapies. They call for a new research paradigm that encompasses a dialectic between relatedness and self-definition that they posit to be at the core of human development.

The editors have wisely included an entire section on single-case studies. To be sure, modern empirical methods have shed light on the limitations of single-case approaches to understanding treatment. Indeed, concepts such as the "schizophrenogenic mother" grew out of work with individual patients that were never submitted to rigorous empirical tests before being used to inform treatment. Such unfortunate episodes in the history of mental health have prompted many to recoil from individual case studies. However, such an extreme reaction risks throwing out the proverbial baby with the bath water. The fact remains that many of the most creative and innovative hypotheses that are eventually verified by empirical research are born in the consulting room out of practitioners' work with individual patients. Levy, Ablon, and Kächele include chapters that describe innovative approaches to single-case study and in this way make the clear statement that this mode of generating new knowledge remains a legitimate and vital part of psychotherapy research.

Finally, the book incorporates chapters that explain state-of-the-art methods for assessing change in psychodynamic therapy. Such measurement tools are essential to our efforts to increase the evidence base for psychodynamic treatments of all varieties. Moreover, they offer the potential to challenge our preconceptions of what constitutes change in therapy and how it is fostered. In the future, we would do well to expand our work on change to study how it is that *different* active ingredients – be they transference interpretations, replacement of dysfunctional automatic thoughts, or fluoxetine – can offer relief to people suffering from the *same* ailments. It is here that frameworks such as dynamical systems theory (chaos theory) may help us understand illness and maladaptive behaviors as "attractor states" that may be disrupted and reorganized by any of a number of interventions [1].

Of course, we will welcome the day when the case for the efficacy of psychodynamic psychotherapy no longer needs to be made. We will welcome a time when scientists, practitioners, and policy makers no longer need to be introduced to or reminded of the empirical support for this powerful form of mental health care. In the meantime, books such as this one are invaluable resources for students, practitioners, and researchers alike.

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Reference

1. Thelen E, Smith LB, Lerner RM, Damon W. Dynamic systems theories. In: Handbook of child psychology. Theoretical models of human development. Vol 1, 6th ed. Hoboken: Wiley; 2006. pp 258–312.

Preface

The Psychodynamic Psychotherapy Research: Evidence-Based Practice and Practice-Based Evidence continues the important work of our first book published in 2009 (Handbook of Evidence-Based Psychodynamic Psychotherapy: Bridging the Gap Between Science and Practice), presenting in one volume significant developments in research in psychodynamic psychotherapy by excellent clinician researchers. The demand for ongoing research initiatives in psychodynamic psychotherapy from both internal and external sources has increased in recent years, and this volume continues to demonstrate the efficacy and effectiveness of a psychodynamic approach to psychotherapeutic interventions in the treatment of psychological problems. Research continues to help all clinicians think critically about our clinical interventions so we can avoid losing ourselves in our subjectively preferred ideas and concepts without empirical support. Psychotherapy in general and psychodynamic psychotherapy specifically need to sustain their involvement in the evidence-based movement within the larger healthcare system. We recognize and value the importance of clinical supervision in refining and validating interventions within psychodynamic psychotherapy, and we offer the work in this volume in the spirit of ongoing discussion between researchers and clinicians about the value of specific approaches to specific patients with specific psychiatric and psychological problems. Multiple forms of treatment interventions have been developed over the past 50 years, and we support the current emphasis on personalized medicine. We offer the work in this volume in the spirit of including psychodynamic psychotherapy in the effort to advance understanding of finding the right treatment for the right patient.

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Acknowledgments

We are pleased to once again thank many supporters of our work in the Department of Psychiatry at Massachusetts General Hospital. Dr. Jerrold Rosenbaum, the Series Editor, has continued to assist our efforts in creating this volume specifically and has also led efforts to develop the practice, teaching, and study of psychodynamic psychotherapy within the department. Toward this end, we are excited that Dr. Bob Waldinger, who wrote the Foreword to this volume, has joined our department as Director of the Center for Psychodynamic Therapy and Research.

We are grateful to the larger psychodynamic community, which has welcomed our first volume and encouraged us to continue our efforts resulting in this follow-up volume. The international community of psychodynamic clinicians and researchers, represented by more than 500 active members of a psychodynamic psychotherapy research listsery, has demonstrated sustained interest in the work of this book.

Springer Science+Business Media and our Editor, Richard Lansing, have encouraged us to produce this volume and offered the opportunity to continue our efforts in a series of follow-up volumes over the next years. We are pleased with their support and their successful efforts to promote the book around the globe.

Our Psychotherapy Research Program seminar has stimulated ideas, questioned some current psychodynamic wisdom, and encouraged us to continue to publish psychodynamic research that refines current practice. We appreciate the interest of Jeremy Nahum, John Kelley, Helen Riess, Josh Roffman, and Ira Lable. Special thanks to Josh Roffman, for volunteering his time reviewing the neuroscience chapters that have been included.

Thanks to Horst Kächele: this volume includes much work from European researchers who have labored over the years to produce research that has perhaps not been adequately recognized in the United States.

And, of course, we are grateful to the committed clinician researchers whose life work comprises the chapters included in this volume. We know firsthand how arduous and at time thankless this crucial work is, so we are glad to showcase the work of such talented and committed professionals. We appreciate the continued contributions of those who offered chapters in 2009 and welcome the new authors.

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Introduction, Part I Psychodynamic Psychotherapy Research: Process, Outcome, and the Brain

This second volume of empirical research in psychodynamic psychotherapy attests to the enduring efforts of an international group of dedicated clinician researchers intent on studying modern psychodynamic psychotherapy approaches to relieving suffering for many patients. This volume follows in a long tradition of books that have offered evidence of the efficacy and effectiveness of psychodynamic psychotherapy treatment [1–7]. The book includes several chapters reflecting research that is currently being conducted in Europe. We are grateful to Horst Kächele who is responsible for helping to include much of this work, probably long overdue in the United States.

Before presenting a review of the chapters in the book, it is important to note that the psychotherapy research culture remains controversial, filled with scientific and political tension. The controversy reflects differing opinions about what research designs and, therefore, research findings should be considered legitimate science. Controversy also hovers around whether psychodynamic treatment deserves a place at the table in an era of emphasis on brain-based interventions.

Some in the research community still believe that only randomized controlled trials (RCTs) represent legitimate tests of treatment efficacy. In the past decade, the prominence of the RCTs as the design of choice has spawned numerous manualized treatments that can be tested in short-term therapy trials. At its worst, this type of either-or thinking leads to narrow definitions of which treatments should be considered empirically supported, empirically validated, or evidence based. Many clinicians and researchers, including ourselves, have vehemently opposed such a singular view. Among them, Wachtel [8] states, "These criteria, moreover, were remarkably tendentious, a set of standards that constituted an ideological litmus test much more than any genuine requirement of adherence to the scientific method...the problem was not that the various task forces that advocated for these shifting labels and fixed criteria were attempting to impose scientific discipline on an unwilling, antiscientific community of practitioners; it was that the recommendations of these task forces were not sufficiently respectful of the canons of science." Both our previous volume and this current volume are testimonies to the importance of considering multiple methods and research designs to inform clinicians making treatment decisions. Both RCTs and naturalistic designs are flawed and yet both have made significant contributions to the literature and knowledge base about what works for whom.

Perhaps the most important question that psychotherapy researchers have been struggling with is not what works for whom, but why and how a given treatment works. Psychotherapy process research remains our primary interest and has emerged as a significant focus of much psychodynamic research recently. Examining the specifics of what actually occurs within a treatment hour as determined by objective raters and relating these processes to outcome hold the most promise for unlocking the mysteries of the very effective intervention we call psychotherapy. Through decades of diligent process research, the importance of the therapeutic relationship has emerged as the primary process

indicator and predictor of successful treatment [5, 9, 10]. (See Chapters 21, 23, and 24 in this volume.) However, researchers and clinicians alike still struggle with the question of whether the salient variables in all treatments are common factors which are responsible for change in psychotherapy. As this book attests to, as researchers, we continue our search for the therapeutic action of treatments, for the active ingredients that lead to change.

Many clinician researchers now agree that the emphasis of future research should be on isolating the principles and interventions of effective psychotherapy treatments [8, 11–13]. We are hopeful that research in psychodynamic psychotherapy and psychotherapy in general will continue to move further away from strict adherence to singular schools of thought in favor of research aimed at determining the treatment processes that lead to sustained change [14]. In Chapter 23 by Smith-Hansen et al. on process research in this book, we make several recommendations for future research, drawing on ideas of Kazdin [13] and Luyten's Commentary on the coming of age of psychoanalytic treatment for the section on Theory, Technique, and Process in this book. In order to move the field forward in attempting to develop evidence-based interventions that will lead to treatment processes that sustain change in our patients, we recommend:

- 1. Examining treatment process in both manualized and naturalistic treatments, both in single-case and group-level studies.
- 2. Using theory as a guide and testing theoretically powerful questions.
- 3. Including more frequent measurements during treatments in order to examine change over time (e.g., what changes first, what changes next) and including extended follow-up periods to capture changes occurring after termination.
- 4. Examining the role of multiple possible mediators and mechanisms in a single study.
- 5. Developing models that capture the complex interactions of relational and technical factors.
- 6. Using sophisticated statistical models as alternative methods for examining issues related to causation.
- 7. Examining the bi-directional, reciprocal influences between therapist and patient in contrast to an outdated notion that the therapist exerts a unidirectional influence on the patient.
- 8. Developing paradigms to study therapist responsiveness to pre-existing patient characteristics and to moment-to-moment changes in the session.

As Jorgensen [14] has reminded us, "It is impossible to pinpoint any single factor that is crucial in every therapy. What is needed is a non-dogmatic, multiple factor model that successfully incorporates the knowledge obtained from the many existing theories of psychotherapy-induced change." The current volume provides wonderful examples of how such recommendations can be applied to the study of multiple populations and problems.

If a focus on RCTs defined the previous decade of psychotherapy research and a focus on process research defines the current decade, then an emphasis on genetics and neuroscience will likely define the decade to come. Determined not to be late to the game this time, it is crucial for psychodynamic psychotherapy to stake its rightful claim as a brain-based treatment. We, therefore, emphasize in this volume the contributions of several researchers who do just that.

The reader will find up-to-date sections on: Outcome Research; Theory, Technique, and Process; Single-Case Studies; and Assessing Change. They all include novel designs and thought-provoking results. Besides, the reader will also find a rich section on Neurobiology of Psychotherapy that includes coverage of neuroimaging and biomarkers, discussing cutting-edge studies offering the possibility of understanding how the brain is affected by interventions based on psychodynamic principles and treatment techniques. Finally, the reader will enjoy useful appendices containing new and updated measures and practical information.

Outcome Research

The section on Outcome Research includes two meta-analyses, one by Shedler and one by Rabung and Leichsenring, which provide clear evidence of the efficacy of psychodynamic psychotherapy. Rabung and Leichsenring's chapter emphasizes treatments in long-term psychodynamic psychotherapy and follows their earlier meta-analysis of short-term psychodynamic treatments that appeared in our first volume. Shedler's chapter solidifies the claim that "empirical evidence supports the efficacy of psychodynamic psychotherapy." The two chapters in this volume and the earlier work on short-term treatments provide empirical data in support of psychodynamic psychotherapy as an equal to other evidence-based treatment orientations. Several chapters support the claims that psychodynamic psychotherapy is helpful to patients in psychological distress, and Shedler's chapter solidifies the claim empirically, demonstrating effect sizes equal to those of other treatment orientations. Further review of the important chapters in this section is very thoroughly done in Jeremy Safran and Alexandra Shaker's excellent invited Commentary.

Theory, Technique, and Process

Patrick Luyten, in his invited Commentary of the Theory, Technique, and Process section, points out that "as is demonstrated in each of these chapters, psychoanalytic treatment research not only may inform clinical practice, but also has the potential to change psychoanalytic practice. In fact, there is no point in denying that psychoanalytic practice has already changed under the influence of research findings, both explicitly and implicitly, and will continue to be changed by research." Luyten invites us to read each of the chapters with eager anticipation as he believes that each reflects "the coming of age of psychoanalytic treatment research." Luyten's Commentary reviews each chapter while placing it in the larger context of the intensifying emphasis on process research. He connects the chapters to other research initiatives and findings in his sweeping review of their meaning for psychodynamic psychotherapy treatments. He also includes an important section on implications for psychoanalytic research and training.

In their chapter, Wong and Hayward teach us about implicit emotional learning as the foundation of psychoanalytic treatment, partially through the use of a clinical case to demonstrate their research findings. The chapter integrates learning theory with psychoanalytic principles.

Single-Case Studies

Three chapters reflect the added value of research to traditional intensive supervisory efforts when studying a single psychoanalytic case. As Fonagy and Moran [15] said in 1993, "The attention to repeated observations, more than any other single factor, permits knowledge to be drawn from the individual case and has the power to eliminate plausible alternative explanations." Horst Kächele, one of the earliest psychoanalyst researchers, offers an in-depth understanding of the entirety of a psychoanalytic case with over 500 sessions. In their writing, Kächele, Schachter, and Thomä, all psychoanalysts, create a research chapter with analysts' emotional sensibilities. We are treated to multiple levels of intensive empirical analysis of variables of interest to analytic thinkers and clinicians. In the process, we feel inspired to make use of tape recordings of psychoanalyses and long-term psychodynamic psychotherapies. This chapter will be riveting for any analytic or dynamic thinker interested in learning about the value of empirical research for clinical practice.

R. Levy et al. demonstrate the richness of the understanding of the therapeutic process of a single psychotherapy session using an empirical measure, the Psychotherapy Process Q-set [16]. The chapter also offers a partial explanation of the rating procedure and the thinking of the particular raters, R. Levy and Ablon.

Katzenstein et al. utilize the Psychotherapy Process Q-set to conduct an intensive empirical study of a long-term psychotherapy treatment that reveals specific patient—therapist repetitive interaction structures that are critical to positive outcome. Of course, patient and therapist have their subjective ideas about the critical components of the therapy, but the chapter offers the view of an impartial other. Interestingly, in this case, there are verbatim statements from the patient that suggest her idea about the critical processes that helped her change conforms to that of the research team.

Assessing Change

The Assessing Change section contains three chapters that focus on specific instruments available to researchers. Siefert and DeFife provide a helpful guide to new researchers by describing ten particularly useful outcome measures commonly used in psychotherapy research. DeFife and Westen discuss the current debate about the use of objective research measures in assessing patients, in this case patients with personality disorders, during the initial evaluation. They end by suggesting a structured clinical interview for assessing patients with personality disorders that they believe contributes to an effective treatment approach. And Hörz et al. introduce the Structured Clinical Interview of Personality Organization, derived from Kernberg's ideas, that has been shown to be effective in assessing severity and change in personality pathology.

Neuroimaging, Biomarkers, and Neurobiology

As Roffman, Gerber, and Glick state in their chapter, "Despite decades of parallel progress in psychodynamic psychotherapy and neuroscientific research, until recently, there was little meaningful interaction between these fields of study... In the last ten years, though, a remarkable synergy between these fields has begun to emerge, with powerful (and overwhelmingly positive) implications for the future of psychotherapy." Toward this end, the section on Neurobiology of Psychotherapy contains two reviews of findings from neuroimaging studies. Roffman, Gerber, and Glick completely update their chapter from our first book and take us on a tour of broad-based psychotherapy-related neuroimaging findings. After reporting the updated findings, they discuss the implications for the future of psychotherapy. Viamontes' chapter reviews neuroimaging findings with a focus on the neurobiology of emotions and memory and then specifically discusses the neural substrates of adaptive change in psychotherapy. These two chapters complement each other well and offer the reader an interesting brain-based view into the future. Eric Kandel [17] has recently stated that "Analysis is the most elaborate and nuanced view of the mind that we have....But analysis is not empirical and we need independent evidence for two points – whether it works (under what circumstances and for whom), and, if so, how it works, that is, what alteration does it produce in the brain? Neurobiology should join forces with psychoanalysis to do this. I think it would be an enormous advance."

In a chapter from a group of Finnish researchers, Lehtonen et al. report on the effects of psychodynamic psychotherapy on the serotonin transport (SERT) function in depressive patients. Lehtonen et al. state that "these findings warrant a conclusion that there is a sub-group of patients in the major depression spectrum, especially those showing signs of rejection sensitivity and other atypical symptoms, whose responses to dynamic psychotherapy are reflected in an increase in SERT binding. Patients with classic symptoms of major depression show similar clinical improvement, but no

changes in SERT binding." Although the findings emerge from a study with very few subjects, the suggestion that dynamic psychotherapy has an impact at the molecular level is an exciting one for the future of research and for the enduring value of dynamic treatment. And, in a brief chapter, again from Finland, Karlsson's 2010 PET study demonstrates an increase in serotonin 1A receptors after 6 months of psychodynamic psychotherapy, whereas a control group treated with SSRIs did not show serotonin receptor changes. Of course, we cannot draw firm conclusions from this penetrating and innovative work, but the findings indicate that psychotherapy has a direct impact on the brain in at least some depressed patients. And, as Karlsson states, "the artificial separation between interventions targeting either brain or mind is outdated. Psychotherapy clearly changes brain functions and there is evidence that medication changes abilities traditionally considered to belong to the mind as distinct from the brain."

In a study with similar aims described the chapter by Ghaznavi et al., psychodynamic psychotherapy research is shown to be central to the larger field of psychiatry. The study hopes to determine the specific areas of the brain that are affected by psychodynamic psychotherapy interventions, in this case a 16-session manualized CCRT treatment for depression. The eventual aim is to identify biomarkers in patients that suggest that treatments based on psychodynamic principles have an increased likelihood of being helpful. If neuroimaging of subjects discovers specific, repetitive pathways in the brain that are affected differentially in patients, it would be possible to determine which patients are pre-disposed toward psychodynamic treatments by administering relatively simple neuroimaging pre-tests. It is the hope of Ghaznavi, Witte, Levy, and Roffman that findings will bring us closer to the aims of the new emphasis on personalized medicine, i.e., finding the right treatment for the right person.

In a further brain-based chapter, Glen Gabbard takes us on a tour of neurobiologically based treatment principles for patients with Borderline Personality Disorder (BPD). This accessible and applicable chapter reminds us that the characteristics of such patients often derive from early childhood trauma, which demands that psychotherapy treatments be sustained over an extended period of time. Gabbard expertly reviews the principles and interventions that can be utilized in current treatments based on our knowledge of brain function in patients with BPD. In a related chapter, Buchheim et al. report findings on neural correlates of attachment dysregulation from studies with BPD patients. Buchheim and her colleagues also suggest that the specific neural findings may provide evidence of the possible mechanisms related to the fearful intolerance of aloneness in these patients.

Finally, Andrew Gerber, in his invited Commentary on the chapters in the Neurobiology of Psychotherapy section, offers three principle mechanisms of action in psychotherapy, anchored in what he says is known about both psychotherapeutic change and neural mechanisms of learning. He also warns us about five common pitfalls in the use of neuroimaging studies in making statements relevant to psychotherapy. His Commentary functions as an overview of the current state of research and a view into one expert's suggestions for future research initiatives. It is clearly an exciting time for the collaboration of psychodynamic psychotherapy and neuroscience. This research is only one way in which psychodynamic psychotherapy has taken its place in the search to discover the right treatment for the right person.

Appendices

Finally, there are two important appendices that add further interest and value to this collection. The first displays the Child Psychotherapy Q-set, (CPQ) published for the first time in English by Celeste Schneider, a student of Enrico Jones, as well as the adult version of the Psychotherapy Process Q-set, revised in April 2009, by the members of our Psychotherapy Research Program in the Department of Psychiatry at Massachusetts General Hospital. The revised PQS-R is also published for the first time.

The second appendix, a list of Manualized Treatments in psychodynamic psychotherapy that have been used for research purposes, is introduced by Kächele et al., who reviews the history and role of manualized treatments. They conclude with a clear statement that our clinical judgment must have the last word in determining the appropriateness of treatments rather than allowing adherence to strict empirical research findings to be the final factor in treatment choice.

Conclusion

We hope these chapters stimulate ideas and questions and lead to further important research. And we hope that clinician researchers will be inspired by the hard work and complex findings embedded in this volume. We three editors feel inspired by the efforts of our contributors and appreciate the willingness of all to participate. We hope the book stands as a call to action for further research in the spirit of finding the right treatments for the right people. Our capacity to improve our ability to help patients thrive and be relieved of psychological distress depends on such efforts.

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References

- 1. Hubble MA, Duncan BL, Miller SD. The heart and soul of change: what works in therapy. Washington, DC: American Psychological Association; 1999.
- Lamb W, Jones E. The effectiveness of psychoanalysis and longer-term psychodynamic psychotherapy: a metaanalysis. Paper presented at the American Psychoanalytic Association meeting, Jan 2009.
- 3. Leichsenring F, Rabung S. Analyzing effectiveness of long-term psychodynamic psychotherapy. J Am Med Assoc. 2008; 300: 1551–1565.
- 4. Shedler J. The efficacy of psychodynamic psychotherapy. Am Psychol. 2010; 65: 98–109.
- 5. Wampold BE. The great psychotherapy debate: models, methods, and finding. 2nd ed. New York: Routledge; 2008.
- Levy R, Ablon SJ. Handbook of evidence-based psychodynamic psychotherapy: bridging the gap between science and practice. New York: Springer Science+Business Media; 2009.
- Leichsenring F. Are psychodynamic and psychoanalytic therapies effective? A review of empirical data. Int J Psychoanal. 2005; 86: 841–868.
- 8. Wachtel PL. Beyond "ESTs": problematic assumptions in the pursuit of evidence-based practice. Psychoanal Psychol. 2010; 27: 251–272.
- 9. Safran JD, Muran CJ, Proskurov B. Alliance, negotiation and rupture resolution. In: Levy RA, Ablon JS, editors. Handbook of evidence-based psychodynamic psychotherapy: bridging the gap between science and practice. New York: Springer Science + Business Media; 2009.
- 10. Beutler LE, Castonguay LG, Follette WC. Therapeutic factors in dysphoric disorders. J Clin Psychol. 2006; 62: 639–647.
- 11. Blatt SJ, Luyten P. Reactivating the psychodynamic approach to classify psychopathology. In: Millon T, Kuegar R, Simonsen E, editors. Contemporary directions in psychopathology: toward the DSM-V, ICD-11, and beyond. New York: Guilford Press; 2010. pp 483–513.
- 12. Blatt SJ, Zuroff DC, Hawley LL, Auerbach JS. Predictors of sustained therapeutic change. Psychother Res. 2010; 20: 37–54.
- 13. Kazdin AE. Mediators and mechanisms of change in psychotherapy research. Annu Rev Clin Psychol. 2007; 3: 1–27
- Jorgensen CR. Active ingredients in individual psychotherapy: searching for common factors. PSA Psychol. 2004;
 24: 516.
- 15. Fonagy P, Moran G. Selecting single case research designs for clinicians. In: Miller NE, Luborsky L, Barber JP, Docherty JP, editors. Psychodynamic treatment research: a handbook for clinical practice. New York: Basic Books; 1993. pp 62–95.
- 16. Jones EE. Therapeutic action: a guide to psychoanalytic therapy. Northvale: Aronson & Co; 2000.
- 17. Arehart-Treichel J. Analysis can use dose of neuroscience, says Kandel. Psychiatr News. March 4, 2011; 46(5):1.

Introduction, Part II European Psychotherapy Research: The History, the Current State, and Recommendations for the Future

The dating of the beginning of systematic psychodynamic psychotherapy research may depend on one's outlook on what constitutes research. Freud and Breuer were explorers charting new territory when they published the case studies on hysteria in 1895. However, Freud was aware of the necessity of systematic data collection when, in the 1920s, he asked his disciples to collect many deeply analyzed cases to prove the point he attacked Jung on [1].

The development of a scientific field of psychodynamic psychotherapy research can be dated to the year 1930 when the psychoanalyst Fenichel produced 10-year outcome statistics on more than 700 patients being treated at the Berlin Psychoanalytic Institute based on therapists' evaluations [2]. The *British Medical Journal* discussed psychotherapy outcome as early as 1935, reporting on 500 cases [3]. However, before the field really started to blossom, the shadows and nightmares of the Hitler Regime all over Europe – except Britain – wiped out the early tentative steps, and made qualified academics from psychiatry and psychology leave the burned ground and settle in large numbers in North America.

In post-war continental Europe, psychotherapy has been very much involved in fighting the sequelae of the war, of the concentration camps, of the separation of children from their parents. Many countries developed a rich clinical culture, setting priorities that would not foster the development of formal research. Hence, it may not be by chance that the year 1952 not only saw Hans-Juergen Eysenck's [4] powerful attack on the then prevailing psychoanalytic therapies but also listened to softer voices from the British psychoanalyst Edward Glover [5] pleading for formal research in psychoanalysis. The North American psychiatrist and psychoanalyst Lawrence Kubie [6] discussed problems and techniques of psychoanalytic validation in a first symposium on psychoanalysis as a science [7].

In post-war Germany, where the generation that had been trained during the Third Reich had to re-establish psychotherapy as a field, the early 1950s marked the move toward systematic research, mainly naturalistic. One of the very first German outcome studies was published by Annemarie Dührssen in 1953, reporting on ratings of therapists of a sample of patients treated at the Berlin Institute of Psychogenic Disorders [8]. At the Munich University policlinic, Cremerius [9] reported on over 600 cases that had been followed up for many years.\(^1\) One must appreciate the self-critical outcome study of the Norwegian psychoanalyst Harald Schjeldrup studying lasting effects of the psychoanalytic treatments he provided to his 28 patients before the German invasion had set an end to his clinical practice [10]. He had been professor and director at the Institute of Psychology since 1922. He realized that "a number of statistics on the results of psychoanalytic treatments have been published. But the figures do not provide an adequate basis for an assessment of the effectiveness of analytic therapy, either absolutely or in comparison with other forms of psychotherapy" [10].

Annemarie Dührssen reported on follow-up data on 1,004 patients [11]. These findings clearly contributed to the efforts to include psychoanalytic-oriented treatments of neurotic disturbances in

¹This study is even highly praised by Eysenck and Beech [13] for the relentless pursuit of long-term follow-up.

insurance coverage for the general population. Comparing the effectiveness and efficacy of the treatments to a control sample strengthened the case [12]. All but 15% of patients showed improvement, the largest group showing very considerable improvement maintained at follow-up. A substantial reduction in insurance claims for physical problems was associated with psychoanalytic treatment in the 5-year period following therapy.

Though we can trace a few happy awakenings of psychotherapy research after the war in Europe as well, the appearance of the first edition of *the Handbook of Psychotherapy and Behavior Change* by Bergin and Garfield in 1971 confronted the European academic psychotherapy community with the striking fact that a field had developed with only one European representative as author of one of the chapters of the Handbook: HansJuergen Eysenck [13]. Trying to understand the European share in the new field, I went through the outcome chapter by Bergin [14]. The result of this search was a meager one: out of about 180 references, some 15 derive from European stock, British and continental:

Fenichel's [2] report was referred to in detail, also the aforementioned *BMJ* discussion from 1935 [3]; the various contributions by Eysenck, especially his negative but very seminal paper on "The Effects of Psychotherapy" [4], were cited. There were also some behavior therapists like Gelder and Marks [15] from the Maudsley Hospital on desensitization; Jonckheere [16], a Belgian colleague, from 1965 reporting on 72 neurotic patients treated with a variety of interventions; the Norwegian psychology professor Harald Schjelderup [10]; another Scandinavian named Kringlen [17] on long-term prognosis of obsessional neurosis; and just a little bit of David Malan, an unpublished manuscript from the year 1967. It did not cite the flagship study of Malan's brief psychotherapy [18].

Bergin's overview missed a few European references that marked the slow beginnings of European psychodynamic treatment research [9, 18–20].

When, after many battles, the University in Vienna opened the Institute for Depth Psychology and Psychotherapy in 1972, Hans Strotzka, as newly elected chair in his introductory lecture, pointed out that "in contrast to all other comparable countries, Austria is lacking nearly completely any effort to objectify the indications for psychotherapeutic treatments and the selection of adequate treatment methods. It lacks any effort to objectify the course of treatment and its outcome" [21]. Strotzka made the comparison to the medical practitioner who solely based on his own experience would select the appropriate antibiotics for his patients. He left no doubt that this situation would not be tolerated in somatic medicine and thus claimed that the field of psychotherapy could not continue to support the highly individualistic notions prevailing in Austrian psychotherapists' minds. He strongly invoked the social responsibility to engage in empirical research [21]. In the same year at a meeting of the European psychoanalytic associations, he addressed the problem that the kind of patients treated in psychoanalysis cannot be referred to by reading the (I quote him) "excellent Handbook, especially the chapters by Garfield and by Luborsky. As cultural aspects are of high relevance, the validity of the American results has to be considered very restricted for central European populations" [22].

German populations were the object of a few naturalistic psychodynamic studies in the 1970s: the Heidelberg follow-up project [23, 24]; the Berlin study [25]; the Stuttgart follow-up study [26]. All these efforts were directed at evaluating the clinical reality; even the notion of a randomized-controlled experiment was not yet in researchers' minds.

This milestone for the development of formal psychodynamic research was provided by the first RCT comparing psychodynamic focal therapy to client-centered therapy conducted by A. E. Meyer at the Hamburg Collaborative Research Program [27]. The findings largely confirmed the equivalence of both kinds of treatment with small advantage for the client-centered modality. However, at the time of the 12-year follow-up, the differences were more salient in terms of matching of patients and therapists [28].

In Britain, the research group around David Shapiro in Sheffield had implemented a RCT comparing the effectiveness of cognitive-behavioral and psychodynamic-interpersonal psychotherapy [29]. Although they secured interesting differences of various dosages with respect to the severity of depression, they also became quite critical about the use of the drug-metaphor for psychotherapy [30].

A salient feature of European psychotherapy research is intricately tied up with the vast diversity of the service delivery systems. It may come as no surprise that generally the more northern countries in Europe (Scandinavian) have deployed more systematic efforts on psychotherapeutic care and its evaluation [31].

Specific turning points for the development of formalized psychodynamic psychotherapy research were the first international conference on Psychoanalytic Process Research Strategies in 1985 and the international meeting of the Society for Psychotherapy Research in Ulm in 1987. Research programs from a variety of European countries were presented demonstrating that one of the most frequent activities was process research [32]. Research on non-verbal interaction was much appreciated [33–35].

The development of psychodynamic psychotherapy research in the 1990s was characterized by a growing diversification of research approaches. Process-outcome research, large scale multi-site studies on the treatment of specific diseases, and health care system research became the leading paradigms [36].

Detailed process research on multiple cases combined with sophisticated outcome measurement became state of the art [37, 38]. Other studies focused on specific disorders like eating disorders [39] and Crohn's disease [40]. The multi-center study on the psychodynamic treatment of eating disorders initiated by the Center for Psychotherapy Research in Stuttgart included a wide range of inpatient and outpatient modalities all over Germany [41]; it also was implemented in many European countries [42]. This study paradigmatically involved academics and non-university institutions, signaling a move to large-scale network operations.

The present European situation is marked by a need to comply with the requirements of Evidence–Based Medicine. The meta-analysis by Grawe and his co-authors [43] ranking behavior therapy as the first line treatment and psychodynamic therapy as a second choice motivated intensive efforts of psychodynamic psychoanalytic researchers. The results of these recent efforts are documented in this volume.²

The future is always difficult to predict. The most recent developments are connected to what Ken Howard in 1987 termed consumer-oriented psychotherapy research. We need to understand the contingencies between patients' needs and therapists' competence in order to better serve these needs. It is obvious from the chapters in this volume that psychodynamic treatment research has made major advances in this direction.

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References

- 1. Freud S. From the history on an infantile neurosis. SE vol XVII; 1918. pp 1–122.
- Fenichel O. Statistischer Bericht über die therapeutische T\u00e4tigkeit 1920–1930. In: Rad\u00e9 S, Fenichel O, M\u00fcller-Braunschweig C, editors. Zehn Jahre Berliner Psychoanalytisches Institut. Poliklinik und Lehranstalt. Wien: Internationaler Psychoanalytischer Verlag; 1930. pp 13–19.
- 3. Luff MC, Garrod M. The after-results of psychotherapy in 500 adult cases. Brit Med J. 1935; 2: 54-59.
- 4. Eysenck HJ. The effects of psychotherapy: an evaluation. J Consult Psychol. 1952; 16: 319–324.
- 5. Glover E. Research methods in psycho-analysis. Int J Psychoanal. 1952; 33: 403-409.
- 6. Kubie LS. Problems and techniques of psychoanalytic validation and progress. In: Pumpian-Mindlin E, editor. Psychoanalysis as science. The Hixon lectures on the scientific status of psychoanalysis. New York: Basic Book; 1952. pp S 46–124.
- Pumpian-Mindlin E, editor. Psychoanalysis as science. The Hixon lectures on the scientific status of psychoanalysis. New York: Basic Books; 1952.
- Dührssen A. Katamnestische Untersuchungen bei Patienten nach analytischer Psychotherapie. Z Psychother Med Psychol. 1953; 3:167–170.
- 9. Cremerius J. Die Beurteilung des Behandlungserfolges in der Psychotherapie. Berlin: Springer; 1962.
- 10. Schjelderup H. Lasting effects of psychoanalytic treatments. Psychiatry. 1955; 18: 109–133.

² Some of the chapters included here are based on presentations at the conference on Psychoanalytic Process Research Strategies III in Ulm, June 2009.

- 11. Dührssen A. Katamnestische Ergebnisse bei 1004 Patienten nach analytischer Psychotherapie. Z Psychosom Med. 1962; 8: 94–113.
- 12. Dührssen AM, Jorswieck E. Eine empirisch-statistische Untersuchung zur Leistungsfähigkeit psychoanalytischer Behandlung. Nervenarzt. 1965; 36: 166–169.
- Eysenck HJ, Beech HR. Counter conditioning and related methods. In: Bergin AE, Garfield SL, editors. Handbook of psychotherapy and behavior change. New York: Wiley; 1971. pp S 543–611.
- 14. Bergin A. The evaluation of therapeutic outcomes. In: Bergin AE, Garfield SL, editors. Handbook of psychotherapy and behavior change. New York: Wiley; 1971. pp S 217–270.
- 15. Gelder MG, Marks IM, Wolff HH. Desensitization and psychotherapy in the treatment of phobic states: a controlled inquiry. Br J Psychiatry. 1967; 113: 53–73.
- 16. Jonckheere P. Considerations sur la psychothérapie. Acta Neurologica et Psichiatrica Belgica. 1965; 65: 667-684.
- 17. Kringlen E. Obsessional neurosis: a long term follow up. Br J Psychiatry. 1965; 111: 709.
- 18. Malan DH. A study of brief psychotherapy. London: Tavistock; 1963. German version: Psychoanalytische Kurztherapie. Eine kritische Untersuchung. Bern/Stuttgart: Huber/Klett; 1965.
- 19. Beckmann D, Richter HE, Scheer JW. Kontrolle von Psychotherapieresultaten. Psyche. 1969; 23: 805-823.
- 20. Boor C de, Künzler E. Die psychosomatische Klinik und ihre Patienten. Stuttgart: Klett; 1963.
- Strotzka H. Soziologische Kategorien psychoanalytischer Patienten. In: Strotzka H, editor. Neurose, Charakter und soziale Umwelt. Beiträge zu einer speziellen Neurosenlehre. Munich: Kindler Taschenbücher; 1973. pp 179–194
- 22. Strotzka H. Die soziale Verantwortung des Psychotherapeuten. In: Strotzka H, editor. Neurose, Charakter, soziale Umwelt. Kindler Taschenbücher, München: Kindler Taschenbuecher; 1973. Pp 203–214.
- 23. Kordy H, von Rad M, Senf W. Success and failure in psychotherapy: hypotheses and results from the Heidelberg follow-up project. Psychother Psychosom. 1983; 40: 211–227.
- 24. Kordy H, von Rad M, Senf W. Time and its relevance for a successful psychotherapy. Psychother Psychosom. 1988; 49: 212–222.
- 25. Rudolf G. Untersuchung und Befund bei Neurosen und Psychosomatischen Erkrankungen. Materalien zum Psychischen und Sozial- Kommunikativen Befund (PSKB). Basil: Beltz; 1981.
- 26. Göllner R, Volk W, Ermann M. Analyse von Behandlungsergebnissen eines zehn-jährigen Katamneseprogrammes. In: Beese F, editor. Stationäre Psychotherapie. Goettingen: Vandenhoeck & Rupprecht; 1978.
- 27. Meyer AE. The Hamburg short psychotherapy comparison experiment. Psychother Psychosom. 1981; 35: 77–220.
- 28. Meyer AE, Stuhr U, Wirth U, Rüster P. 12 year follow-up studies of the Hamburg short psychotherapy experiment. Psychother Psychosom. 1988; 50(4): 192–200.
- Shapiro DA, Barkham M, Rees A, Hardy GE, Reynolds S, Startup M. Effects of treatment duration and severity
 of depression on the effectiveness of cognitive-behavioral and psychodynamic-interpersonal psychotherapy. J
 Consult Clin Psychol. 1994; 62: 522–534.
- 30. Shapiro DA, Harper H, Startup M, Reynolds S, Bird D, Suokas A. The high-watermark of the drug metaphor: a meta-analytic critique of process-outcome research. In: Russel RL, editor. Reassessing psychotherapy research. New York: Guilford; 1994. pp 1–35.
- 31. Kächele H, Pirmoradi S. Psychotherapy in European Public Mental Health Services. Int J Psychother. 2009; 13: 40 48.
- 32. Czogalik D. Interactional processes in psychotherapy. In: Beutler LE, Crago M, editors. Psychotherapy research: an international review of programatic studies. Washington: APA; 1991. pp 26–233.
- 33. Bänninger-Huber E. Prototypical affective microsequences in psychotherapeutic interaction. Psychother Res. 1992; 4: 291–306.
- 34. Krause R, Lütolf P. Facial indicators of transference processes within psychoanalytic treatment. In: Dahl H, Kächele H, Thomä H, editors): Psychoanalytic process research strategies. Berlin: Springer; 1988. pp 41–256.
- Merten J, Ullrich B, Anstadt T, Buchheim P, Krause R. Experiencing of affects and facial behavior in the psychotherapeutic process and its relation to success. Psychother Res. 1996; 6: 198–212.
- Kächele H, Kordy H. Outcome research. In: von Uexküll T, editor. Psychosom Med. New York: Urban & Schwarzenberg; 1993.
- 37. Strauß B. Empirische Untersuchungen zur stationären Gruppenpsychotherapie. Gruppenpsychother Gruppendyn. 1992; 28: 125–149.
- Tschuschke V, Catina A, Beckh T, Salvini D. Wirkfaktoren in stationärer analytischer Gruppenpsychotherapie. Psychother Psychol Med. 1992; 42: 91–101.
- 39. Herzog W, Deter HC, Vandereycken W, editors. The course of eating disorders. Long-term follow-up studies of anorexia and bulimia nervosa. Berlin: Springer; 1992.
- 40. Wietersheim J von. Die Wirksamkeit von Psychotherapie aus der Sicht von M. Crohn-Patienten. Ergebnisse einer multizentrischen Studie. Frankfurt: VAS-Verlag für akademische Schriften; 1999.
- Kächele H, Kordy H, Richard M, Studiengruppe MZ-ESS. Therapy amount and outcome of inpatient psychodynamic psychotherapy of eating disorders. Results of a multi center study across Germany. Psychother Res. 2001; 11: 239–257.
- 42. Kordy H, Krämer B, Palmer RJ, Papezova H, Pellet J, Richard M, Treasure J, COST Action B6. Remission, recovery, relapse, and recurrence in eating disorders: conceptualization and illustration of a validation strategy. J Clin Psychol. 2002; 58: 833–846.
- 43. Grawe K. Psychotherapieforschung zu Beginn der neunziger Jahre. Psychol Rundschau. 1992; 43: 132-162.

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