## Research program

For more three decades, my research has focused on different aspects of the therapeutic change, including variables related to the clients, therapists, therapeutic relationship, and treatment interventions. Over the last several years, this research has primarily taken place within the context of naturalistic settings. In other words, my lab is investigating how therapy is implemented, as well as what impact it has on clients, as it is practice in clinical routine. The overarching goal of this research is to foster connections between science and practice in psychotherapy.

As part of my attempt to build a stronger bridge between research and clinical work, I have been involved in the development of three practice research networks, which are aimed at facilitating active collaborations between clinicians and researchers in the conduct of scientifically rigorous and clinically relevant studies. Within the context of the Pennsylvania Psychological Association-Practice Research Network (PPA PRN), I have first been actively involved in designing and implementing four studies (three studies on the process of change and one on the feasibility and helpfulness of peer supervision) conducted by experienced therapists in day-to-day practice. Second, I have chaired the committee responsible for the creation and implementation of a practice research network at the psychology clinic of the Penn State University. Recognized as a leading model in the country, the clinic is now the site of several studies conducted by students and faculty members. Thirdly, and in collaboration with Ben Locke, Jeff Hayes, and Brett Schofield, I have been involved in the development of a practice-research infrastructure (the Center for Collegiate Mental Health, CCMH) that now includes more than 600 college counseling centers across the US. These centers are using the same instrument to assess their clients' clinical problems, allowing for the collection large amount of clinical data and the completion of several studies by students, faculty members, and clinicians. These three collaborative partnerships have allowed my students and I to be involved in studies examining a wide range of factors related to the utilization, process, and outcome of psychotherapy. For example, some of our empirical investigations have focused on predicting who will benefit more or less from therapy, who will return for new episodes of therapy, and who will do worst during treatment; on examining how much therapists differ in their ability to foster change, to facilitate attendance to therapy sessions, and to reduce drop out from therapy; on investigating the complex relationship between techniques (unique to particular approaches and common to all treatments) and outcome.

The development of such practice-research networks is one facet of what has been identified as "Practice-Oriented research" (POR). POR stands in contrast with research that is conducted in controlled settings, such as traditional randomized clinical trials. In addition of conducting several POR studies, I published numerous conceptual papers and chapters aimed at defining and fostering this research paradigm. With Michael Barkham, Wolfgang Lutz, Andrew McAleavey, Soo Jeong Youn, and Andrew Page, for example, I have reviewed major approaches and exemplars investigations that are characterizing this type of research for the sixth and seventh editions of the Bergin and Garfield's handbook of psychotherapy and behavior change. With Chris Muran, I also served as a guess editor for a special issue for *Psychotherapy Research* (which has since been published as a book by Taylor & Francis) aimed at providing advice to researchers and clinicians interested in conducting POR research in a diversity of naturalistic settings.

Furthermore, I have co-edited three books focusing on the overarching goal of establishing connections between psychotherapy research and practice. The first one (co-edited with Chris Muran, Lynne Angus, Jeff Hayes, Nick Ladany, and Tim Anderson and published by American Psychological Association) informs clinicians of research findings that are relevant to their clinical

practice while paying tribute to the legacy of major psychotherapy researchers around the world (the book also highlight the personal context within which these findings have been generated). The second book (which is now in its second edition, with Tom Otlmanns and Abbigail Powers Lott as co-editors) provides the field with expert reviews of the research on the nature and etiology of psychological problems and tackles the difficult but exciting challenge of deriving clinical implications (in terms of assessment, case formulation, and treatment plan) from this basic research. Designed as a textbook for graduate courses in abnormal psychology as well as a reference book for experienced clinicians, the book involves the pairing of influential scholars from two domains: psychopathology and psychotherapy. By providing a rigorous and distinctive source of knowledge (knowledge that is not tied to one theoretical orientation), psychopathology research is presented as an innovative pathway to enrich and expand current efforts toward evidence-based practice. The third and more recent book provides an updated list of empirically based principles of change that was first identified in a book with Larry Beutler described below. Co-edited with Michael Constantino and Larry Beutler, this book depicts in detailed how six expert therapists implement these principles of change in their day-to-day clinical practice. The book also includes exchanges between researchers and clinicians about different issues related to principles of change, including how they converge across different orientations, how helpful they are clinically, how they can be combined for different purposes (such as teaching and training), and which ones should be the focus of future research.

My empirical and scholarly attempts to build bridges between science and practice have been taking place within the broader context of a movement toward integration in psychotherapy. For most of its modern history, psychotherapy has been divided across theoretical lines. Within the last two decades, however, members of major traditions (psychodynamic, humanistic, and cognitive behavioral) have recognized points of convergence and complementarities across their divergent approaches, with the hope of achieving a more valid understanding of the process of therapeutic change, as well as improving the beneficial impact of psychotherapy, through the integration of these approaches.

Within this scientific and professional context, a major focus of my research has been on the investigation of the process of change of different theoretical orientations. In doing so, I have studied processes that are assumed to be unique to particular approaches, as well as factors that have been identified as common to most psychotherapy schools. Studies within this facet of my research program have suggested that part of the impact of effective forms of psychotherapy are due to variables that were once seen as specific to other orientations. For example, some of my studies show that improvement in cognitive behavioral therapy, the success of which has been assumed to rest on the effect of specific (leaning theory based) techniques, can be predicted by the quality of the therapeutic relationship and the intensity of the client's emotional experience (which are processes traditionally emphasized in psychodynamic and humanistic orientations). Based on these process findings, I have been involved in the development and testing of new forms of therapy aimed at improving existing therapeutic approaches by including elements of intervention empirically shown to be related to improvement. With my colleagues Thomas Borkovec and Michelle Newman, for example, I have conducted two NIMH funded studies on an integrative therapy for generalized anxiety disorders. Based in part on process findings mentioned above, this integrative treatment combines cognitive behavioral techniques with humanistic and psychodynamic interventions focused on interpersonal issues (including the therapeutic relationship) and emotional deepening. Process studies on this and other empirically supported treatments (e.g., cognitive therapy for GAD) are being conducted and will continue to be pursuit in

the lab, such as clarifying the role of the working alliance in therapy (is it facilitating change or is it providing a corrective experience, and is it more important for some clients than others?).

In addition to my empirical work, I have been involved in theoretical contributions addressing key issues in the integration movement. For example, I have co-edited (with Larry Beutler) a book delineating empirically based principles of change that are likely to cut across different theoretical orientations. This book (published by Oxford University Press) is the result of a major Task Force (sponsored by Division 12 of the American Psychological Association [APA] and the North American Society for Psychotherapy Research [NASPR]) aimed at addressing one of the major controversies in the field of clinical psychology. While it is now well established that psychotherapy works, there is still a major debate as to whether client improvement is due to the techniques used by therapist (mostly prescribed by specific treatment models) or to several elements of the therapeutic relationship (most of them assumed to be common to many forms of psychotherapy). This controversy was inadvertently fueled by two past APA Task Forces: one that identified what is now called the "Empirically-Supported Treatments" and the other that defined "Empirically-Supported Therapeutic Relationships". The goal of our Task Force was to demonstrate that change is not adequately explained by either the therapist's techniques or the therapeutic relationship alone, and that there is enough evidence to support principles of change that recognize the role of each of these variables. Involving some of the most well know experts in the field, the book provides practicing clinicians with scientifically derived principles of intervention to guide their work with four major clusters of clinical problems: depression, anxiety disorders, personality disorders, and substance use disorders. In addition, the book offers a list of specific directions for future research. Consistent with my research on the process of change in therapy, these directions have already begun to guide the research that my students and I are conducting and will conduct for many years to come.

As another conceptual contribution to the integration movement, I have edited (with Clara Hill) three books on components of change that cut across different orientations: insight (or the acquisition of a new perspective about self and others), corrective experiences in psychotherapy, and factors that make some therapists better than others (all three books have been published by the American Psychological Association). Based on nine conferences that Dr. Hill and I have organized at Penn State, each book reviews what is known conceptually, clinically, and empirically about the therapeutic issues they respectively focused on. Each book also presents a consensus that was achieved by some of the most influential psychotherapy researchers about the nature of these issues, the factors that facilitate them, their consequences in therapy, as well as future research directions. Dr. Hill and I are currently chairing a fourth series of Penn State Conferences, this time focused on training and supervision in psychotherapy.

Complementing these empirical and theoretical contributions, I have also published several papers and chapters addressing what we know and what we need to know about variables (especially the working alliance between client and therapist) that cut across different theoretical orientations. I have also several publications exploring issues of training that are specific to psychotherapy integration or that relevant to all forms of psychotherapy, including an *American Psychologist* paper discussing the training implications of harmful effects in psychotherapy.