RESEARCH PROGRAM

For more three decades, my research has focused on different aspects of psychotherapy, including variables related to the clients, therapists, therapeutic relationship, treatment interventions, and training. 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.

PRACTICE RESEARCH NETWORKS

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 (PRN), which are aimed at facilitating active collaborations between clinicians and researchers in the conduct of scientifically rigorous and clinically relevant studies.

First, within the context of the **Pennsylvania Psychological Association-Practice Research Network (PPA PRN)**, I have 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 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 800 college counseling centers across the US. These centers are using the same instruments 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 the quality of the working alliance and client outcome in tele-health therapy vs. in-person therapy; and on investigating the complex relationship between techniques (unique to particular approaches and common to all treatments) and outcome.

You will in the list of references below papers describing each of these three PRN infrastructures and examples of published studies that emerged from them.

PRACTICE-ORIENTED RESEARCH

The development of such PRN 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 to the studies conducted in the three PRN described above, I have conducted several POR studies with different groups of investigators, including with researchers in Denmark and Norway.

I have also 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* aimed at providing advice to researchers and clinicians interested in conducting POR research in a diversity of naturalistic settings. I have also co-edited two other series on POR. With Héctor Fernández-Alvarez, the first one was published in the *Argentine Journal of Clinical Psychology* and includes contributions by researchers from Europe, Latin America, and North America. Co-edited with Dana Atzil-Slonim, Kim de Jong, and Soo Jeong Youn, the second one (in *Administration and Policy in Mental Health and Mental Health Services Research*) focuses on new developments and future directions in POR.

See list below for references of POR studies, as well as for the chapters in the chapters in Bergin and Garfield's handbook of psychotherapy and behavior change and papers included in the *Psychotherapy Research*, the *Argentine Journal of Clinical Psychology* and the *Administration and Policy in Mental Health and Mental Health Services Research* series.

SELECTIVE LIST OF REFERENCES

I. Descriptions of practice research network infrastructures

CCMH

McAleavey, A.A., Lockard, A.J., Castonguay, L.G., Hayes, J.A., & Locke, B.D. (2015). Building a practice research network: Obstacles faced and lessons learned at the center for collegiate mental health. <u>Psychotherapy Research</u>, 25,134-151.

PSU Training Clinic

Castonguay, L.G., Pincus, A.L., & McAleavey, A.A. (2015). Practice-Research Network in a psychology training clinic: Building an infrastructure to foster early attachment to the scientific-practitioner model. <u>Psychotherapy Research</u>, 25, 52-66.

Pennsylvania Psychological Association-Practice Research Network (PPA PRN)

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II. Examples of prn studies

CCMH

Davis, K.A., Zhao, F., Janis, R.A., Castonguay, L.G., Hayes, J.A., & Scofield., B.E. (in

press). Therapeutic alliance and clinical outcome in in-person psychotherapy and teletherapy: A noninferiority study. <u>Psychotherapy Research</u>

Hayes, J.A., McAleavey, A.A., Castonguay, L.G., & Locke, B.D. (2016). Psychotherapist effects with White and racial/ethnic minority clients: First, the good news. <u>Journal of</u> <u>Counseling Psychology</u>, 63, 261-268.

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Xiao, H., Castonguay, L.G., Hayes, J.A., Janis, R. A., & Locke, B.D. (2023). Reconstructing Dropout: Building From Multiple Definitions, Therapist Effects, and Center Effects. <u>Psychotherapy Research, 33</u>, 146-157.

Xiao, H., Castonguay, L.G., Janis, R.B, Youn, S.J., Hayes, J.A., & Locke, B.D. (2017). Therapist Effects on Dropout from a College Counseling Center Practice Research Network. Journal of Counseling Psychology, 64, 424-431.

Xiao, H., Hayes, J.A., Castonguay, L.G., McAleavey, A.A., & Locke, B.D. (2017). Therapist effects and the impacts of therapy non-attendance. <u>Psychotherapy</u>, 54, 58-65.

Youn, S.J., Xiao, H., McAleavey, A., Scofield, B.E., Pedersen, T.R., Castonguay, L.G., Hayes, J.A., & Locke, B.D. (2019). Assessing and investigating clinicians' research interests: Lessons on expanding practices and data collection in a large practice research network. <u>Psychotherapy, 56</u>, 67-82.

PSU Training Clinic

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Nordberg, S.S., Castonguay, L.G., Fisher, A.J., Boswell, J.F., & Kraus, D. (2014). Validating the rapid responder construct within a practice research network. <u>Journal of Clinical Psychology</u>, 70, 886-903.

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III. Practice-oriented research

Examples of POR studies (other than PRN studies)

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Solstad, S.M., Kleiven, G.S., Castonguay, L.G. & Moltu, C. (2021). Clinical dilemmas of routine outcome monitoring and clinical feedback: A qualitative study of patient experience. <u>Psychotherapy Research</u>, 31, 200-210.

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Conceptual and clinical publications on POR

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CONTEXT FOR RESEARCH PROGRAM: PATHWAYS OF INTEGRATION

The PRN and POR studies that are being conducted in the lab are taking place within two broad pathways of integration: Between research and practice and across different theoretical orientations in psychotherapy.

I. Integration of science and practice

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.

II. Integration of different theoretical orientations

My empirical and scholarly attempts have been taking place within the context of a movement toward integration in psychotherapy. For most of its modern history, psychotherapy has been divided across theoretical lines. Within the last four 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 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). 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.

As another conceptual contribution to the integration movement, I have edited (with Clara Hill) four books on important issues that cut across different orientations: insight (or the acquisition of a new perspective about self and others), corrective experiences in psychotherapy, factors that make some therapists better than others, and training and supervision in psychotherapy (all four books have been published by the American Psychological Association). Based on twelves conferences that Dr. Hill and I have organized at Penn State since 2001, 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.

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.