

IRWIN EPSTEIN

Clinical Data-Mining

Integrating Practice
and Research



POCKET GUIDES TO
SOCIAL WORK RESEARCH METHODS

Clinical Data-Mining

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To the practitioners and students with whom I was fortunate enough to work.
To my wife Fran—the practitioner I was fortunate enough to marry.
To my mother Rachel—the source of social work within me.

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Acknowledgments

This book is about social work practitioners using available agency data for practice-research purposes. In 2001, I first called this process “Clinical Data-Mining” (CDM). Looking back, my initial experience doing CDM preceded by decades my writing about it as a research method. In fact, it was the basis of my first professional publication. Co-authored with Richard Cloward, “Private Social Welfare’s Disengagement from the Poor” (1965) was, in retrospect, a CDM study and arguably the best paper I ever wrote. Employed as Cloward’s research assistant, I did the drudge work of gathering, sorting, and analyzing available client and service data “mined” from agency archives throughout New York City. The central thesis was his, but the empirical evidence I dug up expanded and challenged his thesis in ways neither of us anticipated. Our paper was widely cited and often vilified. My career as a social work researcher and critic was launched.

Ironically, the first publication about using available “material” for social work research was authored by Ann B. Shyne in 1960. What makes it ironic is that Shyne was one of the prominent social work researchers who were outraged by Cloward’s and my empirically-based assertion of social work’s abandonment of the poor. Equally ironic, I had read Shyne’s paper as a graduate student, copiously underlined it, internalized its lessons, and until Rick Grinnell recently reminded me

of it, conveniently ignored Shyne's impact on my CDM efforts. Thanks for that Rick. Spare me the psychoanalytic interpretations.

Three decades after my use of it with Cloward, I resurrected Shyne's method. However, instead of employing it to *critique* practice, I applied it *with* practitioners to *inform* their knowledge of their *own* practice. In so doing, I was helping social workers incorporate research methods and findings into their practice. Whether our findings were welcome, troubling, or simply surprising, we were *collaboratively* using available data along with traditional research logic and analytic techniques to describe, evaluate, and reflect on their practice. In using CDM as a practice-research consulting strategy, I took a more balanced and appreciative perspective toward practice—cognizant of the seriousness of practitioners' commitments to their clients, the organizational and ethical constraints within which they worked, as well as the strengths and limitations of every research paradigm. Maybe I had mellowed. Maybe not. Either way, by writing this book, I acknowledge the enormous debt I owe to both Cloward and Shyne.

But I have more current debts to acknowledge. This book was written while on sabbatical from Hunter College School of Social Work where I teach mainly in the Doctoral Program and where I occupy the Helen Rehr Chair in Applied Social Work Research (Health & Mental Health). I thank Jacqueline Mondros, Hunter's Dean who graciously provided the sabbatical and Helen Rehr who generously endowed the Chair. The mission associated with the Chair is the promotion of practitioner research. In seeking that objective, Helen was and is a true pioneer. I simply follow her path.

Much of the work described in this book took place over many years as a practice-research consultant at Boysville of Michigan and at Mount Sinai Medical Center in New York. For the work at Boysville, I gratefully acknowledge Br. Francis Boylan, Tony Grasso, Paul Neitman, and Edward Overstreet. For the work at Mount Sinai, my gratitude goes to Susan Bernstein, Susan Blumenfield, and Ken Peake, who supported my consultations and staff seminars, and to Gary Rosenberg, who brought me to Mount Sinai in the first place. In both organizations, the many research-oriented practitioners with whom I collaborated provided research exemplars and learning experiences that I draw upon routinely in my teaching and throughout this book. Thanks go as well to the doctoral programs in which I have taught and/or given CDM dissertation

workshops—the City University of New York, the University of Hong Kong, and the University of Melbourne. Here, I wish to acknowledge Michael Fabricant, Cecilia Chen, and Elizabeth Ozanne, respectively, for their continuing support. I am especially indebted to the doctoral students at these far-flung universities for their willingness to follow my methodological lead in conducting their innovative and paradigm-stretching, CDM dissertations.

Admittedly, this book is intended as an instrument of modest paradigmatic change as well as a promoter of a particular practice-research method. Whether or not my research orientation has changed since my graduate student days, research certainly has. Advances in information technology have made research more accessible to practitioners as well as to academics. Historically emerging practice-research integration “movements” culminating in the presently ascendant Evidence-based Practice (EBP) reinforce the belief that practitioners are professionally and ethically obliged to integrate research into their practice—if not as *producers* of knowledge at least as *consumers* of research and *implementers* of research-based interventions. This book is about practitioners using CDM to perform all three of these functions and about researchers helping them to do so.

Though not always successful, my professional mission has always been about finding routes to the integration of social work practice and research. CDM is one. Sadly, some who have accompanied me most enjoyably on my utopian journey are no longer with me for the rest of the ride. Rebecca Donovan, Tony Grasso, Larry Kressel, Bogart Leashore, Edward Overstreet, and Harold Weissman were much more than colleagues. Their loss is daily felt. Nor was this sabbatical as reposeful and contemplative as I had anticipated. Life intruded. Those who supported me personally during this unexpectedly turbulent year included Jim Agioli, Ted Benjamin, Michael Bramwell, Bill Cabin, Wallace Chan, S.J. Dodd, George Downs, Ros Giles, Harriet Goodman, Daria Hanssen, Craig Hodges, Dana Holman, Richard Joelson, Sarah Jones, Lynette and Jacques Joubert, Marina Lalayants, Bruce Lord, Harry Lund, Emily Ma, Jane Miller, David Nilsson, Rosalie Pockett, Alicia Pon, Leonard Quart, Andrea Savage, Penny Schwartz, Maryanne Sea, Chris Tanti, Sandra Tsang, Darrell Wheeler and, of course, my dear family.

Finally, special thanks must go to Tony Tripodi. Tony and I have been friends and research colleagues since we were graduate students

together at Columbia University. As editor of this Oxford University Press series, he encouraged me to write this book, giving me a chance to “showcase” CDM alongside other, more accepted and institutionalized research methods. For that and for his continuing friendship, I am deeply grateful.

Irwin Epstein, PhD
New York City

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Clinical Data-Mining

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Introduction



The purpose of this book is to introduce social work practitioners, students, agency evaluators, and research academics to the knowledge-generating possibilities inherent in what I call *Clinical Data-Mining* (CDM). Although these terms may connote other things in medicine or marketing, in my simplest definition, CDM is *the practitioners' use of available agency data for practice-based research purposes* (Epstein, 2001).

In this context “clinical” is used in the broadest possible sense, echoing its usage in Vonk, Tripodi and Epstein’s (2006) text entitled *Research Techniques for Clinical Social Workers*. In that book, we define clinical social work practice as follows:

By this last term we refer to the efforts of social workers to help individuals, families and groups of clients to resolve their psychosocial problems. These efforts may involve changing the clients, changing others in the clients’ environment, or both. They take place in a range of organizational settings and are rooted in a variety of theoretical perspectives. (Vonk, Tripodi & Epstein, 2007, p.1).

Because the majority of my early experiences in developing and refining CDM took place in health and mental health settings with direct-service practitioners, it would be very easy to employ a narrower

use of the term “clinical.” However, my more recent experience in employing CDM suggests that it is applicable to any human service setting where there are paper, computerized, electronic and even unintended physical “data” routinely available.

By “data-mining,” I refer to the full range of analytic possibilities that might be applied to existing data for research purposes. Unlike most marketing uses of data-mining, which are limited to large quantitative data-sets and complex statistical manipulations (Rexer, K., Gearan, P. & Allen, H.N., 2007), my use of the term “data-mining” embraces all appropriate applications of quantitative *and* qualitative analysis—from simple descriptive and/or phenomenological studies with small samples to complex multivariate, quantitative studies with large samples or total client populations. In this book, CDM exemplars of each are offered.

WHY SHOULD PRACTITIONERS CONDUCT CDM STUDIES?

In our research text, Vonk, Tripodi, and I assume that the application of “research concepts and techniques can facilitate the rational use of information by social workers engaged in direct practice with individuals, families or groups” (2007, p.1). Furthermore, we point out that the NASW Code of Ethics requires that “[s]ocial workers must possess research knowledge and skills that enable them to utilize existing research to inform practice as well as to engage in research in order to evaluate practice and build practice knowledge” (p.3). These assumptions and justifications apply here as well.

Similarly, the Educational Policy and Accreditation Standards 2.1.6 of the Council on Social Work Education require that schools of social work prepare their students to “engage in research-informed practice and practice-informed research (<http://www.humboldt.edu/~swp/docs/EPAS>.)” CDM facilitates both.

In accordance with these professional mandates, Vonk, Tripodi, and Epstein describe a range of research designs and methodologies for social workers to employ routinely in their practice. Though we conclude with a very brief section on CDM, that book emphasizes the collection and analysis of *original* rather than *available* data. The current book is an attempt to fill that gap, and it assumes that unlike

research methods that rely on original data collection, CDM makes practice research easier, less costly, and more profitable for social workers to fulfill their professional knowledge-building obligations. Plus, it can be enjoyable as well as enlightening.

THE BOOK'S INTENDED AUDIENCES

Broadly, the book is targeted at several audiences within social work but has applicability to other health and helping professions. More specifically, and within social work, the book is intended to be read by

- academics who teach research in schools of social work and are looking for something new to try pedagogically;
- research consultants who conduct and facilitate research in social work settings and are seeking a way to engage practitioners in a more meaningful, collaborative experience;
- evaluation researchers in social work settings who work in isolation from their fellow practitioners and seek a more satisfying partnership;
- research-oriented practitioners who are interested in systematically reflecting on their practice in a manner that does not compromise their service commitment to clients;
- social work master's degree students who want to conduct meaningful and do-able research in their field placements;
- social work doctoral students contemplating their dissertation research projects.

More broadly, CDM can be used by allied health professionals within their disciplines and in multidisciplinary teams. Though the majority of CDM studies cited in this book are conducted by social workers, significant multidisciplinary exemplars are presented as well.

THE THESIS OF THE BOOK

I first employed the term CDM in a keynote address given in 1998 at the 2nd International Conference on Social Work in Health and

Mental Health held in Melbourne, Australia. My talk was dedicated to Helen Rehr and was inspired by her many research publications with agency-based practitioners (Rehr & Rosenberg, 2006). For Rehr, practice and research are inextricably linked (Rehr, 2001). For me, CDM was a practice-research “breakthrough.”

Only now, I realize that the method I was describing was so heavily influenced by the paper written four decades before by Shyne (1960). With characteristic understatement, Shyne titled her paper “Use of Available Material.” Like my own, Shyne’s paper focused on the research potential of available agency data. Unlike mine, Shyne’s target audience was fellow researchers. In contrast, my primary audience was composed of social work practitioners and academics seeking research partnership with them. However, because most social work researchers prefer original data collection and standardized instruments (Epstein, 2001), Shyne’s paper is rarely cited in research texts. Until now, I’ve repeated the oversight.

Benefiting from decades of advancement in computer technology and a more research-friendly climate within social work than Shyne enjoyed, my paper proposed that with truly collaborative research consultation, minimal financial and adequate administrative support, social work practitioners could conduct meaningful, practice-relevant research. They could do this most easily, I argued, by directly retrieving, computerizing, and systematically analyzing the clinical data that they routinely generated in the course of their work. The results in knowledge generated and professional reflection are highly valuable. That, in short, is the thesis of this book.

Since I gave that keynote presentation and published that paper, well over a decade’s experience in helping American, Australian, Chilean, Hong Kong, Israeli, Singaporean, and Swedish social work practitioners conceptualize and conduct CDM studies has provided considerable “empirical evidence” to support my thesis in the form of peer-reviewed, practitioner-initiated research publications. Many of these will be cited throughout this book.

More recently, on the strength of my positive experience with practitioners, I began encouraging my doctoral students at Hunter College School of Social Work—many of whom were themselves practitioners—to consider CDM as a possible dissertation research strategy. Some decided to do so together with other more conventional research

approaches that made use of original data collection. Others completed dissertations based *entirely* on available clinical information. For several, CDM dissertations generated peer-reviewed publications as well and became stepping stones to academic careers. One published hers as a book.

Most recently, a presentation on this subject at the University of Hong Kong involved four local CDM dissertation co-presenters—three of whom had completed their dissertations and one who was well on his way. What distinguished these dissertations was their remarkable combination of methodological rigor and clinical sophistication. For someone promoting CDM, this experience was extremely gratifying as well as suggestive of new analytic possibilities for employing available data. These studies are cited here as well.

Whether with direct-service practitioners or with doctoral students, my somewhat serendipitous “discovery” of CDM was made all the more surprising because practitioners and social work students are commonly characterized by social work academics as *inherently* antagonistic to research (Epstein, 1987). Even at the doctoral level, some have recently suggested that the principle obstacle to more practitioners’ going on for their PhD’s is the fearsome prospect of *magnum opus* research dissertation looming ahead (Robb, 2005). On the contrary, my experience is that the prospect and possibility of a CDM dissertation has quite the opposite effect.

Consequently, one chapter in this book is devoted to practitioner-initiated CDM studies and another to CDM doctoral dissertations. Though I offer no exemplars of CDM studies conducted by BSW or MSW students, there is no reason to assume that the method is beyond the capacity of such students. The simple explanation for the absence of BSW and MSW exemplars is that I do not teach research at those levels. Nonetheless, some of my Hunter School of Social Work academic colleagues do and find the approach quite congenial.

In this book then, I am following the time-honored editorial advice to write about what one knows best, and for me, that’s doing research consultation with practitioners and supervising doctoral dissertations. In fact, for me, these represent my form of “practice.” For research students and teachers at the undergraduate or Master’s degree level, I suggest that CDM research principles and pedagogical applications can easily be extrapolated.