



Case Study Research Methodology

© 2011 Mark Widdowson

Abstract

Commenting on the lack of case studies published in modern psychotherapy publications, the author reviews the strengths of case study methodology and responds to common criticisms, before providing a summary of types of case studies including clinical, experimental and naturalistic. Suggestions are included for developing systematic case studies and brief descriptions are given of a range of research resources relating to outcome and process measures. Examples of a pragmatic case study design and a hermeneutic single-case efficacy design are given and the paper concludes with some ethical considerations and an exhortation to the TA community to engage more widely in case study research.

Key words

Case study design, case study research

Introduction

Case study methodology is becoming increasingly influential in psychotherapy research. Although therapists tend to write case studies as part of their training, there is a definite need for the training of psychotherapists in case study research methodology and developing the skills needed to design rigorous and scientific systematic case studies. The aim of this article is to provide the reader new to case study research with a background in the method to assist them in creating and developing case study research and of contributing this to the TA research literature. Although written for a psychotherapy audience, the key principles of the methodology can be extracted by practitioners from other fields and applied to their own situation.

The development of psychotherapy has been influenced from the beginning by the writing and publishing of case studies. Freud's (1901, 1909) now famous cases were highly significant in the development of psychoanalysis. Case Studies were also influential in the development of behavioural therapy (Wolpe, 1958), and indeed most

modalities of psychotherapy are often influenced by several key case studies which triggered innovative thinking or methods in the originator(s) of the therapy, or cases that were used to test out and verify the effectiveness of the new therapy, or to explain key features of the therapy and how it works to a wider audience (see also Berne, 1961).

"In the practice of psychotherapy, the most basic unit of study is the 'case'" (Eels, 2007). Single-case studies that allow for the examination of the detailed unfolding of events across time in the context of the case as a whole represent one of the most pragmatic and practice-oriented forms of psychotherapy research. (Fishman, 1999, 2005)" (Iwakabe and Gazzola, 2009. p.601). Within psychotherapy, a case study may be of a single episode within a session, a single session, a particular phase or 'chunk' of therapy or an overview of the entire therapy.

Despite the historical significance of case studies in the development of psychotherapy, there are few case studies published in modern psychotherapy books and journals. Within the TA literature there is a lack of detailed case studies which provide the reader with a clear sense of the work, and sufficient information to come to their own conclusions regarding the outcome. Of the case studies which are available, like the case studies of Freud, they each tell a story, but do not provide the required evidence needed for scientific inquiry or for reliable conclusions to be drawn from the presented cases.

The psychotherapy research community has recently begun to turn its attention to case study methodology and how this research approach can be rigorously enhanced so that reliable conclusions can be identified from the studies. Case study methodology is growing in significance as a method highly suitable for use in psychotherapy research and the view is gaining momentum that case study methodology will develop into the next important area of psychotherapy research (McLeod, 2010). Kiesler (1983) states "Studies

seriously pursuing these [psychotherapy] change-process goals cannot attain them by use of traditional, rigorous experimental or nomothetic designs. Instead, what seems to be most appropriate and necessary are small *N* or single-case studies.” (Kiesler, 1983. p.13). Certainly well-constructed and thorough case studies can be used as reliable evidence for the impact of the therapy in effecting change.

The strengths of case study methodology

“Single-case research is best viewed as a sub-class of *intrasubject* research in which aggregation across cases is avoided and the generality of one's findings is addressed through replication on a case-by-case basis.” (Hilliard, 1993: 373-4)

The case study offers a rich method for investigating and researching a single case. The effectiveness of the approach being researched can be verified by replication of outcomes across similar cases. Due of the level of detail kept in the case record, outcomes of different but similar cases can be compared, and the specific variables which might have impacted upon the difference in outcome can then be investigated separately. In psychotherapy research, case study methodology has the advantage of being closely linked to therapy as it is usually delivered. The case study is measuring what actually happens in the therapy situation, rather than creating some tightly controlled situation that may bear little resemblance to ‘therapy as usual’.

Case studies have the advantage of providing the reader with a clear sense of the person of the client, the therapist, the therapy and of the outcome(s). One criticism of methods of psychotherapy research, such as randomised controlled trials (RCTs), is that they focus on large, generalised quantitative data, and that essentially the findings are reduced to a table of numbers without accounting for the complexity of the therapy and without examining the different factors that have impacted on the case. Elliott (2001) describes how such methods of research (such as RCTs) are ‘causally empty’, in that they do not provide sufficient data for clear causal explanations to be drawn as to how or why a particular therapy has generated a particular change. In contrast, detailed case studies which account for and include a range of data (including factors from within and outside the therapy e.g. changes in a client's circumstances) enable the researcher/reader to draw more convincing causal explanations from the case.

“For researchers, the closeness of the case study to real-life situations and its multiple wealth of details are important in two respects. First, it is important for the development of a nuanced view of reality, including the view found at the lowest levels of the learning process and in much theory, that human behaviour cannot be meaningfully understood as simply rule-governed acts.

Second, cases are important for researchers' own learning processes in developing the skills needed to do good research. If researchers wish to develop their own skills to a high level, then concrete, context-dependent experience is just as central for them as to professional learning of any other specific skills” (Flyvbjerg, 2006. p.223)

Case study methodology is also highly relevant to a postmodern perspective to psychotherapy with its accounting for a range of factors in the work. “Predictive theories and universals cannot be found in the study of human affairs. Concrete, context-dependent knowledge is, therefore, more valuable than the vain search for predictive theories and universals” (Flyvbjerg, 2006: 224). Case studies generate context-dependent knowledge which is an appropriate form of knowledge base in social sciences and disciplines based on observation and understanding of human behaviour and interaction *in context*. Flyvbjerg emphasises “in the social and human behavioural sciences...context-dependent knowledge and experience... (is at) the very heart of expert activity” (Flyvbjerg, 2006. p222).

This position is based on the ability of experts to move beyond rigid, rule-bound approaches to ones which embrace complexity and require the higher level of theoretical and intellectual abstraction which is relevant in professional training programmes. Flyvbjerg goes on to state that presenting and discussing case studies is an important teaching method for imparting practical skills and promoting the development of professional decision making skills. Certainly, accounting for complexity in an individual's life and the interaction of various factors which may have influenced the change process, learning and refining the processes of theoretical and intellectual abstraction and assessing the often subtle impact of interventions, are key aspects of psychotherapy training.

Common Criticisms of Case Study Methodology

It is often believed that because the cases are so specific, one cannot make meaningful generalisations from case studies and that other methods are more suited to hypothesis testing and theory building. However this view is not accurate as case studies provide a wonderful opportunity for the researcher to develop explanatory hypotheses or test existing or new theory (McLeod, 2010).

Certainly it is true that it is not possible to generate inferential statistics from a single case or indeed from a small number of cases; however it is possible to use simple descriptive statistics to enable the reader to draw logical conclusions regarding the outcome(s) of the therapy, and replication of the case methodology can result in large databases being constructed which would enable inferential statistics to be generated. If, for