
**THE USE OF LONGITUDINAL CASE STUDIES IN ORGANIZATIONAL,
ENTREPRENEURIAL AND LEADERSHIP EDUCATION AND
RESEARCH: CONTRIBUTIONS AND LIMITATIONS**

Mammy M. Helou

Macquarie University, Sydney, Australia

ABSTRACT

This research study presents an overview and an evaluation of the employment of longitudinal case study analyses in organizational, entrepreneurial and leadership studies. The current study is four-fold. First, to ensure full clarity, this study presents a set of definitions relevant to the terms used in the context of this study. Secondly, this paper presents a discussion of the use of longitudinal case study analyses in organizational studies, innovation and entrepreneurship, and leadership learning, teaching and research. Thirdly, the current research study provides an evaluation of the contributions and limitations of the application of longitudinal case study analyses in organizational, entrepreneurial, and leadership education and research. Finally, a conclusion related to the application of the case study method is presented.

Keywords: Case study approach, longitudinal case study analysis, leadership studies, entrepreneurial studies, organizational studies.

INTRODUCTION

A major reason for the generation of concepts and theories is the development of explanations of behaviour. Models are beneficial given their roles in explaining various phenomena. Nevertheless, at times policy makers and corporate analysts focus their efforts on the technicalities of the model, as opposed to the explanations of the social issues that are supposed to be produced by its application. In other words, the obsession with the model dominates the research question/s under investigation.

The purpose of the current research study is to investigate the usefulness of longitudinal case study analyses as an educational and research tool in organizational, entrepreneurial and leadership studies. To this end, the current study is four-fold. First, to minimize any possible confusion, and to ensure clarity with the terms used, the current research provides basic definitions of these terms as employed in the context of this paper. This is followed by a discussion of the application of longitudinal case study analyses as an educational and

investigative method employed in the learning, teaching, exploration and analysis of organizations, entrepreneurship and leadership. Thirdly, the contributions and limitations of the use of the longitudinal case studies are presented. Fourthly, a conclusion relating to the employment of the longitudinal case study method is presented.

As Ragin (1992) explains, the word “case” relates to a methodological term that is distorted and misused. It now reflects numerous, and possibly, inconsistent, connotations. He argues that scholars should explain the connotations of the term in light of methodological paradigms. The response to what constitutes a case generates varied replies (Ragin, 1992). Numerous definitions of the term “case” and “case study method” are provided, including:

- ‘A case study is an empirical enquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between the phenomenon and context are not clearly evident and in which multiple sources of evidence are used’ (Yin, 1984: 23).
- The case study is a separate research strategy that has its own research designs ... including:
 1. a study’s question;
 2. its propositions, if any;
 3. its unit of analysis;
 4. the logic linking the data to the propositions; and
 5. the criteria for interpreting the findings’ (Yin, 1989: 23).
- Yin (2003a: 13-14) further elaborates on his earlier definition as he states that, ‘a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident’. He further emphasizes that, ‘the case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangular fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis’.
- An interesting definition of case studies featured in the Carnegie Mellon University’s website (cmu.edu/teaching/design/teach/instructionalstrategies/casestudies.html) states that, ‘Case studies are stories. They present realistic, complex, and contextually rich situations and often involve a dilemma, conflict, or problem that one or more of the characters in the case must negotiate’.
- Another expressive definition of a good case study as an educational tool, expressed by Lawrence, and quoted in Christensen (1981) states that, ‘A good case study is the vehicle by which a chunk of reality is brought into the classroom to be worked over by the class

and the instructor. A good case keeps the class discussion grounded upon some of the stubborn facts that must be faced in real life situations’.

- Hartley (2004) defines research design as, ‘the argument for the logical steps which will be taken to link the research question/s and issues to data collection, analysis and interpretation in a coherent way’.
- Causal research could be defined as a ‘term which is used to describe those methodologies which are concerned to establish, in their own terms, where causality lies in the social system under study’ (Easton, 1982: 55).

Yin (1989) provides a rather comprehensive survey of various aspects of the case study research; including design, preparation for data collection, analysis of evidence, and documentation and reporting research outcomes. In addition, he provides examples and illustrations from a wide range of social science disciplines – including policy research analysis. He further explains that it is advantageous to use the case study method when the following three conditions are met:

1. A “How” or “Why” explanatory question is being asked;
2. The question relates to a contemporary set of events; and
3. The investigator has little, or no control over the events.

Application of the Longitudinal Case Study Analysis in Organizational, Entrepreneurial and Leadership Research

There are many variations in how case studies are used in learning, teaching and research (Barkley et al., 2005). As Dunford (1992) explains, regardless of the theoretical model employed to address a crisis management or a conflict resolution situation, two basic conventions need to be made. First, the nature of the conflict has to be addressed. Secondly, the desirability of the conflict should also be noted. This research accepts the fact that an ideal level of conflict exists for any organization, thus, organisational leaders should not aim at establishing an environment void of conflict.

For example, a socio-political conflict may act as a catalyst for long-term productive social change, positively impacting organisational performance. Burton (1972) explains that leadership may lead to the preservation and overstatement of conflict through publicity, thus, escalate its intensity. Various models and frameworks of conflict resolution and crisis management, relating to general theories of behaviour, exist. Multifaceted issues can be efficiently evaluated through the analysis of basic conservative terms. This includes democracy, ethnicity, values and norms, authority, legality, ... (Burton, 1990).

Dunford (1992) examines three diverse viewpoints to the study of organisational conflict. According to the “unitary” viewpoint; conflict is viewed as a state of disharmony. Therefore, it is

considered to have a negative influence on the organisation. With respect to the “pluralist” viewpoint, conflict is an ordinary state reflecting the conflicting interests of the parties concerned. Accordingly, conflict can have either a positive or a negative influence on the organisation. Thus, it is the responsibility of the leader in charge to effectively manage the conflict to trigger a positive effect on the organisation’s performance. The third and ‘radical’ viewpoint on conflict contemplates conflict to be an intrinsic characteristic of systems, given differences in the interests of its stakeholders. As expected, each of the three perspectives of conflict has its own contributions and limitations in terms of their employability to appraise conflict situations. The current study is in favour of the application of the pluralist approach for longitudinal case studies of recovery. As crises have a dual nature, being a burden and an opportunity, the pluralist viewpoint of conflict permits for the appraisal of multi-dimensional crises. A comprehensive literature search on corporate governance and leadership patterns indicates that corporate governance and crisis leadership strategies continue to be underwritten areas of research (‘tHart et al., 1993).

Likewise, the case study approach has been widely used for learning and teaching purposes in the field of innovation and entrepreneurship, where well known universities and successful research centres, worldwide, maintain extensive collections of case studies, teaching notes on the case study approach, background notes on cases, case videos, and online simulations and tutorials on entrepreneurship. This includes Harvard Business School, Arthur Rock Centre for Entrepreneurship, Nanyang Business School, Babson College, University of Virginia, European Case Clearing House, ICMR cast study collection, International Institute for Management Development, among many others.

Furthermore, various scholars and researchers in the field of creativity, innovation and entrepreneurship have employed the longitudinal case study approach to investigate entrepreneurship study programs, and to undertake research in relation to studying entrepreneurial behaviour and/or individual entrepreneurial traits over time. Feng (2013), for example, effectively used the case study approach to study creativity, innovation and entrepreneurship education at the National Pingtung Institute of Commerce, a public business college in Taiwan. Furthermore, in an article titled, ‘Learning from Failure: A Case Study in Entrepreneurship’, Crenna (2011) efficiently employs the case study approach to present a case of failure in entrepreneurship simply pertaining to regular human reasons, where she discusses the challenges faced by small or single-person implementation teams, followed by suggestions for overcoming them to produce more realistic and viable businesses. In addition, in an article titled, ‘Teaching Versus Learning: An Exploratory Longitudinal Case Study’, Dyck et al. (2008) also employs a longitudinal case study to undertake an in-depth exploration and analysis of a key phase in the new product development process in a small business, namely, the period that

commences after the sketching of a new product idea, and concludes with the attainment of full-scale production of the product.

Likewise, major universities and well known educational and research centres, such as the Centre for Educational Leadership, at The University of Washington, College of Education, maintain case studies for an enhanced understanding and practice of educational leadership. For example, in an article titled, 'Learning the Lessons of Leadership Experience: Tools for Interactive Case Method Analysis', Hill et al. (people.ict.usc.edu/~gordon/publications/ASC04A.PDF), successfully employ the case study approach as an interactive tool in leadership education.

Contributions and Limitations of the Longitudinal Case Study Approach

Even though quantitative research tends to be more accepted than qualitative studies, several scholars continue to employ qualitative and descriptive research tools as salient research methods in the social sciences. For example, they are vastly employed in sociology, anthropology, psychology, and criminology. They are also widely used in the education and research of business disciplines, including organisational studies, entrepreneurship and leadership. When a decision is to be made on the employment of multiple case studies versus a single longitudinal study, the deciding factor tends to be the trade-off between the number of cases to be researched and the depth of investigation to be undertaken per case. Needless to say, the depth of the context of the case is by far more extensive for longitudinal cases.

Longitudinal research necessitates the use of process/event-time, as opposed to clock-time, which, in turn, allows for the employment of reconstructive logic, as researchers need to go through the numerous crisis layers to investigate the interactions among the factors under study (Rosenthal and 'tHart, 1991). Even though the implementation of the newly generated rehabilitative policies lead to the generation of a new order, which mostly varies from the old algorithm, this process still provides an efficient risk reduction mechanism (Rosenthal and 'tHart, 1991). Furthermore, a main contribution to the employment of case study analyses is that the examination of the data is usually undertaken within the setting of its use (Yin, 1984; 2003b). In other words, data examination is undertaken within the same situation where the activity is conducted (Zainal, 2007).

The case study approach has been severely criticized (Yin, 1989). Determining the parameter and specifying the research objective are salient when employing the case study method (Yin, 1994). Even though the case study approach is regularly employed in education, as a learning device, the social science literature fails to give credit to the case study method as a salient research method (Perry and Coote, 1994). The case study method is frequently criticized on the basis of the struggle with generality, or the determination of external validity (Bryman, 2004;

Yin, 1989). Another major flaw is the issue of bias, which can be consequential to determining the perspective employed investigating a certain situation (Yin, 1989). Biases can further influence the experiment conduct, as well as the survey questionnaire design. Furthermore, being aware of the biases is not sufficient. Researchers should limit them.

Another frequently voiced flaw of the case study approach is that it is limited to ill-defined and unfocused information. The current research attains that this is a fallacy of the contributions of the case study analysis approach, being a significant objective research method. Even though longitudinal research involves qualitative studies, it should be noted that it is possible to quantify the data pertaining to the factors under focus. In other words, researchers can develop powerful statistical analysis while employing the longitudinal case study approach. An additional criticism to the employment of longitudinal research is the prolonged time period needed in formulating and recording the outcome. In response, Yin (1989) explains that different ways of composing the case study report are available as a means of overcoming long descriptions (Yin, 1989).

Even though there are numerous criticisms to the employment of the case study approach in terms of outcome and significance, yet the case study approach is an imperative method that encompasses theory building, as opposed to hypothesis testing (Perry and Coote, 1994). Many researchers contend for the employment of a single case study analysis, as an effective learning and teaching tool, as well as a powerful theory building approach (Kinch, 1993). The current study contends that a single case study with a narrative, plot and time structure can stand on its own.

The case study approach has numerous advantages (Kohlbacher, 2005; Zucker, 2009). This can be witnessed by the sheer number of researchers who select it as their methodological construct (Yin, 1989). The author of the current study argues that a process/event time and single longitudinal case study research analysis permits the collection of pertinent data which otherwise is problematic to assemble. Longitudinal researchers make use of the rich data and the thorough interpretation of events entrenched in single case studies (Rosenthal and Pijnenburg, 1991). The longitudinal event time case study analysis is crucial methodological approach to explore decline-recovery organisational cycles, as they allow for the stimulation of past data, while making use of the present data.

A major contribution of the employment of a single case study analysis is that the researcher has prospect of moving backward or forward between preliminary analysis, and further data collection, as needed, before reaching a determination. Thus, it allows for validity testing of the generated outcomes (Bryman, 2004). Furthermore, the researcher is simultaneously capable of obtaining additional detail in relation to the situation in focus.

CONCLUSION

Intricate longitudinal studies embody long-term explorations, aimed at assisting organisational leaders and policy planners understand the behaviour in relation to a particular variable over time. The author herewith contends that the single longitudinal case study method has delivered salient contributions. The current research maintains that one longitudinal process/event time case study would be effective for generating holistic recovery policy agendas, for organisations displaying warning symptoms, caused by long-term environmental uncertainties. In terms of policy research, longitudinal studies are desirable as a means of attaining the needed data to the same factors under study over time. In other words, longitudinal case study analyses are needed to explore the causes of, or the emergent critical points of discontinuity, so as to generate pertinent policy interventions.

Single case study analyses have been employed at various levels of analysis, including the corporate level (Turner and Toft, 1989). In general terms, the case study method represents an effective approach for exploring particular behaviours and situations. Even though a crisis is a unique event, employment of the case study approach allows to pass on the knowledge and understanding attained with its investigations. Accordingly, transferrable policy interventions employed could then be adapted and adopted for future organisational situations characterised by comparable threatening signs of uncertainty and lack of performance.

The objective of explanatory case study analysis is the implication of causality (Yin, 1994). As Yin (1989) explains, case studies involve the incorporation of the case study data into theoretical framework/s nominated by the researcher to determine causal links between the variables in focus. In other words, the longitudinal explanatory case study approach is mostly employed to determine causality. As such, event-time and process-time, as opposed to clock-time, should be considered as the borderline separating the phenomena under investigation and its context may well be blurry (Rosenthal and 'tHart, 1991).

REFERENCES

- Barkley, E. F., Cross, K. P. and Major, C. H. (2005). Collaborative Learning Techniques: A Handbook for College Faculty, San-Francisco: Jossey-Bass.
- Bryman, A. (2004). *Social Research Methods*, New York: Oxford University Press.
- Burton, J. W. (1972). Resolution of Conflict, *International Studies Quarterly*, 16 (1), pp. 5-30.
- Burton, J. W. (1990). *Conflict: Resolution and Prevention*, Hampshire: The Macmillan Press.

Carnegie Melon University

<cmu.edu/teaching/designteach/teach/instructionalstrategies/casestudies.html> 13 January, 2017.

Christensen, C. R. (1981). *Teaching by the Case Method*, Boston: Harvard Business School.

Crenna, D. (2011). Learning from Failure: A Case Study in Entrepreneurship, *Open Source Business Resource*, June, <http://timreview.ca/article/447>

Dunford, R. W. (1992). *Organisaional Behaviour: An Organisational Analysis Perspective*, Sydney: Addison-Wesley.

Dyck, B., Starke, F. and Mauws, M. K. (2008). Teaching Versus Learning: An Exploratory Longitudinal Case Study, *Journal of Small Business and Entrepreneurship*, January.

Easton, G. (1982). *Learning from Case Studies*, London: Prentice-Hall.

Feng, H. Y. (2013). A Case Study on Creativity, Innovation and Entrepreneurship Education of The University in Taiwan, Conference paper, Croatia International Conference on Management, Knowledge and Learning, 19-21 June, Zadar, Croatia.

‘t Hart, P., Rosenthal, U. and Kouzmin, A. (1993). Crisis Decision Making: The Centralization Thesis Revisited, *Administration and Society*, 25 (1), pp. 12-45.

Hartley, J. (2004). Case Study Research’, in Cassell, C. and Symon, G. (Eds.), *Essential Guide to Qualitative Methods in Organizational Research*, London: Sage, pp. 323-333.

Hill, R. W., Gordon, A. S. and Kim, J. M., Learning the Lessons of Leadership Experience: Tools for Interactive Case Method Analysis, <people.ict.usc.edu/~gordon/publications/ASC04A.PDF> 13 January, 2017.

Kinch, N. (1993). The Long-term Development of a Supplier-Buyer Relationship: The Case of Olofstrom and Volvo, 9th IMP Conference, September 23-25, Bath.

Kohlbacher, F. (2005). The Use of Qualitative Content Analysis in Case Study Research, *Forum: Qualitative Social Research*, 7(1), <<http://bn-resolving.de/urn:nbn:de:0114-fqs0601211>> 13 January, 2017.

- Perry, C. and Coote, L. (1994). Processes of a Case Study Research Methodology: Tool for Management Development, Australian and New Zealand Academy of Management Annual Conference, December 7-10, Wellington.
- Ragin, C. C. (1992). Introduction: Cases of "What is a Case?" in Ragin, C. C. and Becker, H.S. (Eds.), *What is a Case? Exploring the Foundations of Social Inquiry*, Cambridge: Cambridge University Press.
- Rosenthal U, and Pijenburg B (1991). Simulation-Oriented Scenarios: An Alternative Approach to Crisis Decision Making and Emergency Management, in Rosenthal U, Pijenburg B (Eds.), *Crisis Management and Decision Making: Simulation Oriented Scenarios*, The Netherlands: Kluwer Academic Publishers, pp. 1-18.
- Rosenthal U, and 'tHart P (1991). Experts and Decision Makers in Crisis Situations, *Knowledge: Creation, Diffusion, Utilization*, 12 (4), pp. 350 – 372.
- Yin, R. (1984). *Case Study Research: Design and Methods*, Beverly Hills, California: Sage Publications.
- Yin, R. (1994). *Case Study Research: Design and Methods*, Beverly Hills, California: Sage Publications.
- Yin, R K (1989). *Case Study Research Design and Methods*, California: Sage Publications.
- Yin, R. (2003a). *Case Study Research, Design and Methods*, Thousand Oaks: Sage Publications.
- Yin, R. (2003b). *Applications of Case Study Research*, Thousand Oaks: Sage Publications.
- Zainal, Z. (2007). Case Study as a Research Method, *Journal Kemanusiaan*, 9, June <psyking.net/htmlobj-3837/case_study_as_a_research_method.pdf> 13 January, 2017.
- Zucker, D. M. (2009). How to Do Research, College of Nursing Faculty Publication Series 2. http://scholarwork.umass.edu/nursing-faculty_pubs/2.