Configurational comparative research methodologies

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1 Editorial

Qualitative comparative analysis (QCA) is an analysis technique that uses both qualitative and quantitative methodologies to compare cases and establish causal relationships. QCA helps scholars determine which conditions cause an outcome of interest.

QCA's growing popularity can be attributed to a rise in the use of case studies and efforts by scholars to gain in-depth knowledge of cases while producing generalisable research findings (Rihoux 2006; Ragin and Fiss 2008). QCA is especially applicable in the social sciences because studies in these disciplines often require considerable knowledge of each of a small number of comparable cases. Nevertheless, its applicability to studies with larger data sets has also been demonstrated (Fiss 2011; Vis 2012).

QCA has been applied to studies in political science, management, business administration (Greckhamer et al. 2007), marketing (Johansson and Kask 2016), customer service (Urueña and Hidalgo 2016), and numerous other fields. Another advantage of QCA is that it easily deals with complex configurations, so it copes effectively with the complex antecedents that are studied in the social sciences (e.g. income level, frequency of consumption, price, access to Internet, and demographic factors).

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2 Articles in the special issue

Lin addresses ‘Causal complexity for passengers’ intentions to re-ride’, using multiple regression analysis (MRA) to test the framework and fsQCA to examine the causal complexity of passengers’ intentions to re-ride. The results show that fsQCA has more explanatory power than MRA because it is able to identify the causal recipes that affect passengers’ intentions to re-ride.

The second study, ‘Background factors to innovation performance: results of an empirical study using fsQCA methodology’, by Palacios-Marqués, Roig-Dobón, and Comeig, uses fsQCA to show that entrepreneurial orientation, online social networks, and organisational learning capability are key elements for hotels to obtain innovative results.

‘Technological innovation versus non-technological innovation: different conditions in different regional contexts?’ by García Álvarez-Coque, Mas-Verdú, and Roig-Tierno, identifies the conditions that facilitate the emergence of technological and non-technological innovation at the regional level. Using fsQCA, this study integrates the theory into a framework for assessing the impact of policy, institutions, and firm behaviour.

‘Elderly and technology tools: a fuzzy-set qualitative comparative analysis’ by Mos-taghel and Oghazi, examines the impact of gerontechnology characteristics on perceived usefulness and perceived ease of use. The results suggest that the elderly’s apprehension regarding technology tools is a major concern, considering the ease of use and usefulness of a technology.

The study by Parida, Patel, Frishammar, and Wincent deals with ‘Managing the front-end phase of process innovation under conditions of high uncertainty’. The authors study interdependencies and interplay among practices for managing high-uncertainty process innovations that are coupled with equivocality in the early phases. Specifically, they examine key organisational practices using fsQCA.

‘Stress at the top: Myth or fact? Causal explanations from a fuzzy-set qualitative comparative analysis (fsQCA)’, by Guedes, Gonçalves, and da Conceição Gonçalves, contributes to the literature by examining whether top managers experience more stress than employees at other levels of the hierarchy. The study uses fsQCA to investigate which combinations lead to stress and lack of stress.

In ‘Barriers to women entrepreneurship. Different methods, different results?’ Tur-Porcar, Mas-Tur, and Belso explore how results differ when using different methods: quantitative (PLS and regression analysis) and qualitative (QCA). Their conclusions suggest that (1) PLS analysis is less restrictive than regression analysis as regards results and (2) given that the objective of QCA is to find combinations of conditions that lead to an outcome, the variables that are observed individually are rendered insignificant.

Huang and Yu’s study, ‘Using qualitative approach to forecasting regime switches’, shows how qualitative methods, in this case QCA, can be used to solve quantitative problems. Specifically, the study uses fsQCA to solve a quantitative analysis problem: forecasting of regime switches in time series.

In ‘Selecting explanatory factors of voting decisions by means of fsQCA and ANN’, Vizcaíno-González, Pineiro-Chousa, and Sáinz-González use fsQCA and artificial neural networks to show the determinants of votes on managerial proposals in corporate meetings.

‘A review of integrated QCA and statistical analyses’, by Meuer and Rupietta, examines empirical studies that have used QCA with other traditional statistical analyses. The authors demonstrate how scholars have used this particular combination of methods to make a substantive contribution.

'Entrepreneurial attributes for success in the small hotel sector: a fuzzy-set QCA approach', by Rey-Martí, Felício, and Rodrigues, examines the entrepreneurial attributes of human and social capital, the contingency factors of the small hotel sector, and their relationship with the outcome: building a successful hotel business. The results show that balancing different performance objectives may involve decisions that sacrifice one condition in favour of another that is considered more relevant to achieve better performance.

Finally, 'Fuzzy-logic-programming-based knowledge analysis for qualitative comparative analysis', by Kachroo, Krishen, and Agarwal, presents a method that combines the outcomes of different studies in a meta-analysis framework. This framework uses the results of mixed methodologies to provide a query-based output for decision-making.

References

- Fiss, P.: Building better causal theories: a fuzzy set approach to typologies in organization research. *Acad. Manag. J.* **54**(2), 393–420 (2011)
- Greckhamer, T., Misangyi, V.F., Elms, H., Lacey, R.: Using qualitative comparative analysis in strategic management research: an examination of combinations of industry, corporate, and business-unit effects. *Organ. Res. Methods* **11**(4), 695–726 (2007)
- Johansson, T., Kask, J.: Configurations of business strategy and marketing channels for e-commerce and traditional retail formats: a qualitative comparison analysis (QCA) in sporting goods retailing. *J. Retail. Consum. Serv.* **34**(1), 326–333 (2016)
- Ragin, C.C., Fiss, P.C.: Net effects analysis versus configurational analysis: an empirical demonstration. In: Ragin, C.C. (ed.) *Redesigning Social Inquiry: Fuzzy Sets and Beyond*, pp. 190–212. University of Chicago Press, Chicago (2008)
- Rihoux, B.: Qualitative comparative analysis (QCA) and related systematic comparative methods recent advances and remaining challenges for social science research. *Int. Sociol.* **21**(5), 679–706 (2006)
- Urueña, A., Hidalgo, A.: Successful loyalty in e-complaints: fsQCA and structural equation modeling analyses. *J. Bus. Res.* **69**(4), 1384–1389 (2016)
- Vis, B.: The comparative advantages of fsQCA and regression analysis for moderately large-N analyses. *Sociol. Methods Res.* **41**(1), 168–198 (2012)