

The Impact of a Humanitarian Disaster on the Working Approach of Accountants: A Study of Contingent effects

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Structured Abstract

Purpose – The purpose of this paper is to investigate how a humanitarian disaster as Covid-19 shapes the working approach of accountants. This research is motivated by the call for more in-depth analyses of how Covid-19 affects the work, role, and human condition of accountants. The study aims to discover the contingent effects, based on the contingency theory, on accountants’ work due to a disaster like Covid-19.

Design/methodology/approach – This is a qualitative study with an action research approach. The research relies on semi-structured interviews and the active participation of a co-author in a professional organisation under investigation. Data collected are analysed using thematic analysis through an inductive interpretative approach.

Findings – The contingent shock embodies both a reactive and adaptive approach in the accountants’ professional work. From a theoretical perspective, this study identifies nine contingent phases related to shock. The accountants’ experience helps to understand how the Covid-19 pandemic contingently shapes the working approach of accountants with both short-term and long-term organisational implications.

Originality/value – Based on the literature survey, this is the first study to adopt an action research approach to engage with the complex dynamics involved in the social context of Covid-19 by discovering the effective actions, reactions, changes and solutions to problems experienced by professional accountants. This approach helps to build knowledge that enhances professional, and community practises by answering the call for multidisciplinary contributions in accounting to address the global Covid-19 crisis, its impacts, and opportunities for future research.

Keywords:

Humanitarian Disasters, Accountants, Shock, Contingency theory, Italy, Action research.

1. Introduction and Background

We sense that 'normal' is not coming back, that we are being born into a new normal: a new kind of society, a new relationship to the earth, a new experience of being human. Eisenstein (2011, p.20)

The global and unexpected Covid-19 pandemic, a shock that has both destroyed daily life routines and built a basis for new human conditions bring into context this quote by Eisenstein. This humanitarian disaster affects the practice of accounting and the role and human condition of accountants (Gould and Arnold, 2020). This research aims to understand the impact of Covid-19 on the working approach of accountants, by adopting contingency theory to explain the contingent effects on accountants' work.

Accounting for suffering has been treated by several studies on humanitarian catastrophes, such as slavery (Oldroyd *et al.*, 2008), the Scottish Highland Clearances (Walker, 2003), the Great Irish Famine occurred (O'Regan, 2010), the Holocaust (Funnel, 1998), the War in Vietnam (Chwastiak, 2006), the War in Iraq and the establishment of the Provisional Coalition Authority (Chwastiak, 2008, Cooper and Catchpole, 2009). Barro *et al.* (2020) compare Covid-19 and the Spanish Flu (1918–1920), stating that the mortality and economic effects of Covid-19 can be derived from the world's experience with the Great Influenza Pandemic.

Regarding natural disasters, Agyenim-Boateng and Oduro-Boateng (2019) investigate the floods in Ghana. Baker (2014) examines the effects of the 2005 hurricane Katrina; Taylor *et al.* (2014) describe one of Australia's worst natural disasters caused by the fires of February 2009, called 'Black Saturday'; and Walker (2014) investigates the American mid-western great drought of 1930. Lai *et al.* (2014) highlight the social aspects of the accounting system adopted by the authorities who managed the devastating Italian flood in November 2010. The authors concluded that the accounting procedures activated after the disaster accentuated the damage and the emergency actions taken, and the sense of interdependence between all the actors involved is highlighted.

Among the academic contributions to earthquakes, Shimizu and Fujimura (2010) analysed the 1923 Kanto earthquake. The authors describe the intervention of the Japanese private sector and the use of accounting practises, emphasising their importance. Sargiacomo *et al.* (2014) examined the role of accounting, and other calculation practises after a strong earthquake, showing how the use of accounting in a disaster reduced fraud and led to an improvement in financial responsibility. Furthermore, Sargiacomo and Walker (2020) analysed the Abruzzo's earthquake, focusing on the role played by individual experts working for hybrid organizations during the post-disaster recovery and reconstruction period.

This paper is structured as follows. The next section discusses the theoretical framework of this study, followed by insights into the method, evidence, and discussion. The final section presents the conclusions, theoretical and practical contributions, limitations of the study, and suggestions for further research.

2. Theoretical Framework

Contingency theory teaches that no universally appropriate accounting system can be applied equally in all circumstances (Otley, 1980). Specific features of an accounting system rely on a particular event which needs to be addressed by the organisation. Accordingly, specific aspects of an accounting system should correspond with particular circumstances (Otley, 1980). Consistent with the contingency approach, a shock generates contingent effects in an organisational context. Adapting the contingency framework developed by Otley (1980) (see Figure 1), this research seeks to discover these effects and the related actions and reactions of the professional accountants' working approach due to the Covid-19 shock. Contingent variables, organisational design, type of accounting system, and organisational effectiveness also characterise the framework of this study. Additionally, a shock generates *reactive* and *adaptive* contingent effects through specific contingent phases.

[Insert Figure 1 here]

Consistent with the research purpose, contingency theory is applied in this study to understand how the Covid-19 contingent variables change the organisational design, behavioural accounting characteristics, and organisational effectiveness of accountants' working approach. This change happens through specific contingent phases to be identified through the exploration of the research setting.

3. Method

Action research approach was developed in the mid-1940s from Kurt Lewin (1890-1947) to address the issues in social action, through group decision and commitment to improvement (Gallos, 2006). Arguably, "*action research consists of a set of theories of changing that work to solve real problems while also contributing to theory*" (Gallos, 2006, p. 112). This method bridges the gap and combines theory building with research on practical problems (Cunningham, 1993). Particularly, action research explores and engages with the complex dynamics involved in any social context by identifying effective solutions to problems experienced in unexpected situations and localised settings. Moreover, this systematic approach helps to build a body of knowledge that enhances professional, and community practises (Stringer, 2013). However, action research has not evolved into a unified theory, but has resulted in disparate definitions and characterizations (Peters & Robinson, 1984). In line with Gallos (2006), this study adopts a *participatory action research*, embodying a process of systematic inquiry in which those experiencing a problem in their community or workplace participate with researchers in deciding the focus of knowledge generation, in collecting and analysing data, and in taking action to manage, improve, and solve their problem.

Based on this approach, the selection of the case study follows these steps. As accounting is a social practise that influences both human and organisational behaviours, social functioning, and development (Miller, 1994), this research focuses on the accounting profession to understand their key role during unprecedented times and the impact of their working approach on organisations and society. This study considers the Italian context, as Italy is one of the most affected European

countries by Covid-19 (World Health Organization, 2020). Additionally, one of the co-authors was a CA (Chartered Accountant) in the accounting consultancy firm selected¹. This opportunity helps to examine the effects of Covid-19 from both internal and external perspectives (Quattrone, 2000).

All co-authors conducted semi-structured interviews to reduce biases arising from the professional involvement of one co-author (Stringer, 2013). Closer working-related participants with the co-author involved in the firm have been interviewed just by the other co-authors. The selected interviewees are Associate Partners of a local Italian professional accountancy organisation. They are qualified CAs with an average work experience of 20 years in the accounting field and work as collaborators or employees. They were invited to answer open-ended questions in semi-structured interviews. The interview protocol was developed consistent with the research purpose. The macro-areas discussed were background information, and information and communication technology (ICT) knowledge and expertise, human actions and reactions, big changes, implications, and learning. During the interview process, a reflexive approach was adopted to revise the interview structure and identify new micro-areas of investigation. The research began the day after the declaration of the “state of emergency as a consequence of the health risk associated with the onset of diseases deriving from transmissible viral agents,” announced on 31 January 2020 by the Italian Prime Minister (PM).

The research lasted six months. The first round of interviews was conducted between February 2020 and May 2020 to understand the first actions and reactions resulting from Covid-19. From June 2020 to the end of July 2020, the same respondents were interviewed once again to understand the adaptive behaviours incorporated in their working approach and the implications of this change. The interviews were conducted through telephone, Skype calls, face-to-face interviews, and active participation by one co-author, involved in the organisation under investigation. Interviews were conducted in Italian and recorded, transcribed, and translated in English. Interview transcripts were analysed on a paragraph-by-paragraph and line-by-line basis (Parker and Roffey, 1997). The data collected were analysed using thematic analysis with an inductive approach (Braun and Clarke, 2013). Initial codes were identified through open coding. Data were coded by allocating labels to the macro-area, related to background information, ICT knowledge and expertise, human actions and reactions, big changes, implications, and learning. Axial coding was conducted, where similar codes were aggregated into nodes using NVivo 12. Themes were identified by analysing data into groups related to the sub-themes explored in the interviews (see Appendix 1). Some units were coded to include more than one category. The findings are interpreted based on the elements of the theoretical framework developed. They include contingent variables, organisational design, behavioural accounting characteristics, and organisational effectiveness.

During the pre-shock the knowledge and use of technologies, both at the personal and organisational levels, were assessed to understand the engagement with technology for workflow. Background information about the research context emerged, as shown in Table 1.

[Insert Table 1]

Although the self-assessment of ICT knowledge before the total lockdown is predominately high, the use of technological tools is limited. For instance, the “*Use of one work platform*” (CA1) is mentioned and “*No new technologies (working from home, file sharing, e-meetings)*” (CA1) are implemented.

4. Accountants' response to a humanitarian disaster

The Italian darkest hour came on 9 March 2020, when the PM announced that the country was in lockdown to contain the outbreak:

“There is no more time. I will take responsibility for these measures. Our future is in our hands [. . .]. I am going to sign a decree that can be summarised as follows: I stay at home. The whole of Italy will become a protected zone.” (Giuseppe Conte, 9 March 2020).

This shock challenged the organization members to generate immediate actions.

In particular, the first days after the shock (9 March to 22 March 2020), the reactions were primarily related to personal conditions and professional consequences. The first recorded emotions can be classified as confusion (“*Big confusion about personal, and organisational workflow*”, CA1), altruism (“*Keeping everyone safe*”, CA7), anger (“*Anger about the information delay from international organisations*”, CA6) and fear about personal conditions (“*Health conditions of the family*”, CA2; “*Feeling of losing personal freedom and freedom of movement*”, CA4), working deadlines (“*Fear about meeting deadlines*”, CA7), clients' support (“*How to guarantee continuous support and help to our clients during this period*”, CA2) and availability and feasibility of technological devices.

The overall forced change of routines was driven by internal phases identified with the implementation of action research. Nine main phases representative of a successful action plan management of pre and post shock recovery by the accountants are identified (see Figure 2).

In particular, the “response phase” of a “disaster cycle” (Walker, 2014) in our case include also adaptive and consolidated actions, due to the fact that the disaster is still occurring.

The intent is to develop a short-term (see 4.1. *Contingent reactions*) and long-term road map (see 4.2. *Adaptive contingent effects*) to respond to an imperative changing environmental demand.

Hence, these phases (pre-step, destroying phase, rearranging, shaping phase, reaction, contingency solutions, improvement, proximity, and consolidation stage) can be followed through short-and long-term contingent solutions (Otley, 1980), with positive effects for the implementation of a new working approach and the adaptation of accounting practises.

[Insert Figure 2]

4.1. Contingent reactions

The first experiences of the organization members during the initial reactive phase of the shock showed how the contingent variables, such as technology availability, distribution of work, and professional support, are essential to confront Covid-19 during their work (Otley, 1980):

“I immediately ensured that everyone could work from home, using available technology, distribution of work, access from home to working documents, professional support, etc” (CA1)

By implementing a combined range of contingent reactions (*“Creating the conditions to replace the same previous workload”*, CA3; *“Essential help and support from technology and all digital devices”*, CA4), accountants could minimize a humanitarian disaster. They immediately adopted a different work approach, shifting the adoption of accounting practices from the worksite to the remote working environment. Doing so, the accountants “dehumanised the crisis” (Walker, 2003), becoming immediately “active participants” (Lai et al., 2014) and highlighting the role of accounting (and accounting practices) as a “key facilitating technology” (Lai et al, 2014, p. 599 consistent with Walker, 2014).

Apart from responding to their own “justifiable neediness” by immediately involving themselves “physically, mentally, and emotionally” (Sargiacomo et al., 2014), accountants as “principal accounting actors”, had the key role to assist the other actors (i.e. clients, employers etc) (Sargiacomo et al., 2014), addressing their shock:

“Alleviating clients’ shock due to continuous legislative changes and confusion about fragmented laws and changes in fiscal requirements” (CA9).

“Implementation of ad-hoc solutions to deal with clients’ issues related to old procedures” (CA4).

The perception of accounting as an “important facilitator of the recovery” (Walker, 2014, p. 19) is emphasized also from the immediate use of the accounts (*“The use of the accounts was compulsory in order to urgently support the clients to apply for the governments financial support”*, CA10). This evidence confirms the role of the accounting to *tell the truth*, reducing the risk of opportunistic behaviours (Lai et al., 2014; Sargiacomo et al., 2014) and its implementation as social and institutional practice (Miller, 1994).

4.2. Adaptive contingent effect

The contingent shock also embodies an *adaptive approach* of the new work routine and organization. Particularly, after the initial reactions, from the meetings with the organization members the adaptive perceptions of significant changes started in “Phase 2²”, lasting 13 weeks (from 4 May to 31 July). The contingent working solutions (Otley, 1980) adopted now are consolidated. Green shoots are starting to form in terms of new working approaches, skills, and human interactions. The essential role of the ICT devices is emphasised (*“Improvements in problem-solving skills”*, CA3; *“More familiarisation and engagement with ICT use”*, CA6). During this phase, improvements to new work approaches and consolidated contingency solutions are identified (Otley, 1980). The remote environment is the new normal working approach, and new accounting practises become entrenched (*“The recording of the day-to-day financial transactions is now implemented, adopting electronic invoices or pdf documents. I would never imagine before to close balances of ledger accounts, prepare the trial balance and all the financial statements entirely remotely, without an infinite amount of printed papers and in presence meetings”*, CA10). These evidences empower the role of accounting, and in particular of accounting practices, as a “key facilitating technology” also during the adaptive phases (Lai et al., 2014; Walker, 2014).

Moreover, we can argue that adaptive change is based in the idea that organizations and their members learn (Gallos, 2006, p. 107). In particular, the learning of routines is the stimulus of the adaptive change in behavioural response (Gallos, 2006, p. 107).

However, learning is not necessarily viewed as desirable for the organization and its actors (Gallos, 2006, p. 107). Consequently, signals of permanent changes in society are perceived, with dissimilar consequences on personal and professional relationships:

“Negative changes in social relationships. Absence of human contact: we are not machines! Synergising and sharing approaches are pivotal for our work. Working-life balance is destroyed by smart-working (CA2).

“Smart-working allows more focused working approach and higher balance between work and personal life” (CA3).

5. Concluding Remarks

The purpose of this research was to discover the effects and the related actions and reactions of the professional accountants' working approach due to the Covid-19 shock. This objective was pursued by adopting contingency theory (Otley, 1980) to explain the contingent effects on accountants' work caused by the pandemic. The *participatory action research* approach focussed on semi-structured interviews within a specific professional organisation. The data collected were examined through an inductive interpretative approach.

Our analysis identified nine contingent phases (pre-step, destroying phase, rearranging, shaping phase, reaction, contingency solutions, improvement, proximity, and consolidation stage), as part of a “disaster cycle”, engaging with Walker (2014) research on the adaptive and consolidated actions. The contingent phases identified provide a road map for other professional accountants and organisations to address any further shocks. The reactions captured highlight the progress of work of professional accountants without relevant difficulties or failed deadlines. Despite the fear of failure in the professional development of work, this experience has defined a rational approach to adapting professional activity, identifying the new normality in accounting practices. Other accountants could follow the contingent changes determined by the Covid-19 pandemic in the reorganisation of their professional activities.

In line with contingency theory, we argue that the observed changes have been facilitated from the accounting practises, immediately redesigned and implemented. Our analysis has highlighted and confirmed the potential of accounting as an “important facilitator of the recovery” for the accountants (Walker, 2014, p. 19) and, in general, a supportive tool of the financial emergency, with the ability *to tell the truth*, alleviating the risk of opportunistic behaviours (Lai et al., 2014; Sargiacomo et al., 2014).

Also, we can confirm the role of the accountants as key actors of the shock, capable to answer to the emotional and financial “justifiable neediness” of others (such as their clients), alleviating the suffering (Sargiacomo et al., 2014, p. 667).

To conclude, we understand how the Covid-19 pandemic has determined relevant changes in the accountants' experience. Some of these changes could be considered contingent on short-term effects, while others have long-term implications for the professional work approach. Therefore, the changes related to the Covid-19 pandemic will determine their implications in shaping the professional activities of accountants. The Covid-19 pandemic was the contingent, and disruptive cause for discussing the usual accounting practises within the accounting profession. This pandemic has forced

accounting organisations to move from their comfort zone. It represents not only a contingent situation to react and adapt in the short term but also an opportunity to establish the “new normality” in their professional activities within the accounting domain. Therefore, we cite the words of Roy T. Bennett (2016) “*The comfort zone is a psychological state in which one feels familiar, safe, at ease, and secure. If you always do what is easy and choose the path of least resistance, you never step outside your comfort zone. Great things do not come from a comfort zone.*”

The contribution of this research is mainly threefold. First, it contributes to the accounting literature on humanitarian disasters by examining how a pandemic shapes the working approach and accounting practices of accountants considering both short-term and long-term organisational implications. Second, it advances the contingency theory by identifying specific contingent phases that embody an organisational shock. Third, this study advances professional accounting knowledge on contingent organisational changes and effects.

In addition, based on the literature survey, this is the first study that adopts an action research approach to engage with the complex dynamics involved in the professional context of Covid-19 by discovering the effective actions, reactions, and solutions to problems experienced by professional accountants. This approach contributes to building a body of knowledge that enhances professional, and community practises by offering multidisciplinary contributions in accounting that address the severe global Covid-19 pandemic, its impacts, and the opportunities for future research. Other opportunities to verify our findings could be pursued through the analysis of large-scale professional organisations (big and international accounting firms, or auditing firms) and extended over time to the end of 2020 and the stabilisation of the prospected changes in the future. The limitations of this study are mainly related to the time-space of realisation of our analysis, the number of interviews conducted and that there was only a single case study.

Notes

1. This co-author declares that there are no conflict of interests or biases in conducting this research, and there are no financial or personal interest in the outcomes of the research due to the nature of his/her working activity. Moreover, according to the research ethics adopted to conduct this research, all participants have been informed on the purpose of this research, and on the anonymous treatment of their name and interviews' contents. All participants have given formal written consent to being interviewed, expressing the absence of any potential conflict of interests.
2. “*Phase two starts now [. . .]. Now is the time to coexist with the virus. [. . .]. It is fundamental for each one of us to be responsible, we must never get too close to each other, and the safety distance must be at least one metre. If you love Italy, keep your distance*’ (Italian PM Giuseppe Conte, 26 April 2020).

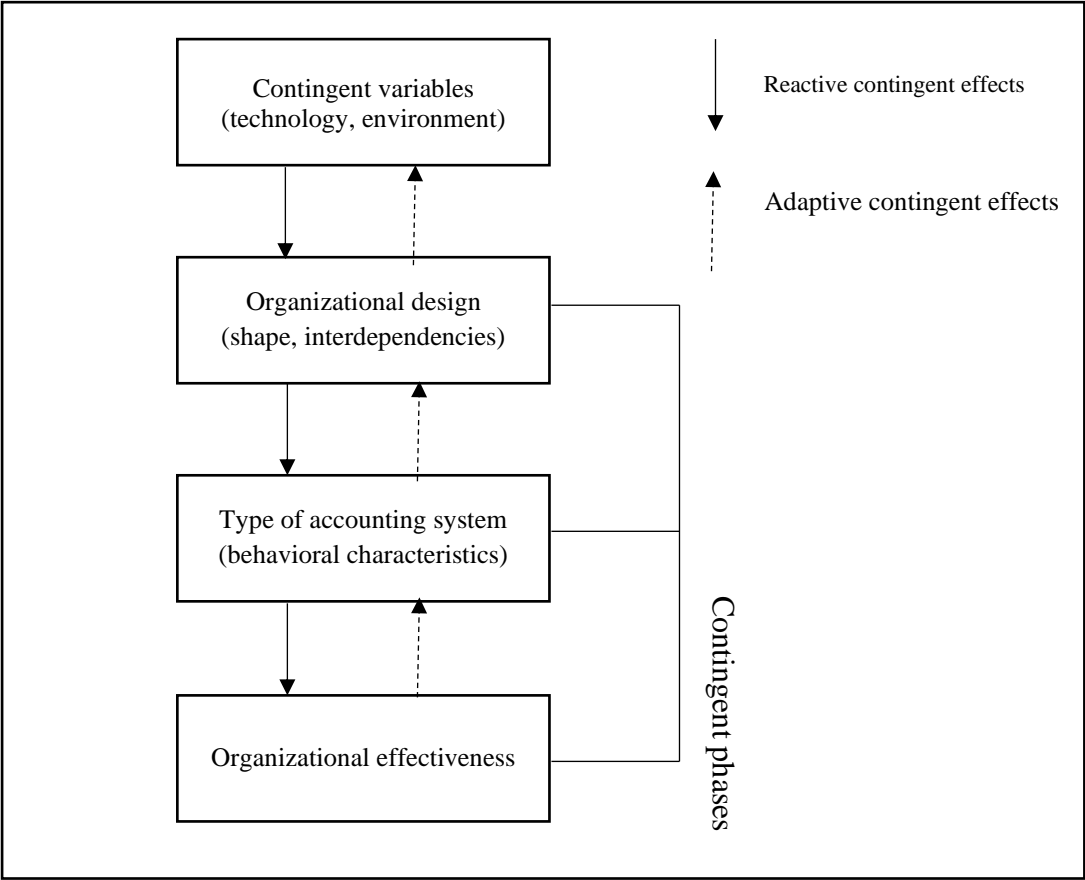
References

- Agyenim-Boateng, C. and Oduro-Boateng, K. (2019), “Accounting for disasters: evidence of under-representation of victims in the accountability process”, *Journal of Accounting in Emerging Economies*, Vol. 9, No. 3, pp. 422-448. DOI: 10.1108/JAEE-04-2017-0048
- Baker, C. R. (2014), “Breakdowns of accountability in the face of natural disasters: the case of Hurricane Katrina”, *Critical Perspectives on Accounting*, Vol. 25, No. 7, pp. 620-632. DOI: <https://doi.org/10.1016/j.cpa.2014.02.005>

- Barro, R. J., Ursúa, J. F., & Weng, J. (2020). The Coronavirus and the Great Influenza Pandemic: lessons from the “Spanish Flu” for the Coronavirus’s potential effects on mortality and economic activity (No. w26866). *National Bureau of Economic Research*. DOI: <https://doi.org/10.3386/w26866>
- Bennett, R. T. (2016), *The light in the heart. Inspirational Thoughts for living your best life*, Roy Bennett Publishing, UK
- Braun, V., and Clarke, V., (2013), *Successful Qualitative Research*, Sage Publications, London
- Chwastiak, M. (2006), “Rationality, performance measures and representations of reality: planning, programming and budgeting and the Vietnam war”, *Critical Perspectives on Accounting*, Vol. 17, No. 1, pp. 29-55. DOI: <https://doi.org/10.1016/j.cpa.2004.05.006>
- Chwastiak, M. (2008), “Rendering death and destruction visible: counting the costs of war”, *Critical Perspectives on Accounting*, Vol. 19, No. 5, pp. 573-590. DOI: <https://doi.org/10.1016/j.cpa.2007.01.002>
- Cooper, C. and Catchpole, L. (2009), “US imperialism in action: an audit-based appraisal of the Coalition Provisional Authority in Iraq”, *Critical Perspectives on Accounting*, Vol. 20, No.6, pp. 716-734. DOI: [10.1016/j.cpa.2008.12.003](https://doi.org/10.1016/j.cpa.2008.12.003)
- Cunningham, J. B. (1993), *Action research and organizational development*, Westport, CT: Praeger
- Eisenstein, C. (2011), *Sacred economics: Money, gift, and society in the age of transition*, North Atlantic Books, California
- Funnel, W. (1998), “Accounting in the service of the Holocaust”, *Critical Perspectives on Accounting*, Vol. 9, No. 4, pp. 435-464. DOI: <https://doi.org/10.1006/cpac.1997.0164>
- Gallos, J. V. (Ed.). (2006), *Organization development: A Jossey-Bass reader*, Jossey-Bass/Wiley.
- Gould, S., Arnold, C. (2020), “The Financial Reporting Implications of COVID-19”, *IFAC*, <https://www.ifac.org/knowledge-gateway/supporting-international-standards/discussion/financial-reporting-implications-covid-19>. Last Accessed Date: 20 August 2020
- Lai, A., Leoni, G., and Stacchezzini, R. (2014), “The socializing effects of accounting in flood recovery”, *Critical Perspectives on Accounting*, Vol. 25, No.7, pp. 579-603. DOI: <https://doi.org/10.1016/j.cpa.2014.04.002>
- Lewin, K. (1946), “Action research and minority problems”, *Journal of Social Issues*, Vol. 2 No. 4, pp. 34–46.
- Miller, P. (1994), Accounting as Social and Institutional Practice: an Introduction, Hopwood, A. and Miller, P. (eds) *Accounting as Social and Institutional Practice*, Cambridge, Cambridge University Press.
- O’Regan, P. (2010), “A dense mass of petty accountability: accounting in the service of cultural imperialism during the Irish Famine, 1846–1847”, *Accounting, Organizations and Society*, Vol. 35, No. 4, pp. 416-430. DOI: <https://doi.org/10.1016/j.aos.2009.10.001>
- Oldroyd, D., Fleischman, R. K., and Tyson, T. N. (2008), “The culpability of accounting practice in promoting slavery in the British Empire and antebellum United States”, *Critical perspectives on Accounting*, Vol. 19, No. 5, pp. 764-784. DOI: <https://doi.org/10.1016/j.cpa.2006.11.005>
- Otley, D. (2016), “The contingency theory of management accounting and control: 1980–2014”, *Management accounting research*, Vol. 31, pp. 45-62. DOI: <https://doi.org/10.1016/j.mar.2016.02.001>
- Otley, D. T. (1980), “The contingency theory of management accounting: achievement and prognosis”, *In Readings in accounting for management control*. Springer, Boston, MA, pp. 83-106. DOI: https://doi.org/10.1007/978-1-4899-7138-8_5

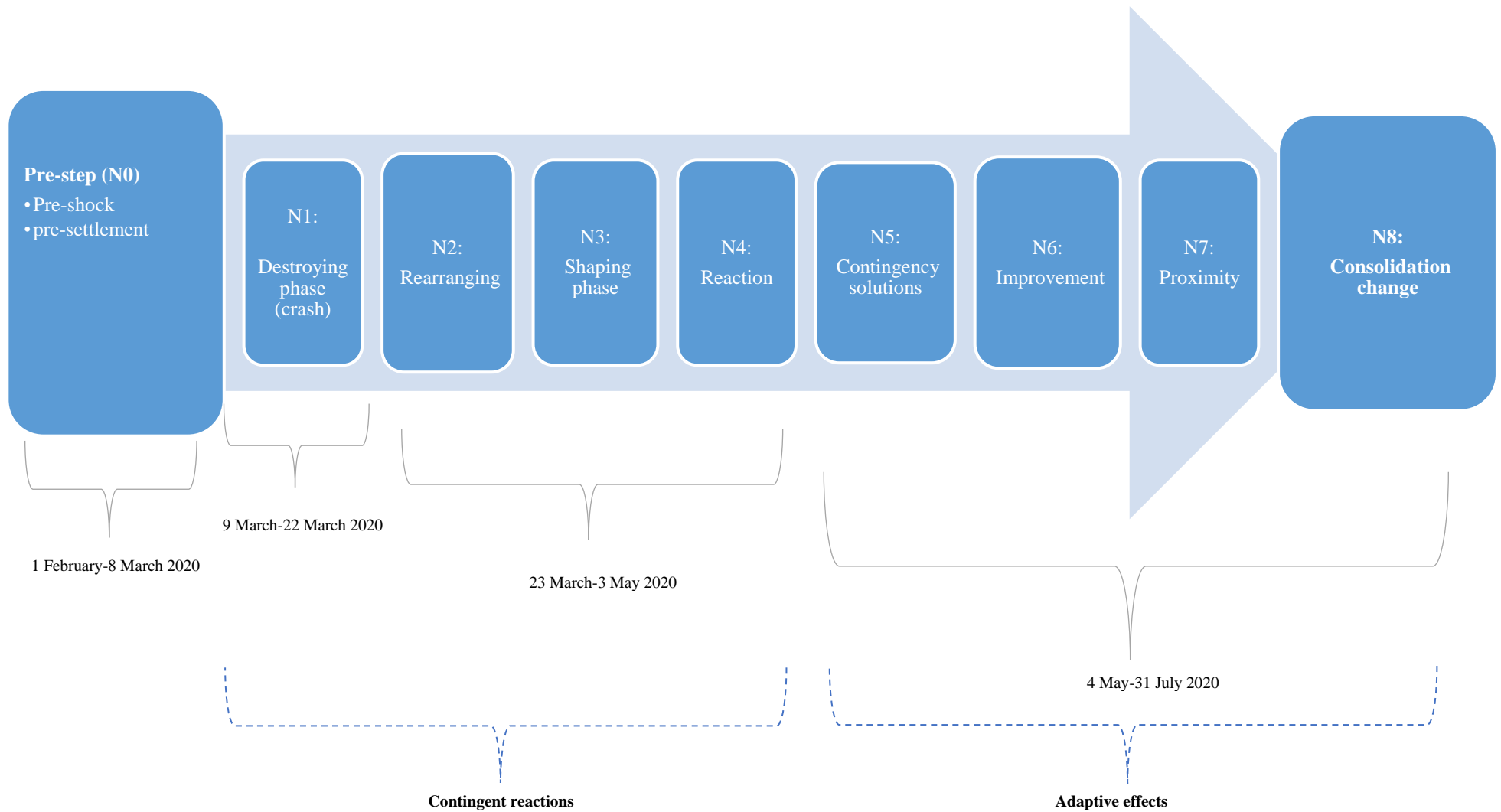
- Parker, L.D. and Roffey, B.H. (1997), "Methodological themes: back to the drawing board: revisiting grounded theory and the everyday accountant's and manager's reality", *Accounting, Auditing and Accountability Journal*, Vol. 10, No. 2, pp. 212-247. DOI:10.1108/09513579710166730
- Quattrone, P. (2000), "Constructivism and accounting research: towards a trans-disciplinary perspective", *Accounting, Auditing and Accountability Journal*, Vol. 13, No. 2, pp. 130-155. DOI: <https://doi.org/10.1108/09513570010323047>
- Sargiacomo, M. and Walker, S.P. (2020), "Disaster governance and hybrid organizations: accounting, performance challenges and evacuee housing", *Accounting, Auditing & Accountability Journal*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/AAAJ-12-2019-4323>
- Sargiacomo, M., Ianni, L., and Everett, J. (2014), "Accounting for suffering: calculative practices in the field of disaster relief", *Critical Perspectives on Accounting*, Vol. 25, No.7, pp. 652-669. DOI: <https://doi.org/10.1016/j.cpa.2014.03.011>
- Shimizu, Y., and Fujimura, S. (2010), "Accounting in disaster and accounting for disaster: the crisis of the Great Kanto Earthquake, Japan, 1923", *Accounting, Business & Financial History*, Vol. 20, No. 3, pp. 303-316. DOI: <https://doi.org/10.1080/09585206.2010.512711>
- Stringer, E. T. (2013), *Action research*, Sage publications, USA
- Taylor, D., Tharapos, M., and Sidaway, S. (2014), "Downward accountability for a natural disaster recovery effort: evidence and issues from Australia's Black Saturday", *Critical Perspectives on Accounting*, Vol. 25, No.7, pp. 633-651. DOI: <https://doi.org/10.1016/j.cpa.2013.01.003>
- Walker, S. P. (2003), "Agents of dispossession and acculturation. Edinburgh accountants and the highland clearances", *Critical Perspectives on Accounting*, Vol. 14, No. 8, pp. 813-853. DOI: [https://doi.org/10.1016/s1045-2354\(02\)00191-0](https://doi.org/10.1016/s1045-2354(02)00191-0)
- Walker, S. P. (2014), "Drought, resettlement and accounting", *Critical Perspectives on Accounting*, Vol. 25, No. 7, pp. 604-619. DOI: <https://doi.org/10.1016/j.cpa.2013.06.005>
- World Health Organization (2020), *Coronavirus disease 2019 (COVID-19) Situation Report – 71*, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200331-sitrep-71-covid-19.pdf?sfvrsn=4360e92b_8.

Figure 1: *Theoretical framework of this study*



Source: Author's elaboration based on Otley (1980, 2016).

Figure 2: Contingent phases



Source: Author's elaboration.

Table 1: *ICT (Information and Communications Technology) expertise and use of technology*

Participants	Self-assessment of ICT expertise	Organization's ICT expertise	Use of Technology
CA1	High	High	Medium-Low
CA2	High	High	Medium
CA3	Medium	High	Medium
CA4	High	Medium-High	Low
CA5	Medium	Medium-High	Medium
CA6	Medium-High	Medium-High	Medium-Low
CA7	High	Medium	Medium
CA8	Medium	Medium	Medium-Low
CA9	High	Medium-High	Medium
CA10	High	Medium	Low

Source: Author's elaboration

Appendix 1: Data analysis

<i>Example quote</i>	<i>Open code</i>	<i>Axial code</i>	<i>Sub-Theme</i>	<i>Theme</i>	<i>Contingency effects</i>
	<ul style="list-style-type: none"> • Economic Background • University of Siena • Certified Public Accountant • Associate Partner of the professional company • High personal and professional responsibilities • Relationship with clients is a priority • Ethics and personal responsibility • Management Accounting and Tax support activities mainly with SMEs • Autonomous and independent activity 	Personal information, educational and professional background	Background information	Context	
	<ul style="list-style-type: none"> • High self-assessment level in ICT expertise • Before Covid-19: use of one work platform • No new knowledge of technologies (work from home, file sharing, e-meetings) 	Self-assessment ICT expertise	ICT knowledge and expertise		Organizational design
<ul style="list-style-type: none"> • “We were pre-ready for this lockdown!” (CA2) • “Personally, daily life has been turned upside down” (CA3) • “Trying to maintain the trust of our clients, for instance providing regular updates and information through dialy email to our clients” (CA10) 	<ul style="list-style-type: none"> • Big confusion about personal, organizational workflow • 15 days of bewildered personal mood • Gradual and progressive adaptation after 15 days • Recovery of personal control and work management • Busy and demanding period at first 	First thoughts and reactions from breaking Covid-19 news	Human actions and reactions	Reactive approach	

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- First worries about availability and feasibility of technological devices
 - Organizational work approach
 - Life-changing shock
 - First negative worries and fears
 - Feeling of losing personal freedom and freedom of movement
 - After 5–6 days adaptation phase
 - Anger about information delay from international organizations
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- *“I immediately ensured that everyone could work from home, using available technology, distribution of work, access from home to working documents, professional support etc.” (CA1)*
 - *“Organize a new routine for me and my family” (CA4)*

- Health conditions of family
- Guarantee continuous support and help to our clients during this period
- Try to define a daily personal schedule and routine
- Systematise working activities
- Creating the conditions to achieve the same previous work-load
- Implementation of ad-hoc solutions to deal with clients issues related to old procedures
- Re-organisation of working approach
- Re-thinking the ways to maintain contacts with clients
- Create an environment to work from home

First actions implemented just after Covid-19 to re-manage working activities

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- Put effort on having everything under control
 - Get used to smart-working approach
 - Use of ICT to deal with working activities (email, telephone etc.)
 - How to enable conditions for our employees to work from home
 - Destroying personal shock due to continuous legislative changes
 - Confusion about fragmented law and fiscal requirements changes
 - Provide everyday support to clients thanks to ICT help
 - Give clients the idea of being present even during this period of shock
 - One Skype meeting per week related to management's deadline
 - Dealing with ICT related issues (e.g. Turning on our software devices from the office etc.)
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- Ability to work from home
 - Technology openness
 - Management skills
 - Problem-solving skills improvements
 - Dealing with urgent and contingent issues
 - IT knowledge
 - Flexibility
 - Attitude to change
 - Communication skills
 - Knowledge of specific accounting mechanisms

Main personal skills
needed to deal with
Covid-19 shock

	<ul style="list-style-type: none"> • Skill to transmit calm to other people and colleagues • Professional trust capabilities 				
	<ul style="list-style-type: none"> • Rediscovery of family affections • More focused working approach • Increase the attention to details • Boost analytical approach • Discover the ease-to-use of ICTs • Big personal effort of colleagues • Flexible working approach (flexible working times) • Higher quality life • Higher work-life balance • Awareness that the previous working model with physical presence with rigid working times is old. 	Positive changes	Big changes	Contingent shock	Contingent variables
<ul style="list-style-type: none"> • <i>“Absence of human contact: we are not machines!” (CA2)</i> • <i>“Fear of the contagious destroys our attitude with people” (CA5)</i> - 	<ul style="list-style-type: none"> • Isolation from lock-down and negative consequences in social relationships • Work-life balance destroyed • Loss of human aspect of social relationships • 	Negative changes			
<ul style="list-style-type: none"> • <i>“24h working from home” (CC1)</i> • <i>“Synergising and sharing approaches are pivotal for our work” (CA2)</i> • <i>“Some things which need to be taken for granted are not taken for granted at all!” (CA9)</i> 	<ul style="list-style-type: none"> • Considering working from home also during normal conditions and not only strictly related to contingent work 	Lessons learned	Implications and learnings	Adaptive approach	Organizational effectiveness

<ul style="list-style-type: none"> • <i>“I can continue to collaborate with my company even after my movement to the UK, I think thanks to the experience with smart working during this shock period!” (CA6)</i> • <i>“We can make it! We can work from home!” (CA6)</i> 	<ul style="list-style-type: none"> • Positive overall assessment on working from home experience • No big changes in meeting work deadlines • Working from home moderates the negative impact of lockdown • Great help and support from technology and digital devices • Optimization of work-time • Different way of interacting with colleagues and clients • Changing of our routines and daily habits • Rescheduling new deadlines • Extreme vulnerability of human beings 	
<ul style="list-style-type: none"> - <i>“We will return to the normal life very soon!” (CA2)</i> 	<ul style="list-style-type: none"> • Willingness to continue smart-working • Nostalgic attitude • Need to balance physical working presence and smart working • 	<p>Short-term implications of the change</p>
<ul style="list-style-type: none"> - <i>“We will come back to our normal life but with negative consequences, because many people considered the lockdown as a lack of personal freedom. Consequently, these people will behave differently” (CA3)</i> - <i>“Differences in working approach: new normality needed!” (CA6)</i> - <i>“Some behaviors will change permanently and will have positive effects on society, environment, especially the good consequences of smart-working”(CA4)</i> 	<ul style="list-style-type: none"> • Permanent consequences with variable entity, depth, breath and coverage. • Rebuild and reconsider the importance of interpersonal relationships • Cultural barriers will privilege previous working model with physical presence in the future within Italian context. • Increase in dealing with urgent situations 	<p>Long-term implications of the change</p>

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- *“From a cultural perspective, Italian people tend to stay together and have human contacts and interactions” (CA4)*
 - Increase in use of ICT also for reluctant people
 - Selfishness
 - Individualism

Source: Author's elaboration, adapted from Otley (1980; 2016).