

# SOCIAL SCIENCES' TRANSFORMATION IN LIGHT OF COVID-19

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**Abstract.** *Transformations in social sciences accelerated by the COVID-19 pandemic remain under-explored. The aim of the article is to analyse scientific literature on social sciences' transformation in light of COVID-19 underpinning the elaboration of implications for teaching a Research Methodology course to the higher education students. The present research work made use of theoretical and empirical methods. The exploratory study was of qualitative nature. The study carried out in April 2021 was based on the analysis of scientific publications selected from the Web of Science and google search by indicating the key words "COVID-19" and "Social sciences' transformation". The conclusion is drawn that social sciences' transformation to the remote conduct is "a new normal" in the conditions of uncertainty. Virtual fieldwork is proposed to be a new qualitative method in social sciences' research as some populations live mostly in digital environments. Another conclusion is that there is a need for a balance, when composing the empirical study's sample, between respondents in the digitally divided populations, namely inclusions of both groups' - digital and non-digital - respondents. Implications for teaching a Research Methodology course to the higher education students are presented. Research limitations are identified. Directions of further research are proposed.*

**Keywords:** *conceptual model, COVID-19, higher education students, traditional and remote fieldwork, social sciences, teaching a Research Methodology course, transformation.*

## Introduction

The global spread of the COVID-19 pandemic has rapidly changed people's lives in an unprecedented way (Ahrens & Zascerinska, 2020). Social, cultural, public health, economic, political dimensions of people's lives have been profoundly effected. The COVID-19 pandemic has severely affected the population (Saladino, Algeri, & Auriemma, 2020). The COVID-19 pandemic has had far-reaching consequences beyond the spread of the disease itself and efforts to quarantine it, including political, cultural, and social implications (Chu, Alam, Larson, & Lin, 2020). The social impact of the COVID-19 pandemic on the population is revealed in uncertainty in economics in regard to copying with COVID-19. The pandemic COVID-19 has compelled the human society to maintain social distancing (Ahrens et al., 2021). Many people have experienced

the overnight digital transformation in the most of their everyday activities such as working, shopping, business management, finance administration, event organisation, etc (Zašcerinska, Aleksejeva, Zašcerinskis, Gukovica, & Aleksejeva, 2020, 2021). The COVID-19 digital life, characterized by the issues with the Internet, computers and software (Ahrens et al., 2021), has created the digital divide among the people and, consequently, inequalities. Currently, the society's cohesion is also a questionable issue in regard to vaccination against the coronavirus as some people wish to get vaccinated as soon as possible. However, some of such people - who wish to get the vaccine as soon as possible - do not belong to the right target group and have to wait till their age group is invited.

During the COVID-19 pandemic, social sciences were the first to react to the emergent situation and propose appropriate solution to overcome the unsettled issues. The social sciences are radically dealing with the phenomenon of the COVID-19 pandemic that are in no way repeated (Maldonado, 2020). The search on the Web of Science (WoS) indicating the key words "COVID-19" and "Social Sciences" show that a little bit less than 490000 publications have been displayed on the WoS website by the 16 April 2021. However, the role and the place ascribed to social sciences and their contributions is not sufficiently valued (Miguel Ferreira & Serpa, 2020).

Against this background, social sciences have also been changing themselves. Transformations in social sciences accelerated by the COVID-19 pandemic remain under-explored. The analysed search on the Web of Science (WoS) indicating the key word "Social Sciences Transformation" show that there are no publications dated by 2020 and 2021 displayed on the WoS website by the 16 April 2021.

The enabling research question is put forward: What are social sciences' transformations to be delivered to the higher education students while teaching a Research Methodology course?

The aim of the article is to analyse scientific literature on social sciences' transformation in light of COVID-19 underpinning the elaboration of implications for teaching a Research Methodology course to the higher education students.

The present research work made us of both – theoretical and empirical methods. The study was of qualitative nature. Exploratory study was implemented. The study was carried out in April 2021. Documents' analysis served as a method of data collection. Data were structured and summarized.

### **Conceptual Framework**

The conceptual framework of the present work is shaped by the implementation of theoretical methods such as analysis of scientific literature, theoretical modelling, systematisation, synthesis, comparison, and generalisation.

Social sciences focus on constantly shifting human behaviours (Bastow, Dunleavy, & Tinkler, 2015). Social sciences are conscious that human beings

have an innate and un-erodible capacity to change what we do in response to being told why we act as we do, or how we are expected to act in future (Bastow, Dunleavy, & Tinkler, 2015).

The social sciences include (Bastow, Dunleavy, & Tinkler, 2015) Economics, Sociology, Anthropology, Political Science, International Relations, Management and Business Studies, Finance, Accounting, Social Policy, Social Work, Education, Planning, Demography, Actuarial Science, and Operational Research.

Social sciences are dynamic, not static (Benson, 1995; Robbins, 2007). It means that social sciences change or, in other words, transform. Transformation is widely agreed to involve significant and fundamental change (Duncan et al., 2018). Transformation is based on processes (Zascerinska, 2013). Transformation can be characterized as (Ahrens, Zaščerinska, Lange, & Aleksejeva, 2021)

- a system process as its properties are linked,
- a complex process as its elements are intertwined,
- a linear process as it proceeds from one stage/phase to another,
- a cyclic process as it can be repeated,
- of social nature as it changes within and by society and/or community,
- of bi-module nature as it includes both external and internal perspectives (Zascerinska, 2013).

Social sciences' transformation are identified to be (Mota & Lopes dos Santos, 2018) as shown in Figure 1

- ontological, and
- epistemological.

Based on Vygotsky's theories (Vygotsky, 1934/1962), these two processes are considered to be inter-connected.

Ontological transformation is connected to the shifts in conceptualization (Neuhaus, 2017), knowledge and content (Zascerinska, 2013). Epistemological transformation is related to the change in 'a way of understanding and explaining how we know what we know' (Crotty, 2003) or, in other words, research methodology.

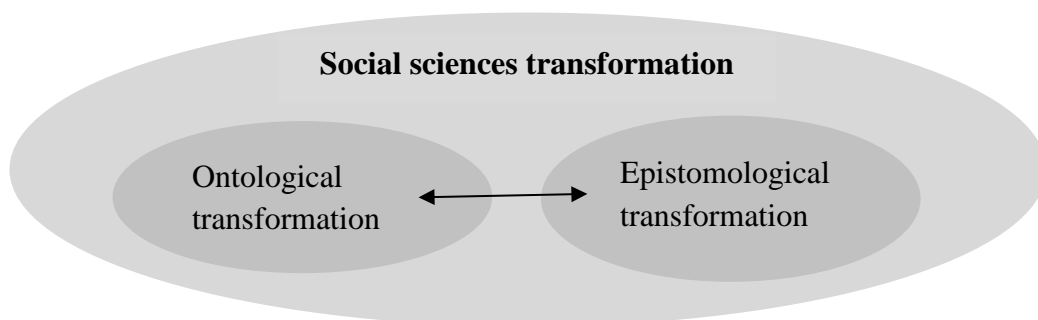
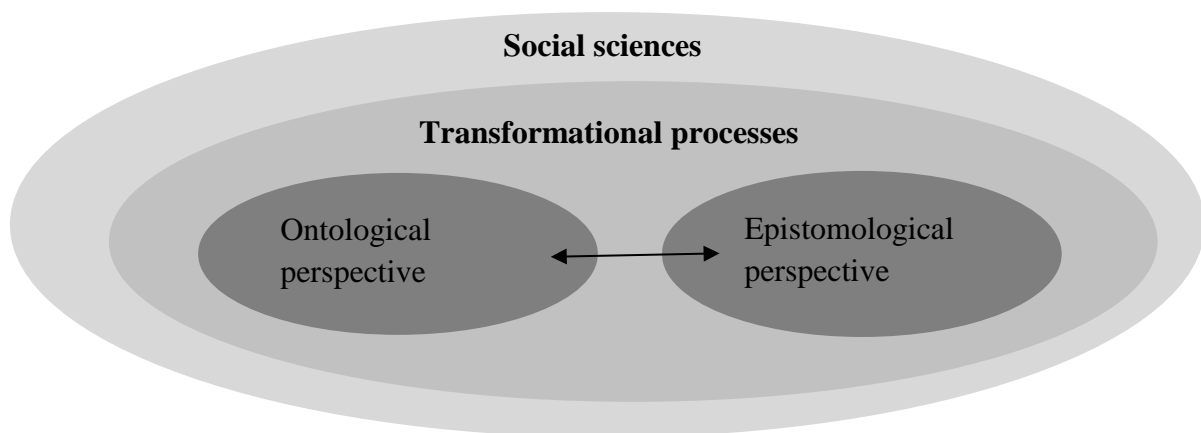


Figure 1 The relationship between university governance and university management

Figure 2 illustrates the conceptual model of social sciences' transformation. The conceptual model will be applied to the analysis of the scientific literature on social sciences' transformation for data structuring and summarizing.



*Figure 2 The conceptual model of social sciences' transformation*

### **Methodology of the Study**

The empirical study was enabled by the research question: What is the impact of the COVID-19 pandemic on social sciences' transformation?

The study purposes were to investigate the effect of the COVID-19 pandemic on social sciences' transformation.

The qualitative study was implemented. Exploratory study was employed in the present work.

The exploratory study was aimed at generating new research questions. The exploratory studies are largely an inductive process to gain understanding (Edgar & Manz, 2017). When the experimental process goes from a general theory to an understanding in specific, exploratory studies observe specific phenomena to look for patterns and arrive at a general theory of behaviour (Edgar & Manz, 2017). The emphasis is on evaluation or analysis of data, not on creating new designs or models (Edgar & Manz, 2017). The emphasis is on perspective and relative importance (Edgar & Manz, 2017).

Interpretive research paradigm was used in the study. Interpretive paradigm is characterized by the researcher's practical interest in the research question (Cohen, Manion, & Morrison, 2003). Interpretive paradigm is featured by the researcher's interest in a phenomenon (Zaščerinska, Aleksejeva, Zaščerinskis, Gukovica, & Aleksejeva, 2021). The interpretive paradigm is aimed at analysing the social construction of the meaningful reality (Zaščerinska, Aleksejeva, Zaščerinskis, Gukovica, & Aleksejeva, 2021). Meanings emerge from the interpretation (Zaščerinska, Aleksejeva, Zaščerinskis, Gukovica, & Aleksejeva, 2021). The researcher is the interpreter (Ahrens, Purvinis, Zaščerinska, Miceviciene, & Tautkus, 2018).

Document analysis was carried out. Scientific publications dated by 2020 and 2021 were selected via google search for analysis. The search was based on the key words “COVID-19” and “Social Sciences”. In accordance with the search results, a great number of the displayed publications were devoted to social transformation, and to the social sciences’ transformations.

Thematic analysis was carried out to elucidate common themes and topics of discussion. Structuring content analysis was used to seek to assess the material according to particular criteria that are strictly determined in advance (Mayring, 2004,269). Summarizing content analysis seeks to reduce the material in such a way that the essential contents are preserved, but a manageable short text is produced (Mayring, 2004, 269).

### Empirical Study Results

Analysis of scientific literature on social sciences’ transformation from the ontological perspective leads to such a conceptualization or, in other words, topic or content in social sciences as transforming systematically for equitable and sustainable development (Krings & Schusler, 2020).

Social science transformation for equitable and sustainable development is based on the concept of inclusiveness (van Niekerk, 2020):

- Inclusive education,
- Inclusive entrepreneurship, and
- Inclusive economy.

It should be pointed that the concept of „inclusive“ is changing

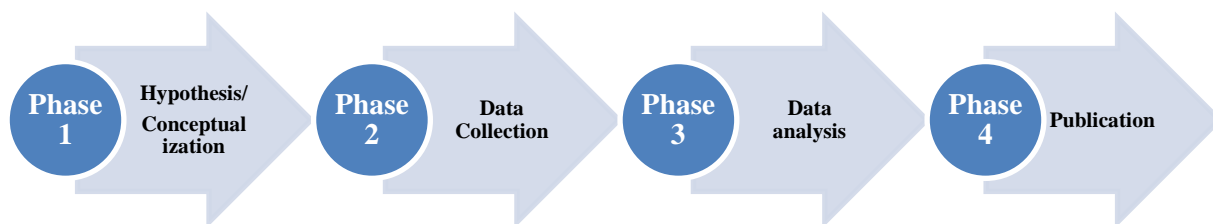
- From focusing on only the disabled (students, participants, etc)
- To widening to the disadvantaged (those who are in family, social, or economic non-favourable circumstances).

Table 1 based on the analysis of scientific publication worked out by a number of researchers (Baczko & Dorronsoro, 2020; Käihkö, 2020; Christia & Lawson, 2020; Monson, 2020; Shankar, 2020; Wood, Rogers, Sivaramkrishnan, & Almeling, 2020) shows social sciences’ ontological development.

*Table 1 Social Sciences’ Ontological Development*

<b>Social Sciences’ Ontological Development</b>	
<i>COVID-19 related</i>	<i>Non-COVID-19 related</i>
Coping with COVID-19	Mostly neglected
Immobility and tourism	
Researcher’s emotions	
Emotions in evidence and as evidence	
Conflict studies	
The impact on health	
Changing requirements of the welfare states	
Past pandemics	
After COVID-19 world	

Figure 3 demonstrates the sequence of the process of the social science research or, in other words, social sciences' epistemological development.



*Figure 3 The sequence of the process of the social science research*

Social sciences' research transformation mostly refers to such phases of the process of the social science research as:

- Phase 2 Data collection, and
- Phase 3 Data analysis.

These transformations proceed

- From conventional implementation of the social science research
- To remote/online conduct.

Remote research methods are preferred, due to the risk of catching the virus, to (Baczko & Dorronsoro, 2020) compensate for the lack of access or, more often, the reluctance of researchers or their institutions to venture into the field.

Table 2 reveals opportunities and limitations of online data collection and analysis as proposed by researchers (Baczko & Dorronsoro, 2020; Käihkö, 2020; Christia & Lawson, 2020; Monson, 2020; Shankar, 2020; Wood, Rogers, Sivaramakrishnan, & Almeling, 2020)

During the COVI-19 pandemic, the misuse of databases has increased that has resulted in the proliferation of mediocre studies and artifacts (Baczko & Dorronsoro, 2020).

*Table 2 Opportunities and Limitations of Online Data Collection and Analysis*

<b>Online Data Collection and Analysis</b>	
<i>Opportunities</i>	<i>Limitations</i>
Online interviews, online experiments, virtual labs	Uneven distribution of the Internet
Online observations	No conventional fieldwork
Online archives of (state) institutions	Exclusion of the marginalised
Online population	No context description
Increased involvement of interviewees' availability (i.e. senior bureaucrats, private expertise)	No empirical data verification by the researcher
No taking notes	Control of knowledge production by the data collecting entities (outsourcing)
No travel and time costs	Limit of discourse analysis
User-friendly tools for data collection and analysis (text, video, image, voice)	The ethics (privacy concerns)
Social distancing	Social distancing

Researchers consider that the COVID-19 pandemic risks aggravating a disturbing decline in the social sciences due to (Baczko & Dorronsoro, 2020)

- increased restrictions on researchers’ travel, and
- diminished opportunities for
- carrying out long-term field studies,
- conducting interviews, and
- recording observations.

According to Baczko and Dorronsoro (Baczko & Dorronsoro, 2020), the practice of fieldwork tends to empower researchers, lets them produce their own hypotheses, and puts distance between themselves and the sorts of Taylorism making a strong comeback.

Table 3 shows emerging trends in the social sciences’ development and their short description.

*Table 3 Emerging Trends in the Social Sciences’ Development and Their Description*

<b>Emerging Trends in the Social Science Development</b>	<b>A short Description of the Trends</b>
Emotions	Emotions are discussed as the new ethical turn in social science research: the intense reaction that researchers’ emotions evoke raises questions about what else lies unspoken (Shankar, 2020). Emotions are viewed as ethical in a time of uncertainty: how emotions and their manipulation are part of social norms, including norms of scholarly work (Shankar, 2020).
Valuing uncertainty	Valuing uncertainty (Shankar, 2020): <ul style="list-style-type: none"> <li>- “naturalizing” Covid-19’s effects on humans: its damages to human bodies now shown to be               <ul style="list-style-type: none"> <li>o very different and</li> <li>o not yet patternable by age, for instance</li> </ul> </li> <li>- “shared humanity” means the same response to this disease.</li> </ul>
Crisis	Crisis (Bond, Lake & Parkinson, 2020) is <ul style="list-style-type: none"> <li>- that heightens conditions of vulnerability and inequality,</li> <li>- that fieldwork is perpetually fraught,</li> <li>- that researchers must demonstrate restraint, and</li> <li>- that empathy is key.</li> </ul>
Common and unique World after Covid	Common and unique World after Covid themes (Grossmann, Twardus, Varnum, Jayawickreme, & McLevey, 2021): <ul style="list-style-type: none"> <li>- Improve care for elders</li> <li>- Improve work-life balance</li> <li>- Gratitude</li> <li>- Nature</li> <li>- Living in the moment</li> <li>- Optimism/positivity</li> <li>- Pro-social behaviour</li> <li>- Health &amp; Well being</li> <li>- Personal Resilience</li> </ul>

## **Empirical Study Findings**

The structuring content analysis allows identifying the interconnections between fieldwork and phases of the social science research:

- Hypotheses in Phase 1 are partly produced in confronting unexpected, singular situations.
- Phase 2 Data collection methods are decisive for theoretical questioning in Phase 1.
- Phase 2 Data collection methods allows reconstructing the contexts of action and of unactualized potentials.
- Continual interaction between hypotheses in Phase 1 and data production in Phase 2 are essential for a reactive modality of theoretical elaboration in Phase 4.

Another finding is the established interconnections between fieldwork and phases of the social science research:

- Novel circumstances discovered in in Phase 2 Data collection and 3 Data analysis imply the necessity of adapting hypotheses in Phase 1.
- The transition from correlation to causality seems in Phase 3 is possible with an investigation that provides direct knowledge of contexts of discourses, facts, and inventions in Phase 2.
- Risk of monocausal explanations such as natural resources, climate change, or identity conflicts in Phase 4 due to non-apprehended contexts in Phase 2.

The summarising content analysis allows finding that the COVID-19 pandemic has impacted the social sciences' transformation. The social sciences' transformation has occurred from both perspectives, namely ontological and epistemological. Another finding is that the social sciences' ontological development during the COVID-19 pandemic focused on mostly COVID-related topics. A finding is that researchers view the social sciences' transformation to mostly remote/online conduct as a risk, consequently, in a negative way.

## **Conclusions**

The theoretical finding is that the conceptual model of social sciences' transformation has been detailed with

- Topics and sub-topics from the ontological perspective, and
- The sequence of the process of the social science research as well as opportunities and limitations from the epistemological perspective.

Figure 4 demonstrates the enhanced conceptual model of social sciences' transformation.

The empirical findings reveal that changes in the social sciences are viewed by the researchers as negative.



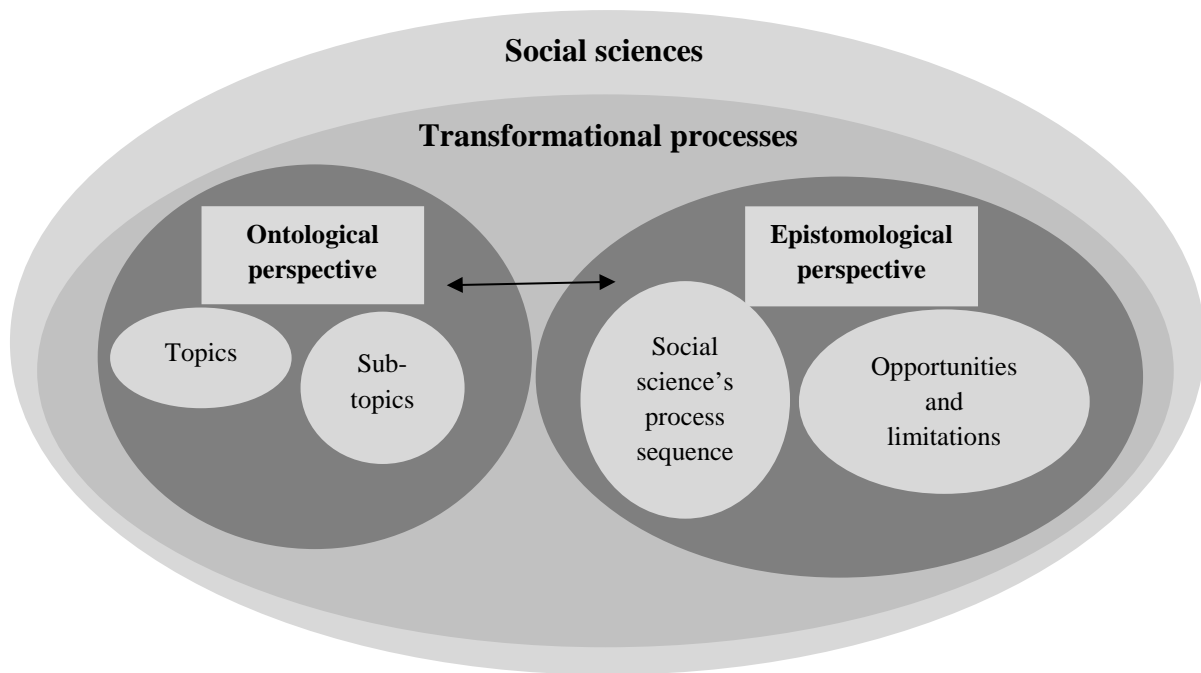


Figure 4 *The enhanced conceptual model of social sciences' transformation*

The conclusion is drawn that social sciences' transformation to the remote/online conduct is "a new normal" in the conditions of uncertainty. Digital fieldwork is proposed to be a new qualitative method in social sciences' research as some populations live mostly in digital environments. Another conclusion is that there is a need for a balance

- Between COVID-19 related and non-COVID-19 related topics, and
- when composing the empirical study's sample, between respondents in the digitally divided populations, namely inclusions of both groups' - digital and non-digital - respondents.

Implications for teaching a Research Methodology course to the higher education students are formulated:

- Teaching both - traditional and digital - qualitative methods such as fieldwork, interviews, etc.
- Methods training to improve students' use of techniques and tools to enable their virtual fieldwork (Christia & Lawson, 2020):
  - enhanced training in web scraping;
  - machine learning techniques, including natural language processing for text and voice;
  - newly developed tools for image and video processing; and
  - incorporating training on online interviewing to classes on fieldwork method.
  - Covering advanced methods sequence and making them more mainstream and easily accessible (including via online learning platforms such as edX),

- Preparing students for communication in digital environments as communication in digital environments differs from communication in traditional settings:
  - Speaking slower than in traditional environment,
  - Using shorter sentences,
  - Words have to be clearly pronounced, etc.

The present research has some limitations. A limitation is that the relationships between the elements of the enhanced conceptual model of social sciences' transformation have been set. Another limitation is that the empirical study was carried out only in the Web of Science and google search environments. The search was limited by two key words, namely "COVID-19" and "Social Sciences' transformation".

Future work will tend to validate the enhanced conceptual model of social sciences' transformation. Further research will focus on empirical studies aimed at investigating the opinion of other respondents (than researchers) such as students, administrative staff members, population's members under investigation and others on the shift of fieldwork from traditional to remote. Comparative studies on the use of both - traditional and digital - qualitative methods in social sciences' research could be of a great interest for the scientific community.

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