Reshaping the Landscape: the Impact of COVID-19 on Social Science Research Methods and Practices

Simmi Agnihotri [1], Vijay Singh [2]*
Himachal Pradesh University
Corresponding Author: Vijay Singh com.vvs@gmail.com

ARTICLE INFO

ABSTRACT

The COVID-19 pandemic has profoundly impacted the field of social science research, necessitating a re-evaluation of research methods and practices. This research explores the transformative efforts of COVID-19 on social science research, focusing on the changes in methodologies and practices that have emerged in response to the pandemic. Existing literature was reviewed on how the COVID-19 pandemic has affected research methods and practices in social sciences. Digital questionnaire was developed to collect primary data from social science researchers indicating the changes they have made in their research methods, the reasons behind these changes, and their perceptions of the effectiveness of these adaptations. Telephonic interviews and focused group discussions were conducted with the selected group of social scientists who have experienced significant changes in their research due to COVID-19. Their experiences, challenges, and innovative solutions they have employed have been explored. Secondary data was also generated from various online and offline platforms. Total 50 social science researchers were surveyed and interviewed. The results of the study shall be helpful to researchers, society, government and policymakers to pay special attention on this particular issue. The main findings and their implications for the field of social science research shall be summarized. The key ways in which the landscape has been reshaped by the COVID-19 pandemic shall be highlighted.

NTRODUCTION

The COVID-19 pandemic, which emerged in late 2019, has brought about widespread changes in our daily lives. It is not just our everyday routines that have been disrupted; even the way we conduct research in social sciences has been profoundly affected. In this study, the researchers aim to explore the impact of the pandemic on social science research methods and practices, investigating how the landscape of research has been reshaped as a result of this global crisis. Social science research has always been a powerful tool to understand and address complex issues facing societies. Researchers in fields of social sciences have played a crucial role in unraveling the mysteries of human behavior and society. But with the advent of COVID-19, the way they gather data, conduct experiments, and make sense of the world has been significantly altered. The term "reshaping the landscape" indicates that the COVID-19 pandemic has had a transformative effect on the field of social science research. It suggests that the traditional approaches and methodologies in social science research have been altered due to the pandemic. The Impact of COVID-19, highlights the pandemic as a key driver of change. It implies that COVID-19 has become a focal point for social science research, affecting not only the subject matter but also the way research is conducted. The title Social Science Research Methods and Practices specifies the focus of the study. It suggests that the research was delved into the methods and practices that social scientists use to conduct their studies, including data collection, analysis, and interpretation.

The pandemic has made traditional research methods, like face-to-face interviews, surveys, and in-person observations, challenging and initially impossible due to social distancing and lockdowns. This has prompted researchers to adapt and innovate. They have had to embrace technology for remote data collection, video interviews, and online surveys. They have also had to grapple with ethical questions concerning privacy and consent in this new digital landscape. Additionally, the pandemic has uncovered new research opportunities. It has highlighted the importance of studying the psychological and societal impacts of global crises, such as mental health challenges, inequalities, and the effectiveness of government responses. The pandemic has pushed social scientists to explore these areas with greater urgency. In this study, we have explored these changes and challenges. We have interviewed social science researchers who have been at the forefront of adapting to this new normal, examine the ethical considerations that have arisen, and explore the evolving role of technology in research. This research suggests an investigation into how the COVID-19 pandemic has brought about significant changes in the field of social science research, particularly in terms of research methods and practices.

Global and by WHO Regions COVID-19 Statistics

Here is information related to COVID-19 statistics, including cumulative cases, new cases in the last 7 days, cumulative deaths, new deaths in the last 7 days, and data related to vaccination for both the global level and specific WHO regions. The Global data shows that the total number of confirmed COVID-19 cases globally is 771,191,203. In the last 7 days preceding the data, 2,846 new

cases were reported worldwide. The total number of COVID-19-related deaths globally is 6,961,014. In the last 7 days preceding the data, there were 31 new reported deaths globally. For every 100 people, an average of 173.41 COVID-19 vaccine doses has been administered. Among every 100 people, 66.12 individuals have received a complete primary series of COVID-19 vaccinations. Out of every 100 individuals, 31.74 have received at least one booster or additional vaccine dose.

The table also provides data for different WHO regions. *Europe*: This region has a cumulative total of 276,378,727 COVID-19 cases and 2,250,150 new cases reported in the last 7 days. There have been 417,389 cumulative deaths, and the new deaths in the last 7 days are not specified. In terms of vaccinations, 186.01 vaccine doses have been administered per 100 population, 64.75 individuals have completed the primary vaccine series, and 34.56 individuals have received at least one booster or additional dose per 100 population. *Western Pacific*: This region has a cumulative total of 207,340,763 COVID-19 cases, with 1,377 new cases reported in the last 7 days. The table doesn't specify the cumulative or new death data. There have been 242.4 vaccine doses administered per 100 population, 85.54 individuals have completed their primary vaccine series, and 55.47 individuals have received at least one booster or additional dose per 100 population. *Americas*: The Americas region reports a total of 193,315,142 COVID-19 cases and 2,959,716 new cases in the last 7 days. The cumulative and new death data are not provided. This region has administered 208.05 vaccine doses per 100 population, with 71.21 individuals having completed their primary vaccine series and 42.42 individuals having received at least one booster or additional dose per 100 population. *South-East Asia*: In this region, there are 61,206,342 cumulative COVID-19 cases and 298 new cases reported in the last 7 days. There have been 5 new deaths in the last 7 days, but the cumulative death data is not specified. The vaccination data shows 165.75 vaccine doses administered per 100 population, with 69.19 individuals completing their primary vaccine series and 21.07 individuals receiving at least one booster or additional dose per 100 population. *Eastern Mediterranean*: This region has a cumulative total of 23,396,717 COVID-19 cases, with 1,171 new cases reported in the last 7 days. There are 26 new deaths in the last 7 days, and a total of 351,518 cumulative deaths. Vaccination data indicates 123.34 vaccine doses administered per 100 population, with 51.6 individuals completing their primary vaccine series and 19.04 individuals receiving at least one booster or additional dose per 100 population. *Africa*: The African region reports a total of 9,552,748 COVID-19 cases, with 175,438 new cases in the last 7 days. Cumulative and new death data is not specified. Vaccination data shows 56.95 vaccine doses administered per 100 population, with 32.55 individuals having completed their primary vaccine series and 5.63 individuals having received at least one booster or additional dose per 100 population. This table provides an overview of COVID-19 cases, deaths, and vaccination data for the global level and specific WHO regions, offering insight into the status of the pandemic and vaccination efforts in different parts of the world.

COVID-19 Statistics by World Bank Income Group

The COVID-19 statistics broken down by World Bank Income Group of top 15 income group countries has been described below. The data includes cumulative cases, new cases reported in the last 7 days, cumulative deaths, new deaths in the last 7 days, and vaccination-related information. *United States of America*: the data shows that the United States has reported a cumulative total of 103,436,829 COVID-19 cases. However, the specific number of new cases reported in the last 7 days is not provided. The cumulative total of COVID-19-related deaths is 1,127,152, and there have been 202.08 vaccine doses administered per 100 population. Among the population, 68.87 individuals have received a complete primary vaccine series, and 35.23 individuals have received at least one booster or additional dose per 100 population. *China*: has reported a cumulative total of 99,315,126 COVID-19 cases, with 1,302 new cases reported in the last 7 days. The cumulative total of COVID-19-related deaths is 121,722. The vaccination data shows 239.03 vaccine doses administered per 100 population, with 87.3 individuals having received a complete primary vaccine series and 56.69 individuals having received at least one booster or additional dose per 100 population. *India*: has reported a cumulative total of 44,999,328 COVID-19 cases, with 124 new cases reported in the last 7 days. The cumulative total of COVID-19-related deaths is 532,034. In terms of vaccinations, 159.91 vaccine doses have been administered per 100 population. 68.99 individuals have received a complete primary vaccine series, and 16.58 individuals have received at least one booster or additional dose per 100 population. *France*: has reported a cumulative total of 38,997,490 COVID-19 cases. In the last 7 days, 167,985 new cases were reported. The cumulative total of COVID-19-related deaths is not provided. In terms of vaccinations, 234.8 vaccine doses have been administered per 100 population. Among the population, 78.37 individuals have received a complete primary vaccine series, and 60.47 individuals have received at least one booster or additional dose per 100 population. *Germany*: has reported a cumulative total of 38,437,756 COVID-19 cases. In the last 7 days, 174,979 new cases were reported. The cumulative total of COVID-19-related deaths is not provided. The vaccination data shows 232.4 vaccine doses administered per 100 population, with 76.37 individuals having received a complete primary vaccine series and 62.65 individuals having received at least one booster or additional dose per 100 population. *Brazil*: has reported a cumulative total of 37,721,749 COVID-19 cases. In the last 7 days, 704,659 new cases were reported. The cumulative total of COVID-19-related deaths is not provided. In terms of vaccinations, 241.5 vaccine doses have been administered per 100 population. Among the population, 80.66 individuals have received a complete primary vaccine series, and 51.93 individuals have received at least one booster or additional dose per 100 population. *Republic of Korea*: has reported a cumulative total of 34,571,873 COVID-19 cases. In the last 7 days, 35,934 new cases were reported. The cumulative total of COVID-19-related deaths is 265.13. Over the last 7 days, there were 86.38 new reported deaths. In terms of vaccinations, 65.62 vaccine doses have been administered per 100 population. Among the population, 265.13 individuals have received a

complete primary vaccine series, and 65.62 individuals have received at least one booster or additional dose per 100 population. *Japan*: has reported a cumulative total of 33,803,572 COVID-19 cases. In the last 7 days, 74,694 new cases were reported. The cumulative total of COVID-19-related deaths is 324.03. Over the last 7 days, there were 81.75 new reported deaths. In terms of vaccinations, 68.47 vaccine doses have been administered per 100 population. Among the population, 68.47 individuals have received a complete primary vaccine series, and 68.47 individuals have received at least one booster or additional dose per 100 population. *Italy*: has reported a cumulative total of 26,082,645 COVID-19 cases. In the last 7 days, 191,715 new cases were reported. The cumulative total of COVID-19-related deaths is 252. In terms of vaccinations, 83.83 vaccine doses have been administered per 100 population. Among the population, 76.09 individuals have received a complete primary vaccine series, and 76.09 individuals have received at least one booster or additional dose per 100 population. *The United Kingdom*: has reported a cumulative total of 24,743,787 COVID-19 cases. In the last 7 days, 229,765 new cases were reported. The cumulative total of COVID-19-related deaths is 222.8. Over the last 7 days, there were 75.45 new reported deaths. Information on vaccination coverage is not provided in this table. *Russian Federation*: has reported a cumulative total of 23,045,833 COVID-19 cases. In the last 7 days, 400,077 new cases were reported. The cumulative total of COVID-19-related deaths is 127.9. Over the last 7 days, there were 54.93 new reported deaths. Information on vaccination coverage is not provided in this table. *Turkiye*: (Turkey) has reported a cumulative total of 17,004,677 COVID-19 cases. In the last 7 days, 101,419 new cases were reported. Information on cumulative deaths and new deaths in the last 7 days is not provided. The table indicates that 59.77 vaccine doses have been administered per 100 population, and 32.91 individuals have received at least one booster or additional dose per 100 population. Information on the complete primary series of vaccinations is not available in this table. *Spain*: has reported a cumulative total of 13,980,340 COVID-19 cases. In the last 7 days, 121,852 new cases were reported. The cumulative total of COVID-19-related deaths is 238.5. Over the last 7 days, there were 79.03 new reported deaths. Regarding vaccinations, 56.02 vaccine doses have been administered per 100 population. Among the population, 56.02 individuals have received at least one booster or additional dose per 100 population. Data on the complete primary vaccine series is not provided in this table. *Viet Nam*: has reported a cumulative total of 11,623,845 COVID-19 cases. In the last 7 days, 71 new cases were reported. The cumulative total of COVID-19-related deaths is 43,206. Over the last 7 days, there were 272.78 new reported deaths. In terms of vaccinations, 88.31 vaccine doses have been administered per 100 population. Among the population, 88.31 individuals have received a complete primary vaccine series, and 59.56 individuals have received at least one booster or additional dose per 100 population. *Australia*: has reported a cumulative total of 11,613,411 COVID-19 cases. In the last 7 days, 23,188 new cases were reported. Information on cumulative deaths and new deaths in the last 7 days is not provided. The table indicates that 269.69 vaccine doses have

been administered per 100 population. Among the population, 84.72 individuals have received a complete primary vaccine series, and 56.48 individuals have received at least one booster or additional dose per 100 population.

Research Gap

A notable research gap in the study of the impact of COVID-19 on social science research lies in the long-term sustainability of the adaptations made during the pandemic. While current research highlights the creative ways researchers have adapted, it does not comprehensively address whether these changes will endure or if there will be a return to pre-pandemic research methods once the crisis more away. Understanding the permanence of these shifts is vital for the research community, institutions, and policymakers to chart the course for future research practices. This knowledge gap leaves a significant question unanswered: Do the adaptations made during the pandemic represent a fundamental transformation in the field of social science research, or are they temporary adjustments necessitated by extraordinary circumstances? Clarifying the long-term impact of these adaptations is crucial for researchers to make informed decisions about their methodologies, institutions to allocate resources effectively, and policymakers to develop policies that align with the evolving landscape of research in a post-pandemic world. Addressing this research gap will guide the academic and scientific community toward strategies and practices that endure and remain effective in an uncertain and rapidly changing world.

Statement of the Problem

The problem we have investigated is how the COVID-19 pandemic has affected the way social scientists conduct their research. This pandemic has brought many changes to our lives, and researchers studying human behavior and society have also had to adapt. The researchers want to understand the challenges researchers face due to disruptions in their research plans caused by the pandemic. This includes the delays in their projects and the need to change the way they collect data. Some people might not have access to the internet or digital devices, which can make it hard for them to participate in research. We also need to look at how researchers maintain ethical standards when doing research online, such as protecting people's privacy and getting their informed consent. Furthermore, the stress and uncertainty brought on by the pandemic and the shift to online research methods are important concerns. The researchers want to know how these challenges affect the quality of the data researchers collect and the well-being of the researchers themselves. Understanding these problems will help us find ways to support researchers and ensure that the research they do during and after the pandemic is accurate, reliable, and respectful of the people they study.

Importance of the Study

This research is important because it helps the researchers to understand how the COVID-19 pandemic has changed the way social scientists do their

research. It shows us the challenges they have faced and the new ways they have adapted to keep their work going. By understanding these challenges, we can find ways to support researchers better and help them do high-quality research, even during difficult times. This research also helps us make sure that everyone, no matter where they live or what technology they have, can be a part of these important studies. Ultimately, this research is important because it helps us keep learning about society, people's behaviors, and the world around us, even when the researchers are facing unexpected challenges like a global pandemic. It helps us keep building knowledge that can improve our lives and the world we live in.

Policy Implications of the Study

The research on the impact of COVID-19 on social science research holds several important policy implications. Policymakers must recognize the long-term transformations in research practices that the pandemic has initiated. This understanding is crucial for allocating resources effectively and supporting researchers in adapting to this new research landscape. There is a need for robust policies that encourage inclusivity in research. Addressing digital divides and ensuring that everyone, regardless of their digital access, can participate in research is a policy imperative. Governments and institutions should consider initiatives that provide digital access to underserved communities to create a level playing field for research. Ethical guidelines for online research must be revisited and updated. Policymakers should work in tandem with research institutions to ensure that these guidelines are comprehensive and adaptive to the evolving digital research environment, emphasizing privacy, informed consent, and the well-being of participants. Policies supporting mental health and well-being for researchers are vital. Recognizing the emotional toll of uncertainty and constant adaptation and providing resources for mental health support is an important step in maintaining the well-being of those contributing to the knowledge base? Technology and its role in research should be a focus of policy discussions. Policymakers can support the adoption and effective use of digital tools and platforms in research by providing resources, guidelines, and incentives. Promoting and incentivizing interdisciplinary collaboration should be a central policy goal. Policymakers can facilitate cross-disciplinary research by providing funding and recognition for collaborative efforts, recognizing that these approaches yield more holistic and effective results in understanding complex societal issues. In conclusion, the policy implications of this research underscore the need for policies that acknowledge and support the transformed landscape of social science research. By addressing digital divides, enhancing ethics, prioritizing inclusivity, and promoting mental health and interdisciplinary collaboration, policymakers can foster a resilient and inclusive research environment that thrives in a post-pandemic world.

METHODOLOGY

Existing literature was reviewed on how the COVID-19 pandemic has affected research methods and practices in social sciences. Questionnaire will be developed to collect primary data from social science researchers indicating the changes they have made in their research methods, the reasons behind these changes, and their perceptions of the effectiveness of these adaptations. Telephonic interviews shall also be conducted with the selected group of social scientists who have experienced significant changes in their research due to COVID-19. Their experiences, challenges, and innovative solutions they have employed shall be explored. Secondary data shall also be generated from various online and offline platforms.

Survey and Questionnaires: Digital questionnaire was developed for survey to collect primary data from social science researchers. These surveys inquire about the changes they have made in their research methods, the reasons behind these changes, and their perceptions of the effectiveness of these adaptations.

Interviews: Telephonically in-depth interviews were conducted with a selected group of social science researchers who have experienced significant changes in their research due to COVID-19. Chat on social media platforms was also one of the methods of interview and discussion to generate the data. Their experiences, challenges, and innovative solutions they have employed have been explored in the study.

Data Analysis: Survey and interview data using both quantitative and qualitative methods was analyzed. Quantitative data was analyzed using simple percentage, while qualitative data was thematically coded and analyzed to identify common patterns and insights.

Ethical Considerations: Explore the ethical challenges faced by social scientists during the pandemic. This could involve reviewing ethical guidelines, as well as discussing specific ethical dilemmas encountered by researchers.

Quality and Reliability Assessment: Assess the quality and reliability of research findings by comparing pre-pandemic and pandemic-era research in terms of methodologies, sample sizes, and outcomes.

Study Area

The present study online social media platforms and offline social science researchers were used as study area. Online digital questionnaires were send to the people those are engaged in the field of social science research and were connected with the researchers through social media. No particular study area was selected for this research.

Sampling Method and Sample Size

To collect the primary data from the sampled respondents, purposive sampling technique was used to select the samples. Digital questionnaire was send to many samples purposively. It was kept in mind that first 50 responses shall be taken in to consideration to draw the results

RESEARCH RESULT AND DISCUSSION

Shift to Online Research: Many social scientists have shifted from traditional in-person data collection methods to online methods like surveys and video interviews to adapt to pandemic restrictions. This change has made research more flexible and accessible.

Challenges with Remote Research: While online research has advantages, it also comes with challenges like issues with privacy, the digital divide, and potential biases in online samples. Researchers have had to find ways to address these challenges.

Ethical Concerns: Researchers have faced ethical questions related to informed consent, data security, and ensuring the well-being of participants during online studies. They've had to adapt their ethical guidelines and practices accordingly.

New Research Opportunities: The pandemic has opened up new research opportunities in studying the social and psychological impacts of crises. Researchers are now focusing on mental health, disparities in society, and the effectiveness of government responses.

Role of Technology: Technology has played a crucial role in enabling remote research. Researchers have been using various tools and platforms for data collection and analysis. These technological changes are likely to continue shaping research in the post-pandemic world.

Interdisciplinary Collaboration: Researchers from different social science disciplines are collaborating more to understand the complex societal effects of the pandemic. This interdisciplinary approach has enriched research and improved our understanding of the crisis.

Research Quality and Reliability: There is ongoing debate about the quality and reliability of research findings during the pandemic. Researchers are actively exploring how to ensure the robustness of their research methods and results. There is a need to conduct research at large scale on this particular problem which can cover more samples to generate more authentic results.

These findings indicate that the COVID-19 pandemic has brought both challenges and opportunities to social science research. Researchers have adapted by embracing technology, addressing ethical concerns, and exploring new research avenues. The research landscape has evolved, and these changes are likely to have a lasting impact on the field.

Positive Impact of the COVID-19 Pandemic on Social Science Research

Improved Research Adaptability: The research findings suggest that social science research has become more adaptable and flexible in the face of unexpected disruptions like the COVID-19 pandemic. Researchers have learned to quickly pivot to online methods, which could prove valuable in future crises or situations where in-person research is not feasible.

Enhanced Ethical Awareness: The research underscores the importance of ethical considerations in social science research. As researchers grapple with new digital methods, they are becoming more conscious of the need to protect

participant privacy and ensure informed consent. These lessons in ethics can benefit research across various fields.

Broader Research Horizons: The pandemic has broadened the horizons of social science research. By focusing on mental health, disparities, and government responses, researchers have started to explore important societal issues with greater urgency. This expanded focus has the potential to lead to more comprehensive and relevant research in the future.

Technology as an Enabler: The research findings highlight the pivotal role of technology in research. Researchers are increasingly leveraging technology for data collection, analysis, and communication. The reliance on technology is likely to continue, making research more efficient and accessible.

Interdisciplinary Collaboration: The study reveals that researchers from various social science disciplines are collaborating more frequently. This interdisciplinary approach can lead to more holistic and nuanced understandings of complex societal issues, ultimately benefiting the broader academic and policy communities.

Research Quality and Robustness: Researchers are actively exploring ways to ensure the quality and reliability of their research during challenging times. The insights gained from this research can help enhance the robustness of research methods, ultimately leading to more trustworthy findings. COVID-19 encourages adaptability, ethical awareness, expanded research horizons, technological integration, interdisciplinary collaboration, and research quality enhancement. These impacts can contribute to a more resilient and responsive social science research landscape in the post-pandemic era.

Challenges for Social Science Researchers during Pandemic

While the research on the impact of COVID-19 on social science research has many positive aspects, there are also negative aspects that need to be acknowledged. These are:

1. *Disruption and Delays:* The pandemic has caused disruptions and delays in ongoing research projects. Many studies had to be postponed or modified, which can slow down the progress of research and the dissemination of important findings.

2. *Inequalities in Access:* The shift to online research methods has exposed inequalities in access to technology and the internet. Not everyone has equal access to devices and high-speed internet, potentially excluding certain groups from research participation.

3. *Limited Face-to-Face Interaction:* Face-to-face interactions with research participants have often been replaced by online or phone-based methods. This shift can limit the depth of understanding and emotional connection that researchers can establish with participants, potentially affecting the quality of research.

4. *Ethical Challenges:* Ethical challenges have arisen in remote research, such as privacy concerns and issues related to informed consent. Researchers have had to navigate these challenges, and sometimes, the solutions are not ideal.

5. *Uncertainty and Adaptation Costs:* Researchers have had to adapt to new methodologies, which can be time-consuming and costly. The uncertainty surrounding the pandemic and shifting research methods can be stressful and challenging for researchers.
6. *Data Quality Concerns:* The reliance on online data collection methods can raise concerns about data quality. Ensuring the accuracy and reliability of data in a digital environment is an ongoing challenge.

The research on the impact of COVID-19 on social science research, while beneficial in many ways, also presents challenges and negative consequences. These challenges include disruptions, inequalities, and limitations in face-to-face interactions, ethical dilemmas, adaptation costs, and concerns about data quality. Acknowledging and addressing these issues is essential for the research community to navigate these turbulent times successfully.

CONCLUSIONS AND RECOMMENDATIONS

In the face of the COVID-19 pandemic, the world of social science research has demonstrated resilience and adaptability. This research, exploring the impact of the pandemic on the field, has revealed both positive and negative aspects. Researchers have shown remarkable flexibility in transitioning to online methods and a heightened awareness of ethical considerations. The expanded focus on critical societal issues, facilitated by the pandemic, has enriched our understanding of complex problems. The role of technology in research has been underscored, and interdisciplinary collaboration has become more prevalent, fostering a holistic approach to research. Efforts to improve research quality have been evident, ensuring more reliable findings.

However, the challenges cannot be ignored. Disruptions and delays have affected ongoing research, inequalities in digital access pose barriers, and the absence of face-to-face interactions raises concerns about the depth of understanding. Ethical dilemmas in online research demand careful handling, and the emotional toll on researchers is a matter of concern. Data quality in remote research remains a challenge, and resource constraints can hinder progress.

Pandemic stopped all the social science research activities, because social scientists do their experiments in the society. That is why social science researches get affected more than others. Social scientists need social interactions to generate the information and required data. Social distancing and non-movement stopped all these activities. With the passage of time social scientists adopted the online platform to conduct their researches but initially it was slow. Lockdown affected all the academic, research, social and economic activities. Huge social disruption was their throughout the globe. It was important to explore all these disruptions and current situation of the society through the lens of social science research. Social science research can better suggest that how to manage the present situation in response to COVID-19 pandemic. Pandemic created the shut down situation in workplaces, educational and research institutions, unemployment, social isolation. This affected the field activities and face to face interaction with the respondents

causes lack of observations. It affected low-income countries more than high-income countries. Due to high risk of virus transmission, conferences and research workshops were postponed or cancelled for a long time. In moving forward, flexibility and contingency planning are key. Researchers must address digital divides, prioritize ethical safeguards, and support well-being. Collaboration and knowledge sharing are crucial for tackling complex pandemic-related issues. Future-proofing research practices to adapt to unforeseen challenges are essential. By embracing these suggestions, the research community can navigate challenges more effectively and ensure the continued pursuit of knowledge, contributing to a resilient and adaptable social science research landscape in the post-pandemic world.

To achieve the objectives of providing insights and recommendations for improving research practices in social sciences in a post-pandemic world, the following measures and insights can be taken into consideration:

Digital Literacy Training: Provide training and resources for researchers to enhance their digital literacy. This includes proficiency in online data collection, data analysis tools, and cyber security measures.

Flexible Research Protocols: Encourage research institutions and universities to develop flexible research protocols that can adapt to unexpected disruptions. Researchers should have contingency plans for in-person and online research.

Inclusivity Measures: Ensure that research remains inclusive by addressing digital divides. This could involve providing access to digital devices and internet connectivity for participants who might not have access.

Ethical Guidelines: Review and update ethical guidelines for online research to address issues like privacy, informed consent, and the well-being of participants. Emphasize the importance of adhering to these guidelines.

Mental Health Support: Recognize the emotional toll that the pandemic and uncertainties in research can have on researchers. Offer mental health support and resources to help researchers cope with stress and maintain their well-being.

Quality Assurance: Implement data quality checks and validation procedures to maintain the integrity of research findings collected through online methods. Ensure that the quality of data is consistently high.

Resource Allocation: Allocate resources for technology upgrades and training to support researchers in their transition to online and hybrid research methods.

Interdisciplinary Collaboration: Promote collaboration between researchers from various social science disciplines. This cross-disciplinary approach can provide a more holistic understanding of complex social issues.

Best Practices Sharing: Establish platforms or networks for sharing best practices and lessons learned in adapting research methods. This encourages knowledge exchange and helps researchers stay informed about effective approaches.

Pandemic-Resilient Research: Encourage researchers and institutions to future-proof their research practices by integrating adaptability and resilience into standard research protocols. This involves having backup plans and digital alternatives readily available. By implementing these measures and considering these insights, the social science research community can adapt, thrive, and

continue producing high-quality research in the post-pandemic world. These steps will help researchers maintain ethical standards, inclusivity, and research quality while enhancing the overall resilience of the field.

ADVANCED RESEARCH

This comprehensive study aims to shed light on the transformative impact of the COVID-19 pandemic on social science research. By exploring the changes in methodologies and practices, as well as the challenges and innovative solutions employed by researchers, this study contributes to a deeper understanding of the evolving landscape of social science research in the face of unprecedented global challenges.

ACKNOWLEDGMENT

REFERENCES

Ahmad, J. U., Akter, S. and Majumder, (2021), Impact of COVID-19 on agricultural production and distribution in South Asia, World Food Policy WILEY; 7:168-182, DOI: 10.1002/wfp2.12032

Ali P. Yunus, Masago Y. and Hijioka Y. (2020), COVID-19 and surface water quality: improved lake water quality during the lockdown, Science of the Total Environment, http://doi.org/10.1016/j.scitotenv.2020.139012, pp. 1-8.

Barei Guyot I. (2021) Social Science Research and COVID-19, Global Development Institute working paper, 2021-052 Manchester: The University of Manchester, ISBN: 978-1-912607-10-5, pp. 1-35.

Ceballos F., Kannan S. and Kramer B. (2020), impacts of a national lockdown on small holder farmer's income and food security: Empirical evidence from two states of India, World Development, 136 (2020), 105069, https://doi.org/10.1016/j.worlddev.2020105069, pp. 1-5.

Collins, C. Okolie and Abiodum, A. Ogundeji, (2022), Effect of COVID-19 on agricultural production and food security: A scientometric analysis, Humanities and Social Science Communications, https://doi.org/10.1057/s41599-022-01080-0.

Conley D. and Joahnson T., (2021), Opinion: Past is Future for era of COVID-19 research in the social science, PNAS, Vol. 118, No. 13, ISBN e-2104155118, https://doi.org/10.1073/pnas.2104155118, pp. 1-4.

Covid-19.who.int

Cretu, D. M. and Ho, Y. S., (2023), The Impact of COVID-19 on Educational Research: A Bibliometric Analysis, Sustainability, 15, 5219, https://doi.org/10.3390/su15065219

Habanyati E. J., (2022), Impact of COVID-19 on Agricultural Sector: Survey Analysis of Farmers Responses from Kerala and Tamil Nadu States in India, Agronomy, Agronomy 2022, 12,503, https://doi.org/10.3390/agronomy12020503, pp. 1-9.

Jacks, L. M., (2021), Impact of the COVID-19 pandemic on agricultural production, livelihoods and food security in India: baseline results of a phone survey, Food Security, 13:1323-1329, https://doi.org/10.1007/s12571-021-01164-w.

Josephson, A. Kilic, T. and Michler, J. D. (2021), Socioeconomic impacts of COVID-19 in low-income countries, NATURE HUMAN BEHAVIOUR, https://doi.org/10.1038/s41562-021-01096-7, Vol. 5, 557-565.

L. Harper, et al. (2020), the impact of COVID-19 on research, Journal of Pediatric Urology, 16, 715-716, https://doi.org/10.1016/j.jpuro/2020.07.002

Liu Yanti, Yuan W-J. and Zhu, Hong-Shao (2022), The State of Social Science Research on COVID-19, Scientometrics (2022) 127:369-383, https://doi.org/10.1007/s11192-021-04206-4.

Mahato S. and Ghosh K. G. (2020), Effect of lockdown amid COVID-19 pandemic on air quality of the megacity Delhi, India, Science of the Total Environment, https://doi.org/10.1016/j.socitotenv.2020.139086, pp. 1-23.

Otto D. and Haase A. (2022), How the COVID-19 pandemic impacts social science research on sustainability: questions of methodology, ethics and justice: comment on Santana et al. 2021, Sustainability Science 2022, 17: 315-318, https://doi.org/10.1007/s11625-021-01066-y.

Paul R. Ward et al. (2022), Editorial: COVID-19 Social Science Research during a Pandemic, Frontiers Public Health, https://doi.org/10.3389/fpubh.2022.923992, Vol. 10. pp1-2.

Rasul G., et al. (2021), Socio-Economic Implications of COVID-19 Pandemic in South Asia: Emerging Risks and Growing Challenges, Frontiers in Sociology, Vol. 6, https://doi.org/10.3389/fsoc.2021.629623, pp. 1-14.

Raynand M., (2021), Impact of the COVID-19 pandemic on publication dynamics and non-COVID-19 research production, BMC Medical

Research Methodology, 21:255, https://doi.org/10.1186/s12874-021-01404-9

Riccoboni M. Verginer, (2022), The impact of the COVID-19 Pandemic on Scientific Research in the Life Sciences, PLOS ONE 17(2): e0263001, pp. 1-16, https://doi.org/10.1371/journal.pone.0263001

Samdeep Kumar M., et al. (2020), Socio-economic impact of COVID-19 outbreak in India, International Journal of Pervasive Computing and Communications, Vol. 16, No. 4, pp. 309-319, DOI:10.1108/ijpcc-06-2020-0053.

Sohrabi, C. et al. (2021), Impacts of coronavirus (COVID-19) pandemic on scientific research and implications for clinical academic training-A review, International Journal of Surgery, 86, 57-63, https://doi.org/10.1016/j.ijsu.2020.12..008

Sridhar A. et al. (2022), Global impact of COVID-19 on agriculture: role of sustainable agriculture and digital farming, Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-022-19358-w, pp. 42509-42525.

Streimikiene D. et al. (2021), Negative effects of COVID-19 pandemic on agriculture: systematic literature review in the frameworks of vulnerability, resilience and risk involved, Economic Research, Vol. 35, No. 1, pp. 529-545, https://doi.org/10.1080/1331677x2021.1919542.

Weiner, D. L., et al. (2020), COVID-19 impact on research, lessons learned from COVID-19 research implications for pediatric research, 88:148-150, https://doi.org/10.1038/s41390-020-1006-3

Xu H. et al. (2020), Possible environmental effects on the spread of COVID-19 in China, Science of the Total Environment, https://doi.org/10.1016/j.scitotenv.2020.139211, pp.1-7.