Lessons from covid-19: Building a fairer, healthier, inclusive and sustainable post-pandemic society

Edited by
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Lessons from Covid-19: Building a fairer, healthier, inclusive and sustainable post-pandemic society

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Editorial: Lessons from COVID-19: Building a fairer, healthier, inclusive and sustainable post-pandemic society

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Editorial on the Research Topic
Lessons from COVID-19: Building a fairer, healthier, inclusive and sustainable post-pandemic society

During 2020 and 2021, there was a surge of research and commentary produced in response to the spread of the novel coronavirus COVID-19, and the associated public health responses. Significant research effort went into charting the progress of the infections, as well as developing therapeutic and preventative measures against those infections. As the early research tried to make sense of the immediate effects of the virus on the body and on society, now we are in a position to take a somewhat more considered view of the effects of the pandemic. These reflections include contributions from the social sciences about the socioeconomic and sociocultural contexts in which the pandemic was experienced and managed and the social factors which influenced behavior and reaction to state policies. Crucially, we can also begin to consider the lessons that we can learn from our experience of and responses to the COVID-19 virus, and how these can inform our progressive reform of societies and notably the inequalities which were highlighted during the pandemic. The papers that came in for this Research Topic reflect sociological preoccupations with how social structures have influenced the effects of the pandemic in ways that are both protective and injurious. In this collection, the papers include explorations of how social ties and social capital, equity, gender and racism have played out in the pandemic to date. With a particular focus on the UK, two papers consider governance and the political implications of social order.

Below we index these papers briefly, starting with Snel et al. who offer an examination of how social capital protected against the well documented negative impacts on mental health during the pandemic in the Netherlands. Association and multiple step linear regression for a weighted panel survey of 22,696 adults showed that the negative impact

on mental health increased over the year 2020. Women, young people and those with low income and poor self-assessed health experienced more fear and more stress, but this was mediated by social capital, defined as trust in institutions and other people as well as participating in solidarity networks.

Looking at the effect of the pandemic on people's social ties, Bertogg and Koos analyse a quota sample of 3,378 individuals, weighted to ensure representation of the whole German population, using multinomial logistic regression, to show both loss and gain of strong and of weak ties. The lockdown period required restriction of contact and was associated with a shrinkage of social network for 1 in 3 people, in terms of losing touch with a friend of acquaintance. However, 1 in 6 reported gaining social ties. The volatility of networks was linked to people's gender, migration background and level of education.

Turning to issues of equity and justice, Karlsen and Nelson use a survey responses and interviews to consider the lived experience of minoritized people in England during the first pandemic lockdown. Frustration with a corrupt and incompetent public response to COVID-19, combined with concerns that racism was intensifying the risks to ethnic minorities, served to undermine confidence in and preparedness to participate in local community involvement. Recognition of the particularly damaging effects of the pandemic-experience of minoritized groups is a crucial step toward rebuilding trust, which in turn is necessary before identifying transformative policy change for a better post-pandemic society for all.

Equity on a global scale preoccupies (Ahlberg and Bradby's) consideration of global inequalities in access to COVID-19 vaccinations. Rich countries' failure to make vaccinations available to poor countries is examined as an effect of economic and political structures of financialized capitalism which re-inscribe disparities in access to basic medications, including the COVID-19 vaccination. Neoliberal deregulation, along with the corporate financialization aspects of the pharmaceutical and medical devices industry, are aspects of healthcare provision that sociologists need to interrogate in order to understand how the pandemic has compounded inequity.

The gendered differentiation of the effects of the pandemic is picked up in three papers. O'Sullivan et al. offer evidence that the negative effects of the pandemic public health restrictions were marked among women, and particularly mothers, to a greater extent than fathers. Drawing on an online survey of 346 parents, they show that mothers reported themselves ten times more likely to be responsible for home schooling during the lockdown in Ireland, and link this to mothers' greater likelihood of reporting themselves to be more stressed than the fathers ($n = 132$) completing the survey.

de Sousa et al. explore how the conditions of the pandemic exaggerated hegemonic male behaviors in a way that was health damaging. They analyze 50 men's responses to a semi-structured online survey with a collective subject discourse method, demonstrating the inequitable balance of power along gendered axes, which were largely disadvantageous to women.

Hamzah et al.s' online survey exploring how self-assessed career success was related to self-efficacy and perception of organizational support during the lockdown in Malaysia. The survey data from 146 women managers were analyzed using multiple linear regressions to show that a perception of supportive management was positively associated with subjective career success.

With a particular focus on the UK, Scambler describes the devastating effects of the COVID-19 pandemic, hard on the heels of a decade of austerity politics. He calls attention to the classic sociological issues of social order and change, as a means to rediscover the discipline's mission to promote the good society, a target which cannot be achieved by further disadvantaging the poor and vulnerable.

May reviews the relationship between science and politics during the response to the spread of COVID-19, focused on England. In tracing tensions between science and politics, May identifies a spectator democracy, characterized by passive citizens and calls for a development of civic epistemologies as an appropriate reform to the atomization of society that the pandemic accelerated.

And finally, Outhwaite reviews *Pandemics, Politics and Society: Critical Perspectives,* edited by Gerard Delanty that makes an early assessment of the social transformation that the COVID-19 pandemic represents, putting COVID-19 in the context of the history of pandemics and providing a broad analysis.

These wide ranging articles deploying a range of different methodological and theoretical frameworks demonstrate the importance of critical social science in making sense of a global event which unsurprisingly sought scientific solutions, for example in the form of vaccines, but which also has extensive social, economic and political implications.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

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Book Review: Pandemics, Politics, and Society. Critical Perspectives on the Covid-19 Crisis

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A Book Review on

Pandemics, Politics, and Society: Critical Perspectives on the Covid-19 Crisis
by Gerard Delanty (Berlin: De Gruyter), 2021, 215 pages, ISBN: 978-3110713237.

The pandemic has made amateur epidemiologists and, later, vaccinologists of us all. Social science has been more in the background: in the United Kingdom, for example, a group of social and behavioural scientists was called on by government mainly to advise about the prospects of public compliance with restrictive measures. Gerard Delanty has however risen to the challenge of confronting the questions which the pandemic poses to social and political theory, initially with a journal article (Delanty, 2020) and now with this major and very impressive edited volume, which brings together some of the world's leading sociologists.

As Delanty notes (p. vii) the pandemic is arguably the most significant social transformation since the end of Soviet communism. As with what Claus Offe called at that time a 'triple transition', there is now a triple crisis: 'a health and medical crisis, an ecological one, and a crisis in capitalism and globalization.' (p. 2) As with a Covid test, the pandemic has imposed an invasive and painful test of current practices of agriculture and globalised agribusiness and travel, and produced a positive, in other words a bad result. 'The pandemic has become a metaphor for a flawed world' (p. 19).

In a neat fit with the theme of this special section, Delanty suggests the possibility, based on the experience of earlier pandemics such as the Black Death and the 1918 flu, 'that out of the current crisis will come some improvements in public policy and a more humanized kind of capitalism than the current precarity that predominates. But such gains took decades if not centuries...' (p. 17).

The book is divided into three sections, on expertise, globalisation and the social. In the first, Claus Offe points to the different categories of people divided by the pandemic and the policies for its mitigation, focusing in particular on those who cannot afford to isolate and 'are forced into a trade-off of life and livelihood.' (p. 34) Something like the same dilemma confronts public authorities, though those which delay introducing restrictive measures end up having to make them more severe and prolonged. Stephen Turner, who has worked substantially on the politics of expertise, explores the paradoxes of its current politicisation, as do Jan Zielonka, drawing on recent analyses of the opposition between technocracy and populism and the emergent phenomenon of 'technopopulism' (Bickerton and Ivernizzi-Accetti, 2021), and Daniel Innerarity. Jonathan White, who has analysed the EU's response to earlier emergencies, and writing before the vaccine supply cock-up of early 2021, examines the particular difficulties of a transnational response.

In the second part of the volume, the sociologist of science Helga Novotny points to the way the pandemic contributes to digitalisation and datafication, and Eva Horn to its implications for the ecological crisis of the anthropocene age. 'If the pandemic can teach us a lesson for managing the future in the Anthropocene, it is not only about tipping points. It is also about the immense cost of

dithering and of scepticism towards scientific findings.' (p. 135) Bryan Turner also adopts a *longue durée* perspective on the 'political theology of Covid-19' and earlier pandemics, while Daniel Chernilo, like Frédéric Vandenberghe and Jean-François Véran, stress its global nature. When Marcel Mauss wrote about the 'total social fact' of the gift, he was not thinking of a gift (in the German sense of poison) affecting the whole world, and now even Antarctica, at more or less the same time. 'Like the collars and shells of the Kula or the animal furs of the potlatch, it circulates freely within social relationships and brings into movement the whole of society...' (p. 175) As Chernilo points out, 'At its peak, lockdowns, quarantines, restrictions of travel, work and education reached around 80% of the world's 7 billion of inhabitants.' (p. 167) While Véran, who had worked with Médecins sans Frontières in Paris and contracted Covid, Vandenberghe, less dramatically, 'endured the anguish of social isolation. We were experiencing, perhaps, the inversion of Sartre's formula: hell, after all, might be the absence of other people.' (p. 186).

In the third and final part, Sylvia Walby shows how social democracy can mitigate the social consequences of the pandemic, and Donatella della Porta suggests that emergencies such as the current one can open up opportunities for social movements, as well as curtailing their activities. The political economist Sonja Avlijaš argues that, in a context where we are all more or less seriously threatened, 'the coronavirus pandemic has made a big dent in the already weakened ideology that the "competitive society" does not need security and protection' (p. 240). Albena Azmanova takes a similar line that the 'battlegrounds of justice' against inequality and catastrophic climate change now include a third battleground directed against precarity resulting from social polarisation: 'the pandemic showed precarity to be the real grievance of the 99 per cent...' (p. 254).

This wide-ranging book is a timely and extremely important contribution which will stand comparison with the host of subsequent books on the topic which we can expect to follow.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

REFERENCE

Bickerton, C. J., and Ivernizzi-Accetti, C. (2021). *Technopopulism. The New Logic of Democratic Politics*. Oxford: Oxford University Press. doi:10.1093/oso/9780198807766.001.0001

Delanty, G. (2020). *Six Political Philosophies in Search of a Virus: Critical Perspectives on the Coronavirus Pandemic*. LEQS Paper No. 156 (London: London School of Economics). doi:10.4324/9780429297045

The English Government Hits Limits: Knowledge Politics and Covid-19

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Tragic its consequences, the Covid-19 pandemic has ripped through societies with, at the time of writing, global death rates exceeding two and a half million people. In the process, there has been variability in terms of how effectively governments have dealt with the pandemic. Differences between political responses, forms of governance and the relationships between science and politics are apparent. This article investigates these relations in the United Kingdom with a particular focus upon the interpretations that informed the response of the English Government and their interactions with the scientific community. For this purpose, it provides an exploration of the political and socio-economic conditions prevailing in the United Kingdom prior to the pandemic. It then examines the interactions between science and politics as the pandemic unfolded during 2020. Then, building on these discussions it views the tensions that arose through a clash between two characteristics within democratic societies: the redemptive and pragmatic. What becomes apparent is the tendency for a form of the redemptive to be favoured over the pragmatic which results in an exposure of limits to usual and narrow political ways of governing.

Keywords: politics, knowledge, pandemic, Covid-19, science, policy, judgement

INTRODUCTION

The Covid-19 pandemic has ripped through societies. At the time of writing, global death rates are estimated to have exceeded three million people with clear differences in the effectiveness of how governments have handled the pandemic. The purpose of this article is to investigate the United Kingdom with a particular focus upon the English Government, the political climate informing their responses and their interactions with the scientific community.

The article is divided into three sections. First, an exploration of the social and political and economic conditions prevailing in the United Kingdom prior to the pandemic that inform the subsequent responses. Second, an examination of the interactions between science and politics as the pandemic unfolded during 2020. In the interactions between the credibility of scientific knowledge and its political interpretation and applicability, a greater understanding of the responses and their consequences emerge. Third, an analysis of these dynamics that draws upon discussions from the first part of the article and views the tensions that arose through a clash between two characteristics within democratic societies.

These insights are influenced by developments in sociological theory. In its refusal to see a simple distinction between the social and economic, it takes inspiration from classical social theory and in particular, the work of Max Weber, who once described himself as a "social economist" (Holton and Turner, 1990). In its examination of socio-economic conditions, prior to the pandemic, it draws upon writings on individualization and fragmentation and the role of the public sphere in society, along with the sociology of knowledge and science. That latter influence is apparent in its

examination of the dynamics between science and politics during the pandemic with an emphasis upon the role of legitimacy in public expectations of political decisions and scientific advice. To further understanding of these dynamics during the pandemic, it turns to political sociology and writings on populism to chart the content and limits to what have been exposed as narrow ways of governing society.

PRE-PANDEMIC SOCIAL CONDITIONS: UNDERSTANDING RESPONSES

We have seen an expansion in our horizons of meaning over the course of the pandemic. In the United Kingdom normal political practices have become ones in which risk is individualized and citizens are expected both to be flexible and to exhibit sufficient commitment in the labour market (Dardot and Laval 2013). It is an era in which doubt is argued to have been seeded and perpetuated in the population, whilst the sphere of public, political accountability shrinks (McGoey 2019). Informing this is a populism that constitutes "external" forces as threats to what are assumed to be traditional ways of life.

A focus on external threats has enabled politicians who extol these ways of being to speak of "taking back" control of national affairs to re-establish internal and sovereign matters. This is a populist challenge to political normalization that draws upon: "a reservoir of raw anti-status-quo feelings" (Laclau 2007). For this to make sense presupposes the existence of established boundaries with the most prominent being the "national." Promulgating alleged threats to liberty and property, alongside references to national cultures, goes to the core of the anxieties of citizens living in situations of socio-economic uncertainty. With the political sphere increasingly emptied of responsibility for ameliorating socio-economic conditions, the effect is to reduce concerns with inequality to matters of meritocracy; from there, a path to individual responsibility for the circumstances in which people live is forged.

These transformations have clear effects upon public and private realms in society. As the private realm is increasingly separated from a diminishing public sphere, the gaze of citizens shifts to their "own performance and thus diverted from the social space where the contradictions of individual existence are collectively produced." The demand then arises: "for individual pegs upon which frightened individuals can collectively hang their individual fears" (Bauman 2001). The public sphere becomes less one of democratic concerns and the establishment of rights and more a "giant screen on which private worries are projected" (Bauman 2001). Accompanying this is the departure of power into an extraterritorial space of electronic networks and transnational financial practices which know no borders, leaving solace for those left behind to be sought in a myriad of opportunities for "escape, avoidance, disengagement and invisibility" (Bauman 2001).

The libertarians informing these views seek a world flattened through the removal of barriers to the realisation of their ambitions. Freed from such constraints the practices they pursue have been characterised as consuming their "own

background conditions of possibility. It is like a tiger that eats its own tail" (Fraser 2019). The consequences for others include the production of huge inequalities, whilst resistance is countered by concerted efforts to place these visions beyond doubt through a process of agnotology. This is not: "the study of ignorance and doubt under all their manifestations, as sometimes mistakenly asserted, but rather the focused study of the intentional manufacture of doubt and uncertainty in the general populace for specific political motives" (Mirowski 2014). Think-tanks and consultancies, fed by the academic wares of university workers hungry for recognition, perpetuate these ways of seeing.

In the process a knowledge politics is born bolstered through a link to notions of "being" in society. Flexibility and uncertainty in the labour market combine with the prevention of forms of action through doubt informed by a suspicion of motives beyond anything other than self-interest. The terrain of the future, which the technicians of transformation who inhabit its territory are busy producing in the present, is rendered increasingly devoid of democratic participation (Mirowski 2014). An increasing absence of political accountability tends to remove contestation and relations between the economy and citizens are fed by anxiety and personal responsibility abstracted from social context. Forms of value then appear that categorize the "unworthy." The consequence is a "virus of precarity" that runs alongside the rhetorical perpetuation of apparently limitless possibility in an unbounded marketplace (Lorey 2015).

In the shrinking space of political accountability comes the realm of blame, particularly of those who perform a public service: for example, care workers, nurses, doctors and teachers. At the start of the pandemic, the United Kingdom. National Health Service were estimated to be short of ten thousand doctors and forty thousand nurses (Davis 2021). Pre-pandemic tendencies were to denigrate and under value the idea of public service, whilst the responsibilities of Government were increasingly assumed to be limited through their efforts to naturalize "the economy." These exercises of societal reconfiguration run in parallel to politicians positioning themselves as the defenders of liberty. Not surprisingly, this does not concern those socio-economic conditions which enable a citizen to participate in society, but a domain for the individual and their significant others which: "entails not simply the absence of frustration (which may be obtained by killing desires), but the absence of obstacles to possible choices and activities—the absence of obstructions on roads along which a man (sic) can decide to walk" (Berlin 1979).

As this occurs, rhetorical allegiances to the nation-state are accompanied by economic liberalization whereby we see the constant movement of capital across borders in order that the liberty of those with considerable funds are not stifled by oppressive tax regimes. The resulting funds tend to reproduce themselves and once established: "continue to grow at rapid pace for decades simply because of its size" (Piketty 2014). These extra-territorial ambitions are manifest in the property markets of global cities (Atkinson 2020), whilst the institutions which seek to regulate these actions require removal. As Jeffrey Alexander put it in his discussion of the 2008 financial crisis: "Democratic states

stripped regulations off their economies like old paint peeling on a hot summer day" (Alexander, 2019: 40).

In these conditions governing is about the dismantling of barriers regarded as blockages to such ambitions. Government is assumed to have a minimal function: that is, to make up for market failures. Yet within this way of seeing the world, government failure easily replaces market failure (Friedman and Friedman, 1980). Overall, to curtail the reach of political power into the market requires: "repealing the regulatory state (while making the state itself the subject of regulation) and limiting the political voice of the people" (Brown 2019). Yet, to attribute simple homogeneity to elites in the production of this climate is problematic, whilst there are unintended consequences and circumstances, as we shall see, that temper their excesses.

In this respect we can detect different rationalities between the moral compass of the New Right and the amoral character of neo-liberal rationality. Nevertheless, this does not become a case of contradiction for there is an accord between the two. Whilst neo-liberal rationality promotes the idea of enterprise as residing within the exceptionality of an individual's character divorced from social context, it is within the family where that morality is inculcated (see Dardot and Laval 2013). It is a different matter when it comes to those who funded Brexit in the City of London. The backers of "first wave financialization" favoured remaining in the European Union, whilst those in the "second wave" wanted to leave and provided significant resources for the Brexit campaign.

As Marlène Benquet and Théo Bourgeron (2021) characterize it, second wave financialization exhibits a mode of accumulation that encourages the public to save and take short-term decisions in the stock market with their managers having: "a largely passive management role and delegate the control of companies to business." The second wave is concerned with asset management, hedge funds and private equity whose model of investment is: "only weakly correlated to the financial markets, either because their investments are unlisted or because they only invest in high-risk stock market sectors". This latter group is concerned with what Sayer (2015) terms wealth extraction, not creation. It is their ambition to turn the City of London into a form of offshore investment platform and their influence can be traced into the heart of the United Kingdom. Government (see: https://mondediplo.com/2021/01/10uk).

The political face of those who pursue these practices are bolstered not just by those for whom these transformations are turned into technical matters apparently divorced from politics, but also those who appear to delight in the creation of turmoil and conflict. The uncertainty this generates operates within Government, as well as the financial and data mining sectors. As the Prime Minister's Chief Adviser put in when seeking new recruits to such efforts, diversity is needed, but not that which is associated with race and gender. This was a reference to "cognitive diversity": "We need some true wild cards … If you want to figure out what characters around Putin might do, or how international criminal gangs might exploit holes in our border security, you don't want more Oxbridge English graduates who chat about Lacan at dinner parties with TV producers and spread fake news about fake news" (see: https://dominiccummings.com/2020/01/02/two-hands-are-a-lot-were-

hiring-data-scientists-project-managers-policy-experts-assorted-weirdos/). After a series of clashes among powerful egos and a public focus during the pandemic on his own behaviour during lockdown, Cummings and the Director of Communications left Downing Street in November 2020 (see: https://www.bbc.co.uk/news/uk-politics-54938050).

These practices judge success according to narrow aspirations fed by a juggling act involving the permanent possibilities assumed to be contained in neo-liberal reproduction. Working not just at a macro, strategic level, but a tactical, micro-political level, they lock-in the direction of public policy through more subtle "capillary tactics" that seek to neutralize politics (Chamayou 2021). They have an insatiable appetite to re-fashion context and include those technicians of transformation who tinker: "with machines and models to demonstrate the mechanics of economic interaction" (Gibson-Graham, Cameron and Healy 2013). Accompanying this are centralised command and control models for the conception of public policy and the formulation of judgements as to whether it is being implemented effectively. Thus, despite the idea of a reduced role for governments, a strong state is needed to put markets in those places once occupied by the public sector. By re-directing demand into markets and away from alternative political aspirations the "big question of the choice of society can be evaded by dissolving it into the tiny questions of a society of choice" (Chamayou 2021: 231).

What about the knowledge produced for these purposes? What we find in these centralised modes is the tendency for public policy to separate the knowledge that it draws upon from the social and economic conditions under and through which it is enacted in given localities (May and Perry 2018). The content of knowledge becomes context-revising and certainly not sensitive, for that would mean recognition of existing conditions that detract from potentiality. Such a focus upon the future, accompanied by the idea of "lagging behind," informs the frenetic reproduction of economic possibility. If this is challenged it becomes a matter of commitment to aspiration that is, minimally, indifferent to the present. In the absence of opposition to the conception of policy, the focus moves to the technicalities of implementation. The result is a triumph of process over purpose with the overall result that the relations between the "why" and "how" of knowledge are subsumed within the narrow confines of measurement (May, 2001).

With this comes a focus upon what is "relevant" and "useful." Whilst these expectations of knowledge have always been with us, they have come to assume an increasing importance in circumscribing what knowledge should be produced and how it should be judged. Deliberations concerning "why" are displaced by the assumed technicalities of effective deployment: "talking about rational efficiency becomes a way of avoiding talking about what the efficiency is actually for: that is, the ultimately irrational aims that are assumed to be the ultimate ends of human behaviour" (Graeber 2015: 15). Calls for transparency in the motives of those who perpetuate and profit from these conditions are well made (O'Neil, 2016), but in the process knowledge becomes a tool of economic manipulation. Attempt to regulate, manage, control and direct produces a new form of

"knowledge politics" (Stehr 1994) that blurs the domains between science, politics and the economy: science is linked to innovation for competitive advantage and wealth creation.

Scientific expertise has become more deeply integrated into the fabric of modern societies and manifest in decisions about the environment, health and welfare and security. Equally, business leaders can be scientists concerned with the technological implications of its insights and universities seek third stream funding from patents and spin out opportunities (May, 2018). As this occurs, politicians refer to the problems of expert control over everyday life. That leaves out critiques of the deployment of knowledge in politics and business activities and works to displace the importance of consideration of values outside of the narrow terrain created between the economy and its promise. Although the idea of a functioning market has been created by the ideas of economists, this works to frame and bound knowledge through an attributed value which denigrates alternatives and seeks to regulate what is credible and applicable (May and Perry, 2011).

These dynamics have effects upon public service and those infrastructures which provide security and can mitigate against the worst excesses of a pandemic. In pre-pandemic political rhetoric we found reference to the problem of democracy being governed by unelected and unaccountable expert bodies. That has a clear appeal. Democracy, after all, is a: "form of government that is based on the idea that no individual or any group has a title to govern over others" (Rancière 2010). However, a distrust and suspicion of such expertise can readily translate into disdain for public service, particularly if it does not conform to the idea of market rationality. The *Art of Judgement*, for instance, is an influential study on the complexity of public affairs and the process of policy making. Noting that there are debates over regulatory systems for political choices, between those who believe in the free market and executive agency, or a combination of those, Geoffrey Vickers writes: "It has always been necessary and desirable that the needs that it (the market) could not express or supply should be expressed and supplied politically" (Vickers, 1995: 155). That is a space of public service between politics and business, but one which now represents a direct challenge to knowledge and competences acquired outside of the market process.

In the United Kingdom public services have increasingly been required to reflect private business practices through the introduction of such things as internal and quasi markets. As this occurs, the Government outsources its expertise to consultancies and awards the private sector with sizeable contracts to perform what were once public services. The result is a shift in legitimacy for the competences informing a public service ethos and what remains of its practices are subject to market measures. What we see is not a liberal approach as expressed by Vickers, through the exercise of caution in respect to the strengths and limitations of markets, but an embrace of the influence of firms on the state (Crouch 2011). It can be cast as both inevitable and desirable, as if it were not the result of a chosen policy in the first place. As one architect of these changes wrote in a lecture during the pandemic entitled "*The Privilege of Public Service*," more people in Government needed to be:

"equipped to read a balance sheet and discuss what constitutes an appropriate return on investment" and to be "conversant with the commercial practices of those from whom we procure services and can negotiate the right contracts and enforce them appropriately" (Gove, M. https://www.gov.uk/government/speeches/the-privilege-of-public-service-given-as-the-ditchley-annual-lecture).

ENTER SCIENCE: POLITICAL JUDGEMENT IN THE PUBLIC GAZE

The limits of these forms of governing and deployment of selective knowledges were to be exposed during the pandemic. Political accountability had been avoided through speed of change, the creation of conditions of uncertainty and allusion to abstract, individual economic opportunity masquerading as public, collective possibility. Rancière's (2006) two opposing systems of legitimacy in governmental authority were to collapse. First, there is the legitimacy sought through the popular vote and second, once elected, that which comes with the ability of political leaders to exercise judgement for the best possible solutions for societal problems.

Brexit is apparent in the first sense of legitimacy and toughness in respect to immigration and asylum policies are easy wins with respect to the second element. The latter are "external" threats that detract from "internal" issues less amenable to populist, rhetorical posturing. Covid-19, however, could not be externalised in this way. Denial or denunciation, as the first stage of reaction, becomes inadequate to the task of meeting a collective, public concern to act. So too is bravado and an almost aggressive nostalgia for the whole through allusion to collective belief bound within nation-states (whilst, it should be added, busily removing the borders which enable it). Ideas of "one nation" were also problematic because of the presence of the devolved administrations in the United Kingdom (Scotland, Wales and Northern Ireland) which enabled a differential response to the pandemic. Here was a societal sense of risk that translated into collective expectations of political leaders. It was born of a sense of fear as "the name we give to our *uncertainty*; to our *ignorance* of the threat and what is to be *done*" (Bauman 2006). These conditions were not simply about ignorance, but an absence of not knowing that translated into an expectation for political leaders to act in the public interest. The pandemic became a test of the second element of legitimacy. This was new.

The response started with what seemed to be an initial indifference and even denial on the part of political leaders. However, as the costs of political indecision mounted, the tendency to perpetuate an individualistic ethic was placed to one side as the United Kingdom entered its first lockdown in March 2020. Citizens were now encouraged to exhibit a relational responsibility in their actions: that is, to be concerned with and care for others, because we are all "in this together" as victims of a threat whose origins may have been external, but rapidly became internal. This call to collectivism was a test of politics as usual and would lead to ambiguity exhibited as an absence of clarity and

coordination and willingness to learn from mistakes. That would have serious consequences for the British population. Disdain for public service and exacerbating precarity were not only inapplicable responses, but potentially disastrous ones. In the process media scrutiny heightened and even attempts by a core technician of turmoil to retrospectively position themselves as the predictor of pandemics would be exposed to public scrutiny (https://www.newstatesman.com/science-tech/2020/05/dominic-cummings-press-conference-blog-predicted-covid-19-coronavirus).

Science in the Public Arena

The usual strategies and tactics needed to be jettisoned and in stepped the scientists to share the terrain of legitimacy. Here was a heterogenous body of scientists who became homogenous as reference to "the science" increased in public frequency. No longer about the narrow constitution of the economy and its potential and rhetorical allusions to a return to national sovereignty, this crisis was immediate and about health and then, health and the economy.

The Government can decide, in the face of an emergency response, when to set up the Scientific Advisory Group for Emergencies (SAGE). Its aim is to provide scientific and technical advice to support decisions in the Civil Contingencies Committee (COBR). In terms of the provision of independent scientific advice, overt governmental control was not an option, but a "presence" in scientific discussions became a second-best scenario. Again, this was exposed and calls followed for the Prime Minister's then Chief Political Advisor to remove himself from SAGE and for their deliberations to be more transparent to the public (https://theconversation.com/dominic-cummings-and-sage-advisory-groups-veil-of-secrecy-has-to-be-lifted-137228).

In these circumstances the tactic to characterise scientists as experts seeking to legislate over what is possible and even desirable for the ways of life of the population could not play. Normally, once in the public sphere, the credibility of the expert becomes the same as the non-expert as the content of the knowledge produced is translated directly into its consequences for society. Most scientists recognise this dynamic. In view of the urgency and relevance of scientific insights for tackling the pandemic, the relations between credibility and applicability were short-circuited. In public policy terms their knowledge was compelling not just because it was useful, but because its visibility made it difficult to ignore (Mulgan 2009). With the questioning of expertise suspended, the realm of deliberation was informed by a shifting terrain of insights that sought to find patterns in emerging data and inform political decision-making beyond the usual sloganeering and narrow pre-occupations.

The scientific orientation was driven less by a search for certainty, but the value in understanding the desirability of various courses of action based upon emerging evidence. As Peter Piot, a microbiologist and Director of the London School of Hygiene and Tropical Medicine put it in reflecting on his own experiences of Covid-19: "The more we learn about the coronavirus, the more questions arise. We are learning while we are sailing" (https://www.sciencemag.org/news/2020/05/finally-

virus-got-me-scientist-who-fought-ebola-and-hiv-reflects-facing-death-covid-19). Such a pragmatic orientation would expose tensions in institutional politics between the quality of deliberation and democratic decision-making (Outhwaite 2021). Avoidance of public, political accountability would inform a political-scientific dynamic as the pandemic evolved. We witnessed the creation of a public platform for science. In televised briefings the focus was upon a combination of scientific knowledge and political judgement. If the universal of science as the exercise of doubt through a preparedness to be exposed to falsification had been exploited by politicians and their technicians who felt no such compunction in pursing their certainties, it was now in a public space informed by a public need for consistent and clear political judgement.

The situation required that scientists act politically in the sense of achieving a consensus between their deliberations and advice and political decisions. As the Chief Medical Advisor put it in evidence to a House of Commons Committee: "I think what SAGE has to do is to try to take complex science and bring it to a position where we say, 'This is the consensus view of where we are now, but we are clear about the function and purposes of argument.' What I think is not helpful is to say, 'Here are several different views,' and ask somebody who is less knowledgeable to bring these together and come to a single view. In SAGE, we try to come up with a consensus view, but we are always clear and open about how we arrive at that" (https://publications.parliament.uk/pa/cm5801/cmselect/cmsctech/correspondence/200518-Chair-to-Prime-Minister-re-COVID-19-pandemic-some-lessons-learned-so-far.pdf). However, despite such assurances, concern about the lack of transparency and political interference in SAGE led David King, former Chief Scientific Advisor, to set up an independent SAGE whose deliberations were publicly available (https://www.independent.co.uk/news/uk/politics/coronavirus-sage-dominic-cummings-david-king-a9496546.html).

Steve Fuller's characterisation of scientists as the "unelected masters of what remains unknown about us to ourselves" (2018: 45) carried with them the weight of public legitimacy in the pandemic. A simple collapse of the political and scientific through exploiting differences or condemning its applicability in the name of the market, would meet bodies of expert opinion who were regarded as doing their best in difficult circumstances. Although differences existed in scientific opinion with respect to modelling and alleviation of the effects of Covid-19 whilst "learning while sailing," here were scientific forums for whom: "obstacles to rational persuasion produced by the lack of relevant knowledge, and the distractions of other business are eliminated, or much mitigated." This rendered them: "much more effective in coming to conclusions than ordinary legislative bodies, whilst preserving the character of liberal persuasion within them" (Turner 2003).

In the face of these dynamics, we witnessed fluctuations in the desire for political leaders to share a platform with the public face of science. Increasing legitimacy for the generation of scientific knowledge was at odds with the scepticism and even contempt towards public institutions. A lack of clarity then followed with the emergence of new bodies. In the middle of the first phase of

the pandemic, the Joint Biosecurity Centre was set up under the direction of a member of the National Cyber Security Centre, which is part of GCHQ (Government Communications Headquarters). The exact nature of the relations between this entity and SAGE and the role of evidence in informing public policy then became a matter of concern for the House of Commons inquiry into lessons learnt from the pandemic, as well as commentators in the British Medical Journal (see: https://committees.parliament.uk/work/657/coronavirus-lessons-learnt/ http://dx.doi.org/10.1136/bmj.m2874). Confusion and matters of blame displacement were exacerbated with the announcement that Public Health England, six months into the pandemic, would be merged with NHS test and trace and the Joint Biosecurity Centre (JBC) into the National Institute for Health Protection. In response to questions from a House of Commons committee, the director-general of the JBC made clear their differences from SAGE: "We are not an independent scientific body that has members per se. We are part of the civil service. We are staffed by civil servants and we report directly to the Secretary of State for Health and Social Care" (See: https://committees.parliament.uk/oralevidence/1085/pdf/). Public transparency appeared to be displaced through translation into Ministerial control.

As accountability and transparency became more clouded, the Government were taken into a terrain of public spending of approximately £300 billion by the end of 2020; serving to reinforce the reality of the interactions between politics and the economy (https://obr.uk/efo/economic-and-fiscal-outlook-november-2020/). In the process consultations with the public sector were informed by suspicion and by October 2020 an estimated £10 billion of public contracts were awarded to private companies in the absence of competitive tender (see: https://www.ft.com/content/7bf2fbdc-a26b-476e-a604-fac15ecfc222). The Health Secretary was later ruled to have breached his "legal obligations" in not publishing details of these contracts within a specific time frame (https://www.bbc.co.uk/news/uk-56125462). At the same time, the Coronavirus Act, granting emergency powers, led to the executive branch of Government acting without normal consultation with Parliament, thereby reducing its powers to hold them to account. The Act itself has been described as the "biggest restriction on civil liberties in a generation" (see: https://www.theguardian.com/commentisfree/2020/sep/29/coronavirus-act-liberties-powers-police-public-health-crisis).

Space And Place: Context Finds a Voice

Along with the interplay between science and politics and issues of transparency and political accountability, the relations between space and place came under strain. Political differences emerged between the devolved administrations in the United Kingdom who spoke of the absence of communication and coordination with Westminster as impediments to the effectiveness of responses. COBR enabled the Prime Minister to meet with the First Ministers of Scotland, Wales and Northern Ireland. Yet it did not meet between May 10 and September 22, 2020, leaving a report on coordination and divergence in responses to the pandemic to conclude: "The use of intergovernmental

fora has declined since May, reducing opportunities for the four governments to co-ordinate their approaches and manage the consequences of divergence" (Sargeant 2020). A reluctance to share centralised prerogatives with the devolved regions was also apparent within England.

It has been argued that the content of knowledge mobilized in neoliberal reforms is context-revising, not sensitive. It seeks to change and mould places in the image of abstract trans-local images (May and Perry, 2018). Impediments to this realisation are blockages to be removed. Sensitivity to social context entails political recognition of places and their representatives. Urgency for change provides no time for reflection or learning in the name of re-fashioning contexts for the future: "The final power would thus be less one of imagination than of anticipation, so much that to govern would *be* no more than to foresee, simulate, memorize the simulations" (Virilio 1986). With time and power aligned in these ways, context is not expected to speak back. That changed in the pandemic.

The introduction of eight elected mayors in England (London has had a mayor with differing powers since 2000) from 2017–2019, who are also chairs of a Combined Authority, introduced a layer of accountability for devolved powers from central Government. The terms of devolution provide for some flexibility, whilst election, as Rancière (2006) reminds us, is also a process of conferring legitimacy for subsequent political decisions. In the case of Combined Authorities this is informed by knowledge through acquaintance with the area, its dynamics and representation of its interests. As relations between time and place altered as the pandemic unfolded, the Government introduced a tier system. "Alert levels," from medium through high to very high, were introduced and deployed to enable a judgement to be made between a "return to normal" measured against transmission rates, with varying degrees of financial support available depending on the level assigned; all of which took place against a backdrop of twenty two billion pounds of initial investment in a test and trace programme, with an additional allocation of fifteen billion over the next two years (https://committees.parliament.uk/committee/127/public-accounts-committee/news/150988/unimaginable-cost-of-test-trace-failed-to-deliver-central-promise-of-averting-another-lockdown/).

Questions over the test and trace programme and use of a tier system created a space for place-based judgement and mobilisation of local knowledge. This was bolstered by private contractors, paid to set up and implement a national test and trace system, not providing an effective process (see: https://www.theguardian.com/commentisfree/2020/nov/03/advice-schools-covid-infection-pupils-classrooms-test-and-trace). The result was an increased local involvement in contact tracing, utilising local expertise, to reach communities. Such practices challenged the centralising tendencies in English politics leading the Mayors of London and Manchester to write: "We are uniquely placed to help. As mayors our focus is exclusively on the city regions we run. But the Westminster Punch and Judy show struggles to relate to this more grown-up and pragmatic 'place before party' approach" (https://www.theguardian.com/commentisfree/2020/oct/25/mayors-are-a-force-for-good-and-its-time-johnson-recognised-that).

Political tensions increased as a proposed Government imposition of tier 3 upon Greater Manchester in October 2020 proved highly contentious. The Mayor of Greater Manchester argued that, should this take place, greater levels of support were needed for business. Politically, however, this was not about the levels of funding as such, with the Government invoking "fairness" in comparison to other tier 3 areas in the North of England, but about an English North-South divide in terms of leveling up of support, not down. That point was not lost on those Conservative MPs elected in 2019 from Northern England which resulted in differences within party ranks (https://theconversation.com/andy-burnhams-standoff-with-london-was-always-about-more-than-just-lockdown-money-148594). Tier 3 was ultimately introduced in Greater Manchester as the Mayor made it clear that it was not desirable to break the law.

It transpired that SAGE had earlier recommended a national "circuit breaker" to prevent the spread of the virus and avoid a higher number of deaths. With the Welsh Government introducing a 17-days virus "fire-break" and Scotland and Northern Ireland imposing their own preventative measures, the political terrain was exposed to regional contestation and bolstered by scientific recommendations concerning the need for a national response which did not discriminate on the grounds of place. As the Chief Medical Advisor put it in evidence to the House of Commons Select Committee: "the argument for strong regional variation in what we do is not terribly convincing" (https://publications.parliament.uk/pa/cm5801/cmselect/cmsctech/correspondence/200518-Chair-to-Prime-Minister-re-COVID-19-pandemic-some-lessons-learned-so-far.pdf). A three-week gap between the Government receiving the SAGE advice and the announcement was justified as being acceptable within the bounds of a "balanced view" (https://www.thetelegraphandargus.co.uk/news/18790627.government-ignored-sage-advice-lockdown-month-ago/).

Schisms between and within politics and science grew. Allegations were made that the Government were in the grip of scientists as unaccountable elites, along with the role of private companies and the pursuit of profitability in the process of science and the funding of the work of scientists themselves (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32064-X/fulltext). As cases exceeded one million and predictions that the death rate could be twice that of the first lockdown, the English Government performed a 'strategic' U-turn and England went into a four-week lockdown at the end of October, with a third following in January 2021.

THE REDEMPTIVE HITS LIMITS

These dynamics can be further understood by taking the earlier discussions concerning pre-pandemic conditions and placing them within the literature on populist politics. Although populism can be a vague term with writers contributing to its clarification (Laclau 2007; Mouffe 2018) Canovan (1999) draws on the work of Oakeshott (1996) to develop her ideas. Oakeshott contrasted the "politics of faith" with the "politics of scepticism." The former is concerned with the pursuit of salvation and

requires for its energy the "mobilization of popular enthusiasm" and "the quest of power to accomplish it" (Canovan 1999). The latter, on the other hand, is suspicious of such motives, reduces its expectations of what politics can achieve and is concerned with order and the reduction of conflict: "For this style of politics, the rule of law is crucial" (Canovan 1999). Oakeshott regarded these two styles of politics as inseparable.

Canovan does not consider these terms sufficiently clear. Instead, she uses the terms "pragmatic" and "redemptive." Whilst seemingly opposed to each other she argues they are also interdependent. Democracy has a redemptive vision "kin to the family of modern ideologies that promise salvation through politics." Its pragmatic face, however, is that it is a form of government which is "a way of running what is always one particular polity amongst others in a complex world" (Canovan 1999). In the gap between them, populism can appear: "one could caricature democracy's pragmatic face with the slogan, 'ballots, not bullets', or (in more academic terms) as 'a system of processing conflicts without killing one another'. A corresponding caricature of the redemptive face might be '*vox populi vox dei*', or 'government of the people, by the people, for the people'" (1999: 9–10. Original Italics).

The redemptive requires the pragmatic for its realisation through the deployment of rules and practices to settle conflicts peacefully. If the redemptive is in ascendancy it emphasises the idea that the people are the source of legitimate authority which becomes apparent only when they take charge of their own lives. Such a realisation does not necessitate democracy and looking around the world, it is one form of government among others for running affairs. Functioning democracies, however, require institutions not only to limit power, but channel it and render it more effective. If the redemptive takes precedence we find: "a strong anti-institutional impulse: the romantic impulse to directness, spontaneity and the overcoming of alienation" (Canovan 1999). As we have seen, for the current English Government it aligns with an attitude that runs from suspicion to contempt for public institutions that need transformation in the abstract image of a market apparently separate from the realm of politics which is increasingly emptied of public accountability.

This form of redemptive politics takes society down a path of limited capability when faced with the collective risk of a pandemic. Fluctuations between strategies of mitigation and suppression of the pandemic in the face of the need for overt Government-led interventions become more likely. Suspicion of public service, in comparison to the assumed efficiencies of the private sector, become internal to a regime charged with responsibility for tackling and alleviating its consequences. Although the process tempered this right-wing populism, it informed an ambiguity in the coherence and consistency of political judgements. We witnessed a preference for awards to private companies, despite a huge variation in their capabilities to deliver; an absence of preparedness to discuss and coordinate with the devolved administrations, as well as with English city and regional political representatives.

Right-wing populism was riding high before the pandemic, particularly with the promise of a return to popular sovereignty

following the outcome of the 2016 referendum to leave the European Union. Political rhetoric referred to external threats to liberty and sovereignty whilst, at the same time, exhibiting tendencies to regard democracy as embodying the "impurity of politics" and a "challenging of governments claims to embody the sole principle of public life" (Rancière 2006). This opened up a political space where we find leaders as "vivid individuals who can make politics personal and immediate instead of being remote and bureaucratic. In this context, amateurism and lack of political experience actually become recommendations" (Canovan 1999). A lack of experience and amateurism would not, however, be appropriate for tackling a societal pandemic. Limits were exposed and the Government were taken into uncomfortable terrain: "When states are targeting asset prices, providing wholesale bailouts to private corporations and buying up substantial portions of their own debt, it becomes far harder to argue that interventions to promote the public good are undesirable because they might disrupt the operation of the market mechanism" (Blakeley 2020).

Attempts to dismantle the boundary of the political through a focus on the economics of things, not people, could not work. People, their families and communities were profoundly affected by Covid-19 which ran through the fault lines of socio-economic inequality. A pragmatic response was needed from political leaders. Normally, they seek to configure a heterogenous population through a focus on micro demands in the marketplace. The pandemic brought the present into sharp focus and the response had to be much more than the creation of a playing field for the few over the needs of the many. The population had moved from heterogenous spectators. A need arose for good judgement and transparency in political decision-making which is so often displaced by a media fuelled theatre of scandal. That induces a passivity among citizens informed by grievance and complaint within "spectator democracy' (Han 2017). The pandemic created a homogenous expectation to act on an internal matter with very high, collective risks. That translated into active expectation of political leaders which exposed the limits of their usual actions.

These tensions informed how science and politics interacted. Steve Fuller's discussion of anticipatory and precipitatory governance, although referring to innovation, is helpful here. The former is concerned with a precautionary principle such that those things which are likely to create more harm than good would not be pursued. The latter, on the other hand: "operates on the assumption that some harm will be done, no matter what course of action is taken, and that the task is to derive the most good from it" (2018: 175). In this latter course we find a calculation that harm may be done in the short-term, but over time a better outcome will emerge. That is the preferred form for those who emphasise disruption in the name of a future in which the end justifies the means.

Politicians of this persuasion and their associated technicians of transformation and turmoil often follow the command of "no pain, no gain" (Fuller 2018). For this reason, the activation of public legitimacy ascribed to the practices of a precautionary science was met first by denial and then, varying degrees of

incorporation. The usual tactics to supress knowledge circulating in the domain of public accountability where anxiety, fear and expectation were rife, could not play. Concerns and consequences were both generalized and personal and in search of answers not reducible to market preference. That created a powerful confluence not amenable to being met with the usual tactics. A realm opened-up where public expectation focused on the production of knowledge informed by a precautionary principle as a challenge to usual epistemic relations that work to: "insulate themselves from critical challenge by distorting the space of reasons and presenting relations of rule or domination as 'natural' (unalterable), 'God-given', or in some way falsely, as sufficiently justified" (Forst 2014).

Those dynamics informed the shifting boundaries between scientific advice and political judgement. Science had a public face and that informed judgement of political decision making. However, scientific practices themselves were also challenged. After all, if they do not understand this political climate, a reflexive blindness to the conditions informing practice will emerge. If you are "learning to fly whilst in the plane" and do so whilst assuming high degrees of "epistemic impermeability" (May with Perry 2011) are in place that assume a simple separation between knowledge production and reception, you will not remain in the air for long. Transparency in these relations is important and its absence in SAGE led to an independent group being set up in the face of a democratic lag in which normal parliamentary scrutiny was suspended. Concerns with scientific consensus, particularly when laws are being deployed to circumvent normal democratic process, can be problematic when dealing with rapidly changing situations: "Assertions about scientific consensus circumvent debate within the scientific community and with others inside and outside academia with relevant expertise; rapid imposition of laws or regulations precludes mechanisms of democratic control that would usually be expected before such major policy interventions, such as parliamentary debates or impact assessments" (Martin et al., 2020).

Scientific practices had much to learn and needed to adapt in this fluid climate. As the pandemic evolved, viewpoints from different disciplines were required. A scientific hierarchy was at play during the early stage of the pandemic, as is common in situations requiring interdisciplinary responses (see Callard and Fitzgerald, 2017). "Behavioural scientists" became involved. This is a generic term that covers the "othering" of disciplines by those in positions to make these judgements. Social factors were key to understanding and we moved from what seemed an initial reluctance to recognise these factors, to those with an understanding of their dynamics playing an increasing role in deliberations over time. The issue remains, however, as to whether they engage in the generation of insights on an equal basis or are expected to examine the implications for the public of the application of insights already placed in the realm of unproblematic justification (May and Perry, 2022). Whilst sufficient evidence on such issues is yet to emerge, early studies suggest that such integration was not apparent and whilst the urgency of the situation may explain some outcomes, it does not preclude more imaginative responses

which incorporate a wider variety of perspectives (Martin et al., 2020).

If the pandemic has taught us anything about the relations between science and society, it is the need for more sustainable "civic epistemologies" (Jasanoff 2012). What lies at the heart of democracies, exacerbated by this right-wing populism, is how particular experts are enrolled into the apparatus of formal government bodies and how such knowledge is produced and interpreted and deployed. Sheila Jasanoff refers to this as living in an "Expert Raj" in which such processes: "are as opaque to ordinary citizens as the self-legitimating claims of rulers in distant metropoles were to colonial subjects living in the peripheries of empire" (2012: 11). A way to approach this is to examine events, such as the pandemic, where the: "principles underlying trust in government by experts are exposed to public scrutiny" (2012: 11). That requires degrees of transparency which, as we have seen, have not been sufficiently evident and are also being eroded.

When it comes to an understanding of this context from health scientists, it is argued that in Britain we find "a tradition of respect for evidence" but "data tend to be used as weapons in political debate rather than for reasoned argument" (Marmot 2015). In characterising the issue in this way and in dealing with matters of public health, Michael Marmot seeks to maintain "the fiction that I am not political" (2015: 342). Despite this, his conclusions are clear: "disempowerment, material, psychosocial and political, damages health and creates health inequities" (2015: 346). Similar observations are apparent in recent observations on the pandemic whereby it is the form of capitalism pursued by political leaders that has ripped into the 'social fabric' of society (Horton 2020). We find a clear ambivalence here regarding the boundaries between the political and scientific which, as we have seen, have sought to be reconfigured in the name of narrow notions of the economy, separate from society. Their maintenance to ensure scientific credibility is important, but they move over time and in the current era political distortion is in the ascendancy. To maintain such credibility, particularly in the face of how the pandemic has exacerbated existing, deep rooted inequalities, science must understand that and build it into its practices, or its risks reproducing this situation.

SUMMARY

A virus of precarity brought about by the actions described above, found itself confronted by coronavirus which tracked through the fault lines of socio-economic inequality. A redemptive distaste for democracy and the public institutions which maintain its pragmatic dimensions informed Government responses to the pandemic. Scientific practice operated on a precautionary basis at odds with the tendency towards precipitatory governance. The consequences in ill-health and death in the United Kingdom are evident and whilst a public inquiry into the handling of the pandemic has been announced for Spring 2022, its remit and date of reporting is yet to be determined (https://www.bbc.co.uk/news/uk-57088314).

We have seen calls to "go back" to the economy and exercise the precautionary principle via allusion to "following the evidence"; particularly when faced with political dissent from within the ranks of the Conservative Party. Overall, the desire to move beyond the current situation is understandable. At the time of writing, we have seen nearly one hundred and thirty thousand deaths; continuing symptoms of the effects of long-Covid; rising mental health issues; effects on education and learning among young people; increased rates of unemployment; higher rates of domestic violence; delayed operations and amplification of already existing huge inequalities in health and income and levels of public debt not seen since the two World Wars. As it stands, will the levels of support provided for business be given over to the public sector and those in need in the future? The National Health Service had considerable public support, but will the funding for this institution and its workers, having repeatedly proved themselves to society in such awful circumstances, be exempt from the impulses charted here? We are led by those who know what they dislike, born of their selected experiences transposed into a generality through the creation of socio-economic conditions that have dire consequences for most. It is accompanied by a refusal to dwell on history and how it forges the present in favour of a focus upon imaginary futures of limitless potential.

Despite attempts to break the boundaries between the economy and well, just about everything else, expressions of general political conflict during the pandemic occurred. We witnessed this in Black Lives Matter. That brought to attention not only to a critique of the political speaking as if it were a universal, but a demand for social justice. In the process the apparent solidities of the past, constituted in statues of the venerable, were exposed as built upon violence and exploitation (https://www.bbc.co.uk/news/av/uk-52954994). Running through to current times, it became a history of the present exposed as the struggle between memory and forgetting. No wonder that the representatives of the political ideology charted here want history to be taught as the reciting of dates, celebration of Monarchs and overall, rendering its study as a nostalgic revere of yesteryear. Whilst defending the right to dissent, these protests were described by the Home Secretary as "dreadful" and actions by the London Mayor to form a commission into diversity were characterised by the Leader of the House of Commons as a "loony left-wing wheeze" (https://www.theguardian.com/politics/2021/feb/12/priti-patel-hits-out-at-dreadful-black-lives-matters-protests).

The analysis presented here is not complacent concerning the public institutions of democracy. As Black Lives Matter demonstrated: "The crisis ushered in by coronavirus has accelerated the need to find this common ground between the defenders of institutional norms and those who agitate for economic justice" (Davies 2020). Whilst this Government seeks to dismantle them, for those who seek a more equal society, they need reform. Nevertheless, in the process we can easily forget, albeit flawed, how they came about: that is, to address the limitations of a society seen as indifferent to human need. In the meantime, political space is occupied by visions and practices which, not so long ago, would have been

regarded as extreme. Knowledge has become a tool to manipulate, distract and persuade. We have not entered a period of post-truth. We live in an era in which knowledge is selected and deployed by those whose visions are myopic and for which society is paying a very high price.

This is not a politics seeking to recognise differences in the name of greater understanding and tolerance and respect, but one which atomizes society. It mobilises prejudice and mistrust to suit a desire for power to run uninhibited through the body politic. The legitimacy that holds such power in check is at an all-time low and with that political accountability. Its forward march has been tempered by the pandemic. The call for a "return to freedom" is part of current political rhetoric, but so too is the desire of the population to return to a greater sense of normality. Despite the death toll, public focus is now upon vaccination rates and the hope for a return to normal. Once again, time and power interact and with that the propensity for forgetting to triumph

over memory. Relieved of fear through the desire to return to normal, the issue is not only effective control of the pandemic, but that the problems which result from this politics will persist and learning will, once again, depart.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

REFERENCES

Alexander, J. C. (2019). *What Makes a Social Crisis? the Socialization of Social Problems*. Cambridge: Polity.

Atkinson, R. (2020). *Alpha City: How London Was Captured by the Super-rich*. London: Verso.

Bauman, Z. (2001). Cambridge: The Individualized SocietyPolity.

Bauman, Z. (2006). *Liquid Fear*. Cambridge: Polity.

Berlin, I. (1979). *Four Essays on Liberty*. Oxford: Oxford University Press. Originally Published in 1969.

Blakeley, G. (2020). *The Corona Crash: How the Pandemic Will Change Capitalism*. London: Verso.

Brown, W. (2019). *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West*. New York: Columbia University Press. doi:10.7312/brow19384

Callard, F., and Fitzgerald, D. (2017). *Rethinking Interdisciplinarity across the Social Sciences and Neurosciences*. Basingstoke, Hampshire: Palgrave Macmillan. Open Access. Available at: https://link.springer.com/book/10.1057%2F9781137407962.

Canovan, M. (1999). Trust the People! Populism and the Two Faces of Democracy. *Polit. Stud.* 47, 2–16. doi:10.1111/1467-9248.00184

Chamayou, G. (2021). *The Ungovernable Society: A Genealogy of Authoritarian Liberalism*. Cambridge: Polity. Translated by Brown, A.

Crouch, C. (2011). *The Strange Non-death of Neoliberalism*. Cambridge: Polity.

Dardot, P., and Laval, C. (2013). *The New Way of the World: On Neo-Liberal Society*. London: Verso. Translated by Elliott, G

Davies, W. (2020). *This Is Not Normal: The Collapse of Liberal Britain*. London: Verso.

Davis, C. M. (2021). Readiness and Resilience of the Health Systems of the UK and Russia during Covid-19 Epidemics in 2020-2021: Impacts of Priorities, Shortages and Rationing. *Post-Communist Economies* 33 (1), 1–63. Available at: https://www.tandfonline.com/doi/full/10.1080/14631377.2020.1867433?src=. doi:10.1080/14631377.2020.1867433

Forst, R. (2014). *Justification and Critique: Towards and Critical Theory of Politics*. Cambridge: Polity. Translated by Cronin, C. Originally Published in 2011.

Fraser, N. (2019). *The Old Is Dying and the New Cannot Be Born*. London: Verso.

Friedman, M., and Friedman, R. (1980). *Free to Choose: A Personal Statement*. London: Harcourt. doi:10.1037/e511922011-008

Fuller, S. (2018). *Post-truth: Knowledge as a Power Game*. London: Anthem Press. doi:10.2307/j.ctvgd30v

Gibson-Graham, J. K., Cameron, J., and Healy, S. (2013). *Take Back the Economy: An Ethical Guide for Transforming Our Communities*. Minneapolis: University of Minnesota Press.

Graeber, D. (2015). *The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy*. London: Melville House.

Han, Byung-Chul. (2017). *Psychopolitics: Neoliberalism and New Technologies of Power*. London: Verso. Translated by Butler, E.

Holton, R., and Turner, B. (1990). *Max Weber on Economy and Society*. London: Routledge.

Horton, R. (2020). *The Covid-19 Catastrophe: What's Gone Wrong and How to Stop it Happening Again*. Cambridge: Polity.

Jasanoff, S. (2012). *Science and Public Reason*. London: Earthscan, Routledge. doi:10.4324/9780203113820

Laclau, E. (2007). *On Populist Reason*. London: Verso. Originally Published in 2005.

Lorey, I. (2015). *State of Insecurity: Government of the Precarious*. London: Verso. Foreword by Butler, J. Translated by Derieg, A. Originally Published in 2012.

Marmot, M. (2015). *The Health Gap: The Challenge of an Unequal World*. London: Bloomsbury.

Martin, G. P., Hanna, E., McCartney, M., and Dingwall, R. (2020). Science, Society, and Policy in the Face of Uncertainty: Reflections on the Debate Around Face Coverings for the Public during COVID-19. *Crit. Public Health* 30 (5), 501–508. doi:10.1080/09581596.2020.1797997

May, T. (2018). Evidence and Insight: In Search of the Distinctiveness of the University as a Site of Knowledge Production. *Insights* 10, 2–15. Available at: https://www.dur.ac.uk/resources/ias/insights/MayTim.pdf. doi:10.2148/benv.37.3.352

May, T., and Perry, B. (2018). *Cities and the Knowledge Economy: Promise, Politics and Possibilities*. Oxford: Routledge.

May, T., and Perry, B. (2011). *Social Research and Reflexivity: Content, Consequences and Context*. London: Sage.

May, T., and Perry, B. (2022). *Social Research: Issues, Methods and Process*. 5th Edition. Maidenhead: Open University Press/McGraw-Hill.

May, T. (2001). Power, Knowledge and Organizational Transformation: Administration as Depoliticization. *Social Epistemology* 15 (3), 171–185. doi:10.1080/02691720110076512

McGoey, L. (2019). *The Unknowers: How Strategic Ignorance Rules the World*. London: Zed Books.

Mirowski, P. (2014). *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown*. London: Verso.

Mouffe, C. (2018). *For A Left Populism*. London: Verso.

Mulgan, G. (2009). *The Art of Public Strategy: Mobilizing Power and Knowledge for the Common Good*. Oxford: Oxford University Press. doi:10.1017/upo9781844653904

Oakeshott, M. (1996). *The Politics of Faith and the Politics of Scepticism*. New Haven: Yale University Press.

O'Neil, C. (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. London: Allen Lane.

Outhwaite, W. (2021). "Cherche pas à Comprendre: Cosmopolitan Hermeneutics in Difficult Times," in *Hans-Herbert Kögler's Critical Hermeneutics*. Editors D. Ľubomír, C. Kurt, and M. Mertel (London: Bloomsbury).

Piketty, T. (2014). *Capital in the Twenty-First Century*. Cambridge, Mass: Harvard University Press. Translated by Goldhammer, A.

Rancière, J. (2010). *Chronicles of Consensual Times*. London: Continuum. Translated by Corcoran, S. doi:10.5040/9781350252073

Rancière, J. (2006). *Hatred of Democracy*. London: Verso. Translated by Corcoran, S.

Sargeant, J. (2020). *Co-ordination and Divergence: Devolution and Coronavirus*. London: Institute for Government. Available at: https://www.instituteforgovernment.org.uk/sites/default/files/publications/coordination-divergence-devolution-coronavirus.pdf. doi:10.4324/9780429259241

Sayer, A. (2015). *Why We Can't Afford the Rich*. Bristol: Policy Press.

Stehr, N. (1994). *Knowledge Societies*. London: Sage.

Turner, S. (2003). *Liberal Democracy 3.0: Civil Society in an Age of Experts*. London: Sage.

Vickers, G. (1995). *The Art of Judgement: A Study of Policy Making*. Centenary Edition. Thousand Oaks, California: Sage.

Virilio, P. (1986). *Speed and Politics: An Essay on Dromology*. New York: Semiotext(e). Originally Published in 1977. Translated by Polizzotti, M.

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Staying "One Step Ahead of a Racist": Expanding Understandings of the Experiences of the Covid-19 Pandemic Among People From Minoritized Ethnic Groups Living in Britain

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Covid-19 has had a disproportionate impact on those in minoritized ethnic groups. Considerable attention has been given to evidence of ethnic inequalities in rates of infection, hospitalisation, and death. But other ways in which the pandemic experience has been affected by ethnicity have received less consideration. This paper explores the lived experiences of people in different minoritized ethnic groups living in South West England, during the United Kingdom's first pandemic lockdown, using qualitative data collected from interviews and comments provided on a survey. Perceived positive opportunities for growth were offset by anxiety and stress, which were themselves compounded by an awareness of the additional risks they experienced as members of racialised groups, and a sense that this was being ignored—or intentionally exacerbated—by the British authorities. Frustration with an incompetent and corrupt national Government was intensified by concerns regarding their racist motives. Racism in wider society undermined confidence in key public institutions, such as the NHS and the police, while also producing barriers to informal local-community pandemic responses. Only through recognition of the particular ways in which the pandemic affected those in minoritized ethnic groups, including the multiple and compounding effects of current and historical racism, will it be possible to identify avenues for transformative systemic policy change and opportunities to rebuild trust and a better post-pandemic society for all.

Keywords: Covid-19, coronavirus, ethnicity, health, inequality, race, racism

INTRODUCTION

The evidence regarding the disproportionate impact of the Covid-19 pandemic on those in minoritized ethnic groups living in Britain and elsewhere is irrefutable (Aldridge et al., 2020; Haque et al., 2020; Larsen et al., 2021; PHEd 2020a; 2020b; Platt and Warwick 2020a; Sze et al., 2020; WEC, 2020). In particular, studies have shown those with Bangladeshi, Black African, Black Caribbean, Indian and Pakistani ethnicities to experience higher rates of infection, hospitalisation and death compared with the white British population. But it is clear that the impact of the pandemic on society has not only been in relation to increased illness and death.

Increasingly, empirical evidence has exposed other ways in which the pandemic, and the measures introduced to mitigate its effects, have disadvantaged those in minoritized ethnic groups, often by exacerbating pre-existing inequalities (Karlsen et al., 2020; Li and Heath, 2018, Longhi 2018). For example, people in ethnic minority groups already struggling to make ends meet found themselves in occupations more vulnerable to the economic consequences of social distancing measures or less open to working at home or furlough (BSWN, 2020, Platt and Warwick, 2020a,b). The "digital divide" (and implications of overcrowded accommodation) became even more significant in a world where work and study were conducted almost entirely online (Baker et al., 2020). These negative experiences will, in turn, exacerbate persistent ethnic inequalities in health (Bambra et al., 2020; John et al., 2021; Maddock et al., 2021). For example, in the United Kingdom, people in Black, Asian (and "other white") groups reported poorer mental health and an increased sense of worry following the first pandemic lockdown[1] (Barnes and Hamilton, 2020). Research from the US has also indicated higher risk of food scarcity as a consequence of the pandemic among marginalised ethnic groups which is likely to be replicated in the United Kingdom (Siddiqi et al., 2021).

Media and political debate regarding these ethnic inequalities often focused only on the immediate health consequences of the pandemic itself. Moreover, the perceived causes of these inequalities tended to prioritise explanations which focused on genetic or biological issues or the choices and behaviours characteristic of particular ethnic groups. Higher rates of Covid-19 infection were presented as being caused by cultural preferences for multigenerational households, which led to overcrowding (CRED, 2021). Higher rates of death were linked to co-morbidities like diabetes and heart disease, which were perceived to be produced by biological and/or behavioural issues. Not surprisingly, Duffy et al. (2021) found that a significant minority of the British public blamed people in minoritized ethnic groups for their own disadvantage. In the US too, "insidious and potentially racist allusions ... emerge[d during discussions of the pandemic,] appearing to blame African Americans as somehow responsible for the relatively large number of cases and deaths from Covid-19 in the United States, stoking age-old tropes, and attributing morbidity and mortality to the behaviours and predispositions of BAME groups" (Bentley, 2020).

Yet consistently, the empirical evidence regarding the causes of these and other ethnic health inequalities shows that these are influenced far more greatly by societal/structural issues, than biological or cultural ones (Karlsen et al., 2019; Baumer et al.,

2020; Otu et al., 2020; WEC, 2020; Simms, 2021). Endemic processes of direct and indirect racist societal exclusion operate across lives, and over generations, to limit people's access to good-quality housing, education, employment and healthcare, each of which operate to produce health and economic disadvantage independently and are also mutually reinforcing (Brynin and Guveli, 2012; Darlington-Pollock and Norman, 2017; Rafferty, 2021; Zwysen et al., 2021). The low incomes, poor living conditions, poor health and other negative experiences of parents also impact on the health and economic outcomes of their offspring, who carry this disadvantage into their own child- and adulthoods, to be further exacerbated by their own experiences of exclusion. While we can identify a role for health conditions such as diabetes and heart disease in Covid-19 outcomes, we cannot divorce these from the impacts of lives lived on low incomes in access to healthy food or the higher levels of stress these circumstances induce. Overcrowded accommodation is an economic problem rather than a choice, and is often accompanied by issues of housing quality which will encourage respiratory and other health conditions (Darlington-Pollock and Norman, 2017). As such, these processes of exclusion concentrate those in minoritized ethnic groups in living and working conditions which expose them to greater risks of Covid-19 infection, and reduce their resilience to its more serious consequences when it occurs (Barnes and Hamilton, 2020; Brynin and Guveli, 2012; BSWN, 2020; Li and Heath, 2018; Longhi, 2020; Mamluk and Jones 2020; Platt and Warwick 2020b; Rafferty, 2021; Simms, 2021).

The United Kingdom Government continues to refute the existence of racism and its role in the generation of inequalities, including those recognised during the Covid-19 pandemic (Bamrah et al., 2021; CRED, 2021). Yet racism is a socially embedded phenomenon which plays a central role in the generation and perpetuation of these ethnic inequalities, directly and indirectly contributing to the limited life chances and premature deaths of those in minoritized ethnic groups (Nazroo and Becares, 2020; b; Gee et al., 2012; Karlsen et al., 2019; Karlsen and Nazroo 2002; Kreiger 2014; Lewis et al., 2015; Paradies et al., 2015; Priest et al., 2013; Williams 2018; Williams et al., 2019). We must recognize not only that such racisms produce the economic inequalities which explain ethnic inequalities in Covid-19 infections and their outcomes but also that interpersonal and societal racism may be exacerbated in times of social stress, with significant consequences to those it victimizes.

The more direct ways racism has affected the experience of the pandemic among racialized people living in the United Kingdom remains underexamined. There is emerging evidence, particularly from the United States, regarding the ways in which the branding of Covid-19 as a "Chinese virus" has increased exposure to inter-personal violence among those considered (East) "Asian" (Coates, 2020; Darling-Hammond et al., 2020; Dhanani and Franz, 2020), and of the negative health consequences of this on both adults and children (Cheah et al., 2020). But Black and other Asian Americans also experienced greater interpersonal racist violence during the pandemic (Ruiz et al., 2020). In the United

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[1]Lockdown is the cessation of all non-essential activities to slow the spread of Covid-19. In the United Kingdom, this saw strict limits imposed on people's activities both within and outside of their homes, including both what they could do and who they could spend time with. The first United Kingdom lockdown was applied on 23 March 2020, lasting until 4 July 2020, although regional/territory specific approaches were introduced after this time. Subsequent national lockdowns were implemented in October 2020 and January 2021, although with differing degrees of impact (e.g., regarding whether or not educational establishments were affected) and territorial timeframes.

Kingdom, racially-motivated hate crimes reported to the police rose by 12% in the year to March 2021, constituting three-quarters of the 124,091 hate crimes reported during that period (Home Office 2021). We must better understand the impact that this experience has had on its victims.

We must also recognize that racism manifests in various forms, and is not only experienced as explicitly racist verbal or physical violence or dehumanizing treatment such as that which led to the death of George Floyd from police brutality in Minneapolis, US on May 25, 2020, producing a global response so central to the pandemic experience of many, including those in this study. It is also in the more subtle everyday racisms (Essed 1992), or daily hassles, which are more difficult to measure but remain a constant feature of the lives of many people in minoritized ethnic groups (Williams et al., 2003; Karlsen and Nazroo, 2017). Indeed, racism, unlike other criminal acts, need not be experienced personally for it to produce a sense of threat. As such, racist violence should not be considered simply an attack on an individual person, but an attack on a member of a category or group, "an attack on the community as a whole" (Virdee 1995, p. 284). George Floyd's murder, and knowledge of other racist attacks or racially-motivated social exclusions, can serve to increase a sense of personal threat amongst those in racialised groups. Anticipating experiences of prejudice produces higher levels of stress (including an identifiable cardiovascular response) even where this expectation is not realised in an experience of violence (Sawyer et al., 2012). As such, simply living with the fear of being a victim of racism has found to be significantly associated with poorer health experience (Karlsen and Nazroo, 2004).

Research consistently shows the ways in which experiences of vicarious/indirect racism, and "vigilant coping"–monitoring or modifying your behaviour to protect yourself from anticipated discrimination–can directly affect mental wellbeing, with increased depression, anxiety, sleep deprivation and symptoms of post-traumatic stress disorder (Hicken et al., 2013; Himmelstein et al., 2015; Tynes et al., 2019; Chae et al., 2021). Identified physical responses to indirect racism and vigilant coping include elevated cortisol (Huynh et al., 2017) as well as higher rates of obesity (Hicken et al., 2018) and cardiovascular disease (Clark et al., 2006). The stress of vicarious racism has also been recognised in the rise in adverse health outcomes—such as elevated cortisol, or pre-term and low birthweight birth among those in racialised groups—following events which reinforce a sense of endemic racism in a society (Smart Richman and Jonassaint, 2008)–including the anti-immigration raids in Iowa, US in 2008 (Novak et al., 2017) and the presidential election of Donald Trump in 2016 (Gemmill et al., 2019).

Finally, we must recognize that racism is more than a sum of its parts. Single incidents of racism, while influential in themselves, also evoke painful memories of past racist experiences and communal histories of prejudice, which exacerbate their impact. Evidence from the Pew Research Center that, during the pandemic, Black and Asian Americans were more likely to worry that people will be suspicious of them while wearing a protective facemask in stores or other businesses (Ruiz et al., 2020) suggests that persistent racist tropes of higher

criminality among certain minoritized ethnic groups continue to leach into people's daily lives. Racism identified in one domain can also raise concerns about a risk of exposure in others, particularly for incidents perpetuated by people in positions of societal responsibility. Emerging evidence from the United Kingdom indicates that people in minoritized ethnic groups were exposed to more aggressive policing during the lockdown period (Busby and Gidda, 2020; Harris et al., 2021a). Living in areas with very high levels of police brutality have been found to be significantly and directly associated with poorer mental health and higher blood pressure and obesity, the latter both physical manifestations of extreme stress (Bor et al., 2018; Sewell et al., 2021). But Harris et al. (2021b) argue that "the new police powers [introduced during the pandemic were] adding to and exacerbating pre-existing forms of racist policing". As such, these recent experiences may also reinforce a preexisting sense of distrust in the police both among the direct victims and others in racialized groups. As a service operating on behalf of, and representing, wider structures of power in society, these experiences will also add to people's concerns regarding their risks of experiencing unfair treatment in their interactions with other statutory services as well as the extent to which they can expect protection from harm from the Government, in relation to their pandemic vulnerabilities or more generally.

This paper aims to help develop a clearer picture of the experiences of the first pandemic lockdown, using interviews conducted with, and written comments provided by, individuals who considered themselves part of a minoritized ethnic group and living in the South West region of England. While we find evidence of some positive lockdown experiences, stories are often haunted by an awareness of the existence and implications of widespread racially-motivated prejudice and ill-treatment in British society. Some participants describe personal experiences of negative treatment, but a sense of risk of exposure to racist violence also had a significant impact on people's lives. Pervasive among this sample are negative attitudes towards the pandemic responses of the British Government, and the sense that these were motivated by racism in the highest offices. Rebuilding British society in its aftermath demands that we recognise and respond to this directly.

METHODS

This paper reports qualitative findings from a project exploring the pandemic experiences of people in minoritized ethnic groups living in the South West of England, conducted between June and September 2020. The project was developed in partnership with Black South West Network (BSWN), a Bristol-based Black-led racial justice charity organisation. The study comprised an online survey, distributed via the mailing lists of BSWN and other organisations based in the South West with an ethnically diverse membership. The survey asked a series of questions about people's lives before and during the pandemic lockdown. Respondents to this survey were invited to participate in a follow-up semi-structured in-depth interview. These interviews explored how participants had spent their time

during lockdown, how they had been feeling, whether they had received any help they needed and their attitudes towards the activities of their local community and national and local government during this period. This paper focuses on findings from the nine people who participated in the interviews, and the 56 people (out of the 108 who responded) who provided comments on an open section of the survey. Neither the survey or interview asked people directly about the impact of their ethnicity or racism on these experiences. As a consequence, the centrality of issues of ethnicity/"race" to these discussions/comments varies between them. However, because these issues were raised spontaneously, this offers a more realistic reflection of the importance/relevance of these issues to participants' perceptions of these experiences than might be offered by studies which ask about these issues more directly.

Pandemic restrictions prevented in-person interviews. Interviews were therefore conducted remotely—via phone, Zoom, or Microsoft Teams depending on participant preference, by a researcher presenting as a feminine white person. It is unclear whether, or how, these factors affected the findings. Interviews were only conducted in English and were between 30 and 60 min duration. Following the interviews, participants were sent a list of resources for further information and support and a £10 voucher. Interviews were audio or video recorded, dependent on platform, and uploaded to a secure server before being transcribed and deleted. Interviews were transcribed with all identifiable details anonymized. Ethical approval for the study was provided by the ethics committee of the School for Sociology, Politics and International Studies at the University of Bristol (Ref: SK050620).

The interview participants variously defined their ethnicity as: Black African, British Indian, South African/Mixed Race, Kashmiri, Black British Caribbean, Black Caribbean British, Black Caribbean, and Black British. All interview participants classified themselves as cis women and the majority were born in the United Kingdom. Two participants were aged in their mid-to-late 20s, two were in their late 30s or early 40s, four were in their mid-50s and one was in their early 60s. Some participants lived alone, others with their partner and/or children. Most of the participants considered themselves relatively financially secure, and relatively unaffected by the more severe economic implications of the pandemic exposed in other research (Barnes and Hamilton, 2020). Most of them were able to work from home during the Covid-19 lockdown. The nature of the study methodology meant that they also did not suffer from the most severe aspects of digital exclusion. These factors would suggest that exposure to the more negative aspects of the pandemic may have been limited among this group. However, several participants had been unable to find work or lost business opportunities or investments as a result of the economic slowdown coinciding with the pandemic. As such, this experience of privilege is by no means homogeneous or universal. However, these factors reinforce our awareness that, as with all qualitative research, these study findings are potentially unique to this sample and setting and cannot be generalised to other individuals or groups, in the United Kingdom or elsewhere.

The survey respondents providing comments were somewhat more diverse than those participating in the interview. Of the 56 people providing comments, six classified themselves as cis male. One person classified themselves as "Bangladeshi", five as "Black African", 13 as "Black Caribbean", two as "Black – other", three as "Chinese", eight as "Indian", two as "Mixed – Asian and white", three as "Mixed – Black African and white", seven as "Mixed – Black Caribbean and white", two as "Mixed – other", two as "other Asian", two as "Pakistani" and one as "Somali". The five people who classified themselves as "other", described their ethnicity as (variously): "Taiwanese"; "British Asian/Indian", "Filipino", "Jamaican/Indian" and "3/8 Jamaican, 1/8 Indian and 1/2 English" Their inclusion therefore helps mitigate some of the impact of bias produced by the apparent homogeneity of the interview sample.

A thematic analytical approach was used (Braun and Clarke 2006), which examined separately the themes emerging from the interview transcripts and survey comments. In each case, one author took the lead in analysing a source, whose decisions were ratified by the other. The themes from each data source were then combined for presentation. In the findings, quotes from interview participants can be identified by the prefix "IP" in their participant identifier, while survey respondents can be identified by the prefix "SR". For each quotation, we also include information on the gender, age and self-identified ethnicity of the contributor. Themes identified relate to 1) the impact of ethnicity on people's pandemic experience, 2) the impact of a heightened sense of Covid-19 risk, and 3) the causes and consequences of inadequate Government responses to the pandemic.

RESULTS AND DISCUSSION

Many participants described the ways in which the lockdown period had provided opportunities for positive personal growth. However, the period was also associated with experiences of loss, personal difficulty and heightened emotion. For those in minoritized ethnic groups, there were additional issues associated with expectations regarding the maintenance of particular cultural traditions and absence from and fear for family living abroad. People's concerns were also exacerbated by evidence regarding the greater risk of infection and death among those in minoritized ethnic groups and a perceived lack of ability among participants to protect themselves and their family from this. People also expressed a sense of additional vulnerability to racist violence, which people felt had risen in response to the pandemic and other incidents occurring during this time. Racism from others could act as a barrier to support from their local community, while a fear of exposure to racism could also affect people's social engagement in a range of ways.

Things were made more difficult by what was ubiquitously considered the national Government's poor handling of the crisis. The measures introduced to protect people—including those specifically targeted at those in minoritized ethnic groups—were considered ineffective. Participants also described the implications of Government and media

discourses which were seen to purposefully misrepresent the evidence regarding the drivers of ethnic inequalities in Covid-19 infections and deaths. Not only did this cause confusion amongst those attempting to determine and respond to their personal Covid-19 risk but was also argued to directly increase their risk of exposure to racist violence. Some participants considered the Government's dismissive attitude to be the latest manifestation of a longstanding racism among political leaders and other powerful bodies in Britain. This awareness exacerbated concerns regarding how to protect themselves from infection and their chances of receiving care if they became ill. It also reinforced a wider sense of marginalisation in and exclusion from British society.

The Impact of Ethnicity on the Pandemic Experience

Perhaps as a consequence of being largely unencumbered by the socioeconomic stresses identified as disproportionately affecting those in minoritized ethnic groups (Barnes and Hamilton, 2020; Siddiqi et al., 2021), all interview participants described positively the ways in which pandemic lockdown had offered them opportunities for personal and/or social growth. This uninterrupted time enabled people to develop new or reinvigorate old hobbies and "take stock" of and "re-evaluate" their lives. People valued having capacity to pause, be more "mindful", "slow [their] pace of life" and learn to appreciate "small achievements". Lockdown also enabled some people to engage in making special memories with significant others, and build stronger networks in their local community.

But alongside these more positive experiences, participants described various difficulties. Several participants had experienced the death of relatives and friends, from Covid-19 and other causes. Participants described loneliness and the impact of the loss of "control", freedom, valued social contacts and previously-made plans. Some lived in accommodation which was considered too "confined". Others, particularly those with young children, experienced difficulties due to a lack of outside space. Many participants described an increase in "anxiety" with the "uncertainty" brought by the pandemic, some even fearing "mental breakdown". People experienced additional stress—going into "overdrive" to manage the new complexities of carrying out ordinary tasks, like visiting the supermarket. There were also simple activities which no longer seemed possible:

> It has been really really hard. [...] You're not feeling the same freedom, you used to go out and chat [...] I'm really chatty–I would see people on the street and start chatting to them, but obviously you don't feel the same way. Even if you wanted [to chat], the other person might be apprehensive if she has [in case I had] Covid (IP04, Female, 42, Kashmiri)

Such findings are consistent with research on the pandemic experiences of the general population (Ettman et al., 2020; Reading Turchioe et al., 2020). However, there were particular ways in which being part of a minoritized ethnic group was

considered to have impacted on people's lockdown experience. For example, some people felt that the difficulties of social distancing were exacerbated by cultural traditions encouraging more frequent social contact:

> Back home, you're used to family and friends coming around all the time, which is really different here (IP04, Female, 42, Kashmiri).
> I have an Indian background. We are all about family and keeping in touch. [...] Not seeing them every week was difficult (IP02, Female, 28, British Indian).

Cultural expectations regarding the provision of care to the infirm, bereaved and deceased also could add to the mental strain of the pandemic, particularly when these traditions were not recognised or responded to by statutory services or policymakers:

> Cultural expectations of many South Asian communities require different types of support during illnesses and deaths. E.g Bangladeshi families don't cook for 3 days post any death in the family. Family and friends are expected to deliver food to the mourning family during this time. Lockdown during this pandemic has increased the burden of community care on many of us. Without any state support and the disproportionate death rates in our community puts us under unprecedented anxiety and stress (SR05, Female, 36, Bangladeshi).

While the pandemic meant that opportunities for holidays and social gatherings were missed by many, the cancellation of international travel was particularly difficult for those with close family living abroad. The circumstances of the pandemic in other national contexts could also add stress:

> All of my mum's side are in India and [...] initially it was full lockdown and then there was news of police brutality and then there was news of how bad [high] the numbers [of cases] were, people hijacking food trucks and all this. And obviously I'm just thinking, 'Oh my god! My family. What is it like for them?' (IP02, Female, 28, British Indian)

People's lockdown experiences were also affected by a fear of negative treatment. Some people described personal experiences of racially-motivated poor treatment, in this case in line with other research identifying biased policing during the pandemic (Busby and Gidda, 2020, Harris et al., 2021a; b):

> I was stopped 3 times during lockdown by police and PCSO [Police Community Support Officer] while out with my 3 year old daughter, none of my white mum friends were (SR38, Female, 47, Indian).

But others described how their fear of racist victimisation had affected their lives and their mental health. Some participants

reacted to these fears by adopting vigilant coping behaviours, such as reducing their social contact.

> I have some friends who are of East Asian decent and they've experienced racial attacks—being made to feel like they were the cause for the pandemic. [...] even though I'm African, I initially felt safer to stay home and on edge of [because I was worried about] what effect the pandemic would have on racial tensions (SR03, Female, 23, Black African).

While acknowledging that some people experienced an additional risk to which she was not exposed, SR03 also identifies a wider racism endemic to British society which has been exacerbated by the pandemic, and of which all those in racialised groups are at risk. People's fear of exposure to racist violence also increased with lockdown restrictions on movement, a loss of witnesses potentially making violence more likely as well as reducing opportunities to respond effectively if it did.

> Hate can be quite frightening, and [...] your children are walking the street at night, knowing there could be anyone like that walking on the streets. It did get quite frightening because of the isolation of the lockdown, not so many witnesses if you're on the street for any aggression or violence (IP07, Female, 53, Black Caribbean).

Experiences of racism in one domain could also produce fears about negative treatment in others. In the quotation below, and as with SR03 above, the articulation of racism by members of the public produced concerns regarding the ubiquitous nature of racism in Britain, including its presence among those providing healthcare. This heightened people's sense of stress and also their perceived need for extra vigilance in behaviours to reduce the risk of infection:

> With BLM [...] I found a lot of bigots, and a lot of negativity, a lot of racism [online...] which didn't make me feel confident that if I went out and asked for support, or if my health failed and I needed support and I came across someone that was really against BLM and was very angry because they'd had a protest that they were going to treat me [kindly]–so I kept myself as safe as possible because there was no way I was entering into a hospital. [...] it played on your mental health a lot. (IP07, Female, 53, Black Caribbean)

Racism could directly undermine people's ability to develop supportive networks with their neighbours, which limited people's sense of available support during the lockdown:

> [The] white middle-class neighbourhood helped each other. They didn't help me [...] I thought, 'Even at the lowest point, where we could all die [...] they still have that racism.' (IP07, Female, 53, Black Caribbean)

In the absence of support from her local neighbourhood, IP07 established a "community" of people with similar ethnicities living in other areas. This network could not only provide the practical and emotional support she needed during the pandemic but also offered connections stemming from common experiences of social exclusion:

> My community is extended—Black professionals and the Black communities that I live close to, that I go to for food, warmth, emotional warmth [...] And those are the people that kept my sanity, and those are the people that understand that we are at the bottom of the chain (IP07, Female, 53, Black Caribbean)

A fear of racism could also impact on someone's access to social support. IP04 describes how such anxieties had prevented them from even trying to initiate social connections:

> ...because English is not your first language, your name isn't familiar, you probably don't talk in the same accent as people do here, so it's really difficult to adjust yourself to that kind of life. At times, when you feel those negative things [attitudes], you feel like "oh probably everybody is the same' but then when positive things happen, you start thinking 'oh no, there are still good and nice people around". [...] When somebody does a nice gesture for you, you feel overwhelmed. (IP04, Female, 42, Kashmiri)

As before, negative experiences identified in one domain increased a perceived need for vigilance in others, which led them to avoid making efforts to engage with people with whom they were unfamiliar despite the potential benefits of such relationships. While this participant does not explicitly mention racism, the "negative things" she has experienced relate to characteristics which would mark her as culturally different. Moreover, her sense of being "overwhelmed" by any "nice gestures" suggests that her sense of vulnerability to racism is significant. As discussed earlier, this may have occurred as a consequence of previous personal experiences of racist violence or through the development of a perception based on the experiences of others—or wider public discourses—that such reactions are commonly experienced by people with similar characteristics to hers.

The Impact of a Heightened Sense of Covid-19 Risk

People's pandemic anxiety was exacerbated for those, or with family, with health conditions considered to increase the risk of Covid-19 complications, particularly when they worked in a role which they could not provide at home. This concern increased with news regarding the higher prevalence of Covid-19 infections and deaths amongst those in minoritized ethnic groups.

> It has been a constant worry with my husband and eldest son going to work. It has been a huge worry

knowing that BAME people are at a higher risk. It has just been a huge worry overall and it has battered my mental health (SR41, Female, 36, Mixed—Black Caribbean and white).

Awareness of this additional health risk encouraged people to go to more extreme measures to protect themselves, even if this could exacerbate their social isolation.

I wasn't worried too much before and at the start of lockdown. However since the news of BAME people being much more likely to be impacted I have been very worried—I rarely leave the house and it has caused me anxiety for the first time in my life (SR39, Male, 37, Mixed—Black African and white).

People felt that the Government's pandemic planning did not acknowledge, and might actually increase, these risks:

I have had some increased anxieties since lockdown rules have relaxed and am aware of higher risks for BAME people (SR24, Female, 42, Indian).

Some of the participants unable to work from home during the pandemic felt empowered to negotiate with their employers to ensure their safety at work, should this become necessary. But there was a concern that not everyone had that same capacity, or "voice".

Nobody would force me to go into an office or do anything I didn't want to do [...] But like I said I'm probably in a better position than most because I've got a voice. So if you make me do something I'm not doing it and I can give you reasons why—and I'll use [my knowledge of] policy to protect myself. I think if I was more of a vulnerable person and I had to work such as a taxi driver, or a person who was working frontline in a shop and I had to work or I wouldn't get paid, it would be a different position (IP07, Female, 53, Black Caribbean).

Here, and in the quotation below, there is an awareness of the consequences of the occupational concentration which is argued to help explain ethnic inequalities in Covid-19 infections and deaths (Platt and Warwick, 2020a,b, BSWN, 2020):

As an African migrant, a lot of people tend to work as healthcare assistants, nurses, doctors, so just knowing that a lot of my family members were out there on the frontline, there was anxiety on that front and hoping that they remain safe. I think the knowledge as well that there's higher prevalence in BAME communities—obviously that kind of added to the anxiety (IP01, Female, 25, Black African).

These comments may suggest that all those working in such roles may be exposed to a similar risk—regardless of ethnicity.

However, the comments of some survey respondents suggested a particular lack of empowerment among those in minoritized ethnic groups in some occupations which may help explain ethnic inequalities in infections and deaths even within particular occupations (Cook et al., 2020). These people argued that they had been placed at unnecessary risk by their employer in a way which was not experienced by white colleagues.

I am the only BAME employee in my service. [...] I had to raise a complaint as I felt I was being put at risk not in line with that expected of my white colleagues despite [me] having increased risk [established through a workplace risk assessment] (SR17, Female, 30, Mixed—Asian and white).

I was given more responsibility to lighten the load [on] other senior members of staff [...] I was offered no flexibility [...] WFH [working from home] was only for the senior staff, whom are white (SR21, Female, 43, Indian).

In addition to problems with the actions of particular employers, participants also described Government failures to provide to support to those at additional risk: that "Black people who are on the frontline have the least protection and are not given any dedicated support." (SR33, Female, 36, Black African). While the Government had introduced new measures designed to assess the risk posed to those in minoritized ethnic groups in the workplace, these measures placed additional burden on staff and could directly increase people's sense of vulnerability to infection. Moreover, some people felt that such measures were simply "tick box" exercises, which had no practical value and only served the Government by giving people the impression that were taking appropriate action when they were not:

I've had extra risk assessments at work. [...] it just became a big deal [inconvenience] anytime I did a home visit and then because I was having these extra risk assessments, it made me more nervous to do these home visits. [...] I feel like I'm just in a box and being asked for a tick-box exercise rather than anything else. (IP02, Female, 28, British Indian)

This distrust in the Government's motivations was also raised in relation to other aspects of the pandemic, as we shall discuss in the next section.

The Causes and Consequences of Inadequate Government Responses to the Pandemic

Every participant expressed shock and deep frustration at the Government's handling of the pandemic, which had significantly undermined their "trust". Having family and friends living in other national contexts offered participants a particularly clear vantage point from which to recognise specific opportunities the

Government had missed to act quickly and effectively in the face of rising infections and deaths, rather than waiting till "after the horse had bolted". The Government's inaction was particularly frustrating to those whose work enabled them to see first-hand the dire need for rapid action.

> Don't get me started. The Government—working in the field I'm in, I saw cases [...] and we had to sit and wait for the Government to tell us what to do—by then it's too late (IP09, Female, 56, Black Caribbean).

Government and media discussions regarding the causes of the pandemic—which ignored the role played by long-term Government policy in the escalation of the problem—reinforced this sense of dishonesty and corruption. Participants believed that members of the scientific community had been bribed to distort the truth, "paid back-handed to tell me rubbish". Again, these issues were particularly frustrating to those that worked in health or social care, or had friends and relatives in nursing homes or hospitals.

> In a nursing home [...] that's where we saw the lack of PPE [...] The media going out there ["blah blah"], we just thought "lies, lies, lies", all the way through. Then you go through anger [get angry] because obviously they then blame nursing and care staff and you knew that nursing and care staff did an incredible job.[...] So it was just the "blame game" [...] You [Government] knew it [what was happening] but [...] you were too busy covering your own asses (IP07, Female, 53, Black Caribbean).

Participants described media reports of ethnic inequalities in Covid-19 risk as particularly unhelpful and "sensationalist". As a consequence, they felt they had received little valuable information regarding the reasons for these differences, how to protect themselves or the Government's "action plan" to respond to them. This "insufficient guidance/research and action" was felt to expose "the Government's lack of priority [to protect people in ethnic minority groups] even though we appear to be the worst affected" (SR59, Female, 37, Black African).

Explanations offered for ethnic inequalities in Covid-19 infections and deaths, when they occurred, were described as "disgustingly divisive". There was a concern that these had focused on genetic/biological factors and ignored the structural factors which actually explained these greater risks. For some participants, it was clear that the issue "was less about race and more about postcodes" (SR56, Female, 34, Pakistani) and other societal factors. They took this apparent distortion of the evidence as further indication of the Government's dishonesty.

> [The message that] 'you [those in ethnic minority groups] basically have [problems with] your metabolism or your body make-up and it's totally different [to other people's] so you're going to be high profile [at high risk] for Covid-19′ was bull [shit]—we just thought "you weren't treating us

properly". [...] You know it's not that [explanation. Actually,] it's lack of resources, PPE, and maybe lack of trust, lack of good quality of health[care], so there were more reasons behind it [than they were admitting] (IP07, Female, 53, Black Caribbean).

Others highlighted the shortcomings in this framing by simply asking, "Since when was a virus racist?" (SR49, Female, 34, Mixed—Black Caribbean and white). Even where these reports included greater acknowledgement of the significance of structural factors, they did not always offer sufficient analytical depth to allay people's fears or confusion:

> It was almost like sensationalist reporting in that 'you're more likely to die of Covid or contract covid if you're BAME′ and they didn't say why. One local reporter said, it's because these groups don't often have access to a garden. And I'm like, 'well, I've always had a garden. So it was all this sort of rubbish, because the likely explanation doesn't put the Government in a good light [...] If there's no why or understanding then you're scaremongering. You're not really helping the situation. [...] I'm isolating by myself in a three-bed semi-detached [house] with a garden. I can't be the only [Black] person [like that]. So it would be interesting to see, is it BAME living in poorer conditions, you know high rise [accommodation]? What is it? (IP05, Female, 39, Black British Caribbean)

Even though this participant recognises her more privileged socioeconomic position, the media report did not support them to fully appreciate whether and how this might enable a reduced vulnerability to Covid-19 infection, or its more extreme consequences. Again, there is a perception that the Government and media would purposefully withhold information to avoid exposing their contribution to the problem. IP05 also reflected on the tendency for the Government and media to present a very homogenised, negative and biased portrayal of those in minoritized ethnic groups:

> I'm Black but I don't live in the poorest suburb of (area). I drive, I'm in this [higher] pay bracket, where am I? Unless I'm Black, single, single mother, on benefits, you know all the kind of negatives—I don't exist. And I go, 'well, I know I'm not unusual and there are others, so where are we (IP05, Female, 39, Black British Caribbean).

This homogenising discourse further reinforced a sense that ethnic inequalities in Covid-19 were driven by genetic/biological risks, and immune to the effects of socioeconomic and other privilege. It was also felt unhelpful for people trying to determine their own level of pandemic risk:

> I find that a lot of the discussion around "BAME" [Black, Asian and Minority Ethnic] during this

pandemic relates to Black or Black&Asian [people], but doesn't consider other groups. [. . .] I feel I always have to check if I'm included or not. (SR22, Female, 45, Mixed—other)

As a mixed-race person I have struggled at times to know whether and to what extent advice related to increased risk for "BAME" people applies to me (SR17, Female, 30, Mixed—Asian and white).

More generally, people described how their own pandemic response had been undermined by confusing and contradictory Government messaging which forced people to make their own decisions about how to protect themselves. This distrust of the Government's motives also encouraged a perceived need for additional vigilance, to "use your [own] intelligence, not just listen to what the Government is telling you". People described seeking alternative and, what were perceived to be, more reliable sources of information on how to manage their risk than the Government was providing.

We created a bubble long before the Government told us we could because we knew we were going to have to protect ourselves. There was no way, as a Black person, I was going to take on anything that white upper-class person was going to tell me, because they weren't going to have any thoughts on my behaviour or what was going to help me (IP07, Female, 53, Black Caribbean).

This distrust of the Government's motivations could also affect people's engagement with other aspects of the Government's response to the pandemic, for example in relation to the Covid-19 vaccine, voicing suspicions and concerns which have also been raised by NHS staff (Woodhead et al., 2021):

Now we're back to "[. . .] we want Black people to come in first and have the injections because you're at highest risk". How many idiots do you think are out there that are going to be Black–including myself–that are going to have an injection by our glorious leader [Boris Johnson] that made so many mistakes at the beginning? And then we have a glorious leader [Donald Trump] in America giving out the same message–"you're nothing, you're rubbish, I think nothing of you, but you're going to have the injection first and then we're going into Africa". (IP07, Female, 53, Black Caribbean)

While it is unclear whether this concern led to a refusal to receive the vaccine, it is likely to have contributed to a greater sense of hesitancy, and additional stress amongst those receiving the vaccine. There is a strong sense here of the ways in which racism perceived in different contexts, even when experienced indirectly (eg through the comments and actions of Donald Trump), can combine to introduce/perpetuate a personal sense of vulnerability, which may even directly exacerbate a health risk,

through disengagement with effective pandemic protection strategies.

Approaches which failed to acknowledge the diversity within and between minoritized ethnic groups encouraged a sense that they were inherently different from the rest of (white) British society. Participants argued that this enabled them to be presented (by the Government and media) as a threat to (the health of) British society, which could directly motivate racist violence:

I don't like being classed as "BAME" [. . .] since Covid it has underlined [reinforced] the racism [existing in Britain] where people are [. . .] making it known [encouraging people to think] that we are carriers. "BAME" I see as classed as 'others'. (SR19, Female, 56, Black Caribbean)

People felt that the pandemic had been used to try to galvanise the white British public, through the further marginalisation of minoritized ethnic groups and to serve an anti-immigrant agenda:

Worryingly is the narrative that shifted from "white people pulling together and fighting this through", to members of the BAME community targeted as the major carriers and causing harm and being reckless. It was ironic that once the PM overcame the virus, his first point of business was tackling immigration, never mind the fact that many non-whites died looking after their elderly. [It] speaks volumes (SR44, Male, 50, Black Caribbean).

As such, rather than ensuring the protection of the whole population, the Government had "turn[ed the pandemic] into a race war" (SR49, Female, 34, Mixed—Black Caribbean and white).

Other events occurring during this time were also felt to have been misappropriated to reinforce this sense that those in minoritized ethnic groups are inherently problematic and dangerous. The Government and media were argued to have purposefully misrepresented the Black Lives Matter movement protests occurring in response to the death of George Floyd in order to "politicise" them and reinforce a sense that those in minoritized ethnic groups were to blame for their own difficulties, in part by minimising the attention given to the risky activities of people in other ethnic groups.

I think there's a bit of a blame sometimes—so like the Black Lives Matter protest. The news really focused on how 'this is really going to help the surge of coronavirus, the numbers are going to go up and up and up' and actually everyone on that protest was keeping their distance. They were wearing masks. As much as they could do at protests, they were following rules. And then you've got those pictures of Brighton where you've got hundreds and hundreds of people hoarding on the

beach and then nothing [was said] (IP02, Female, 28, British Indian).

People were also angry that this victim-blaming had enabled the Government and media to impede their ability to express their legitimate concerns about the scale of racism in Britain: "It felt like the pandemic was being used to stop people from going out to protest." (IP01, Female, 25, Black African).

Like Elias et al. (2021), people did not see these negative depictions as incidents isolated from the negative treatment of people in minoritized ethnic groups in other contexts and times. People described how negative representations in relation to the pandemic replicated and were enabled by earlier discourses about those in racialised groups.

> With Brexit, the racism has risen and people have been attacked [...] I've grown up with all the racism and to keep seeing it and hearing it—it just seems like it's never going to go (IP09, Female, 56, Black Caribbean).

> We stem from hate and we're still moving through hate. [... like] Nigel Farage who stokes things so badly and has these sheep behind him. And then you have the people who take it further, is it the Christchurch murderer who killed 50-odd people in a mosque (IP07, Female, 53, Black Caribbean).

These quotations described the legacies of racism experienced since childhood, which influence and are reproduced in later racist tropes, for example, during Brexit. They also reflect on the significant role of commentators like anti-immigrant United Kingdom Independence Party (UKIP) leader Nigel Farage and other political leaders in encouraging the racist violence perpetrated by others—the "sheep" who follow them unquestioningly, sometimes to perform acts of massacre such as the deaths of 50 people following shootings at two mosques in Christchurch, New Zealand, on March 15, 2019. It was argued that this political atmosphere presented opportunities which were then exploited by the Government during the pandemic.

> So they go through [they thought] "let's just blame them [Black people] because it's easier" because at the moment, we're in the right-wing place. So let's just keep it there because people will believe that (IP07, Female, 53, Black Caribbean).

The increase in (awareness of) incidents of racism during the pandemic had a significant impact on people's wellbeing. People explained "the impact of systematic racism in the world, this has affected me a lot" (SR42, Female, 56, Black—other) and that the increase in "race related attacks has been hard to watch and endure" (SR33, Female, 36, Black African). Even when occurring in contexts distant from their own, this awareness could encourage people to reflect on themselves as members of a racialised group, and the inescapable nature of and risks associated with this. Direct and indirectly experienced incidents of racism occurring during the pandemic could become "triggers" for earlier negative experiences which exacerbated people's mental distress.

> The triggers from the media, BLM [Black Lives Matter protests] and BLM happening at the same time as Covid–[...] through lockdown, I've had time to reflect and through BLM I've seen a lot more of the racism that we face [...] You face it daily [...] Everything you do you have to think about your skin colour because you know you may be treated differently (IP07, Female, 53, Black Caribbean).

Similarly, IP01 describes the way in which reflecting on previous experiences of negative treatment, motivated by experiences in relation to the death of George Floyd and the Black Lives Matter protests and ethnic inequalities in Covid-19, had produced "a lot of anger in the community" as it has exposed the persistence of these issues as a consequence of a lack of meaningful action to address them among those with the power to do so:

> For a lot of people it [BLM] brought up past experiences of racism which people had brushed under the carpet. I think it brought to the forefront some of the issues of racism that is experienced by Black people in particular. So, I think a related issue was obviously the higher prevalence of coronavirus deaths within the Black community. I think it added to the rhetoric of the BLM movement' (IP01, Female, 25, Black African).

The pandemic, then, as well as a specific event, became the latest manifestation of the negative treatment which those in minoritized ethnic groups had to continuously negotiate, as "second class citizen[s]". This final quote is a testament to the perpetual effort involved in maintaining resilience in the face of these constant threats of victimisation, which come from all sectors of society:

> They were trying to make you a victim and they didn't succeed because you were always one step ahead of them, like you [always] are, because you have to be, in work or in life. You're always one step ahead of a racist. It was just amazing the path they took. And with straight faces (IP07, Female, 53, Black Caribbean).

Despite this long history, this participant still expresses disbelief that, during the Covid-19 pandemic, the British Government could behave so abominably so brazenly, ie "with straight faces", without any concern for negative repercussions. Not surprisingly, this offered them little hope for things improving in the future.

CONCLUSION

These findings offer a valuable insight into the experiences of people in different minoritized ethnic groups during the first Covid-19 lockdown in South-West England in 2020. Initially, some

participants, shielded from the more severe financial consequences of the pandemic and its lockdown, described positive experiences including opportunities for personal growth. In itself, this may not be considered a particularly novel finding. However, it takes on new significance in light of popular discourses, referenced by our participants, which present those in racialised groups as inherently different from wider British society. Yet, the influence of "ethnicity" still looms large. A sense of greater health risk—to yourself, your friends and family and other people "like you"–developed as evidence emerged of persistent ethnic inequalities in Covid-19 infections and deaths. These concerns were compounded by knowledge of the concentration of those in minoritized ethnic groups in exposed occupations or with particular co-morbidities. But there is also evidence of a particular sense of threat which is not rooted in the pandemic itself. That while the virus may not be "racist", the implications for people's pandemic experience of living in a society where racist victimisation is considered endemic are expressed very clearly. On top of a general sense of Government incompetence, corruption and distrust, people described a racism which infected policy and behaviour at a national level. A racist media which spun stories which deliberately delegitimised and demonised peaceful and justified protests and the ignored the actual drivers of higher infections and deaths to blame the victims. Statutory authorities who failed to protect. And a public—justified by behaviour from the top—who used the pandemic and protests as opportunities for racist violence.

The consequences of direct experience of poor treatment are easily understood. But these findings also effectively illustrate the nature of lives lived with the threat of violence, even if that threat is not always actually realised. A fear of going out in public for fear of being attacked. A fear of needing to rely on people for protection, information or care who would deliberately act to harm you, whether that be neighbours, the police, healthcare providers or the Government. Concerns which led to greater mental strain both directly and indirectly, including as a consequence of the various forms of vigilance people adopted in response. This research offers further evidence of the need to recognise the inter-connected and reinforcing nature of incidents of racism. The pandemic and other racisms experienced—vicariously or personally—at this time (including the death of George Floyd and the actions it prompted) combined to paint a stark picture of the risk experienced by all those in racialised groups, in Britain and elsewhere. These incidents also became "triggers" which forced people to reflect on their own histories as members of these groups. The pandemic, then, became not a snapshot of a time like no-other, but testament to the past and an insight into the risks of the future.

While this paper offers valuable insights into the pandemic experiences of those in minoritized ethnic groups, the sample is small and select. As such, these findings are not generalisable to a wider population and we cannot establish the extent to which these experiences may be common. In particular, the impact of vulnerability to poverty on experiences of lockdown remains a significant part of the pandemic experience of many, disproportionately those in minoritized ethnic groups. Interview participants in this study were relatively privileged in terms of career, socioeconomic position, English-language ability, citizenship/migration status, and digital connectivity. This limits the potential for this study to offer insights into

this aspect of pandemic experience and this must be the focus of further research. There is also a need for further research which can explore more directly the ways in which this pandemic experience is gendered (Laster-Pirtle and Wright, 2021). That said, it may be argued that this research offers a valuable opportunity to not focus on, what one participant called, "all the negatives", approaches which may in themselves encourage the sense that those in minoritized ethnic groups are inherently different and problematic, compared with the white British majority. Moreover, these findings show that while economic security enables some potential commonalities in pandemic experience with wider British society, it does not protect people from all the health risks to which those in minoritized ethnic groups are exposed. Our findings concur with existing literature regarding the range of ways in which racism can impact on people's lives and wellbeing.

Despite centuries spent trying to find it, there remains no solid evidence that ethnic inequalities in the vast majority of health or other social and economic circumstances can be explained by physical or cultural differences between the groups. All other things being equal, the pandemic experiences of the British public *should* be complimentary. Our participants see this clearly. Railing against persistent victim-blaming discourses, they instead draw attention to the role of structural/societal factors: racism; a lack of economic resources, social support and effective healthcare; a reduced ability to protect yourself in the face of vulnerabilities; and people's reactions to the lack of trust these engender. If we are to have a hope of successfully building a fairer, healthier, inclusive and sustainable society in the aftermath of the pandemic, we must, as a minimum, insist that political, media and academic discourses are similarly reflective regarding the causes of these inequalities.

We must also acknowledge the centrality of racism to the experiences of many people in minoritized ethnic groups living in the United Kingdom, and elsewhere. It is a key driver of the inequalities in economic and other experience so significant for ethnic inequalities in Covid-19 infections and deaths (PHE, 2020a; Becares and Nazroo, 2020; Godlee, 2020). This research suggests that racism has also played more a direct and prominent role in the pandemic experiences of people in minoritized ethnic groups. While many of us experienced fear as Covid-19 spread around the globe, this fear was exacerbated among those who not only felt they did not have the attention of those with the power to protect them, but that they might actually sacrifice them to save themselves. Sewell et al. (CRED, 2021) are correct to argue that people's sense of racism may be forged in history. But this research suggests that this history continues to repeat itself. For many, the pandemic has served as further evidence of the need for those in ethnic minority groups to maintain a healthy sense of distrust to survive, and be mindful that "the racist" remains close behind.

DATA AVAILABILITY STATEMENT

The data presented in this article are not readily available because this would contravene the terms of the ethical

agreements under which the research was conducted. Requests to access the data should be directed to SK, saffron.karlsen@bristol.ac.uk.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the SPAIS Ethics Committee, School of Sociology, Politics and International Studies, University of Bristol. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

SK designed and led the project, RN was the research associate on the project and led on the data collection. Both authors contributed significantly to the analysis of the data and drafting of the manuscript.

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REFERENCES

Aldridge, R. W., Lewer, D., Katikireddi, S. V., Mathur, R., Pathak, N., Burns, R., et al. (2020). Black, Asian and Minority Ethnic groups in England are at increased risk of death from COVID-19: indirect standardisation of NHS mortality data. *Wellcome Open Res.* 5, 88. doi:10.12688/wellcomeopenres.15922.2

Baker, C., Hutton, G., Christie, L., and Wright, S. (2020). *COVID-19 and the Digital divide London: UK Parliament*. Available at: https://post.parliament.uk/covid-19-and-the-digital-divide/.

Bambra, C., Riordan, R., Ford, J., and Matthews, F. (2020). The COVID-19 pandemic and health inequalities. *J. Epidemiol. Community Health* 74, 964–968.

Bamrah, J. S., Chakravorty, I., and Singhal, P. (2021). *The Sewell Report Risks Turning the Clock Back on the fight against Racism in the UK* BMJ. https://blogs.bmj.com/bmj/2021/04/12/the-sewell-report-risks-turning-the-clock-back-on-the-fight-against-racism-in-the-uk/.

Barnes, A., and Hamilton, M. (2020). *Coronavirus and the social impacts on Different ethnic groups in the UK: 2020 London: Office for National Statistics*. Release date 14 December 2020 https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/coronavirusandthesocialimpactsondifferentethnicgroupsintheuk/2020.

Baumer, T., Phillips, E., Dhadda, A., and Szakmany, T. (2020). Epidemiology of the First Wave of COVID-19 ICU Admissions in South Wales-The Interplay Between Ethnicity and Deprivation. *Front. Med. (Lausanne)* 7, 569714. doi:10.3389/fmed.2020.569714

Becares, L., and Nazroo, J. Y. (2020). *Racism is the Root Cause of Ethnic Inequities in COVID-19* Discover Society. https://archive.discoversociety.org/2020/04/17/racism-is-the-root-cause-of-ethnic-inequities-in-covid19/.

Bentley, G. R. (2020). Don't blame the BAME: Ethnic and structural inequalities in susceptibilities to COVID-19. *Am. J. Hum. Biol.* 32 (5), e23478. doi:10.1002/ajhb.23478

Black South West Network (BSWN) (2020). *Impact of COVID-19 on BAME Led Businesses*. Organisations & Communities Bristol:BSWN available at https://static1.squarespace.com/static/594948a7414fb5804d2b4395/t/5ec3ee32a5b5c27385219625/1589898876817/Covid19_Report_v2_compressed.pdf.

Bor, J., Venkataramani, A. S., Williams, D. R., and Tsai, A. C. (2018). Police killings and their spillover effects on the mental health of black Americans: a population-based, quasi-experimental study. *Lancet* 392 (10144), 302–310. doi:10.1016/S0140-6736(18)31130-9

Brynin, M., and Güveli, A. (2012). Understanding the ethnic pay gap in Britain. *Work, Employment Soc.* 26 (4), 574–587. doi:10.1177/0950017012445095

Busby, M., and Gidda, M. (2020). *BAME people fined more than white population under Coronavirus laws* the Guardian. Available at: https://www.theguardian.com/world/2020/may/26/bame-people-fined-more-than-white-population-under-coronavirus-laws.

Chae, D. H., Yip, T., Martz, C. D., Chung, K., Richeson, J. A., Hajat, A., et al. (2021). Vicarious Racism and Vigilance During the COVID-19 Pandemic: Mental Health Implications Among Asian and Black Americans. *Public Health Rep.* 136 (4), 508–517. doi:10.1177/00333549211018675

Cheah, C. S. L., Wang, C., Ren, H., Zong, X., Cho, H. S., and Xue, X. (2020). COVID-19 Racism and Mental Health in Chinese American Families. *Pediatrics* 146 (5), e2020021816. doi:10.1542/peds.2020-021816

Clark, R., Benkert, R. A., and Flack, J. M. (2006). Large arterial elasticity varies as a function of gender and racism-related vigilance in Black youth. *J. Adolesc. Health* 39 (4), 562–569. doi:10.1016/j.jadohealth.2006.02.012

Coates, M. (2020). Covid-19 and the rise of racism. *BMJ* 369, m1384. doi:10.1136/bmj.m1384

Commission on Race and Ethnic Disparities (CRED) (2021). Commission on Race and Ethnic Disparities. The Report. Available at: https://www.gov.uk/government/publications/the-report-of-the-commission-on-race-and-ethnic-disparities.

Cook, T., Kursumovic, E., and Lennane, S. (2020). *Exclusive: Deaths of NHS staff from Covid-19 analysed* Health Services Journal. Available at: https://www.hsj.co.uk/exclusive-deaths-of-nhs-staff-from-covid-19-analysed/7027471.

Darling-Hammond, S., Michaels, E. K., Allen, A. M., Chae, D. H., Thomas, M. D., Nguyen, T. T., et al. (2020). After "The China Virus" Went Viral: Racially Charged Coronavirus Coverage and Trends in Bias Against Asian Americans. *Health Educ. Behav.* 47 (6), 870–879. doi:10.1177/1090198120957949

Darlington-Pollock, F., and Norman, P. (2017). Examining ethnic inequalities in health and tenure in England: A repeated cross-sectional analysis. *Health Place* 46, 82–90. doi:10.1016/j.healthplace.2017.04.011

Dhanani, L. Y., and Franz, B. (2020). Unexpected public health consequences of the COVID-19 pandemic: a national survey examining anti-Asian attitudes in the USA. *Int. J. Public Health* 65, 747–754. doi:10.1007/s00038-020-01440-0

Duffy, B., Hewlett, K., Hesketh, R., Benson, R., and Wager, A. (2021). *Unequal Britain: Attitudes to Inequalities after Covid-19*. London: KCL. https://www.kcl.ac.uk/policy-institute/assets/unequal-britain.pdf.

Elias, A., Ben, J., Mansouri, F., and Paradies, Y. (2021). Racism and nationalism during and beyond the COVID-19 pandemic. *Ethnic Racial Stud.* 44 (5), 783–793. doi:10.1080/01419870.2020.1851382

Ettman, C. K., Abdalla, S. M., Cohen, G. H., Sampson, L., Vivier, P. M., and Galea, S. (2020). Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic. *JAMA Netw. Open* 3 (9), e2019686. doi:10.1001/jamanetworkopen.2020.19686

Gee, G. C., Walsemann, K. M., and Brondolo, E. (2012). A Life Course Perspective on How Racism May Be Related to Health Inequities. *Am. J. Public Health* 102, 967–974. doi:10.2105/AJPH.2012.300666

Gemmill, A., Catalano, R., Casey, J. A., Karasek, D., Alcalá, H. E., Elser, H., et al. (2019). Association of Preterm Births Among US Latina Women With the 2016

Presidential Election. *JAMA Netw. Open* 2 (7), e197084. doi:10.1001/jamanetworkopen.2019.7084

Godlee, F. (2020). Racism: the other pandemic. *Bmj* 369, m2303. doi:10.1136/bmj.m2303

Haque, Z., Becares, L., and Treloar, N. (2020). *Over-Exposed and Under-Protected: The Devastating Impact of COVID-19 on Black and Minority Ethnic Communities in Great Britain*. London: Runnymede Trust. https://www.runnymedetrust.org/uploads/Runnymede%20Covid19%20Survey%20report%20v3.pdf.

Harris, S., Joseph-Salisbury, R., Williams, P., and White, L. (2021). *A Threat to public safety: policing, Racism and the Covid-19 pandemic London*. London, United Kingdom: Institute of Race Relations. Available at: https://irr.org.uk/wp-content/uploads/2021/09/A-threat-to-public-safety-v3.pdf.

Harris, S., Joseph-Salisbury, R., Williams, P., and White, L. (2021). A Collision of Crises: Racism, policing, and the COVID-19 pandemic London: Institute of Race Relations. Available at: https://www.runnymedetrust.org/uploads/projects/CoDE%20Briefings/Runnymede%20CoDE%20A%20Collision%20of%20Crises%20FINAL.pdf.

Hicken, M. T., Lee, H., Ailshire, J., Burgard, S. A., and Williams, D. R. (2013). "Every shut eye, ain't sleep": The role of racism-related vigilance in racial/ethnic disparities in sleep difficulty. *Race Soc. Probl.* 5, 100–112. doi:10.1007/s12552-013-9095-9

Hicken, M. T., Lee, H., and Hing, A. K. (2018). The weight of racism: Vigilance and racial inequalities in weight-related measures. *Soc. Sci. Med.* 199, 157–166. doi:10.1016/j.socscimed.2017.03.058

Himmelstein, M. S., Young, D. M., Sanchez, D. T., and Jackson, J. S. (2015). Vigilance in the discrimination-stress model for Black Americans. *Psychol. Health* 30 (3), 253–267. doi:10.1080/08870446.2014.966104

Home Office (2021). Official Statistics: Hate Crime, England and Wales, 2020 to 2021. Available at: https://www.gov.uk/government/statistics/hate-crime-england-and-wales-2020-to-2021/hate-crime-england-and-wales-2020-to-2021.

Huynh, V. W., Huynh, Q. L., and Stein, M. P. (2017). Not just sticks and stones: Indirect ethnic discrimination leads to greater physiological reactivity. *Cultur Divers. Ethnic Minor. Psychol.* 23 (3), 425–434. doi:10.1037/cdp0000138

John, J. R., Curry, G., and Cunningham-Burley, S. (2021). Exploring ethnic minority women's experiences of maternity care during the SARS-CoV-2 pandemic: a qualitative study. *BMJ Open* 11, e050666. doi:10.1136/bmjopen-2021-050666

Karlsen, S., and Nazroo, J. Y. (2004). Fear of racism and health. *J. Epidemiol. Community Health* 58 (12), 1017–1018. doi:10.1136/jech.2004.020479

Karlsen, S., and Nazroo, J. Y. (2017). "Measuring And Analyzing "Race," Racism, And Racial Discrimination," in *Methods in Social Epidemiology*. Editors J. M. Oakes and J. S. Kaufmann (San Francisco: Jossey-Bass).

Karlsen, S., and Nazroo, J. Y. (2002). Relation between racial discrimination, social class, and health among ethnic minority groups. *Am. J. Public Health* 92 (4), 624–631. doi:10.2105/ajph.92.4.624

Karlsen, S., Roth, M., and Becares, M. (2019). "Understanding the influence of ethnicity on health," in *Understanding 'race' and ethnicity*. Editors S. Chattoo, K. Atkin, G. Craig, and R. Flynn (Bristol: Policy Press).

Karlsen, S., Nazroo, J. Y., and Smith, N. R. (2020). Ethnic, Religious and Gender Differences in Intragenerational Economic Mobility in England and Wales. *Sociology* 54 (5), 883–903. doi:10.1177/0038038520929562

Krieger, N. (2014). Discrimination and Health Inequities. *Int. J. Health Serv.* 44 (4), 643–710. doi:10.2190/HS.44.4.b

Larsen, T., Bosworth, M., and Nafilyan, V. (2021). *Updating ethnic Contrasts in Deaths involving the Coronavirus (COVID-19), England: 24 January 2020 to 31 March 2021 London: Office for National Statistics*. Release date 26 May 2021 https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19englandandwales/24january2020to31march2021.

Laster Pirtle, W. N., and Wright, T. (2021). Structural Gendered Racism Revealed in Pandemic Times: Intersectional Approaches to Understanding Race and Gender Health Inequities in COVID-19. *Gend. Soc.* 35 (2), 168–179. doi:10.1177/08912432211001302

Lewis, T. T., Cogburn, C. D., and Williams, D. R. (2015). Self-reported experiences of discrimination and health: scientific advances, ongoing controversies, and emerging issues. *Annu. Rev. Clin. Psychol.* 11 (1), 407–440. doi:10.1146/annurev-clinpsy-032814-112728

Li, Y., and Heath, A. (2018). Persisting disadvantages: a study of labour market dynamics of ethnic unemployment and earnings in the UK (2009-2015). *J. Ethnic Migration Stud.* 46 (5), 857–878. doi:10.1080/1369183x.2018.1539241

Longhi, S. (2020). A longitudinal analysis of ethnic unemployment differentials in the UK. *J. Ethnic Migration Stud.* 46 (5), 879–892. doi:10.1080/1369183x.2018.1539254

Maddock, J., Parsons, S., Di Gessa, G., Green, M. J., Thompson, E. J., Stevenson, A. J., et al. (2021). *Inequalities in healthcare Disruptions during the Covid-19 pandemic: Evidence from 12 UK population-Based longitudinal studies*, 06, 21258546, 2021 . (Note that this article is a preprint and has not been peer-reviewed.).*medRxiv*08

Nazroo, J. Y., and Becares, L. (2020). *Ethnic inequalities in COVID-19 mortality: A Consequence of persistent Racism*. London: Runnymede Trust. Available at: https://www.runnymedetrust.org/uploads/Runnymede%20CoDE%20COVID%20briefing%20v3.pdf.

Novak, N. L., Geronimus, A. T., and Martinez-Cardoso, A. M. (2017). Change in birth outcomes among infants born to Latina mothers after a major immigration raid. *Int. J. Epidemiol.* 46 (3), 839–849. doi:10.1093/ije/dyw346

Otu, A., Ahinkorah, B. O., Ameyaw, E. K., Seidu, A. A., and Yaya, S. (2020). One country, two crises: what Covid-19 reveals about health inequalities among BAME communities in the United Kingdom and the sustainability of its health system. *Int. J. Equity Health* 19 (1), 189. doi:10.1186/s12939-020-01307-z

Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., et al. (2015). Racism as a Determinant of Health: A Systematic Review and Meta-Analysis. *PLoS ONE* 10 (9), e0138511. doi:10.1371/journal.pone.0138511

Platt, L., and Warwick, R. (2020b). COVID-19 and Ethnic Inequalities in England and Wales. *Fisc Stud.* 41, 259–289. doi:10.1111/1475-5890.12228

Platt, L., and Warwick, R. (2020a). *Are Some Ethnic Groups More Vulnerable to COVID-19 than Others*. London: The Institute for Fiscal Studies. www.ifs.org.uk/uploads/Are-some-ethnic-groups-more-vulnerable-to-COVID-19-than-others-V2-IFSBriefing-Note.pdf.

Priest, N., Paradies, Y., Trenerry, B., Truong, M., Karlsen, S., and Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Soc. Sci. Med.* 95, 115–127. doi:10.1016/j.socscimed.2012.11.031

Public Health England (PHE) (2020a). *Beyond the Data: Understanding the Impact of COVID-19 on BAME Groups*. London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892376/COVID_stakeholder_engagement_synthesis_beyond_the_data.pdf.

Public Health England (PHE) (2020b). *Disparities in the Risk and Outcomes of COVID-19*. London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892085/disparities_review.pdf.

Rafferty, A. (2021). Ethnic penalties in graduate level over-education, unemployment and wages: evidence from Britain *Work. Employment Soc.* 26 (6), 987–1006.

Reading Turchioe, M., Grossman, L. V., Myers, A. C., Pathak, J., and Creber, R. M. (2020). Correlates of Mental Health Symptoms Among US Adults During COVID-19, March-April 2020. *Public Health Rep.* 136 (1), 97–106. doi:10.1177/0033354920970179

Richman, L. S., and Jonassaint, C. (2008). The Effects of Race-related Stress on Cortisol Reactivity in the Laboratory: Implications of the Duke Lacrosse Scandal. *Ann. Behav. Med.* 35 (1), 105–110. doi:10.1007/s12160-007-9013-8

Ruiz, N. G., Horowitz, J., and Tamir, C. (2020). Many Black and Asian Americans Say They Have Experienced Discrimination Amid the COVID-19 Outbreak Pew Research Center. Available at: https://www.pewresearch.org/social-trends/2020/07/01/many-black-and-asian-americans-say-they-have-experienced-discrimination-amid-the-covid-19-outbreak/.

Sawyer, P. J., Major, B., Casad, B. J., Townsend, S. S., and Mendes, W. B. (2012). Discrimination and the Stress Response: Psychological and Physiological Consequences of Anticipating Prejudice in Interethnic Interactions. *Am. J. Public Health* 102, 1020–1026. doi:10.2105/AJPH.2011.300620

Sewell, A. A., Feldman, J. M., Ray, R., Gilbert, K. L., Jefferson, K. A., and Lee, H. (2021). Illness spillovers of lethal police violence: the significance of gendered marginalization. *Ethnic Racial Stud.* 44 (7), 1089–1114. doi:10.1080/01419870.2020.1781913

Siddiqi, S. M., Cantor, J., Dastidar, M. G., Beckman, R., Richardson, A. S., Baird, M. D., et al. (2021). SNAP Participants and High Levels of Food Insecurity in the Early Stages of the COVID-19 Pandemic. *Public Health Rep.* 136 (4), 457–465.

Simms, A. (2021). COVID-19, Black jurisdictions, and budget constraints: how fiscal footing shapes fighting the virus. *Ethnic Racial Stud.* 44 (5), 836–850. doi:10.1080/01419870.2020.1859576

Sze, S., Pan, D., Nevill, C. R., Gray, L. J., Martin, C. A., Nazareth, J., et al. (2020). Ethnicity and clinical outcomes in COVID-19: A systematic review and meta-analysis. *EClinicalMedicine* 29, 100630. doi:10.1016/j.eclinm.2020.100630

Tynes, B. M., Willis, H. A., Stewart, A. M., and Hamilton, M. W. (2019). Race-related traumatic events online and mental health among adolescents of color. *J. Adolesc. Health* 65 (3), 371–377. doi:10.1016/j.jadohealth.2019.03.006

Williams, D. R., Lawrence, J. A., Davis, B. A., and Vu, C. (2019). Understanding how discrimination can affect health. *Health Serv. Res.* 54 Suppl 2, 1374–1388. doi:10.1111/1475-6773.13222

Williams, D. R., Neighbors, H. W., and Jackson, J. S. (2003). Racial/ethnic discrimination and health: findings from community studies. *Am. J. Public Health* 93 (2), 200–208. doi:10.2105/ajph.93.2.200

Williams, D. R. (2018). Stress and the Mental Health of Populations of Color: Advancing Our Understanding of Race-related Stressors. *J. Health Soc. Behav.* 59 (4), 466–485. doi:10.1177/0022146518814251

Williams, D. R., Lawrence, J. A., and Davis, B. A. (2019). Racism and Health: Evidence and Needed Research. *Annu. Rev. Public Health* 40 (1), 105–125. doi:10.1146/annurev-publhealth-040218-043750

Women and Equalities Committee (WEC), House of Commons (2020). Unequal Impact? Coronavirus and BAME people *Third Report of Session 2019–21 London.* House of Commons https://committees.parliament.uk/publications/3965/documents/39887/default/.

Woodhead, C., Onwumere, J., Rhead, R., Bora-White, M., Chui, Z., Clifford, N., et al. (2021). Race, ethnicity and COVID-19 vaccination: a qualitative study of UK healthcare staff. *Ethn. Health*, 1–20. doi:10.1080/13557858.2021.1936464

Zwysen, W., Di Stasio, V., and Heath, A. (2021). Ethnic minorities are less likely to find good work than their white British counterparts, even when born and educated in the UK. *LSE British Politics and Policy Blog.* Available at: https://blogs.lse.ac.uk/politicsandpolicy/ethnic-penalties-and-hiring-discrimination/.

Let's Campaign for a Fairer Society in the Aftermath of COVID-19

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In this paper I ground a brief account of the impact of COVID-19 on the United Kingdom in an understanding of a decade of austerity politics from 2010 to 2020, itself a product of the advent and consolidation of post-1970s financialised or rentier capitalism. I argue that such an analysis is essential if realistic plans are to be laid for a "better"—understood here as a more equitable or "fairer"—society. I go on to consider the contributions that sociology can, and arguably should, make to this end. This involves a range of engagements from scholarship at one end of the spectrum to action or muckraking sociology at the other. In addition to plotting a role for sociology, I suggest a set of criteria for recognizing a "fairer society"; postulate a series of institutional reforms that might characterize the attainment of such a society; and outline and confront social structural, cultural and agential obstacles to its realization. A theme running throughout the paper is that the delineation and promulgation of the "good society" remains central to any credible—that is, post-Enlightenment reconstruction of - the sociological project.

Keywords: austerity, rentier capitalism, COVID-19, fairness, sociology, good society

INTRODUCTION

COVID-19 (hereafter COVID) has hit the United Kingdom (UK) harder than it has many other kindred western, post-industrial societies. There is an emerging picture on why this is which can be encapsulated in the following propositions:

- the UK was ill-prepared for a pandemic, having paid too little attention to prior warnings about shortages of hospital beds, equipment and facilities;
- the context of this pandemic-specific lack of readiness was a health system, the National Health Service (NHS), that had been systematically under-funded during a decade of political austerity from 2010–2020;
- austerity was a calculated political choice that reflected a governmental agenda to open up public sector institutions, including the NHS, to competition from private business;
- once COVID entered the UK, and even allowing for the lack of readiness, the governmental response was inadequate in terms of: delayed action, strategic errors, inefficiency and loss of trust;
- COVID has provided prolonged cover both for the assault on the NHS and for other political initiatives;
- politically, COVID has permitted the systematic pursuit of state authoritarianism.

I am aware that this series of assertions will be regarded by some as: 1) polemical rather than sociological; 2) in need of more by way of empirical corroboration; and/or 3) signaling a form of activism or engagement in the volatile contemporary politics of the UK. I will not defend them again as I have done so in some detail elsewhere (Scambler, 2020; Scambler et al., 2021; and in numerous blogs at: www.grahamscambler.com; see also Ashton, 2020; Horton, 2020; Sample, 2021). My focus in

this paper is "society after COVID". More particularly, I want to address how COVID has revealed the true nature of our "fractured society" in the UK (Scambler, 2018b); the primary structural, cultural and agential obstacles to the creation of a better—interpreted here as a "fairer"—society; and the role that sociology might play in this process. It might be objected that an analysis based on the nation state in general, and a single example like the UK in particular, is no longer compelling in a globalised world; but the intention in this paper is to start the ball rolling and in the process to exhort further theory and research based on a comparative perspective.

THE FRACTURED SOCIETY

There are multiple ways in which UK society might be judged fractured, and in which COVID can be said to have exposed, widened and deepened these fractures. Moreover it is crucial that any comments on post-COVID society are rooted in an understanding of the "take-off" point that is the present. Rather than repeat more comprehensive comments from prior publications on the nature and extent of extant fractures, I will here settle on a few select themes. While the most threatening of the fractures, the ineluctable culmination of what (Beck, 1992) termed the "boomerang effect" in his *Risk Society*, is undoubtedly climate change, and the most immediate the global pandemic, the thematic focus of this paper will be on intra-national inequality, cultural relativity and the generative mechanisms of what I have called the "class/command", "stigma/deviance", "insider/outsider" and party/populist' dynamics (Scambler, 2020a).

INTER- AND INTRA-NATIONAL INEQUALITY

Increasing intra-national inequality in the UK is associated with the transition from industrial to post-industrial or rentier capitalism in the 1970s. The differences in employment and taxation systems in industrial and post-industrial capitalism are summarized in **Box 1**. Rent is defined in this context as income derived from the ownership, possession or control of scarce assets under conditions of limited or no competition (Christophers, 2020; see also; Sayer, 2016). Significant—and often high - levels of wealth and income inequality have been a feature of societal formations throughout history. If the period of Occidental welfare statist capitalism following the conclusion of WW2 was exceptional, providing something of a "lull", inequality has once again grown substantially in rentier capitalism post-1980s. Moreover the arrival of COVID has witnessed a conspicuous spurt. Jack Leslie, speaking for the Resolution Foundation, is quoted as saying that it is unusual for wealth to increase during a recession but that the impact of events during 2020 and 2021 had "turbo-charged" the gap between rich and poor (see Elliot, 2021).

The UK experienced its biggest 1-year fall in output in over three centuries in 2020, but since the start of the crisis in February 2020 total household saving rose by £200bn, household debts (excluding credit cards) decreased by approximately £10bn, and house prices - which fell by an average of 22% over the previous four recessions—rose by 8%. Overall, total UK wealth increased by £900bn to £16.5tn during the pandemic, but the poorest households were more likely to have run down rather than increased their savings. Nor did they share in the house price boom because they were less likely to own a home. The richest 20% of households were four times as likely to have increased their savings during the crisis as the poorest 20% of households (47 vs. 12%), and 2.5 times as likely to have reduced their debts. According to the Resolution Foundation, this reflected pandemic-induced spending reductions being concentrated among those on higher incomes. The adults in the richest 10% of households currently have wealth of £1.4m each following a £50,000 increase during the crisis, while the poorest 30% gained an average of just £86 per adult in additional wealth.

BOX 1 | The Principal Differences in Employment Relations and Taxation Systems in Industrial and Post-industrial Capitalism.
Source: Byrne and Ruane (2017).

Industrial employment relations and tax system	Post-industrial employment relations and taxation system
Keynesian/Beveridge mode of regulation	Post-industrial/consolidation state mode of regulation
Industrial workforce approaching half of total workforce	Primarily service sector workforce; industrial workforce less than 15% of total
Full employment with frictional unemployment	Disguised unemployment (e.g., extension of higher education; early retirement); underemployment
Job security and substantial worker rights	Flexible labour—spread of precarious employment, limited worker rights
Employer-borne risk and responsibilities to workforce	Transfer of risk to workers—use of 0 hours contracts and forms of self-employment
Large public sector and devalorised labour	Declining public sector as proportion of all employment and recommodification of labour
Relatively high trade union membership	Low trade union membership
Relatively high wages	Lagging wages and spread of low wages; heavy reliance on wage subsidy
Strong protections for workers in public sector	Workers in public sector exposed to market competition
Status and protection for professionals	Extension of Fordism into professional work and proletarianisation
High top rates of income tax	Relatively low top rates of income tax
Relatively strong link between national insurance contributions and benefits received	Weak link between national insurance contributions and benefits received
Higher corporation tax rates	Lower corporation tax rates
Avoidance and evasion practices which do not catastrophically compromise the tax system	Avoidance and evasion practices which catastrophically compromise the tax system
Strong and independent tax collection authorities	Weakened tax collection authorities strongly influenced by corporate lobbying

A further brief comment on wealth distribution is relevant, and it concerns that fraction of the top 1% of wealth-owners, the "super-rich", whom I have long argued play a crucial role in producing and reproducing inequality in the UK (Scambler, 2018b). According to the latest annual *Sunday Times* listing, an additional 24 billionaires were added to the UK's list during 2020/21, making a total of 171, the highest number in the 33 years of the newspaper's rich lists. The gains reaped by the super-rich came in a year that the UK government stepped in to pay the wages of millions of citizens (see Jolly, 2021).

What of income inequality? Unsurprising, in fact with unerring predictability, income inequality in the UK too grew both during the decade of political austerity and with the arrival of COVID. According to the Office of National Statistics (Office of National Statistics, 2021), income inequality had steadily increased to 36.3%—as measured by the Gini coefficient—just before the pandemic. This was the highest level of income inequality over the previous decade (if lower than levels reported during the economic downturn of 2008). While income inequality for people in retired households increased 3.5 percentage points to 30.7% in the decade ending in 2020, income inequality among those in non-retired households increased on average by 0.2% per annum to 36.5% over this same period. Interestingly, the typical working-age income level in the UK is £29,437 while in France it is £29,350 (Savage, 2021); however, the poorest fifth of working-age households in the UK are 20% poorer than their French counterparts, while the richest fifth are 17% richer. Overall, the combination of lower incomes at the bottom level of British earners, comparatively low levels of private savings, and a less generous security safety net has meant that UK households were particularly exposed to economic shocks like the COVID crisis.

The incomes of top earners followed a different pattern. The annual pay of FTSE chief executives actually fell during the pandemic but still equates to what a "key worker" would earn in a lifetime (High Pay Centre, 2021). The CEOs of companies in the blue-chip share index were paid £2.69m on average in 2020, with vaccine-maker AstraZeneca's chief executive taking the top place courtesy of a £15.45m deal. The average CEO pay figure fell by 17% compared with the £3.25m recorded in 2019 but is still 86 times what an average British worker earns in a year. Interestingly, across the nine companies that used the furlough scheme for their employees but have yet to repay it, CEOs earned an average of £2.2m each.

So wealth and income inequality, exacerbated by COVID, remain distinctive and significant in the UK. Health inequalities have a similar, and causally related, profile. While changes to employment relations and the tax system outlined in **Box 1** predictably enhanced health inequalities, research published in 2017 estimated that spending cuts in health and social care during the decade of austerity also contributed to an excess of 45,000 deaths between 2012 and 2014, and would lead to approximately 150,000 further excess deaths between 2015 and 2020 (Watkins et al., 2017). Marmot et al. (2020), updating their review of ten yours earlier, found that people can now expect to live more of their lives in poor health; improvements in life expectancy have stalled, and declined for the poorest 10% of women; the health gap has grown between wealthy and deprived areas; and living in a deprived area in the North East is worse for people's health than living in a similarly deprived area in London, to the extent that life expectancy is nearly 5 years less (see also Hiam et al., 2020). The advent of COVID, predictably and unquestionably, has further exacerbated health inequalities along predictable lines, notably around class, ethnicity or race and disability (Marmot and Allen, 2020; Bambra et al., 2021).

CULTURAL RELATIVITY

A causal companion of rentier capitalism—although by no means either determined by or reducible to it—has been a discernible cultural shift. This has been characterised in numerous different if overlapping ways. The umbrella term of "cultural relativity" is designed to capture the shift in all its variety. As Lyotard (1984) maintained a generation ago, "grand" narratives (embracing ideas of progress, whether pro- or anti-capitalist) have given way to a multiplicity of "petit" narratives (offering people a bewildering array of "choices" of beliefs, attitudes, philosophies and lifestyles). This latter has been analysed using concepts like recognition and belonging (see Honneth, 2020); and it has given rise to a debate between theorists who continue to emphasise social structure in general, and social class in particular, and consider the contradictory and competing material interests of capitalists and wage labourers to be the fundamental division in rentier capitalism; and theorists who argue that the cultural shift has displaced, compromised, skewed, or at least diminished, structural class relations. There is clear evidence that the contemporary shift in culture has impacted significantly on people's "subjective" sense of their own class position and interests. Houtman et al. (2012), for example, show how throughout Europe people's voting behaviour no longer "simply" follows class location. They rightly conclude, however, that "class is not dead, but has been buried alive under the increasing weight of cultural politics" (Houtman et al., 2012: 121). Class as an "objective" structural factor, I too have contended, remains alive and well, indeed the more so in rentier capitalism than in welfare state capitalism, hence the sustained growth in wealth, income and health inequalities (Scambler, 2018b).

More needs to be said on cultural relativity than that it occludes and obscures the *heightened* causal efficacy of objective structural relations of class for personal health, wellbeing and longevity. Just as (Habermas, 1989) was surely correct to insist that a postmodern culture—because it denies the possibility of a rationally compelling alternative to the status quo—constitutes a "new conservatism", so the cultural shift alluded to here is a very real threat to any potential for transformative social change. This is so for reasons beyond a resistance to constructing "grand" narratives for change. An analysis of cultural relativity beyond Lyotard's postulation of "grand" vs. "petit" narratives suggests that something akin to a "grand" narrative has now emerged *at the end of "grand" narratives*. Allied to the contemporary strands of populism, this can be defined in terms of a family of concepts that

include "post-truth", "anti-woke", "culture clash", "cancel culture", "gaslighting", "hate speech", and so on. They find their personification in politicians like Trump and Johnson. The point to note is that politicians for whom the status quo remains desirable have re-jigged today's "petit" narratives to construct what, after (Lakatos, 1970), might be called a "protective belt" of auxiliary "cultural theories" around the core of their neoliberal ideology.

CLASS/COMMAND, STIGMA/DEVIANCE, INSIDER/OUTSIDER AND PARTY/ POPULIST

It is one thing to document and theorise structural and cultural change, and quite another to account for or to explain it sociologically. Four generative mechanisms (among many) are proffered here (see also Scambler, 2020a; Scambler, 2020b). The first is the "class/command dynamic". This asserts that a fraction of the 1% called out by the Occupy Movement, those I have called "capital monopolists" (ie financiers, major shareholders, CEOs of transnational companies), the essence of the contemporary transnational and nomadic "ruling class" in more familiar parlance, now exercise greater sway over the national state apparatus than was the case in welfare state capitalism: capital buys power to make policy in its interests and now gets more for its political investments [as has become particularly apparent during COVID (see Scambler et al., 2021)]. The pandemic has proved hugely profitable for capitalists in general and capital monopolists in particular (Preston and Firth, 2020). I have made what I think is now an uncontroversial case that the class/ command dynamic is the prepotent generative mechanism for understanding and explaining the emergence and impact of rentier capitalism.

The "stigma/deviance dynamic" is one of a number of companion mechanisms (Scambler, 2020a). It maintains that shame (stigma) is being increasingly and strategically converted into blame (deviance) for political ends. Employing (Goffman, 1968) terminology, people once seen as "non-conforming" are being recast as "non-compliant". Just as it takes power to effectively police shame, so it does to append blame to shame (Scambler, 2018a; Tyler, 2020). "Heaping blame on shame", or "weaponising stigma", has the effect of rendering those subjected to this strategy "abject"; and people who are abject find it very difficult to resist policies and practices instituted to their disadvantage. The enhanced rate of class exploitation that has simultaneously lit and stoked the fires of capital accumulation and deepened wealth, income and health inequalities has been facilitated by the state, and the stigma/deviance dynamic has been a significant device to this end. If people can be blamed for their shameful difference, then they can more easily be abandoned by the state, leading to the cutting of tax-funded welfare expenditures.

The third dynamic is that of the "insider/outsider". Rentier capitalism's cultural relativism is pertinent here. It has led to cultural disorientation, a "disconnected fatalism" and a tendency to fundamentalist thinking and populist engagement. The

diminution of the role of structures like class as primary resources for identity formation, together with the emergence of identity politics, has prompted new levels of cultural disinhibition. Othering, or "outsidering", has become easier. Adapting (Elias and Scroton, 2008) distinction between the established and outsiders, Pentintseva (2015) delineates four dimensions to processes of outsidering with special reference the contemporary movement of peoples:

- the relatively powerless position: in economic terms, but also in terms of access to social or formal facilities, services or institutions (e.g., legal status, possibilities of mobility, status differentials in institutional contexts);
- the lack of protection and opportunities afforded by membership in powerful social networks;
- limited internal cohesion between new migrants as a whole, rooted in the fact that they are all "new";
- representations and stereotypes of these groups as threatening, images based on the socially unacceptable characteristics of a small minority of group members (eg issues of social distancing, "ethnicising" and problematising particular attributes).

There is ample evidence in the UK and throughout much of the European Union that the insider/outsider dynamic, allied with the stigma/deviance dynamic, both involving a politics of othering, have led to a widespread recasting of refugees and asylum seekers as parasitic economic migrants. It is a phenomenon with an unambiguous genesis in imperialism, colonialism and racism (Tyler, 2020). Thus the insider/ outsider dynamic has a strong ethnic or racial bias (e.g., May's "hostile environment" policy and the "Windrush" scandal).

The "party/populist" dynamic has to do with the class de-alignment in party political voting in the UK, which is in part a by-product of the "intrusion" of cultural issues. But in the UK as elsewhere formerly stable and secure mainstream political parties are being challenged by putative populist movements. Fraser (2019) argues that a pre-existing "hegemonic bloc", articulated in the form of "progressive neoliberalism", has recently given way to a period she classifies as an interregnum. She distinguishes between "reactionary populism" and "progressive populism" as current contenders for dominance. Given that the UK's Conservative Party under Johnson—that ex-Eton and Oxford "boy/man" (Beard, 2021) - has moved to subsume, and to a degree represent, the racialised reactionary populism much in evidence around Brexit, plus the ongoing divisions in the Labour Party post-Corbyn, an element of neoliberal governmental stability and security, however precarious, has seemingly returned.

There is no contention here that this quartet of dynamics exhausts the social structures that lie behind contemporary social order/change, merely that they are playing major roles. What should be clear is that any attempts to "build back better"—to reiterate, *understood as fairer*—will have to overcome an intimidating set of structural, cultural and agential obstacles.

THE SOCIOLOGICAL PROJECT

I see the sociological project as part and parcel of Habermas' "reconstructed" Enlightenment project, that is, of a re-grounded Enlightenment project severed from its white, imperial, male and classed roots (Habermas, 1989; Scambler, 1996). It issues in the close-knit family of six types of sociology, sociologist and logics or modes of engagement outlined in **Box 2**. The first four will be familiar from the seminal paper by Burawoy (2005). Of my additions, *foresight sociology,* associated with what I have called a speculative mode of engagement, refers to the anticipation of alternate futures, while *action sociology*, strategic in orientation, refers to what I argue is a collective sociological responsibility to counter *and overcome* ideological misrepresentations of the social world emergent from vested interests. In what follows the emphasis is on these two, as yet under-represented, types of sociology (see Scambler, 2018b). The account on offer claims to be: 1) consonant with the latest empirical research conducted within professional sociology; 2) a challenge to the lack of ambition often found within policy sociology; 3) anchored in a critical sociology of contemporary societal change; and 4) an extension and development out of public sociology.

BOX 2 | | Six Types of Sociology.		
Sociologies	**Sociologists**	**Mode of Engagement**
Professional	Scholar	Cumulative
Policy	Reformer	Utilitarian
Critical	Radical	Meta-theoretical
Public	Democrat	Communicative
Foresight	Visionary	Speculative
Action	Activist	Strategic

Source: Scambler and Scambler (2015).

Greener (In Press) affords a useful starting point for the application of the sociological project when he revisits the Beveridge Report of 1942 (Beveridge, 1942) and its examination of the societal ills of the time and its proposed remedies. Beveridge, it will be recalled, discerned five "Giants'"that required tackling: Want, Disease, Ignorance, Idleness and Squalor. Greener argues that this quintet might now be replaced by five "New Giants":

- Inequality: this could be seen as a replacement for Want. What is different between 1942 and the present is that despite the fact that on average people are considerably richer, there are growing differences in wealth and income between social strata. "Inequality is a New Giant because individually we can do little about it—it requires a collective solution. Rising inequality appears to be a symptom of an increasingly dysfunctional form of capitalism ... Rising inequality, in a time of lower economic growth than that which was achieved in the 1950s and 1960s means all boats do not rise together, and flat living standards for some while others become wealthy at levels not seen since the 1930s" (Greener, In Press: 8).
- Preventable mortality: this can be seen as a replacement for Disease. COVID has reaffirmed that inequalities have profound links to health. Moreover, preventable mortality is another "collective action problem", requiring both structural inequalities and the nature and reach of the health system to be addressed.
- Job quality: Beveridge maintained that people out of work, or Idle, were particularly likely to fall into poverty. The present job market is very different from that in 1942: the Fordism of industrial society has been replaced by the less unionized and well-remunerated service sector jobs of post-industrial society (see **Box 1**). Households are much more likely to have all adults working ... Work has become more precarious since the 1980s leading analysts of change writing of the "precariat ..." (Greener, In Press: 9). Furthermore the future looks daunting as robots and artificial intelligence algorithms wait in the wings.
- Fragmenting democracy: Greener selects this from a number of possible replacements for Ignorance. For all the recent focus on education levels, he detects "a sense of democracy being in crisis" which he connects with the rise of populism. In particular: "online privacy is being compromised and used to tailor political messaging, as well as to spread untruth ... "(Greener, In Press: 10). Ignorance has taken on a new look in association in the era of cultural relativity.
- Environmental degradation: whereas Beveridge was concerned above all with housing when he considered Squalor, and notwithstanding continued housing travails, "there is a much bigger threat attached to the circumstances in which we live—that of environmental degradations and the problems it will bring to us all" (Greener, In Press: 11). COVID assumes a somewhat lesser salience in the context of climate change.

Greener's analysis naturally invites an interrogation of the role of sociology in responding to New Giants such as these. Three challenges stand out: 1) what might a "good"—or better, fairer—society look like; 2) what are the major obstacles to its creation; and 3) how might these obstacles be overcome. Each will be commented on in turn.

Parameters for a Fairer Society

Beveridge was of course not a sociologist, but rather an evidence-based reformer, committed to improving the lot of the citizenry as a whole in the wake of WW2. He provided a policy blueprint and something of a narrative without drifting into utopianism. The notion of foresight sociology introduced earlier exhorts a sociological engagement with parameters for alternative futures, extending to detailed innovative institutional change. As Levitas (2017): 3) maintains, "the imagination of a potential, different society in the future draws attention to the need for change, offers a direction towards that change, and a stimulus to action in the present." (see also Levitas, 2013). This is not the occasion to go into detail, but a few preliminary comments are in order.

The first point is to acknowledge that those philosophical principles of democracy, freedom, equality, justice and so on that commonly constitute criteria for identifying a good society are independent but not absolute: there is necessarily a trade off between them in any actually existing societal formation. The telling query thus becomes: are the trade offs optimal for the citizenry as a whole? In the UK, as in many other societies, there are conspicuous and troubling deficits. Consider democracy for example. The evidence is unambiguous. Miliband (1965) argued long ago that the UK's parliamentary democracy might more accurately be called a "capitalist democracy" in that it functions to underpin and reproduce the vested interests of a tiny minority. Explicated in terms of the four generative mechanisms outlined earlier, a strong case can be made that the class/command dynamic subverts democratic policy-making by privileging and facilitating the capital accumulation of a fraction of the 1%; the stigma/deviance dynamic assists in this process by silencing or marginalising the voices of those most vulnerable to (class-based) exploitation and/or (command or state-based) oppression; the insider/outside dynamic further "others" the marginalized whilst adding a strong racialised element - most dramatically captured in the relabeling of refugees and asylum seekers as "economic migrants"—which diverts public attention from exploitative and oppressive measures; and, finally, the party/populist dynamic allows for the translation of "othering" into an electoral asset. When added to this structural mix, the phenomenon identified here as cultural relativity makes the construction and dissemination of narratives for social change and resistance to the political status quo all the more difficult.

It is implicit in the concept of trade offs that subversions of democratic processes have echoes, and themselves echo, compromises in other principles. A democratic deficit, for example, will almost invariably be linked with deficits in freedom, equality and justice. To resurrect an old liberal distinction between formal and actual freedom, it is apparent that while all citizens are formally free to apply to send their offspring to Eton, still the breeding ground for multiple UK elites, very few are actually free to do so: they simply lack the requisite economic, cultural and social capital. The extent of wealth and income inequality in UK's rentier capitalism was sketched earlier. Nor can there be any doubt that this family of deficits in democracy, freedom and equality add up to a substantial charge of injustice. It is not just that in the UK the trade offs between independent political principles has gone seriously awry, but also that no lasting remedy can be accomplished via pro-capitalist piecemeal social engineering, which is all that capitalist/parliamentary democracy can offer [and that only when confronted by a potential crisis of legimation (Habermas, 1975)]. It will require a social transformation to re-set the UK's family of interlinked principles of good governance.

Obstacles to Creating a Fairer Society

For all that a number of professional sociologists are on record as anticipating a likely crisis in rentier capitalism (see Wallerstein et al., 2013; Streeck, 2016), it is axiomatic both that capitalism possesses remarkable powers of recovery and reinvention and that the structural, cultural and agential obstacles to its displacement are considerable. The significance of structural obstacles in this regard was implicit in the earlier discussion of the class/command dynamic for example, and further elaboration is unnecessary at this juncture. People in the UK inhabit a social world structured by sex/gender and race/ethnicity as well as by class. Indeed, for all that it is objective class relations that remain pivotal for capitalism, capitalism has from its origins in the long 16th century wrested advantage from pre-existing structures around sex/gender and race/ethnicity. Moreover, as intersectional studies have demonstrated, the boundaries in lived experience between the working class, women and racial minorities have long been and remain porous.

The cultural shift towards relativity has readily accommodated individualized discourses around identity politics and human rights. These are of course important matters in their own right. However, Sayer (2005): 87) makes the important point that capitalism is not dependent on identity; and he goes on to assert that one of the great disappointments of recent research on inequalities has been "a tendency to invert the former neglect of identity-sensitive, cultural influences by denying the co-presence of identity-neutral mechanisms." To rehearse a view outlined earlier, subjective class relations may have diminished in salience for identity formation, but objective class relations (articulated *via* identity-neutral mechanisms) have certainly not (see Scambler, In Press).

These cultural phenomena have significant implications for mounting challenges to the status quo. While rentier capitalism could conceivably implode as a result of its own largely unopposed excesses (see Wallerstein et al., 2013), cultural relativity: 1) inhibits the construction of rival "grand" narratives proclaiming alternate futures, and thus 2) undermines both a collective sense of solidarity and the potential for the collective "agential" action that Greener and others argue is a prerequisite for effective social change.

Overcoming Obstacles to Transformative Change

Even allowing for the possibility of a "self-destruct", the historical durability of capitalism and the severity of the structural, cultural and agential obstacles to achieving transformative change are daunting. Wright (2019) discerns a sextet of "logics":

- Smashing capitalism: the classic logic of revolutionaries, maintaining that capitalism is unreformable and must be destroyed and replaced by socialism;
- Dismantling capitalism: the logic of that subset of revolutionaries who eschew the notion of "rupture"—with all its "unpredictable" sequelae—in favour of state-directed reforms that incrementally introduce a socialist alternative from above;
- Taming capitalism: this logic commends neutralizing the "harms of capitalism" without replacing it;
- Resisting capitalism: the logic of opposing capitalism from outside of the state and without the motivation and ambition of capturing state power;

- Escaping capitalism: the logic here is that capitalism is too powerfully entrenched to overthrow but that insulation from its harms is possible, for example in sheltered or cooperative communities.

Wright's exhorts an amalgam of logics, which he entitles "eroding capitalism". No economy, he contends, is "purely" capitalist, and it is always possible to build more democratic, egalitarian, participatory economic relations in the cracks and fissures of the fractured society. Such initiatives might in the long term lead to the displacement of rentier capitalism's systematic, economic role in society.

The strategy of "permanent reform" espoused elsewhere might perhaps be cast as "escaping capitalism" plus "resisting capitalism" through "dismantling capitalism" towards "smashing capitalism" (see Scambler, 2018b). The thinking behind it can be summarized as follows:

- Social structures like class, gender and race, understood as enduring (beneath-the-surface) mechanisms, have long historical tap roots and are exceptionally resistant to (on-the-surface) agential efforts to revise, deconstruct or disassemble them.
- Within the UK's existing system of capitalist democracy, a parliamentary route to transformatory structural change is all but inconceivable, as was evidenced recently by the rapid and effective undermining of the Corbyn challenge.
- Principal among the mechanisms causally responsible for wealth, income and health inequalities is a class/command dynamic, reinvigorated in the period of rentier capitalism, which asserts that these inequalities derive above all else from the transnational sway of a tiny minority of owners of capital assets who buy power from the nation state to implement policies to their advantage.
- Given the ongoing "contamination" of the state's power elite and the impotence of parliament, the only way to effect structural, transformatory change is by mobilizing the populace (Della Porta, 2020).
- A precondition of the effectiveness of a people's movement is that it is class-based, in other words underwritten by the working class, which as Wright maintained, unites the bulk of those who "work to live".
- Although the likelihood of this kind of working-class unity and class-based collective action—and hence of an effective people's movement—remains slight, it can (perhaps only) occur in the event of a "trigger event" occasioning a crisis of state legitimation.
- Such a people's movement will necessarily involve a series of alliances across overlapping campaigns and group interests.
- As Bambra and colleagues (2021) have suggested, COVID might carry the potential to precipitate a legitimation crisis (see also Tooze, 2021): transformatory change typically only obtains after a major social upheaval, as occurred in the UK after WW2.
- The optimal strategy in present circumstances could therefore be one of permanent reform, that is, a continuous and coordinated push for reform along a

spectrum from the *attainable* to the *aspirational* (e.g., from local municipal and/or cooperative initiatives to those that expose and call into question enduring social structures).

Permanent Reform

It is one thing to prescribe a strategy and another to show what it might look like in practice. In this section, after a few words on culture, the focus is on attainable-to-aspirational economic change. Privilege and advantage are written into and underlined in UK culture. This is nowhere more apparent than in the survival of a monarchy that remains obscenely rich and clandestinely and extra-legally active in the political arena. Why is it important? Because its absence would expose to critique a series of institutions that are parasitic upon it, like hereditary titles, the House of Lords and the honours system. When the present monarch dies, attainable ends might include a trimming of "the firm", the abolition of hereditary titles, the replacement of the House of Lords by a second chamber based on deliberative democracy and the end of the conspicuously corrupt honours system [a quarter of top Conservative Party donors have received honours or peerages]. Aspirational change might include the introduction of republican governance. The point to emphasise here is that culturally and economically attainable reforms en route to aspirational or transformatory change are related dialectically and, arguably, need to occur in tandem.

Of overriding import are challenges to rentier capitalism itself. Towards the attainable end of the spectrum might be included such measures as restoring trade union rights, abolishing hire and rehire practices, ending zero hour contracts, increasing sick pay, replacing Universal Credit, raising the UK's parsimonious state pension, restoring funding to the NHS, and expanding public housing. Christophers (2020) is particularly helpful as we move towards the aspirational end of the spectrum (see here Sayer and McCartney (2021) on the importance of attainable-to-aspirational reforms for reducing health inequalities). Following his detailed examination of the UK's overriding commitment to rentier capitalism, he considers several options for policy shifts. The first of these involves competition policy, and his focus is on countering the negative consequences of pervasive monopoly so often facilitated by the state: "unconstrained" capitalism tends towards the monopoly conditions favoured by its most powerful actors' (Christophers, 2020: 388). Towards the attainable end of the permanent reform spectrum might be changes to a tax system that currently betrays an extreme "rentier bent". Reforms to modify the system so as to limit rentiers' ability to make excess profits might, for example, reduce the extant tax-based subventions supporting rentiers as well as increasing tax rates. Tax havens should clearly be closed.

Piketty (2014) has estimated that the return on assets (r) globally before tax has always been greater than the rate of economic growth (g); and for most of the history of capitalism, r after tax has also been greater than g, hence his claim that, *ceteris paribus*, wealth inequality increases under capitalism. Unusually during the period after WW2, g exceeded net (post-tax) r, in the process curbing inequality (largely through a combination of "exceptional growth" and

progressive taxation policies). In the present era of rentier capitalism Piketty commends higher taxes on assets to bring r back below g and thus counteract surging wealth inequality (Christophers, 2020: 392). In similar vein, Monbiot (2018) argues for breaking the power of "patrimonial capital" and the vicious circle of wealth accumulation and inequality.

Christophers adds that UK governments have not only "featherbedded rentiers", they have actively encouraged them, *via* tax subsidies, to be/become rentiers. Taxes on incomes earned from non-rentier activities could be lowered, he advises, "utilizing what economists refer to as the "negative reinforcement" aspect of taxation: removing an aversive stimulus in order to strengthen what is deemed to be a positive behaviour or outcome"; and taxes on rentier assets and income streams could be introduced, or increased, thereby discouraging rentierism (he gives the example here of introducing a land-value tax) (Christophers, 2020: 393).

Christophers also promotes the idea of a state investment bank, which would have the potential to contribute to seeding/funding a transition away from rentierism. Unarguably, this transition requires to be accompanied by another: to a low-carbon future. So what kind of salient non-asset intensive economic activities might the state invest in? Christophers' shorthand answer is workers and their skills rather than non-human assets and their protection from competition. He appends to this investment in collective consumption of essential or "foundational" goods and services, including material services (e.g., pipes and cables, networks and branches distributing water, electricity, banking services and food), and providential services (e.g., education, health and social care and income maintenance). Another necessary and vital state investment, to reiterate, is in a green or carbon-neutral economy.

Wrapping up this brief sketch of attainable-to-aspirational economic policy change, special reference needs to be made to ownership. For any meaningful transformation from rentier capitalism, the current direction of ownership transfers from the public to the private sector must be reversed. This means shrinking the portfolio of exclusive proprietary assets on which the rentier is able to "earn" private rents. Monbiot (2018): "the economic power of the owners of wealth translates into political power. The richer a tiny segment of society becomes, the better it is able to capture politics and undermine democracy. Eventually, we get a government of the elite, by the elite, for the elite." This, Christophers accurately concludes, is the current state of play in the UK.

CONCLUSION: SOCIOLOGY AND THE FRACTURED SOCIETY

This paper has covered a lot of ground, and necessarily in an abbreviated fashion. No apology is offered for this since the objective was to set out, with examples, a framework for a vibrant, relevant and engaged sociology of the UK as a fractured society facing something of a perfect storm of political austerity, Brexit, COVID and climate change in an era of largely unopposed post-industrial rentier capitalism. While there are the beginnings of a professional macro-sociological literature on these issues, there remain deficits in both a foresight sociology of alternate—utopian, dystopian or merely revised—futures and an action sociology of commitment to the pursuit of a good or better, fairer, post-fractured society. As Christophers concludes in his excellent analysis of rentier capitalism, the obstacles—structural, cultural, agential, causal offspring of the quartet of "dynamics" outlined earlier—remain daunting. He notes the strength of the "establishment backlash" against the proposals mooted by the Corbyn-led Labour Party during the course of 2017 and 2019. Witness for example the proposals for progressive land reform contained in the Labour-commissioned "Land for the Many", published in mid-2019. Monbiot, one of its co-authors, was led to reflect on the readiness of the UK's "billionaire press" to go into battle on behalf of the 'ultra-rich' and "oligarchic power" (Christophers, 2020: 415).

It is critically important that sociologists address these issues: doing so does not turn them into polemicists, although it may involve contesting institutional pressures, which can amount to a form of sociological taming (Scambler, 1996; Scambler, 2018b). While it remains a legitimate and important aspect of the sociological project: 1) for professional sociologists to conduct research into a broad and "unlimited" range of social phenomena, 2) for policy sociologists to explore issues with a view to informing exercises in piecemeal social engineering, 3) for critical sociologists to remain reflective about the evolving paradigms that constitute disciplinary practices, and 4) for public sociologists to disseminate its theories and research into the public sphere of the lifeworld, I have suggested that this cannot/should not satisfy the extent of its responsibilities. This paper has taken the sociology of the COVID pandemic as a starting point and outlined, with illustrations, an agenda that deliberately encompasses classical sociological issues of social order and social change whilst insisting that it should - after Habermas—commit to a "reconstructed" Enlightenment project and extend its remit to advocate for what was once termed the good society.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

REFERENCES

Ashton, J. (2020). *Blinded by Corona: How the Pandemic Ruined Britain's Health and Wealth*. London: Gibson Square Press.

Bambra, C., Lynch, J., and Smith, K. (2021). *The Unequal Pandemic: COVID-19 and Health Inequalities*. Bristol: Policy Press.

Beard, R. (2021). *Sad Little Men: Private Schools and the Ruin of England*. London: Harvill Secker.

Beck, U. (1992). *Risk Society: Towards a New Modernity*. London: Sage Publications.

Beveridge, W. (1942). *Social Insurance and Allied Services*. London: HMSO, 6404.

Burawoy, M. (2005). For Public Sociology. *Am. Sociol. Rev.* 70, 4–28. doi:10.1177/000312240507000102

Byrne, D., and Ruane, S. (2017). *Paying for the Welfare State in the 21st Century*. Bristol: Policy Press.

Christophers, B. (2020). *Rentier Capitalism: Who Owns the Economy and Who Pays for it?*. London, United Kingdom: Verso.

Della Porta, D. (2020). *Social Movements in Times of Pandemic: Another World Is Needed*. Open Democracy.

Elias, N., and Scroton, J. (2008). *The Established and the Outsiders*. Dublin: Dublin University Press.

Elliot, P. (2021). *UK Wealth gap Widens in Pandemic as Richest Get £50,000 Windfall*. London, United Kingdom: Guardian.

Fraser, N. (2019). *The Old Is Dying and the New Cannot Be Born*. London: Verso.

Goffman, E. (1968). *Stigma: The Management of Spoiled Identity*. Harmondsworth, United Kingdom: Penguin.

Greener, I.. *The "New Five Giants' – Conceptualising the Challenges Facing Societal Progress in the 21st century Social Policy and Administration* (In Press).

Habermas, J. (1975). *Legitimation Crisis*. London: Heinemann.

Habermas, J. (1989). *The New Conservatism*. Cambridge: Cambridge University Press.

Hiam, L., Dorling, D., and McKee, M. (2020). Things Fall Apart: The British Health Crisis 2010-2020. *British Medical Bulletin* 133, 4–15.

High Pay Centre (2021). *CEO Pay Survey 2021: Median FTSE 100 CEO Now Paid £2.69 Million*. London: High Pay Centre.

Honneth, A. (2020). *Recognition*. Cambridge: Cambridge University Press.

Horton, R. (2020). *The Covid-19 Catastrophe: What's Gone Wrong and How to Stop it Happening Again*. Cambridge: Polity Press.

Houtman, D., Achterberg, P., and Derks, A. (2012). *Farewell to the Leftist Working Class*. New Brunswick: Transaction Publishers.

Jolly, J. (2021). *Number of Billionaires in UK Reached New Record during Covid Crisis*. London, United Kingdom: Guardian.

Lakatos, I. (1970). "Falsification and the Methodology of Scientific Research Programmes," in *Criticism and the Growth of Knowledge* Editors I. Lakatos and A. Musgrave (Cambridge: Cambridge University Press). doi:10.1017/cbo9781139171434.009

Levitas, R. (2013). *Utopia as Method: The Imaginary Reconstitution of Society*. London: Palgrave Macmillan.

Lyotard, J. F. (1984). *The Postmodern Condition*. Manchester, UK: Manchester University Press.

Levitas, R. (2017). Where There Is No Vision, the People Perish: a Utopian Ethic for a Transformed Future. CUSP. Available at: cusp.ac.uk/essay/m1-5 (Accessed September 22, 2021).

Marmot, M., and Allen, J. (2020). COVID-19: Exposing and Amplifying Inequalities. *J. Epidemiol. Community Health* 74, 681–682. doi:10.1136/jech-2020-214720

Marmot, M., Allen, J., Boyce, T., Goldblatt, P., and Morrison, J. (2020). *Health Equity in England post 2010: The Marmot Review Ten Years on*. London: Institute of Health Equity.

Miliband, R. (1965). *Marx and the State*. London, United Kingdom: The Socialist Register, 278–296.

Monbiot, G. (2018). *Wheel of Fortune*. MONBIOT. Available at: https://www.monbiot.com (Accessed February 22, 2018).

Office of National Statistics (2021). *Household Income Inequality, UK: Financial Year Ending 2020*. London: ONS.

Pentintseva, O. (2015). Approaching New Migration through Elias' 'established' and 'outsider' Lens. Available at: https://lib.umich.edu/h/humfig/11217607.

0004/–approaching-new–migration-through-eliass-established?rgn=main;view=full-text (Accessed October 4, 2018).

Piketty, T. (2014). *Capital in the Twenty-First Century*. Cambridge,MA: Belknap.

Preston, J., and Firth, R. (2020). *Coronavirus, Class and Mutual Aid in the United Kingdom*. London: Palgrave Macmillan.

Sample, I. (2021). *BMA to Issue Damning Critique of Government over Covid Crisis*. London, United Kingdom: Guardian.

Savage, M. (2021). *British Families Took Bigger Hit to Income during Covid Pandemic than Europeans*. London, United Kingdom: Guardian.

Sayer, A., and McCartney, G. (2021). Economic Relationships and Health Inequalities: Improving Public Health Recommendations. *Public Health* 199, 103–1066. doi:10.1016/j.puhe.2021.08.017

Sayer, A. (2005). *The Moral Significance of Class*. Cambridge: Cambridge University Press.

Sayer, A. (2016). *Why We Can't Afford the Rich*. Bristol: Policy Press.

Scambler, G., and Scambler, S. (2015). Theorizing Health Inequalities: the Untapped Potential of Dialectical Critical Realism. *Soc. Theor. Health* 13, 340–354. doi:10.1057/sth.2015.14

Scambler, G., Goodman, B., and Scambler, M. (2021). Sociology, Knowledge and Engagement: A Case for a Muckraking Sociology of Health and Healthcare in the Time of COVID. Available at: https://doi.org/10.31235/osf.io/26pjn.

Scambler, G. (1996). The `Project of Modernity' and the Parameters for a Critical Sociology: An Argument with Illustrations from Medical Sociology. *Sociology* 30, 567–581. doi:10.1177/0038038596030003009

Scambler, G. (2018a). Heaping Blame on Shame: 'Weaponising Stigma' for Neoliberal Times. *Sociological Rev.* 66, 766–782. doi:10.1177/0038026118778177

Scambler, G. (2018b). *Sociology, Health and the Fractured Society: A Critical Realist Account*. London: Routledge.

Scambler, G. (2020). Covid-19 as a 'breaching experiment': Exposing the Fractured Society. *Health Sociol. Rev.* 29, 140–148. doi:10.1080/14461242.2020.1784019

Scambler, G. (2020a). The Fractured Society: Structures, Mechanisms, Tendencies. *J. Crit. Realism* 19, 1–13. doi:10.1080/14767430.2020.1712545

Scambler, G. (2020b). *A Sociology of Shame and Blame: Insiders versus Outsiders*. London: Palgrave.

Scambler, G. "The Elephant in the Room: Sayer on Class," in *Ethics, Economy and Social Science: On the Work of Andrew Sayer* Editors G. Calder and B. Sanghera (London: Routledge). In Press

Streeck, W. (2016). *How Will Capitalism End?* London: Verso.

Tyler, I. (2020). *Stigma: The Machinery of Inequality* London: Zed.

Tooze, A. (2021). *Has Covid Ended the Neoliberal Era?*. London, United Kingdom: Guardian.

Wallerstein, I., Collins, R., Mann, M., Derluguian, G., and Calhoun, C. (2013). *Does Capitalism Have a Future?* Oxford: Oxford University Press.

Watkins, J., Wulaningsih, W., Da Zhou, C., Marshall, D. C., Sylianteng, G. D. C., Dela Rosa, P. G., et al. (2017). Effects of Health and Social Care Spending Constraints on Mortality in England: a Time Trend Analysis. *BMJ Open* 7, e017722. doi:10.1136/bmjopen-2017-017722

Wright, E. (2019). *How to Be an Anti-Capitalist in the 21st Century*. London: Verso.

Social Capital as Protection Against the Mental Health Impact of the COVID-19 Pandemic

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The corona pandemic has a huge impact on the mental wellbeing of the Dutch population. Based on a large-scale panel survey (*N* = 22,696) on the social impact of COVID-19, this article firstly examines which social groups are most susceptible to the mental health consequences of the pandemic. Secondly, we examine whether social capital provides protection against this impact. We find that the mental health impact of COVID-19 is considerable and that it increased over the course of 2020. Women, young people, respondents with low incomes and/or poor self-perceived health, experience relatively more fear and stress due to the pandemic. We do not find a difference between respondents with or without a migration background. Social capital (received support, trust in people and in institutions) has the expected effect: the more support and trust, the less fear and stress. There is a mediation effect. Older people, respondents with high incomes and/or good health experience less fear and stress, partly because they have more social capital. This is different for females. They would experience even more fear and stress, compared to men, were it not for the fact that they have more social capital. Hence we conclude that social capital indeed provides some protection against the negative mental health consequences of COVID-19.

Keywords: COVID-19, social capital, mental wellbeing, social support, trust

INTRODUCTION

Several studies showed that the COVID-19 pandemic has a major impact on the mental wellbeing of specific segments of the population. A survey among Dutch university students, for example, showed that over half of the respondents had trouble concentrating, felt lonely, and feared that the pandemic may adversely affect their academic progress (Caring Universities, 2020). The pandemic also led to mental health issues among nursing and care home residents, particularly when these homes were closed to visitors to prevent infections among residents. Many residents experienced anxiety, sombreness, and loneliness. While nursing and care homes were closed to protect older people in need of care, this actually resulted in harmful mental health effects, perhaps even increased the mortality risks (Van der Roest et al., 2020).

These early Dutch studies are in line with the findings of the first international studies on these issues, which found that the COVID-19 pandemic had moderate, in some cases severe consequences for mental health: feelings of depression, anxiety, loneliness, etcetera (Holmes et al., 2020; Kim and Laurence, 2020; Pierce et al., 2020; Sønderskov et al., 2020; Wang et al., 2020; Xiong et al., 2020; Zhang and Ma, 2020). Based on a survey among American adults, Kim and Laurence (2020, p. 710) conclude that pre-existing inequalities in health status and job stability amplify

the negative mental health consequences of COVID-19-induced restrictions. Their findings also suggest that the mental impact of restrictive measures increased over time. A first Dutch study, however, found only limited mental health consequences of COVID-19 during the first months of the pandemic. Feelings of emotional loneliness were up only slightly after the outbreak of the virus, while symptoms of anxiety and depression actually decreased compared to pre-Corona times (Van der Velden et al., 2021). Our study comes to different outcomes, possibly because it spans a longer period of time, during which—as we shall see—the mental health consequences of the pandemic intensified. The purpose of our study is to determine which groups of the Dutch population (particularly in terms of social class and ethnicity) were affected most by the pandemic's adverse mental health consequences. Furthermore, we will study whether having social capital offers some level of protection against pandemic-related feelings of anxiety and stress.

This study is based on a large-scale survey about the societal impacts of COVID-19 conducted in the Netherlands in November 2020 ($N = 22,696$). Compared to two previous surveys held in April 2020 and July 2020, this November survey showed a strong increase in mental distress (cf. Engbersen et al., 2020). It is important to note that these three survey waves were conducted in different contexts. The corona virus hit the Netherlands in several waves. After the first wave of infections in March and April 2020 came the summer months when the virus seemed to slowly disappear from the Netherlands. However, in the fall of 2020, the virus started to spread again, ushering in the predicted second wave. As early as in April 2020, it was clear that one quarter of our respondents more often felt anxious, nervous, irritable, and stressed since the outbreak of COVID-19. In July 2020, these feelings of pandemic-related anxiety and stress eased, but they quickly soared again in November 2020, when colder weather conditions accelerated the spread of the virus and the Dutch government started to impose strict measures to curb the virus. Particularly striking were the feelings of hopelessness due to the COVID-19 pandemic. In November, nearly 40% of respondents felt they "have nothing to look forward to" (Engbersen et al., 2020, p. 10).

This contribution takes a sociological perspective to examine the extent to which the Dutch population experiences feelings of anxiety and stress because of the pandemic and the measures taken in response. We will do this in two ways. First, we examine which social groups experience such feelings of anxiety and stress and to what degree. Our second and central focus is whether social capital, i.e., people's social contacts and networks and their level of trust in "people in general" ("general" or "social trust") and in institutions ("institutional trust"), offers protection against the mental health consequences of the pandemic. We expect this protective effect, because social contacts work as a buffer against everyday anxieties, and provide support and relevant health information. Trust in other people promotes mutual collaboration. People with institutional trust will be more compliant to the regulations by the authorities during the pandemic. The article is structured as follows. In the next section, we discuss existing literature on the correlation between social class, social capital, and (mental) health differences, with

a specific focus on recent research on the effects of the COVID-19 crisis. After explaining our research method, we describe our findings with respect to (1) which social groups are hit harder by the adverse effects of the pandemic and, (2) whether social capital provides protection against these effects. We conclude with a discussion of the theoretical implications of our findings.

LITERATURE REVIEW: SOCIAL CLASS, SOCIAL CAPITAL, AND THE MENTAL HEALTH CONSEQUENCES OF COVID-19

The Role of Social Class and Migration Background

Socioeconomic health differences in the Netherlands are a well-documented fact. Less-educated people in the Netherlands live, on average, 6 years less than people with higher educational qualifications. The differences in life expectancy in good health are even greater. The less-educated have 15 fewer years of healthy life expectancy than the highly educated (cf. Mackenbach, 2012; Mackenbach et al., 2016)[1].

The question is whether we can see similar socio-economic health differences in the case of COVID-19. Although it was said initially that "corona does not discriminate", both international and Dutch research showed social and ethnic disparities in the extent to which people are affected by the virus (Hawkins et al., 2020; Millet et al., 2020; Patel et al., 2020; Public Health England, 2020). A study by Netherlands Statistics showed that the mortality rate due to COVID-19 during the first months after the virus outbreak was twice as high for the lowest income quintile in the Netherlands compared to the highest quintile. Ethnic differences in mortality rates due to COVID-19 were smaller also because the pandemic began and caused many deaths in a Dutch region with relatively few non-Western migrants. However, in the Dutch major cities where many non-Western immigrants live, the mortality rate due to COVID-19 for persons with a non-Western migration background was 50% higher than for native residents of these cities (De Visser et al., 2021). The latter findings confirm previous research which found an overrepresentation of individuals with a non-Western migration background in the number of hospital admissions due to COVID-19 in Amsterdam (Coyer et al., 2021).

There are various reasons why both low-income groups and minority groups are hit harder by COVID-19. Both lower educated natives and non-Western migrants are more likely to have the well-known risk factors (obesity, diabetes, etc.) that also play a role in COVID-19 infections. In addition, people from both groups are more likely to have jobs involving a higher risk of infection—e.g., construction, cleaning, personal services—and offering fewer options for home working, which also increases the chance of infection. Besides, they often live in poorer houses with less space, which may promote the spread of the virus. Both low educated (or illiterate) natives and migrants with insufficient language command may also have restricted

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[1]See also data published by Statistics Netherlands: https://opendata.cbs.nl/#/CBS/nl/dataset/83780NED/table?ts=1590569035685.

access to adequate health information and to health care (Patel et al., 2020; Cockerman, 2021). Finally, some cultural factors that may play a role. For instance, a stronger bond with their own community and extended family may increase the risk of infection at family gatherings.

This study does not contain data about the number of COVID-19 infections or mortality rates. We examine the impact of the pandemic on people's mental wellbeing as one of the aspects of the social impact of COVID-19. More in particular, our focus is on whether the mental health consequences of the COVID-19 pandemic differ by social status (educational attainment and income level) and by migration background. Based on existing research, we expect a positive relationship between respondents' social status and their subjective wellbeing. People with a lower level of education and with lower income are more often confronted with financial strain, while lacking knowledge and coping strategies to adequately handle such strain, resulting in mental tension and insecurity (Holmes et al., 2020; Kim and Laurence, 2020; Pierce et al., 2020; Wang et al., 2020; Xiong et al., 2020).

Research about the mental health consequences of the COVID-19 pandemic also systematically point to low levels of income and education as risk factors, although the positive effect on wellbeing diminishes gradually for the highest incomes (Holmes et al., 2020; Kim and Laurence, 2020; Pierce et al., 2020). One may also question the direction of this correlation. Does lower educational attainment and income lead to greater strain and less wellbeing? Or are persons with these kinds of feelings less able to reach higher levels of education and acquire a higher income? We expect to see stronger feelings of anxiety and stress among respondents with lower educational and income levels, if only because they are more likely to work jobs that involve a greater risk of infection, are less able to work from home, or tend to have less job security.

We also expect persons with a non-Western migration background to experience higher levels of anxiety and stress because of the COVID-19 crisis. We already mentioned various economic and possible cultural factors that cause people with a non-Western migration background to be more exposed to the risk of infection, which can lead to more anxiety and stress. In fact, research by Stronks et al. (2020) showed that the chance of depression is twice or even three times as high among Dutch people with Surinamese, Turkish, and Moroccan background as it is among Dutch people without a migration background, although these differences are partly due to differences in social status between the various population groups.

The Role of Social Capital

Our second question is whether social contacts, social networks and trust, grouped together under the term "social capital", offer protection against the pandemic's adverse mental health consequences.

Although scholars (Bourdieu, 1986; Putnam, 2000) give different definitions of social capital, they generally agree on three core aspects of social capital: social and institutional trust, norms of reciprocity and social networks. Sociologists also show that social capital benefits both people's individual life opportunities and the functioning of social communities in many ways; our study concentrates on the correlation between social capital and people's mental health (Coleman, 1990; Portes, 1998).

Empirical research generally showed that social capital results in positive health outcomes, although this differs with the various forms and levels of social capital and the examined health outcomes (see for overviews: De Silva et al., 2005; Song et al., 2016; Cockerman, 2021). Social contacts and networks give access to social support and valuable health information. Social contacts and networks also work as a protective buffer against everyday tensions and anxieties. People with many social contacts experience negative events such as the pandemic as less threatening or have less of an emotional response to them (Putnam, 2000, p. 332; Kawachi and Berkman, 2001). Social capital also implies social norms, such as maintenance of healthy norms and promotion of health behaviour (Nieminen et al., 2013). Other studies showed that the trust dimension of social capital contributes to people's subjective experience of wellbeing (Portela et al., 2013), self-reported mental health (Lindström, 2008) and reduces major mental depressions (Fujiwara and Kawachi, 2008). People with high levels of social and institutional trust will engage more in solidaric practices and will be more compliant to hygienic and preventive behaviour required by the authorities (Makridis and Wu, 2021).

High levels of social capital also enhance the ability of individuals and communities to cope with crises (Makridis and Wu, 2021). Drawing on two American studies, Tierney (2019) claimed that social capital contributes to people's resilience, making them better able to withstand the adverse health effects of natural disasters such as extreme weather, flooding, and epidemics. First, Klinenberg (2002) showed that the extreme heat wave in Chicago in July 1995 resulted in higher mortality rates in a poor and isolated Chicago neighbourhood than in a qua social status comparable district with many shops and restaurants, therefore more people in the streets, more social contacts and, in general, more community life. Social capital, Klinenberg argued, protects otherwise vulnerable residents, which explains the lower mortality rate in this neighbourhood.

Secondly, Adeola and Picou (2014) studied mental health symptoms [depression, post-traumatic stress disorder (PTSD)] among Katrina survivors 3 years after the hurricane. They found that mental health symptoms were still widespread, but that they were more prevalent in certain population groups (African Americans, women, single adults, and people with weaker social networks). Lack of social capital was the strongest predictor of long-term health problems. Adeola and Picou (2014) explained this by the positive influence of networks: social contacts can both set an example of healthy lifestyles and work like a buffer. People with many social contacts experience negative events as less threatening or have less of an emotional response to them.

The positive effects of social capital are also shown in recent studies on the Corona pandemic. Although social interactions foster infections, research shows that social capital is in fact negatively associated with COVID-19 growth rate and with COVD-19 deaths and hospitalizations (Varshney and Socher, 2020; Borgonovi et al., 2021; Makridis and Wu, 2021). There are various explanations for this association. Social networks

provide people with health-related information, which in turn may result in health protective behaviour such as wearing face masks, washing hands frequently, and avoiding unnecessary social contacts. Individuals in communities with strong norms of reciprocity and social solidarity may be more aware of the psychological costs if they infect others. Trusting people have more concern for others, leading to more hygienic practices and social distancing. High levels of institutional trust may result in more compliance to public health recommendations such as social distancing, mask wearing and vaccination (Barrios et al., 2020; Borgonovi and Andrieu, 2020; Varshney and Socher, 2020; Borgonovi et al., 2021; Ferwana and Varshney, 2021; Makridis and Wu, 2021).

There is a growing body of studies on the role of social capital in reducing the mental health consequences of the pandemic with mixed outcomes. Chan et al. (2021) found that social capital has indeed a negative effect on mental health problems resulting from the pandemic, but only for the non-active population. For economically active individuals, employment and financial stability are more important than social support. They also found that social capital did not affect subjective wellbeing in times of corona. Wang et al. (2021) found that psychosocial support, in particular from the near family, lowered the negative effect of the pandemic on feelings of loneliness, but not on the mental health of respondents. Paolini et al. (2020) found that social and political trust had a significant positive effect on the subjective wellbeing of Italians in the early days of the pandemic, but not on the level of distress of respondents. Van Tilburg et al. (2021), on the other hand, found in a study on Dutch elderly that a decline in institutional trust was associated with increased mental health problems and emotional loneliness.

In our analysis, we distinguish two dimensions of social capital, each with two different indicators: the relational or network dimension (social contacts as such and social support exchanged within social networks) and the cognitive or trust dimension (general trust and institutional trust). We analyse the impact of these different dimensions and indicators of social capital separately. The ratio for doing so, besides methodological reasons[2], lies in previous research which showed that different forms of social capital produce different social outcomes. Yip et al. (2007), in a study in rural China, found that trust is positively associated with various health outcomes (self-reported health, psychological health, subjective wellbeing), but that there is "little statistical association" between organizational membership (as indicator of the network dimension of social

capital) and these outcomes. Similarly, Ding et al. (2020) found that two forms of social capital—community engagement and individual commitment to social institutions—have opposite impacts on social distancing during the corona pandemic. The first is measured by membership of clubs and associations (which relates to the network dimension of social capital), the latter is measured by voting and contributing to social institutions (related to the trust dimension of social capital). And Makridis and Wu, as already mentioned, concluded that "..social capital affects response to COVID-19 through trust and norms, rather (than) social networks and trust" (Makridis and Wu, 2021, p. 14).

Based on these insights, we expect that both dimensions of social capital (networks and trust) provide a certain level of protection against the adverse mental health consequences of the COVID-19 crisis.

Hypotheses
We derive four hypotheses from our overview of relevant studies on social class, social capital and mental health consequences:

- Hypothesis 1: People with a lower social status in terms of education and income experience more anxiety and stress as a result of the COVID-19 pandemic;
- Hypothesis 2: People with a non-Western migration background experience more anxiety and stress as a result of the COVID-19 pandemic;
- Hypothesis 3: People with more social capital in terms of social networks and social support experience less anxiety and stress as a result of the COVID-19 pandemic;
- Hypothesis 4: People with more social capital in terms of institutional and general trust experience less anxiety and stress as a result of the COVID-19 pandemic.

DATA AND METHODS
Data, Sample, and Weighting
The data used in this study are derived from a large-scale online survey on the social impact of the COVID-19 pandemic in the Netherlands conducted in November 2020 by election research institute Kieskompas (Engbersen et al., 2020).

For data collection, Kieskompas used their national panel, which is a representative stratified sample (stratified random sampling) of the Dutch voting population (18+ years). The questionnaire was distributed among 48,329 Kieskompas panel members, 19,577 panel members returned the questionnaire (40.5% response rate). Additionally, three cities participating in the research (Amsterdam, The Hague, and Rotterdam) employed extra activities to include more underrepresented groups. They placed adds on Facebook, disseminated an anonymous participation link for the survey in a targeted manner, one city distributed the questionnaire among their own city panel. In the end of the fieldwork period, the questionnaire could be filled in through an anonymous participation link. These activities resulted in about 5,500 extra respondents.

In order to make the results generalizable for the Dutch voting population, Kieskompas applied a weighting to make the survey results representative for education, age, gender, region,

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[2]We used Principal Component Analysis (PCA) to see if all relevant items could be reduced into one factor (social capital). The PCA test showed that we are unable to summarize all items into one single factor, because not all items load on the same component. Additionally, one single component does not (sufficiently) capture the variance between the items. Furthermore, Confirmatory Factor Analysis (CFA) was performed to test the validity of the subscales. The results show that not all fit indices indicate a good model fit for each sub scale separately (see **Table A2** in **Appendix 2**, cf. Beaujean, 2014). A second-order CFA model was also tested to see if a single factor (social capital) could explain the covariances between each sub scale. However, not all fit indices indicate good fit (possibly because some of the subscales themselves were only moderately reliable). All in all, we argue that according to the literature and the "moderate" fit of the separate subscales it is informative to use them as an estimation of the related constructs.

migration background and voting behaviour. Questionnaires with insufficient information about these characteristics were excluded from the sample. All of this resulted in a sample of 22,696 respondents which is representative for the (adult) Dutch population as a whole.

Measurements

The dependent variable in our study is a scale describing the level of anxiety and stress experienced due to the COVID-19 pandemic. This scale is based on respondents' responses to six statements in the questionnaire, the first of these being: "Ever since the COVID-19 outbreak in the Netherlands, I more often feel anxious." In the same way, respondents were asked whether they, since the COVID-19 outbreak, more often felt nervous, stressed or irritable, found it harder to relax, and if they felt like there was nothing to look forward to. These questions are based on the *Depression Anxiety Stress Scale* (DASS) [earlier translated to Dutch by De Beurs et al. (2001)]. We asked respondents to (strongly) disagree or (strongly) agree with these statements (1–5). Their answers were plotted on an "anxiety and stress" scale with the average score on the six items. The scale turned out to be very reliable (Cronbach's Alpha 0.89).

Respondents' migration background, socio-economic status, and social capital are the explanatory variables in the study. Respondents' *migration background* was determined based on their country of birth and both their parents' country of birth and recoded into three categories: Dutch people without a migration background (reference category), Dutch people with a Western migration background, and Dutch people with a non-Western migration background. The level of education and net monthly income are indicators of someone's socio-economic status. Respondents' *level of education* was measured using three dummy categories: low (no education, only primary education up to level 1 secondary vocational education; the reference category), medium (second-stage secondary or pre-university education, levels 2–4 secondary vocational education), and high (higher professional education, university education, bachelor and higher). Respondents' *net monthly income* was classified in five dummy categories: minimum income (under €1,150 for single-person households and €1,600 for multiple-person households; reference category), between minimum and modal income (from €1,150 for single-person households/€1,600 for multiple-person households to €2,150), modal to double modal income (€2,150–€3,500), between double and three times modal income (€3,500–€5,000), and over three times modal income (€5,000 or more).

Respondents' social capital was established using four indicators: social contacts, social support received or expected, general trust, and institutional trust. Three indicators were captured as scales on which multiple responses (items) are combined. The *social contact scale* is based on a question about social encounters, contacts by phone and/or through written communication, and online contacts with people with whom the respondent does not share a household. Respondents were asked about the frequency of their contacts with family members, friends or close acquaintances, neighbours, or other people in their local community. The possible answers ranged from

"almost daily," "at least once a week," "two or three times a month," and "once a month," to "under once a month" and "never". The social contact scale is the average score on these four items. A high score on the contact scale means frequent contact, while a low score means little to no contact. This scale turned out to be moderately reliable (Cronbach's Alpha 0.664).

The *help received scale* is based on the question: "If you were to need help personally due to the COVID-19 outbreak, who from outside your household would you expect to be there for you?" Respondents were asked to indicate for family members who live elsewhere, friends, neighbours, or acquaintances (four items) whether they were "already receiving help from them" or would "definitely," "maybe," or "certainly not" expect help from them if needed. This scale also turned out to be moderately reliable (Cronbach's Alpha 0.597). The *institutional trust scale* measures the level of trust in the national government, local government, Netherlands Institute of Public Health and Environmental Protection (Dutch acronym: RIVM), and municipal health service (Dutch acronym: GGD). In response to questions about their level of trust in these institutions, respondents had a choice between whether they trust these institutions very little, little, not much/not little, do trust them, or have a lot of trust in them (1–5). The institutional trust scale showing the average score on these four items was highly reliable (Cronbach's alpha 0.858). The *trust in people* (or *general trust*) scale is based on a single question that asked respondents to indicate how much they trust "people in general" (1–5).

Finally, several control variables were included in the analyses. *Sex* was included with "male" as the reference category. *Age* was included as a continuous variable. *Home situation*, originally with six categories, was recoded and included in two dummy categories: single-person households (reference category) and multi-person households. *Perceived health*, measured in five categories, was recoded into four categories: (very) poor (reference category), moderate, good, and very good.

The descriptive information on the variables is listed in **Table 1**. Missing data was deleted using the listwise deletion method. The rate of missing data as per the listwise deletion method ranges from 0% (age) to 8.5% (income). The loss of respondents due to listwise deletion is relatively high, due mainly to the missing answers to the question about respondents' income. Associations between the variables are displayed in **Table 2**. Analyses demonstrated that most variables were significantly correlated with each other in our sample, however most of them are not substantial (<0.4).

Analysis Strategy

The ultimate goal of our analysis is to examine whether social capital mediates the adverse mental impact of the COVID-19 pandemic. To do so we have to examine the mutual associations between three groups of factors (demographic characteristics, experienced anxiety and stress since the Corona outbreak, and social capital). To examine these associations, we use linear regression analysis in multiple steps[3]. First, we analyse the

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[3]According to Field (2009, p. 224), a VIF > 10 is seen as problematic in terms of multi-collinearity. All of our VIF values are below this criterion.

TABLE 1 | Descriptive statistics.

	Mean	S.d.	Min.	Max.
Anxiety and stress (April 2020)	2.49	0.96	1.00	5.00
Anxiety and stress (July 2020)	2.44	0.89	1.00	5.00
Anxiety and stress (November 2020)	2.67	0.94	1.00	5.00
Gender				
Male	0.50		0.00	1.00
Female	0.50		0.00	1.00
Age (in years)	49.97	17.59	18.00	96.00
Migration background				
Native	0.81		0.00	1.00
Western	0.10		0.00	1.00
Non-Western	0.08		0.00	1.00
Living situation				
Oneperson household	0.24		0.00	1.00
Morepersons household	0.76		0.00	1.00
Health				
(Very) bad	0.04		0.00	1.00
Moderate	0.19		0.00	1.00
Good	0.58		0.00	1.00
Very good	0.17		0.00	1.00
Education				
Low	0.25		0.00	1.00
Mediate	0.43		0.00	1.00
High	0.32		0.00	1.00
Income				
Minimum	0.14		0.00	1.00
Minimum to modal	0.21		0.00	1.00
Modal to 2x modal	0.29		0.00	1.00
2x modal to 3x modal	0.24		0.00	1.00
More than 3x modal	0.12		0.00	1.00
Social contacts (0–5)	2.77	1.05	0.00	5.00
Support received (1–4)	2.35	0.51	1.00	4.00
Trust in people in general (1–5)	3.23	0.94	1.00	5.00
Trust in institutions (1–5)	3.39	1.00	1.00	5.00

correlation between the demographic characteristics and anxiety and stress: who experiences the mental health impact of the pandemic? Secondly, we analyse (a) the association between the demographic characteristics and the four social capital indicators and (b) the association between the social capital indicators and anxiety and stress. Finally, we include all variables into one regression model. We assume that social capital has the expected protective effect when the initial mental health impact of the pandemic disappears or diminishes after including social capital into the analysis in the last step.

OUTCOMES: THE MENTAL HEALTH CONSEQUENCES OF THE COVID-19 PANDEMIC

Our study aimed to identify the social impact of the COVID-19 pandemic, in particular the mental health impact of the

pandemic. Do respondents experience more anxiety and stress since the Corona outbreak? In our survey, conducted in November 2020, the average score was 2.7 on a scale from 1 to 5. This means that the feelings of anxiety and stress caused by the COVID-19 crisis were higher in November 2020, during the run-up to the second wave of the pandemic, than in previous stages of the pandemic, including the outbreak of the virus in April 2020 (average of 2.5) (see **Table 1**).

The remainder of this article will be based solely on cross sectional data from the third survey (November 2020). **Appendix 1** to this article gives the outcomes of additional linear regression analyses.

Social Class and Mental Health Consequences of COVID-19

In **Table 3**, we analyse the association between demographic characteristics of respondents and their experienced level of anxiety and stress (Model 1). These results enable us to examine whether certain social groups experience more anxiety and stress due to the pandemic than other groups, thereby testing the first two hypotheses of this study.

Model 1 in **Table 3** shows that women and young people experience more anxiety and stress since the virus outbreak than men and older people (the statistically significant negative correlation between age and experienced level of anxiety and stress means: the older the person, the less anxiety and stress). Respondents with (very) good perceived health and those with a higher income (from modal income upwards) experience less pandemic-related anxiety and stress than respondents who rate their own health as "(very) poor" or who live on a minimum wage (both reference category). We do realise that low income and poor (perceived) health often go hand in hand.

In addition, various personal characteristics turn out not to correlate with the experienced level of anxiety and stress. For example, we did not find the expected association between the respondents' home situation and the experienced anxiety and stress. We expected this association because people who live on their own have fewer opportunities to share their concerns with others, especially when possibilities for social contact outside the home are restricted, than people who share a home with someone else (other adults and/or children). Jace and Makridis (2021) also found that being married works as a protective factor on mental health during the pandemic. This turned out not to be the case in our research. Perhaps people in multi-persons household worry about the others in their household, including their children. Another explanation may be that singles benefited from online social contacts to such an extent that it compensated for living alone.

We also do not find a statistically significant difference between people with higher and lower educational levels and the level of experienced anxiety and stress. This is surprising because, as mentioned above, we did see a difference in anxiety and stress levels between respondents with a minimum income on the one hand and those with an (above) average income on the other. A possible explanation is that lower educated respondents are less concentrated in vulnerable segments of the labour market

TABLE 2 | Correlation of all variables in the analyses (unweighted).

| | Gender | Age | Migration background | | | Living situation | Eduation | Income | Health | Social contacts | Support received | Trust in people in general | Trust in institutions | Anxiety and stress |
			No migration background	Western background	Non-western background									
Gender	1													
Age	−0.089**	1												
No migration background	−0.28**	0.018**	1											
Western background	0.022**	0.038**	−0.867**	1										
Non-western background	0.016*	−0.104**	−0.448**	−0.058**	1									
Living situation	−0.080**	−0.096**	0.033**	−0.029**	−0.014*	1								
Eduation	0.056**	−0.139**	−0.059**	0.054**	0.020**	0.017*	1							
Income	−0.122**	−0.070**	0.005	0.002	−0.012	0.421**	0.289**	1						
Health	−0.026**	−0.184**	0.001	−0.012	0.019**	0.106**	0.156**	0.195**	1					
Social contacts	0.065**	0.072**	0.001	0.014*	−0.028**	0.041**	0.050**	0.076**	0.055**	1				
Support received	0.041**	0.154**	0.016*	−0.004	−0.025**	0.020**	0.005	0.055**	0.052**	0.317**	1			
Trust in people in general	0.048**	0.107**	0.026**	−0.006	−0.042**	0.062**	0.120**	0.140**	0.146**	0.166**	0.234**	1		
Trust in institutions	−0.009	−0.068**	0.017*	−0.014*	−0.008	0.041**	0.172**	0.156**	0.169**	0.026**	0.115**	0.286**	1	
Anxiety and stress	0.100**	−0.237**	−0.009	0.000	0.017*	−0.017*	0.011	−0.080**	−0.191**	−0.068**	−0.141**	−0.157**	−0.122**	1

For correlations of numeric variables Pearsons's r is used (marked grey), for nominal or ordinal variables Spearman's rho.

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

TABLE 3 | Determinants of anxiety and stress resulting from COVID-19 (Linear regression).

	Model 1				Model 4				Model 5			
	B	Sig	SE	ß	*B*	Sig	SE	ß	*B*	Sig	SE	ß
(Constante)	3.912	***	0.048		4.559	***	0.057		4.569	***	0.056	
Gender (male = ref)												
Female	0.114	***	0.013	0.062	0.132	***	0.013	0.072	0.130	***	0.012	0.071
Age (in years)	−0.015	***	0.000	−0.271	−0.014	***	0.000	−0.253	−0.014	***	0.000	−0.254
Migration background (non = ref)												
Western	0.031		0.020	0.010	0.021		0.020	0.007	0.025		0.020	0.008
Non-Western	−0.059		0.036	−0.011	−0.079	*	0.036	−0.015	−0.073	*	0.036	−0.014
Living situation (single = ref)												
More persons household	0.013		0.016	0.006	0.015		0.015	0.007				
Health [(very) bad = ref]												
Moderate	−0.106	**	0.035	−0.044	−0.071	*	0.034	−0.030	−0.076	*	0.034	−0.032
Good	−0.440	***	0.033	−0.241	−0.369	***	0.033	−0.202	−0.375	***	0.032	−0.205
Very good	−0.758	***	0.035	−0.332	−0.667	***	0.035	−0.292	−0.676	***	0.035	−0.295
Education (lower = ref)												
Secondary	−0.044		0.023	−0.023	−0.026		0.023	−0.013	−0.029		0.022	−0.015
Higher	0.010		0.022	0.005	0.052	*	0.022	0.028	0.050	*	0.022	0.027
Income (minimum = ref)												
Minimum to modal	−0.057	*	0.026	−0.024	−0.038		0.026	−0.016	−0.040		0.025	−0.017
Modal to 2x modal	−0.119	***	0.024	−0.061	−0.089	***	0.024	−0.046	−0.083	***	0.024	−0.043
2x modal to 3x modal	−0.147	***	0.025	−0.072	−0.103	***	0.025	−0.051	−0.097	***	0.024	−0.047
More than 3x modal	−0.167	***	0.027	−0.071	−0.111	***	0.027	−0.048	−0.104	***	0.026	−0.044
Social contacts (0–5)					−0.006		0.006	−0.007				
Support received (1–4)					−0.120	***	0.014	−0.062	−0.124	***	0.013	−0.064
Trust in people in general (1–5)					−0.066	***	0.008	−0.062	−0.066	***	0.008	−0.062
Trust in institutions (1–5)					−0.085	***	0.007	−0.085	−0.085	***	0.007	−0.084
	$F = 191.26***$; $R^2 = 0.121$; adj. $R^2 = 0.121$				$F = 176.42***$; $R^2 = 0.141$; adj. $R^2 = 0.140$				$F = 203.04***$; $R^2 = 0.141$; adj. $R^2 = 0.141$			

B, unstandardized regression coefficient; SE, standard error of the regression coefficient; ß, standardized regression coefficient; R^2, explained variance; adj. R^2, adjusted explained variance.

[*]*$p < 0.05$.*
[**]*$p < 0.01$.*
[***]*$p < 0.001$ (two tailed).*

(with many flexible jobs and fewer possibilities for home work) and, therefore, experience less anxiety and stress. To summarise, hypothesis 1, which expected respondents with lower social status (in terms of education and income) to experience more anxiety and stress as a result of the pandemic, is confirmed for lower income groups, but not for people with a lower level of education.

Migration Background and Mental Health Consequences of COVID-19

We expected people with a non-Western migration background to experience more anxiety and stress as a result of the COVID-19 crisis than native Dutch respondents due to the fact that the incidence of infections among non-Western migrants is relatively higher. Model 1 (**Table 3**) does not confirm the expected difference. Initial bivariate analyses (not shown) established that both Western and non-Western migrants experience more anxiety and stress caused by the COVID-19 pandemic than respondents without a migration background. However, these differences disappeared after including other personal characteristics, especially education and income, in the multivariate analysis[4]. This leads to a nuanced answer to hypothesis 2. Initial differences between respondents with and without a migration background disappear when the analysis takes account of differences in social status. It is, therefore, more about people's socio-economic position than about ethnic or cultural characteristics.

What initially surprised us was that young people experience higher levels of anxiety and stress due to the COVID-19 crisis than older people, while the latter group is exposed to considerably greater health risks (see also Nearchou et al., 2020). There are various reasons why COVID-19 and the restrictions to stem its spread have major mental health consequences precisely among young people. Young people want to discover the world, meet new people, and strike up relationships. The loss of social contacts is more consequential for them than it is for older people. In addition, young people may be more susceptible to stress and depression than older age groups (Hammen, 2015). Finally, many young people may also be depressed by have low jobs, income security and mounting student debt.

Social Capital and Mental Health Consequences

Our second research question is whether having social capital protects against the adverse mental health consequences of the COVID-19 pandemic. In other words: do respondents with higher scores on the four social capital indicators experience less pandemic-related anxiety and stress? And if so, which groups display these protective effects of social capital? To examine these issues, we conducted additional linear regression analyses. First, we examined the correlation between relevant personal features and the four social capital indicators (**Table A1**, Model 2a to

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[4]Weighting may also be a factor here. Bivariate analyses were conducted on the weighted dataset for this study, while the multivariate regression analyses were conducted on the unweighted dataset. But also in the unweighted dataset, it still turns out that non-Western migrants experience significantly more ($p < 0.05$) stress than native Dutch people.

2d, see **Appendix 1**) and the association between these social capital indicators and the experienced levels of anxiety and stress (**Table A1**, Model 3, see **Appendix 1**). Finally we included all variables into the regression model (Model 4 and Model 5 of **Table 3**).

Model 2a to 2d (**Table A1**, **Appendix 1**) show whether the various groups among our respondents returned different scores on the various social capital indicators. Women generally score higher on most social capital indicators than men. Only in terms of institutional trust, there is no difference between the sexes. With the same three indicators, we found a positive correlation with age: the older the respondents, the higher the score. Young respondents only score higher than older people on institutional trust. When it comes to respondents' migration background, we see that respondents with a non-Western migration background return significantly lower scores on social contacts and general trust than the native-Dutch reference group. Respondents with a Western migration background also return lower scores on both general and institutional trust. Other than that, however, there is little difference between respondents with and without a migration background in their scores on the social capital indicators.

What does matter, however, is the respondents' perceived health and social position. Respondents who perceive their health as (very) good return higher scores on all four social capital indicators than those with (very) poor self-rated health, which confirms that perceived health and social capital are clearly related. In terms of educational attainment, we see that respondents with the highest level of education in particular return significantly higher scores on nearly all the social capital indicators than the reference group of lower-educated people. Only on received support, there is less difference between respondents with high and low educational levels. Those with a medium level of education deviate less from lower educated respondents in terms of social capital. Institutional trust is the only factor on which respondents with a medium level of education return significantly higher scores than those with a low level of education. When it comes to income, we see that all other income groups return significantly higher scores on the four social capital indicators than the reference group of respondents who live on minimum wage. In general, there seems to be a linear positive correlation between income and social capital: the higher someone's income, the more social capital they have.

In Model 3 (**Table A1**, **Appendix 1**), we analyse the association between the various social capital indicators and the level of anxiety and stress experienced due to COVID-19. The results are fairly straightforward. All four indicators (social contacts, support received, general trust, and institutional trust) have a statistically significant negative correlation with anxiety and trust. The greater the respondents' social capital, the less anxiety and stress they experience. Only on the first indicator (social contacts), this correlation is considerably weaker. Apparently, merely having contacts with friends and family carries less weight when it comes to the mental health consequences of the COVID-19 crisis.

Finally, the full model with all variables is presented in Model 4 and Model 5 (**Table 3**). Model 5 contains only the significant

correlations from Model 4 to create a more robust model. In our discussion of the results, we will focus only on Model 5. Firstly, we see that three of the four social capital indicators still have the expected negative impact on the level of anxiety and stress experienced as a result of the COVID-19 pandemic. People who receive support (or expect to) and have greater general and institutional trust experience relatively lower levels of anxiety and stress. These aspects of social capital offer some protection against the adverse mental health consequences of the COVID-19 crisis, although we should mention that the extra explained variance after including social capital into the model is rather limited (compare the r^2 of Model 1 with Model 4 and 5). Only the last social capital indicator, i.e., the number of contacts with family and friends as such, is not significantly correlated with the experienced level of pandemic-related anxiety and stress, which is why it is not included in Model 5. Our outcomes differ from those of Makridis and Wu (2021) who found that only the trust dimension of social capital protects against the spread of the virus, rather than the social network dimension. These findings partly confirm both hypothesis 3 (only for received or expected informal support, not for social contacts as such) and hypothesis 4 of this study.

Secondly, we examine the mutual correlation between all three groups of factors in the analysis: does adding the factor of social capital to the analysis give us a better understanding of *why* some groups experience more anxiety and stress than others? Do young people, for example, experience more anxiety and stress partly because they have less protective social capital? When we compare the extent of the effects in Model 1 and Model 5 (**Table 3**), several salient facts emerge. Firstly, the gap between men and women in terms of experienced level of anxiety and stress widens slightly. Women not only experience more anxiety and stress than men, but the difference becomes greater when we realise that women generally have more (protective!) social capital. In other words: if women did not have more social capital than men, the difference in anxiety and stress compared to the men would be even greater.

The opposite is true for the difference between young people and older people, low and higher income groups, and between respondents with excellent and poor perceived health in both models. The general picture is that the differences between these categories shrink when we add the protective effect of social capital to the analysis, in Model 5. Young people, for example, experience more anxiety and stress as a result of the pandemic than older respondents, partly because they have less protective social capital than older people. We see the same when we compare the results for low-income and high-income respondents or respondents with poor or excellent perceived health. Low-income respondents and respondents with (very) poor perceived health experience more anxiety and stress than those with a higher income and those with better perceived health, partly because the two former categories of respondents have less protective social capital than the latter two. This was also the picture that Model 2 of **Table A1** (see **Appendix 1**) showed.

We can conclude that the differences between men and women, between older and younger people, between people who are in good health and people whose health is not so good, and

between high-income people and low-income people are partly the result of the fact that the former of each of these categories has more social capital that offers some level of protection against the adverse mental health consequences of the COVID-19 pandemic. To corroborate this finding, we finally examined whether the protective effect of social capital might work differently for the youngest age group (18–34 year olds) compared to older age groups. This turns out not to be the case (data not included in the table). The difference is that young people return lower scores on the various social capital indicators than older age groups.

CONCLUSION AND DISCUSSION

In this article, we analysed the impact of the COVID-19 pandemic on the mental wellbeing of people in the Netherlands based on a large-scale and representative sample of the Dutch population. The data showed that the mental health consequences of the pandemic were considerable, especially in November 2020, on the eve of the predicted second wave of the pandemic. In November 2020, nearly 40% of respondents said they "feel they have nothing to look forward to". A large number of respondents reported feeling more anxious or stressed since the COVID-19 pandemic broke out.

We found that the mental health consequences of the COVID-19 pandemic are not spread evenly over all groups of the Dutch population. Women, younger people, people on a minimum wage, and those in not-so-good or poor health experience significantly higher levels of anxiety and stress as a result of the COVID-19 crisis. Among men, older people, high-income groups, and people in good to excellent health, the mental health consequences of the pandemic are significantly less. However, our analysis did not show a statistically significant difference in mental health impact between people with and without a migration background. Initial differences in the extent to which respondents with and without a migration background experience anxiety and stress caused by the pandemic disappeared after controlling for differences in social status. When it comes to social status, we saw that low-income people experienced mental health consequences as a result of the COVID-19 pandemic more often than people from higher income groups, but we did not see this same difference when comparing people with lower and higher educational attainment. Financial uncertainty apparently has a greater effect on feelings of anxiety and stress caused by the COVID-19 pandemic than educational background does. In Bourdieu's terms, it is more about economic than cultural capital.

The central question of this study was, however, whether having social capital (defined both as being part of solidarity networks and as having trust in institutions and in other people) offers some protection against the adverse mental health impact of the pandemic. As expected, three of four social capital indicators used in the study, i.e., support received or expected, trust in institutions, and general trust, have a significant negative impact on experienced levels of anxiety and stress: the more support and trust, the lower the level of anxiety and stress. When people receive or expect support from others and/or when they

have positive expectations of the trustworthiness of others and institutions such as governments, they experience less pandemic-related stress and anxiety. Only social contacts as such appeared not to correlate with less anxiety and stress. An explanation may be that having contact with people who are stressed themselves will also result in more anxiety and stress.

The scientific contribution of this study concerns on the one hand our finding that, in contrast to Ding et al. (2020) and Makridis and Wu (2021), both the network dimension and the trust dimension have an impact on perceived levels of anxiety and stress, and on the other hand that social capital has a different effect for different groups. If we take differences in the extent of social capital into account, the initial gap between men and women in terms of the level of anxiety and stress they experience becomes slightly larger. In other words: if women did not have more social capital than men, which they generally do, the difference in anxiety and stress compared to men would be even greater. The reverse applies when considering the differences in the level of anxiety and stress experienced within age, income, and health groups. If we include differences in social capital in the analysis, then the differences in the results within these groups become smaller. We can conclude that the differences between men and women, between older and younger people, between people who are in good health and those in poor health, and between high-income and low-income groups are *partly* the result of the fact that some groups have more social capital, which in one way or another offers protection against the adverse mental health consequences of the COVID-19 pandemic.

We are aware of the limitations of the study. Firstly, the cross-sectional study design limits the extent to which cause-effect relationships can be inferred from the findings. We analyse the relationships between social capital and expressed feelings of anxiety and stress, but we do not know the exact causal relationships. However, our research strategy is theoretically grounded in the scientific literature and we discuss our findings under the assumption that these are the correct causal directions. Secondly, our sociological approach has its limits. There is a long tradition of explaining (mental) health differences through differences in economic (income) or cultural capital (education) of social groups. More recently, the significance of social capital has been added to this literature, although including social capital in the models used in this study added only limited extra explained variance. Hence, social capital has a small but meaningful effect on relieving anxiety and stress in this study. We believe it is important to include insights from behavioural sciences and psychology about coping styles, resilience and personality factors in future studies on mental wellbeing in times of a pandemic. Thirdly, additional longitudinal research is important to gain closer insight into changes to social capital and how such changes can affect mental wellbeing. For some groups, for example, the social restrictions of the COVID-19 crisis may lead to a strongly reduced living environment, fewer social contacts, and less social support. Institutional trust may also decrease further among certain groups, which add to feelings that they are not less supported by important institutions. This, again, may result in increased feeling of anxiety and stress.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the corresponding author.

ETHICS STATEMENT

The survey data for this research were collected by Kieskompas ("Election compass"), a Dutch political research organization that coordinates large research panels. Kieskompas asked informed consent from its panel members. The study is approved by the FSW Research Ethics Review Committee (RERC) of the Free University (VU), Amsterdam, The Netherlands.

AUTHOR CONTRIBUTIONS

ES wrote the initial text. JdB was responsible for all statistical analyses. GE and MvB finalized the article. All authors contributed to the article and approved the submitted version.

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REFERENCES

Adeola, F., and Picou, S. (2014). Social capital and the mental health impacts of hurricane katrina: assessing long-term patterns of psychosocial distress. *Int. J. Mass Emerg. Disast.* 32, 121–156.

Barrios, J., Benmelech, E., Hochberg, Y., Sapienza, P., and Zingales, L. (2020). Civic capital and social distancing during the COVID-19 pandemic. *J. Pub. Econ.* 193:1–11. doi: 10.1016/j.jpubeco.2020.104310

Beaujean, A. A. (2014). *Latent Variable Modeling Using R: A Step-by-Step Guide.* New York, NY: Routledge.

Borgonovi, F., and Andrieu, E. (2020). Bowling together by bowling alone: social capital and Covid-19. *Soc. Sci. Med.* 265, 113501. doi: 10.1016/j.socscimed.2020.113501

Borgonovi, F., Andrieu, E., and Subramanian, S. V. (2021). The evolution of the association between community level social capital and COVID-19 deaths and hospitalizations in the United States. *Soc. Sci. Med.* 278, 113948. doi: 10.1016/j.socscimed.2021.113948

Bourdieu, P. (1986). "The forms of capital," in: *Handbook of Theory and Research for the Sociology of Education*, eds. J. G. Richardson (New York, NY: Greenwood Press), 241–258.

Caring Universities (2020). *De geestelijke gezondheid van studenten tijdens de COVID-19 pandemie. De eerste voorlopige data uit het Caring Universities consortium.* Available online at: https://caring-universities.com/wp-content/uploads/2020/11/De-geestelijke-gezondheid-van-studenten-tijdens-de-COVID-19-pandemie-rapportage-van-Caring-Universities-19082020-versie-2-9112020.pdf (accessed March 10, 2022).

Chan, S. M., and Chung, G. K. K., Chan, Y. H., Woo, J., Yeoh, E. K., Chung, R. Y.-N., et al. (2021). The mediating role of individual-level social capital among worries, mental health and subjective well-being among adults in Hong Kong during the COVID-19 pandemic. *Curr. Psychol.* 1–11. doi: 10.1007/s12144-021-02316-z

Cockerman, W. (2021). *The Social Causes of Health and Disease, Third Edn.* Cambridge: Polity Press.

Coleman, J. (1990). *Foundations of Social Theory*. Cambridge: Harvard University Press.

Coyer, l, Wynberg, E., Buster, M., Wijffels, C., and Schreijer, A. (2021). Hospitalisation rates differed by city district and ethnicity during the first wave of COVID-19 in Amsterdam, The Netherlands. *BMC Pub. Health.* 21:1721. doi: 10.1186/s12889-021-11782-w

De Beurs, E., Van Dyck, R., Marquenie, L. A., Lange, A., and Blonk, R. W. (2001). De DASS: een vragenlijst voor het meten van depressie, angst en stress. *Gedragstherapie* 34, 35–54.

De Silva, M., McKenzie, K., Harpham, T., and Huttly, S. (2005). Social capital and mental illness: a systematic review. *J. Epidemiol. Commu. Health* 59, 619–627. doi: 10.1136/jech.2004.029678

De Visser, M., Kunst, A., Stoeldraijer, L., and Harmsen, C. (2021). *Sociaal-demografische verschillen in COVID-19-sterfte tijdens de eerste golf van de corona-epidemie.* Available online at: https://www.cbs.nl/nl-nl/longread/ statistische-trends/2021/sociaal-demografische-verschillen-in-covid-19-sterfte-tijdens-de-eerste-golf-van-de-corona-epidemie#:~:text=De%20totale %20sterfte%20aan%20COVID,voor%20overlijden%20aan%20COVID%2D19 (accessed March 10, 2022).

Ding, W., Levine, R., Lin, C., and Xie, W. (2020). Social distancing and social capital. Why U.S. counties respond differently to COVID-19. *Natl. Bureau Econ. Res.* doi: 10.3386/w27393

Engbersen, G., Van Bochove, M., De Boom, J., Burgers, J., Etienne, T., Krouwel, A., et al. (2020). *De verdeelde samenleving. De maatschappelijke Impact van COVID-19 in Amsterdam, Den Haag, Rotterdam en Nederland.* Rotterdam: KWP Leefbare Wijken/EUR. Available online at: https://www.impactcorona. nl/wp-content/uploads/2021/01/De-verdeelde-samenleving-210118.pdf (accessed March 10, 2022).

Ferwana, I., and Varshney, L. R. (2021). Social capital dimensions are differentially associated with COVID-19 vaccinations, masks, and physical distancing. *PLoS ONE* 16, e0260818. doi: 10.1371/journal.pone.0260818

Field, A. (2009). *Discovering Statistics Using SPSS, Third Edition*. Los Angeles, CA; London, etc.: Sage.

Fujiwara, T., and Kawachi, I. (2008). Social Capital and Health. *Am. J. Prevent. Med.* 35, 139–144. doi: 10.1016/j.amepre.2008.04.015

Hammen, C. L. (2015). Stress and depression: old questions, new approaches. *Curr. Opin. Psychol.* 4, 80–85. doi: 10.1016/j.copsyc.2014.12.024

Hawkins, R. B., Charles, E. J., and Mehaffey, J. (2020). Socio-economic status and COVID-19–related cases and fatalities. *Public Health* 189, 129–134. doi: 10.1016/j.puhe.2020.09.016

Holmes, E., O'Connor, R., and Perry, V. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Lancet Psychiatry* 7, 547–560. doi: 10.1016/S2215-0366(20) 30168-1

Jace, C., and Makridis, C. (2021). Does marriage protect mental health? Evidence from the COVID-19 pandemic. *Soc. Sci. Quart.* 102:2499–2515. doi: 10.1111/ssqu.13063

Kawachi, I., and Berkman, L. (2001). Social ties and mental health. *J. Urban Health NY Acad. Med.* 78, 458–467. doi: 10.1093/jurban/78.3.458

Kim, H. H. S., and Laurence, J. (2020). COVID-19 restrictions and mental distress among American adults: evidence from Corona Impact Survey (W1 and W2). *J. Public Health* 42, 704–711. doi: 10.1093/pubmed/ fdaa148

Klinenberg, E. (2002). *Heat Wave. A Social Autopsy of a Disaster*. Chicago: University of Chicago Press.

Lindström, M. (2008). Social capital, anticipated ethnic discrimination and self-reported psychological health: a population - based study. *Soc. Sci. Med.* 66, 1–13. doi: 10.1016/j.socscimed.2007.07.023

Mackenbach, J. (2012). The persistence of health inequalities in modern welfare states: the explanation of a paradox. *Soc. Sci. Med.* 75, 761–769. doi: 10.1016/j.socscimed.2012.02.031

Mackenbach, J., Kulkhánova, I., Artnik, B., Bopp, M., Borrell, C., Clemens, T., et al. (2016). Changes in mortality inequalities over two decades: register based studies of European countries. *Br. Med. J.* 353, i1732. doi: 10.1136/bmj. i1732

Makridis, C. A., and Wu, C. (2021), How social capital helps communities weather the COVID-19 pandemic. *PLoS ONE.* 16, e0258021. doi: 10.1371/journal.pone.0258021

Millet, G., Jones, A. T., Benkeser, D., Baral, S., Mercer, L., Beyrer, C., et al. (2020). Assessing differential impacts of COVID-19 on black communities. *Ann. Epidemiol.* 47, 37–44. doi: 10.1016/j.annepidem.2020.05.003

Nearchou, F., Flinn, C., Niland, R., Subramaniam, S., and Hennessy, E. (2020). Exploring the impact of COViD-19 on mental health outcomes in children and adolescents: a systematic review. *Int. J.0 Environ. Res. Public Health* 17, 1–19. doi: 10.3390/ijerph17228479

Nieminen, T., Prättälä, R., Martelin, T., Härkänen, T., Hyyppä, M. T., Alanen, E. et al. (2013). Social capital, health behaviours and health: a population-based associational study. *BMC Public Health* 13, 613. doi: 10.1186/1471-2458-13-613

Paolini, D., Maricchiolo, F., Pacilli, M. G., and Pagliaro, S. (2020). COVID-19 lockdown in Italy: The role of social identification and social and political trust on well-being and distress. *Curr. Psychol.* 1–8. doi: 10.1007/s12144-020-01141-0

Patel, J. A., Nielsen, F., Badiani, A., Assi, S., and Unadkat, V. A., Patel, B., et al. (2020). Poverty, inequality and COVID-19: the forgotten vulnerable. *Public Health* 183, 110–111. doi: 10.1016/j.puhe.2020.05.006

Pierce, M., Hope, H., Ford, T., Hatch, S., Hotopf, M., John, A., et al. (2020). Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatry* 7, 883–892. doi: 10.1016/S2215-0366(20)30308-4

Portela, M., Neira, I., and Salinas-Jiménez, M. (2013). Social capital and subjective wellbeing in europe: a new approach on social capital. *Soc. Indic. Res.* 114, 493–511. doi: 10.1007/s11205-012-0158-x

Portes, A. (1998). Social capital. Its origins and applications in modern sociology. *Ann. Rev. Sociol.* 24, 1–24 doi: 10.1146/annurev.soc.24.1.1

Public Health England (2020). *Beyond the Data: Understanding the Impact of COVID-19 on BAME Groups.* London, PHE. Available online at: https://assets. publishing.service.gov.uk/government/uploads/system/uploads/attachment_ data/file/892376/COVID_stakeholder_engagement_synthesis_beyond_the_ data.pdf (accessed March 10, 2022).

Putnam, R. D. (2000). *Bowling Alone. The Collapse and Revival of American Community.* New York, NY: Simon and Schuster.

Sønderskov, K., Thisted Dinesen, P., Santini, Z., and Dinesen Østergaard, S. (2020). The depressive state of Denmark during the COVID-19 pandemic. *Acta Neuropsychiatr.* 32, 226–228. doi: 10.1017/neu.2020.15

Song, L., Son, J., and Lin, N. (2016). "Social capital and health," in *The New Blackwell Companion to Medical Sociology*, editors. W. Cockburn (Oxford: Whiley-Blackwell), 184–210.

Stronks, K., Sekercan, A., Snijder, M., Lok, A., and Verhoeff, A., Kunst, A. et al. (2020). Higher prevalence of depressed mood in immigrants' offspring reflects their social conditions in the host country: the HELIUS study. *PLoS ONE* 15, e0234006. doi: 10.1371/journal.pone.0234006

Tierney, K. (2019). *Disasters: A Sociological Approach*. Cambridge: Polity Press.

Van der Roest, H., Prins, M., Van der Velden, C., Steinmetz, S., Stolte, E., and De Vries, D. (2020). The impact of COVID-19. Measures on well-being of older long-term care facility residents in the Netherlands. *J. Am. Med. Direct. Assoc.* 21, 1569–1570. doi: 10.1016/j.jamda.2020.09.007

Van der Velden, P., Hyland, P., Contino, C., von Gaudecker, H.-M., Muffels, R., and Das, M. (2021). Anxiety and depression symptoms, the recovery from symptoms, and loneliness before and after the COVID-19 outbreak among the general population: findings from a Dutch population based longitudinal study. *PLoS ONE* 16, e0245057. doi: 10.1371/journal.pone.0245057

Van Tilburg, T., Steinmetz, S., Stolte, E., Van der Roest, H., and, De Vries, D. H. (2021). Loneliness and mental health during the COVID-19 pandemic: a study among Dutch older adults. *J. Gerontol. B* 76, e249–e255. doi: 10.1093/geronb/gbaa111

Varshney, L. R., and Socher, R. (2020). COVID-19 growth rate decreases with social capital. *medRxiv.* 1–11. doi: 10.1101/2020.04.23.20077321

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C., et al. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the

general population in China. *Int. J. Environ. Res. Public Health* 17, E1729. doi: 10.3390/ijerph17051729

Wang, Y., Ariyo, T., Liu, H., and Ma, C. (2021). Does psychosocial support buffer the effect of COVID-19 related stressors on mental health among Chinese during quarantine? *Curr. Psychol.* 1–11. doi: 10.1007/s12144-021-01663-1

Xiong, J., Lipsitz, O., Nasri, F., Lui, L., and Gill, H., Phan, et al. (2020). Impact of COVID-19 pandemic on mental health in the general population: a systematic review. *J. Affect. Disord.* 277, 55–64. doi: 10.1016/j.jad.2020.08.001

Yip, W., Subramanian, S., Mitchell, A., Lee, D., Wang, J., and Kawachi, I. (2007). Does social capital enhance health and well-being? Evidence from rural China. *Soc. Sci. Med.* 64, 35–49. doi: 10.1016/j.socscimed.2006.08.027

Zhang, Y., and Ma, Z. F. (2020). Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning Province, China: a cross-sectional study. *Int. J. Environ. Res. Public Health* 17, 2381. doi: 10.3390/ijerph17072381

APPENDIX 1

TABLE A1 | Determinants of social contacts, support received, trust in people in general, trust in institutions and anxiety and stress resulting from COVID-19 (Linear regression).

	Model 2a contact			Model 2b support received			Model 2c trust in people			Model 2d institutional trust			Model 3 anxiety and stress		
	B	SE B	ß	B	SE B	ß	B	SE B	ß	B	SE B	ß	B	SE B	ß
(Constante)	1,987 ***	0,056		1,922 ***	0,026		2,300 ***	0,046		2,955 ***	0,049				
Gender (male = ref)															
Female	0,163 ***	0,015	0,080	0,062 ***	0,007	0,066	0,129 ***	0,012	0,075	0,010	0,013	0,006			
Age (in years)	0,005 ***	0,000	0,087	0,005 ***	0,000	0,171	0,008 ***	0,000	0,146	−0,001 **	0,000	−0,026			
Migration background (non = ref)															
Western	0,020	0,024	0,006	−0,011	0,011	−0,007	−0,052 **	0,019	−0,019	−0,057 **	0,021	−0,019			
Non-Western	−0,130 **	0,043	−0,022	−0,019	0,020	−0,007	−0,162 ***	0,035	−0,032	−0,070	0,037	−0,013			
Living situation (single = ref)															
More persons household	0,076 ***	0,018	0,033	0,010	0,008	0,010	0,058 ***	0,015	0,030	−0,040 *	0,016	−0,020			
Health ((very) bad = ref)															
Moderate	0,151 ***	0,041	0,057	0,024	0,019	0,019	0,152 ***	0,034	0,068	0,243 ***	0,036	0,103			
Good	0,246 ***	0,038	0,121	0,075 ***	0,018	0,080	0,371 ***	0,032	0,216	0,425 ***	0,034	0,235			
Very good	0,322 ***	0,041	0,127	0,126 ***	0,019	0,108	0,468 ***	0,034	0,218	0,500 ***	0,036	0,221			
Education (lower = ref)															
Secondary	0,049	0,027	0,022	0,030 *	0,012	0,030	0,055 *	0,022	0,030	0,122 ***	0,023	0,063			
Higher	0,118 ***	0,026	0,058	0,025 *	0,012	0,027	0,186 ***	0,022	0,108	0,304 ***	0,023	0,168			
Income (Minimum = ref)															
Minimum to modal	0,147 ***	0,031	0,055	0,050 ***	0,014	0,041	0,079 **	0,025	0,035	0,079 **	0,027	0,033			
Modal to 2x modal	0,148 ***	0,028	0,068	0,064 ***	0,013	0,065	0,121 ***	0,023	0,066	0,163 ***	0,025	0,085			
2x modal to 3x modal	0,209 ***	0,030	0,092	0,084 ***	0,014	0,080	0,196 ***	0,025	0,103	0,229 ***	0,026	0,114			
More than 3x modal	0,230 ***	0,032	0,088	0,082 ***	0,015	0,068	0,259 ***	0,026	0,118	0,320 ***	0,028	0,138			
Social contacts (0-5)													−0,014 *	0,006	−0,016
Support received (1-4)													−0,197 ***	0,014	−0,102
Trust in people in general (1-5)													−0,115 ***	0,008	−0,108
Trust in institutions (1-5)													−0,079 ***	0,007	−0,079
	F = 36,97***; R^2 = 0.026; adj. R^2 = 0.025			F = 52,27***; R^2 = 0.036; adj. R^2 = 0.036			F = 96,52***; R^2 = 0.065; adj. R^2 = 0.065			F = 87,29***; R^2 = 0.059; adj. R^2 = 0.059			F = 235,69***; R^2 = 0.042; adj. R^2 = 0.042		

*B, unstandardized regression coefficient; SE B, standard error of the regression coefficient; ß, standardized regression coefficient; R^2, explained variance; adj. R^2, adjusted explained variance; * p < 0.05, ** p < 0.01, *** p < 0.001 (two tailed).*

APPENDIX 2

TABLE A2 | Fit-indices of the confirmatory factor analyses: three sub scales separately and one higher-order model.

Model specification	X^2	df	CFI	SRMR	RMSEA
Social contacts 4 items	2389***	2	0.875	0.072	0.22
Social support 4 items	756.45***	2	0.944	0.035	0.124
Institutional trust 4 items	1619.39***	2	0.893	0.045	0.18
Social capital (Second-order-model for the three sub scales)	5785.85***	51	0.878	0.041	0.069

A non-significant X^2, CFI> 0.90, SRMR< 0.08, and RMSEA< 0.06 indicate a good model fit (Beaujean, 2014).

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Sociohistorical Analysis of Normative Standards of Masculinity in the Pandemic of COVID-19: Impacts on Men's Health/Mental Health

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Objective: This study aims to analyze sociohistorically how the normative patterns of hegemonic masculinity produced impacts on men's health/mental health in the context of the COVID-19 pandemic.

Methods: A qualitative study from a socio-historical perspective was conducted with 50 men based on an online survey. A semistructured form was applied. The data were analyzed by the Collective Subject Discourse method, interpreted in the light of the context of epidemic disease and hegemonic masculinity.

Results: The experience of the pandemic exposed the normative patterns of masculinities from the consummation of acts representative of the pandemic context, which incited men to deny the existence of COVID-19 disease and to delay the understanding and adoption of measures to protect and control COVID-19. As a repercussion, men presented conflicts in the regulation of emotions; presented emotional suppression; were more reactive; felt threatened regarding the loss of the role of family provider, virility; and revealed a sense of invulnerability, added to the weakening of self-care.

Conclusion: The discourse revealed that the men's behaviors are consistent with the characteristics of hegemonic masculinity, but express signs of recognition that this behavior causes harm to themselves and their health.

Keywords: pandemics, COVID-19, masculinities, men's health, mental health care, mental health

INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic has been configured as a complex, multifaceted phenomenon of global magnitude (Guan et al., 2020). It currently represents the most complex health challenge of the century, causing repercussions for the living condition and health situation of populations, especially those in a greater context of vulnerability (Freitas et al., 2020; Nicola et al., 2020). It has been observed that men have presented the highest rates of contamination by the new coronavirus and have been more affected by COVID-19, even developing the most severe form of the disease, such as severe acute respiratory syndrome, as it occurs in Brazil (Coronavirus Epidemiological Bulletin 36, 2020).

In a sociohistorical way, it is possible to locate the phenomena characteristic of the pandemic that explain various repercussions, which can be analyzed from the identification of acts that compose a play and that can be framed as a picture (Rosenberg, C., 2010; Rosenberg and Mantovani, 2016). These sociohistorical phenomena are structured in a conjuncture way and influence the social fabric, like the social constructions of masculinities (Rosenberg, C. E., 2010; Connell and Messerschmidt, 2013). This theory constitutes a relevant milestone for the deepening of qualitative studies, in overcoming reductionisms about empiric and idealistic conceptions, in understanding the individuality of the subject, its relationship with the external—social and with historical processes, in this particular case, the pandemic of COVID-19.

The definition of normative patterns of masculinities constitutes the contours of hegemonic masculinity models, which use rigid attributes of definition of the human being in society, namely, heterosexuality, whiteness, wealth, dominance, power, subordination, and others that are directed to the maintenance of man in centrality and not in the periphery (Connell, 2005, 2014; Connell and Messerschmidt, 2005, 2013). However, tensions in this way have been provoked over the years by denouncing the potential for toxicity of this model for men themselves, for women and children, and for society—social organization (Connell, 2014).

Masculine and masculinity are directed to an empirical meaning, permeated by labels, objects, events, and specific qualities, in which, depending on culture, they are perceived and associated with men. It is important to add that the adjectives and nouns used to define masculinities are also used as a relevant theoretical construction of analysis of the social scene and fundamental to the self-concept of individuals (Spence, 1984). It is therefore indispensable to understand complex social phenomena, such as a pandemic, and other contexts that surround it, such as paternities, homosexuality, gender stereotypes, violence and male domination, corporeity, well-being, gender and health relations, already identified since the 1980s (Nolasco, 1981; Taylo, 1983; Bourdieu, 1999; Courtenay, 2000; Luck et al., 2000; Keijzer, 2003).

Hegemonic masculinity is a unique, essentialist, rigid model based on stereotyped and solidified gender characteristics and typologies. This model implies standardization, exclusion, and oppression of other models of non-dominant masculinity, which do not privilege heterosexuality, whiteness, eurocentrism, patriarchy, power, and the dominance of social class (Connell and Messerschmidt, 2013).

In this sense, it is justified to carry out studies that are dedicated to analyzing hegemonic masculinities and other emerging models of masculinities and the context of health, in order to locate tensions and identify flexibilities and discursive reformulations, transformations, and masculine movements toward the mobilization of masculinities to the ideas that are multiple, multidirectional, non-hierarchical, and plural, as already identified in the pandemic context (Connell and Messerschmidt, 2013; Jewkes et al., 2015; Sousa et al., 2021).

With the advent of the COVID-19 pandemic, gender relational aspects have been raised in the literature (Schurz et al., 2019; Sousa A. F. L. et al., 2020), not only to present the markers of gender and gender differentiation (Jin et al., 2020; Purdie, 2020) implicated in the onset of epidemic disease but also to explain questions related to how normative patterns of hegemonic masculinity can impact men's life and health (Sanchez et al., 2020; Santos et al., 2020).

Given the health emergency of COVID-19, added to the need to deepen scientific knowledge about a new sociohistorical phenomenon, and the relevance in investigating the experiences of men living in Brazil regarding the health situation, the reasons for the development of this study are justified. Given the context presented, this study was guided by the research question: How did the normative standards of masculinity produce health/mental health impacts for men in the context of the COVID-19 pandemic? This article aims to analyze sociohistorically how the normative patterns of hegemonic masculinity produced impacts on men's health/mental health in the context of the COVID-19 pandemic.

METHODS

This study is a qualitative study from a sociohistorical perspective. In this approach, the understanding of phenomena occurs from their historical event, in which the particular is considered an instance of the social and collective totality (Freitas et al., 2015). The research was conducted remotely in all regions of the country (e.g., north, northeast, central, southeast, and south). The participants of the research were 50 men, who met the following inclusion criteria: being a man and having legal majority—age equal to or above 18 years, and men who were declared not to have a fixed residence in Brazil. Foreign men who were in transit on international trips, who did not reside in Brazil, and who did not experience the daily epidemic of COVID-19 in Brazil were excluded from the study.

For the selection and recruitment of participants, we adopted the snowball technique (Patias and Hohendorff, 2019) applied in spaces of virtual ambience in digital social networks such as Facebook, Instagram, and WhatsApp. The technique used was supervised by four researchers with expertise and training in the area. All performed professional teaching and research activities during the data collection period; two were male researchers and two were female researchers. They had a direct relationship with the object of the study but had no previous connection with the participants because it was an online survey. For sample seizure,

the theoretical saturation criterion of the data was considered (Nascimento et al., 2018).

The data collection occurred between April and June 2020 in a non-sequential and non-consecutive way between the states using Google Forms; they were validated internally by researchers and members of the research group and externally through a pilot test with 20 participants. A shape and terminologies were changed, without the need to adjust the content. The form consisted of two parts: Initially, closed questions, referring to sociodemographic characteristics, such as education, age, gender identity, sexual orientation, race/color, region of the country, type of housing, and with whom you live; employment, such as occupation and income; and health as a disease by COVID-19, access to the health system and professionals, and use of psychotropic drugs. Finally, to meet the objective of the study, the researchers proposed the following open questions: how did you experience the COVID-19 pandemic? As a man, have you noticed any impairments caused by the COVID-19 pandemic? These questions were selected from the previous analysis of the content on the theme published in the common media at the beginning of the pandemic and were derived from the discussions of the research group.

Participants' responses were organized and systematized after reading line by line, processed and coded in the NVIVO12 software, and submitted to analysis by the Collective Subject Discourse (CSD) method (Lefevre et al., 2009). The procedure took place under the execution and supervision of researchers with expertise and training in the area. The total data obtained from the 50 forms were analyzed by identifying co-occurrences, convergences, and complementarity in compliance with the criteria of theoretical saturation (Nascimento et al., 2018) and COREQ guidelines (Pinto et al., 2018). These synthesis discourses start from the individual fragments of each participant and express social thought, that is, the opinion of the collectivity of the group of men investigated with the inclusion of their impressions, observations, and analysis about the phenomenon, materialized in textual writing (Lefevre and Lefevre, 2014).

The interpretation was based on the theories of Charles (Rosenberg, 1989, 1992, 2003; Rosenberg and Goldem, 1997; Rosenberg, C. E., 2010) who propose that the context of epidemic disease is organized into four representative acts, namely, progressive revelation, randomness management, negotiation of the public response, and subsidence and retrospection.

This perspective considers that the pandemic event is explained to the metaphor of framing, in an exercise of buying epidemics to plays and their paintings and four acts, which compose it. Therefore, it was possible to describe previous pandemic events with detail to locate existing dramaturgic acts at each time of the epidemiological course of diseases and analyze the impacts generated on the daily life of societies (Motta, 2020; Oliveira, 2020; Ramos Filho, 2020).

Moreover, for interpretative analysis of masculinities, the findings are anchored in the reference of masculinities, in the theoretical perspective proposed by Connell, which analytically defines the concept of masculinities and advances in scientific knowledge by revealing the concept of hegemonic masculinity and subaltern and/or marginalized masculinities (Connell, 2005,

2014; Connell and Messerschmidt, 2013). In addition, we used other references from the scientific literature on masculinities, as a way to enhance the scope of the discussion on the subject.

This study met all national and international standards of ethics in research involving human beings. The anonymity of the participants was ensured, with the identification of the discourses by the initials CSD (Collective Subject Discourse). The Research Ethics Committee approved the project, under the opinion of number CAAE: 32889420.9.0000.5531 and n. 4.087.611. This study was extracted from a Ph.D. thesis in Nursing and Health, linked to the School of Nursing and Health of the Federal University of Bahia, Brazil.

RESULTS

The characterization of the participants was delineated because they mostly had male gender identity—cisgender, gay sexual orientation, in the age group between 18 and 67 years, with self-declared brown race/color, complete higher education level, and more prevalent residence in the Northeast region in Brazil. They claimed to reside in masonry houses, with more than five rooms, in the coexistence of non-elderly relatives. The approximate income declared was more than five minimum wages.

Most of the participants worked and had formal work links. They made priority use of the private health system. Most did not seek support or support to cope with the pandemic; however, those who sought it chose to turn to family and friends and security and public administration services, and, finally, health services.

They are concerned about the pandemic scenario, whose most significant reasons for concern were the economic situation, the distancing of people from social life, and the situation of their loving relationships. They reported performing strategies to cope with the pandemic, such as the practice of leisure activities, hand washing and hygiene, use of alcohol gel, body hygiene, and compliance with quarantine. They pointed out that the pandemic brought changes in daily habits such as healthcare and increased habits such as consumption of content in the media and abusive consumption of alcohol and other drugs. Among the participants investigated, 18 reported having been diagnosed with COVID-19.

The findings that make up the "synthesis discourses" are anchored in the hegemonic masculinity constructs, which permeate the construction of the masculine in the discourse of men who reside in Brazil and experience the context of the COVID-19 pandemic in their country.

SYNTHESIS DISCOURSES: DELETERIOUS IMPACTS OF HEGEMONIC MASCULINITY ON MEN'S HEALTH IN THE CONTEXT OF PANDEMIC

The categories emanating from the "Central Ideas" reflect the dimensions of the hegemonic patterns of masculinities tensioned with the advent of the pandemic and the deleterious

impacts on health. The discourses are didactically framed in the theoretical context of the disease through the presentation of the contexts experienced by men in each figurative act proposed in the theory. The Central Ideas presented in the categories of Synthesium Discourses express most of the public investigated; however, the findings revealed the collective representation of this group.

Central Idea 1: In COVID's Progressive Revelation: Conflicts in the Regulation of Emotions and Suppression of Feelings

This category presents the first act of presentation of the Covid-19 pandemic, which takes place with a progressive revelation, in the face of emotional deflagration:

[…] I have been feeling confused about my feelings most of the time since the pandemic arrived when it extended, I began to experience feelings of guilt, fear, anger and it affects me a lot and causes my mental health to be compromised. In the most of the time I keep these feelings and do not put out, hide and do not share with people and the fact that I spend more time indoors in isolation, in the absence of physical activities, without access to sunlight and contact with people and the fear of the consequences that may occur, has left me stressed and with mood swings. The fear was greater of being unemployed than of being infected and idleness has made me more reactive and introspective. I am a man and because of this, create barriers to expose emotions. Even before the pandemic I already had difficulty sharing feelings, anguish and fears and chose to keep myself quiet to comply with the "male" posture, rather than taking over and talking about my pains. Men tend to be more closed in relation to their feelings and being isolation at home increases the negative feelings, difficult to be dealt with. With the pandemic my communication became more limited I felt paralyzed. We are often taught how to be a provider, one who solves all situations all the time, but who does not learn to deal with his feelings. This situation is serious, because like me, other men may experience mental disorders such as depression, panic syndrome and anxiety disorders, which can lead to suicide (Men's CSD).

Central Idea 2: In COVID-19 Randomness Management: Family Provision Compromise

The fear of consequences to family provision was evidenced in the collective discourse of men in the context of the pandemic:

[…] I need to maintain the financial situation, take care of family members and other dependents, and this has generated frustration for not achieving these expectations. Many men like me are suffering in this pandemic because they are not being able to support the house, given that this is an assignment passed through several generations and involves a very great social pressure on the responsibilities to be fulfilled by me, and the male population. Now with the pandemic I feel that this pressure on having to provide for the family has become more aggravated, affecting my masculinity in various ways, whether it's the pressure suffered in the workplace, which was exclusively a male environment, or for the family, which charged for me to manage and perform (Men's CSD).

Central Idea 3: In COVID-19 Randomness Management: Threats to Virility

The fear of the emergence of threats to male virility was evidenced in the collective discourse of men in the context of the pandemic:

[…] I am not being able to leave the house to deposit my energies in what I was doing before the pandemic, I have now felt more limited, needy and affected by the fact that I am single, thirsty for sex and not being able to perform it, due to isolation. I imagine this situation should also be happening to women, but this is a more common issue among men (Men's CSD).

Central Idea 4: In Negotiation of the Public Response: Sense of Invulnerability and Adoption of Harmful Behaviors

The fragment discourse below revealed the exposure of the sense of male invulnerability in relation to the COVID-19. In addition, it expressed the adoption of harmful health behaviors adopted by men in the context of the pandemic:

[…] sometimes I don't feel so fragile and it's also because men feel powerful to the point where they think it's a cold, which ends up influencing me. I confess that we men tend to live with the risk, to be more exposed and to have the slightest habit of caring. The aggressiveness added to the gender culture built the idea of a strong man, has led not to fear the COVID-19. Because social interaction plays an extremely important role for men in normal days, with the arrival of the pandemic I began habits to provide distraction, such as excessive consumption of alcohol and pornography that lead me to sexual compulsion in an uncontrolled manner (Men's CSD).

Central Idea 5: In Subsidence and Retrospection: Neglect and (Dis)Healthcare

Attitudes and practices of neglect and (dis)healthcare are observed in the male discourse in the experience of the COVID-19 pandemic:

[…] I am not getting used to the isolation and the additional care and restrictions imposed by the authorities. I know it is necessary, but I confess that the situation generated by the pandemic has generated an internal conflict and a great deal of stress, causing me to tend to undue behavior. This is because men are more relapsing in relation to health care. I imagine that this situation should not apply to everyone, but it should reach a significant portion of men, who should not be adapting well to all this, after all the change of habits surprised me unexpectedly and many men just like me needed to change their lifestyle, such as work, physical exercise, leisure and sexual practices. Confess that I neglected the measures, failed to comply with the isolation, stopped wearing the mask and made several meetings with friends during quarantine. I also used medications on my own to prevent infection (Men's CSD).

DISCUSSION

The findings of this study can reveal the deleterious impacts caused to male health arising from the social construction of

hegemonic patterns of masculinities that were tensioned by the COVID-19 pandemic in its sociohistorical context.

The strengths of this study are concentrated in the fact that the findings provide insights into an unknown area and provide useful and relevant knowledge about how the pandemic context of COVID-19 has affected men's lives and health, making it possible to predict its impacts on families and communities, which goes beyond the dimension of transmission and involvement by COVID-19. In addition, it allows advancing the understanding of the social construction of masculinities from a sociohistorical perspective of pointing out the revealing milestones of each event, perception, and male social practice in this place.

The discursive findings are permeated by contradictions, which express the discomfort of men when confronted with tensions to hegemonic patterns of masculinity, driven by the cataclysmic effects caused by the pandemic (Guan et al., 2020; Sousa et al., 2022). The loss of structurally attributed social roles has had significant repercussions on daily routine, the maintenance of status, the performance of tasks and functions, and the way of being and being in the world during a pandemic (Freitas et al., 2020; Lancet, 2020; Nicola et al., 2020). Thus, when experiencing all these events, men have presented responses to coping. In the Brazilian sphere, for example, masculine positions expressed in a massive way, including the presidential representative, incited the adoption of a hegemonic posture of masculinity. The display of messages, such as it's just a little flu (Lancet, 2020) or we can't be a sissy's country, somehow may be influencing the way men are conceiving and dealing with the pandemic phenomenon.

When analyzing how Rosenberg, C. E. (2010) sought to historiographically investigate epidemic disease, it is possible to recognize that the pandemic is permeated by complex characteristic phenomena, which need to be valued, as a way of understanding to cope and know how to face its effects in a less harmful way. In this sense, the framing of the epidemic disease makes it possible to make one realize the denialists movements that surround the emergence of the new disease and that mark the configuration of the first act of the context, to the extent that initially men are confronted with epidemic phenomena, which are generators of conflicts of emotional character in the face of denial and the discomforts generated by masculinities. Thus, how people understand how to manage and establish coping strategies for the current and subsequent pandemic context.

The expanded knowledge about the social phenomenon of the pandemic from the sociohistorical perspective provides contributions to social education in health, the advancement of scientific knowledge about the multiple social dimensions mobilized from an epidemic event. In addition, it allows it to be understood with greater characterization, the way men interact with diseases causing epidemic outbreaks, which can expand the repertoire of social initiatives to be developed with populations.

Regarding the investigated public, it was observed that the existence of strict normative standards of hegemonic masculinity made it difficult to understand what health behaviors men should adopt during the pandemic and caused them to experience conflicts in emotional regulation, with negative reflexes that resulted in the suppression of feelings and disarrangements to mental health driven by emotional instability, in addition to conflicts of decision and male identity. In this direction, the literature has already reinforced the appearance of influences of masculinity norms in male mental health (Milner et al., 2019).

The emergence of significant damage to the mental health status of populations was predictable since the beginning of the epidemic in China (Qiu et al., 2020). Investigations have revealed an important worsening of mental health problems such as anxiety, depression, and increased stress levels and drew attention to the future impacts caused by posttraumatic stress; the emergence of severe mental illness may lead to the risk of suicide (Hiremath et al., 2020).

Consequences relevant to the health sector, such as those imposed by social isolation, were explained in the male discourse, which demonstrated impacts on mood, loss of human contact and the natural environment, increased stress, and the prevalence of Common Mental Disorders (Hiremath et al., 2020; Mamun and Griffiths, 2020; de Sousa et al., 2021; Teixeira et al., 2022).

The standardized practice of the sense of male invulnerability and the adoption of behaviors that are not healthy and even harmful to health were evidenced in the discourse of men, who did not consider themselves in a situation of fragility toward the new disease and now revealed attributes of hegemonic masculinity present in the attitudes and practices constructed and performed. In addition, we found in the discoveries male strategies to deal with the pandemic, which was directed to the harmful conduct of life habits, referring to abusive consumption of alcohol and other drugs, pornographic entertainment, and uncontrolled sexual compulsivity. In this sense, our study's findings, added to those already evidenced in the scientific literature, reinforce the urgent need to protect male mental health in all life cycles, avoid the harmful effects of machismo on men's lives, strengthen and create educational initiatives on gender and social construction of masculinities, and the relationship with healthcare with different male audiences, children and adolescents and young people. In addition, a review of public health policies was proposed, with the intention of expanding funding directed to mental health and psychosocial care of the population, as a way to reduce the impacts caused by posttraumatic stress caused by the COVID-19 pandemic.

Healthcare, such as disease prevention and control care, appeared to be discreet and timid for men. Having to adhere to the recommended health measures proved uncomfortable for the public investigated. Such attitudes and practices are close to other health contexts, which reveal that part of the male public neglects and resists the therapies instituted by professionals in health services (Barros et al., 2018; Separavich and Canesqui, 2020).

In the collective discourse of men, the perception of themselves in relation to the emergence of threats to male virility, due to the impairment of affective and sexual routines, impacted the performance of sexual practice, making it limited and causing discomfort, which may be related to the hegemonic pattern of sexual function and the hypersexualization of life (Connell, 2005, 2014; Connell and Messerschmidt, 2013). Thus, it is important to encourage male self-care, such as sexual

and reproductive health, self-management, and physical and mental health, as a way to promote post-pandemic resilience and contribute to the increase in health literacy levels, so that men can be more strengthened to deal with the impacts caused by the pandemic and to more effectively face other epidemic events that may arise.

With the threats generated to the symbolic place of family provision, control, and proficiency in public space, added to the fissures caused to economic and financial power, the male discourse revealed discontent with the prolonged permanence in the domestic environment by the performance of new tasks dictated as feminine and the fissures caused to the labor occupation previously exercised and modified by the pandemic. On the contrary, the tensions generated to masculinities may imply reflections and learning, as provided for in the fourth and final act representative of epidemic disease (Rosenberg, C. E., 2010; Oliveira A. C. D. et al., 2020). Therefore, attention is recommended directed to men and their families as an effective strategy to promote bonding, harmony, and the maintenance of family nuclei of support and affection.

In a society structured in patriarchy, colonialism, machismo, and capitalism, certainly the construction of men's masculinities will be based on references that lead them to imagine and perform attitudes and practices that refer to the ideals of strength, honor, invincibility, domination, control, leadership, and invulnerability, and, in addition, the voracious exercise of virility and sexualization (Connell, 2005, 2014; Connell and Messerschmidt, 2013).

Thus, when questioned or affected by an event or a situation, they can destabilize themselves and suffer more significantly with the possible changes and transformations in the hegemonic model in force. Therefore, they need to be better observed. It is based on these findings found in our study that male behavior in the face of complex social scenarios such as a pandemic can be better understood, enabling the broadening of the therapeutic repertoire of health professionals, qualifying care, strengthening the construction of strategies to protect male mental health, individual and collective growth for post-pandemic resilience, and the overcoming of male attributes harmful to men's health in their different territories and sociocultural, political and historical contexts (Bühler et al., 2021; Moreira et al., 2021).

Thus, it is recommended to work on the reconfigurations of gender roles in the production of healthcare, whether in institutional spaces or in other social and therapeutic spaces, aiming at overcoming gender inequalities, which impact longitudinally.

Such contexts that permeate the hegemonic attributes of masculinities that are structured in the social context, and which were fissies with the advent of the COVID-19 pandemic, are also an explicit reflection of the epidemic phenomena that make up the second act of the framing of the disease, namely, the possibility of falling ill and dying, social acceptance, the emergence of taboos, cultural and cultural influences, stigma, and discrimination (Rosenberg, C. E., 2010; Rosenberg and Mantovani, 2016). Thus, it is when men recognize the disaggregating potential of the pandemic

for themselves, and consequently, for their social construction of masculinity, that these reveal situations representative of the randomness of infection (Rosenberg, C. E., 2010; Rosenberg and Mantovani, 2016).

From the hegemonic masculinity model instituted and socially accepted, social expectations are constructed about the profile of men, hoping that they will be providers of their families, be sexually dominant, present behaviors that involve risks, and have difficulties to demonstrate or discuss their emotions or seek help. This fact is associated with higher rates of addictions, suicide, homicide, and traffic accidents among men, as well as the development of chronic non-communicable diseases such as hypertension, heart problems, and diabetes, among others. Thus, it is necessary to have a close look at health professionals in order to promote actions for male mental health (PAHO, 2019).

It was possible to observe in this study that men now perceive themselves in this hegemonic model of masculinity, and now question it, and recognize that it is provocative of negative repercussions for themselves and for their health. This process of going to come reflective may be evidencing the negotiations that are being made by men regarding the denial and credit of the disease, whether at the individual or collective level, through the responses of society and the community to the perception, meaning and coping with the epidemic disease, which thus configures the third act of the theoretical context of COVID-19 (Oliveira, 2020; Sousa A. R. et al., 2020; Medrado et al., 2021). This act is permeated by public pressures, the emergence of the institution of collective sanitary measures such as vaccination; social distancing; the closure of schools, trades, and industries; and circulation bans (Rosenberg, C. E., 2010; Rosenberg and Mantovani, 2016; Blog do prisco, 2020; Motta, 2020).

Moreover, during the COVID-19 pandemic, denialism in Brazil took alarming proportions, manifesting itself in the denial or minimization of the severity of the disease. In this sense, situating the denialism of the pandemic within a broader phenomenon is fundamental for the action of health educators. This involves unraveling its origin and its relationship with certain political, economic forces, with conservative values, with necropolitics, and also addressing the reasons for its popularization. These are early-stage discussions that allow us to understand and problematize denialism and its contemporary growth (Morel and Massadar, 2021).

Thus, health professionals need to promote educational strategies to reduce uncertainties; promote population adhering to prevention protocols; demonstrate therapeutic treatments without scientific validation; promote vaccination, so as not to compromise the country's response to the pandemic; and prevent the threat to democracy.

Even though the existence of rigid contours of masculinity among the investigated group is observed, when the collective existence of the sense of invulnerability and the exercise of behaviors harmful to male health are observed, this place can be viewed with positivity, since it is notorious to demonstrate a self-reflective process about itself and its masculinities (Sousa A. R. et al., 2020). In this context, reflections and learning scans in the face of the experience of the pandemic appear late means in this group of men investigated, making the consummation

of the fourth act of the context a question not yet given among these individuals. Moreover, Rosenberg draws attention to the early forgetfulness of the disease, without understanding the importance of epidemic events emerging in the dramaturgic daily life of an episodic disease, such as those that generate a pandemic (Silveira and Figueiredo, 2009; Rosenberg, C. E., 2010; Rosenberg and Mantovani, 2016; Blog do prisco, 2020; Motta, 2020; Neto, 2020).

The fact of early forgetting of the pandemic, such as denying it, was observed in the male public in Brazil. Encouraging governmental, non-governmental, and organized civil society actions with a focus on male education for the adoption of a culture of care, which allows to deal responsibly with the epidemic and other events, needs to be a priority among countries. Thus, an intersectoral work, articulated with the different social organizations such as schools, universities, religious denominations, associations, groups, and entities, should be structured in their countries to overcome the disadvantages caused by machismo, which has negatively impacted the ecosystem.

Other relevant aspects need to be reflected in relation to masculinities and the context of the pandemic, such as overcoming individualism and reviewing neoliberal policies and male sex education (Lamb et al., 2021). In countries such the United States, the work done with men in this perspective can bring contributions in government actions; generalize public health approaches; resignify attitudes, beliefs, and individual male responses attributed to the health crisis of COVID-19, and the lessons that can be learned from the pandemic and its intersections with gender (Lamb et al., 2021).

Based on these considerations, it is recommended that the theoretical-political lens of intersectionality can be explored for a better understanding of the processes of social construction of masculinities, their relations with health, disease, and care, especially among groups of men marked by social and health vulnerabilities, such as black men, homosexuals, bisexual, and transgender, and in the context of urban poverty, as evidenced in a study conducted before the advent of the COVID-19 pandemic (Oliveira E. et al., 2020).

If there is no longer the possibility of denying the existence of the disease, since impacts are experienced through the advent of the disease, the latter act is configured characteristically by the subsidence of the outbreak and its retrospection, which can be fast but can also be lasting. Behavioral phenomena can be recognized as an escape, the search for protection, and unavoidable circumstances such as falling ill, dying, surviving, focusing on cases, hospitalizations and deaths, epidemiological fluctuations of indicators, and the evolutionary stage of the epidemiological process.

Moreover, it is in the fourth and final act that the expectations that surround the feeling of change, transformation, overcoming unequal, unjust and distressing contexts, and the realization of new meanings and feelings of a "new normal," permeated by significant consequences—social, economic, educational, political, cultural, demographic and historical, already dimensioned, corrected, qualified or not

(Silveira and Figueiredo, 2009; Rosenberg, C. E., 2010; Rosenberg and Mantovani, 2016; Blog do prisco, 2020; Motta, 2020; Neto, 2020).

Although they are in positions of privilege, men whose masculinities are stuck in hegemonic patterns, the recognition of conflicts in the understanding of what is "if man," already implies expressive mobilization of the masculinist constructs. Thus, it is possible to infer that the pandemic brought to light the possibility of recognizing the male as to their frailties, even though they are permeated by denial (Rosenberg, C. E., 2010; Rosenberg and Mantovani, 2016), when the need to rethink self-toxic and degrading patterns, and the construction of new references, based on a positive and healthy masculinity.

In this sense, it is necessary to deconstruct the idea that there is a single model of hegemonic masculinity, where there is no room to surface feelings and emotional frailties. This model is mainly associated with negative characteristics, which portray men as non-emotional, independent, non-caregivers, aggressive and non-passionate. These characteristics contribute to the spread of toxic practices, such as physical violence against women and criminal behavior (Connell and Messerschmidt, 2013).

Implications for Practice and Research

The contributions of the study focus on the expansion and deepening of the sociohistorical analysis of the COVID-19 pandemic, the revealing of the relational dimensions of gender in the experiences of men about the patterns of masculinities expressed, which cause deleterious impacts on male health. In addition, the study allowed us to locate the context of COVID-19 disease from daily, relational and symbolic facts of men's lives. It provides a substantial basis for studies and practices focused on male health and epidemic diseases. Thus, it dialogs with the need to expand the implementation of public policies, such as the National Policy for Integral Attention to Men's Health, the Brazilian Ministry of Health, and health professionals and related areas that perform actions for men.

Study Limitations

The limitations of the study are expressed in the use of a single technique for data collection, which may have generated loss of data seizure, when combined with other techniques, such as those performed face-to-face; the disparate reach of participants in the digital social networks surveyed, which may have concentrated on the sample in specific cycles of ambiences. The measurement of a concentric sample in a region of the country, which may have seized a particular territorial cutout, and the availability of the data collection form only in the virtual ambience. This may have excluded the men who do not have access to online technological resources and/or who do not have skills in the use of Information and Communication Technologies (ICT).

CONCLUSION

The male discourse revealed that men have their masculinity structured in the hegemonic model, but express signs of recognition that this model causes harm to themselves and their

health. In the experience of the hegemonic model of male, men do not explain the adoption of healthcare attitudes, making them more exposed to the transmission of the new coronavirus, causing COVID-19, and the deleterious effects caused by the pandemic.

The findings allowed us to understand that the progressive revelation of COVID-19 among men was permeated by conflicts in emotional regulation and suppression of feeling in relation to the pandemic, whereas the management and randomness of COVID-19 were marked by a sense of commitment to the family provision and threats to virility that the negotiation of the response to the public mobilized the self-perception of invulnerability and the practice of harmful behaviors, which implied subsidence and careless retrospection with the health of men.

The experience of the pandemic exposed the normative patterns of masculinities from the consummation of acts representative of the pandemic context, which incited men to deny the existence of COVID-19 disease and to delay the understanding and adoption of protection and control measures of COVID-19. As a repercussion; men presented conflicts in the regulation of emotions; presented emotional suppression, were more reactive; felt threatened regarding the loss of the role of family provider, virility; and revealed a sense of invulnerability, added to the weakening of self-care.

Finally, this study contributes to the opening of a field of research aimed at masculinities and the health of men in pandemic contexts. Although it is expected that the pandemic exaggerates health behaviors with unfavorable outcomes among the male public, this study advances in scientific knowledge by explaining the sequence of behavioral events explanatory of the experience experienced by men in a context of the global health crisis through the expression of their masculinities.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Universidade Federal da Bahia. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

ARS contributed to conception and design of the study and supervised the study. WM, TS, IA, CB, ÉA, MM, RS, JT, LL, NG, ES, ÁFS, LA, LV, and ÁP organized the database, performed the statistical analysis, and wrote the first draft of the manuscript. All authors contributed to manuscript revision, proofread, and approval of the submitted version.

REFERENCES

Barros, C. T., Gontijo, D. T., Lyra, J., Lima, L. S. D., and Monteiro, E. M. L. M. (2018). "Mas se o homem cuidar da saúde fica meio que paradoxal ao trabalho": relação entre masculinidades e cuidado à saúde para homens jovens em formação profissional. *Saúde e Sociedade* 27, 423–434. doi: 10.1590/S0104-12902018166057

Blog do prisco. (2020). *A epidemia como uma peça teatral. 2020. Recuperado em 14 de jul de 2020, de*. Available online at https://www.blogdoprisco.com.br/a-epidemia-como-uma-peca-teatral/ (accessed June 16, 2021).

Bourdieu, P. (1999). *A dominação masculina*. Rio de Janeiro: Bertrand Brasil.

Bühler, N., Pralong, M., Rawlinson, C., Gonseth, S., D'Acremont, V., Bochud, M., et al. (2021). Caring During COVID-19: Reconfigurations of Gender and Family Relations During the Pandemic in Switzerland. *Front. Sociol.* 5:737619. doi: 10.3389/fsoc.2021.737619

Connell, R. (2005). *Masculinities*. Berkeley: University of California Press.

Connell, R. (2014). Margin becoming center: For a world-centered rethinking of masculinities. NORMA. *Int. J. Masculinity Stud.* 9, 217–231. doi: 10.1080/18902138.2014.934078

Connell, R. W., and Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gend. Soc.* 19, 829–859. doi: 10.1177/0891243205278639

Connell, R. W., and Messerschmidt, J. W. (2013). Hegemonic masculinity: rethinking the concept. *Revista Estudos Feministas* 21, 241–282. doi: 10.1590/S0104-026X2013000100014

Coronavirus Epidemiological Bulletin 36. (2020). *Recuperado em 14 de nov de 2020, de*. https://www.gov.br/saude/ptbr/media/pdf/2020/outubro/23/boletim_epidemiologico_COVID_36_final.pdf

Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Soc. Sci. Med.* 50, 1385–1401. doi: 10.1016/s0277-9536(99)00390-1

de Sousa, Á. F. L., Teixeira, J. R. B., Lua, I., de Oliveira Souza, F., Ferreira, A. J. F., Schneider, G., et al. (2021). Determinants of COVID-19 vaccine hesitancy in portuguese-speaking countries: a structural equations modeling approach. *Vaccines* 9, 1167. doi: 10.3390/vaccines9101167

Freitas, A. R. R., Napimoga, M., and Donalisio, M. R. (2020). Análise da gravidade da pandemia de COVID-19. *Epidemiologia e serviços de saúde* 29, e2020119. doi: 10.5123/S1679-49742020000200008

Freitas, M. T. D. A., Bernardes, A. S., Pereira, A. P. M. S., and Pereira, M. L. (2015). O sujeito nos textos de Vigotski e do Círculo de Bakhtin: implicações para a prática da pesquisa em educação. *Fractal: Revista de Psicologia* 27, 50–55. doi: 10.1590/1984-0292/1355

Guan, W. J., Ni, Z. Y., Hu, Y., Liang, W. H., Ou, C. Q., and He, J. X. (2020). Clinical characteristics of coronavirus disease 2019 in China. *N. Eng. J. Med.* 382, 1708–1720. doi: 10.1056/NEJMoa2002032

Hiremath, P., Kowshik, C. S., Manjunath, M., and Shettar, M. (2020). COVID 19: Impact of lock-down on mental health and tips to overcome. *Asian J. Psychiatr.* 51:102088. doi: 10.1016/j.ajp.2020.102088

Jewkes, R., Morrell, R., Hearn, J., Lundqvist, E., Blackbeard, D., Lindegger, G., et al. (2015). Hegemonic masculinity: combining theory and practice in gender interventions. *Cult. Health Sex* 16, 96–111. doi: 10.1080/13691058.2015.1085994

Jin, J. M., Bai, P., He, W., Wu, F., Liu, X. F., and Han, D. M. (2020). Gender differences in patients with COVID-19: focus on severity and mortality. *Front. Public Health*, 8:152. doi: 10.3389/fpubh.2020.00152

Keijzer, B. (2003). "Hasta donde el cuerpo aguante: género, cuerpo y salud masculina," in *La salud como derecho ciudadano: perspectivas y propuestas desde América Latina*, eds C. F. Cáceres, M. Cueto, M. Ramos, and S. Vallas (Lima: Universidad Peruana Cayetano Heredia), 137–152.

Lamb, S., Pagán-Ortiz, M., and Bonilla, S. (2021). How to Provide Sexual Education: Lessons from a Pandemic on Masculinity, Individualism, and the

Neoliberal Agenda. *Int. J. Environ. Res. Public Health.* 18:4144. doi: 10.3390/ijerph18084144

Lancet, T. (2020). COVID-19 in Brazil: "So what?". *Lancet* 395:1461. doi: 10.1016/S0140-6736(20)31095-3

Lefevre, F., and Lefevre, A. M. C. (2014). Discurso do sujeito coletivo: representações sociais e intervenções comunicativas. *Texto contexto-enferm.* 23, 502–507. doi: 10.1590/0104-07072014000000014

Lefevre, F., Lefevre, A. M. C., and Costa Marques, M. C. (2009). Discourse of the collective subject, complexity and self-organization. *Ciencia Saud. Coletiva* 14:1193. doi: 10.1590/s1413-81232009000400025

Luck, M., Bamford, M., and Williamson, P. (2000). *Men's Health: Perspectives, Diversity and Paradox*. London: Blackwell Sciences.

Mamun, M. A., and Griffiths, M. D. (2020). First COVID-19 suicide case in Bangladesh due to fear of COVID-19 and xenophobia: Suicide prevention strategies. *Asian J. Psychiatr.* 51:102073. doi: 10.1016/j.ajp.2020.102073

Medrado, B., Lyra, J., Nascimento, M., Beiras, A., Corrêa, A. C. P., Alvarenga, E. C., et al. (2021). Men, masculinity and the new coronavirus: sharing gender issues in the first phase of the pandemic. *Cien Saude Colet* 26, 179–183. doi: 10.1590/1413-81232020261.35122020

Milner, A., Shields, M., and King, T. (2019). The influence of masculine norms and mental health on health literacy among men: Evidence from the ten to men study. *Am. J. Men's Health* 13:1557988319873532. doi: 10.1177/1557988319873532

Moreira, W. C., Sousa, K. H. J. F., Sousa, A. R., Santana, T. S., Zeitoune, R. C. G., and Nóbrega, M. P. S. S. (2021). Mental health interventions implemented in the COVID-19 pandemic: what is the evidence? *Rev. Bras. Enferm* 74:e20200635. doi: 10.1590/0034-7167-2020-0635

Morel, A., and Massadar, P. (2021). Negacionismo da Covid-19 e educação popular em saúde: para além da necropolítica. *Trabalho, Educação e Saúde .* 19:e00315147. doi: 10.1590/1981-7746-sol00315

Motta, D. (2020). *História e pandemia: lições de um passado que se repete. Faperj. 2020*. Available online at: http://www.faperj.br/?id=3970.2.4 (accessed June 16, 2021).

Nascimento, L. D. C. N., Souza, T. V. D., Oliveira, I. C. D. S., Moraes, J. R. M. M. D., Aguiar, R. C. B. D., and Silva, L. F. D. (2018). Theoretical saturation in qualitative research: an experience report in interview with schoolchildren. *Rev Bras enferm,* 71(1), 228-233. doi: 10.1590/0034-7167-2016-0616

Neto, L. C. D. (2020). O 'cotidiano epidêmico': a gripe espanhola e o novo coronavírus. Revista eletrônica de jornalismo científico. Recuperado em 21 de jul de 2020. Available onilne at https://www.comciencia.br/o-cotidiano-epidemico-a-gripe-espanhola-e-o-novo-coronavirus/ (accessed June 16, 2021).

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., and Iosifidis, C. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *Int. J. Surg.* 78, 185–193. doi: 10.1016/j.ijsu.2020.04.018

Nolasco, A. D. (1981). Male concepts: on masculinity, parenthood and family planning. *Popul Forum* 7(1), 6–8.

Oliveira, A. C. D., Lucas, T. C., and Iquiapaza, R. A. (2020). O que a pandemia da COVID-19 tem nos ensinando sobre adoção de medidas de precaução? *Texto & Contexto-Enfermagem* 29, e20200106. doi: 10.1590/1980-265X-TCE-2020-0106

Oliveira, E., Couto, M. T., Separavich, M. A. A., and Luiz, O. C. (2020). Contribuição da interseccionalidade na compreensão da saúde-doença cuidado de homens jovens em contextos de pobreza urbana. *Interface (Botucatu).* 24:e180736. doi: 10.1590/Interface.180736

Oliveira, W. K. (2020). *How Brazil can hold back COVID-19. Epidemiol. Serv. Saúde, v. 29, n. 2, e2020044, 2020. Disponível em*. Available online at http://www.scielo.br/scielo.php?script=sci_arttext&pid=S2237-96222020000200200&lng=en&nrm=iso (accessed on nov 24 2020)

PAHO. (2019). *Masculinities and Health in the Region of the Americas. Executive Summary*. Washington, D.C: Paho.

Patias, N. D., and Hohendorff, J. V. (2019). Critérios de qualidade para artigos de pesquisa qualitativa. *Psicologia em estudo* 24:43536. doi: 10.4025/psicolestud.v24i0.43536

Pinto, I. F., Campos, C. J. G., and Siqueira, C. (2018). Investigação qualitativa: perspectiva geral e importância para as ciências da nutrição. *Acta Portuguesa de Nutrição* 30–34.

Purdie, A. (2020). *Sexo, gênero e COVID-19: Dados desagregados e disparidades de saúde. 2020 Recuperado em 22 de jul de 2020, de*. Available online at https://blogs.bmj.com/bmjgh/2020/03/24/sex-gender-and-COVID-19-disaggregated-data-and-health-disparities/ (accessed June 16, 2021).

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., and Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *Gen. Psychiatr.* 33(2):e100213. doi: 10.1136/gpsych-2020-100213

Ramos Filho, C. F. (2020). *A epidemia como uma peça teatral. Blog do prisco, 2020. Disponível em*. Available online at https://www.blogdoprisco.com.br/a-epidemia-como-uma-peca-teatral/ (accessed December 16, 2020).

Rosenberg, C. (1992). *Explaining Epidemics and Other Studies in the History of Medicine*. Cambridge: Cambridge University Press.

Rosenberg, C. (2010). *Humanity's Burden: A Global History of Malaria. By James LA Webb, Jr*. New York: Cambridge University Press, 2009.

Rosenberg, C., and Mantovani, R. (2016). On the history of medicine in the United States, theory, health insurance, and psychiatry: an interview with Charles Rosenberg. *História, Ciências, Saúde-Manguinhos* 23, 211–220. doi: 10.1590/S0104-59702016000100013

Rosenberg, C. E. (1989). What Is an Epidemic? AIDS in Historical Perspective. *Daedalus* 118, 1–17.

Rosenberg, C. E. (2003). What Is Disease? In Memory of Owsei Temki. *Bull Hist Med*77, 491–505. doi: 10.1353/bhm.2003.0139

Rosenberg, C. E. (2010). *Explaining epidemics and Other Studies in the History of Medicine*. Cambridge: Cambridge University Press.

Rosenberg, C. E., and Goldem, J. (1997). *Framing Disease: Studies in Cultural History*. New Brunswick: Rutgers University Press.

Sanchez, T. H., Zlotorzynska, M., Rai, M., and Baral, S. D. (2020). Characterizing the impact of COVID-19 on men who have sex with men across the United States in April, 2020. *AIDS Behav.* 24, 2024–2032. doi: 10.1007/s10461-020-02894-2

Santos, D. F., Lima, R. D. C. D., Demarchi, S. M., Barbosa, J. P. M., Cordeiro, M., Sipioni, M. E., et al. (2020). Masculinity in pandemic times: where power decreases, violence increases. *Scielo* [Preprint]. doi: 10.1590/SciELOPreprints.900

Schurz, H., Salie, M., Tromp, G., Hoal, E. G., Kinnear, C. J., and Möller, M. (2019). The X chromosome and sex-specific effects in infectious disease susceptibility. *Hum. Genom.* 13, 1–12. doi: 10.1186/s40246-018-0185-z

Separavich, M. A., and Canesqui, A. M. (2020). Masculinidades e cuidados de saúde nos processos de envelhecimento e saúde-doença entre homens trabalhadores de Campinas/SP. *Bras. Saúde e Sociedade* 29:e180223. doi: 10.1590/S0104-12902020180223

Silveira, A. J. T., and Figueiredo, B. G. (2009). Apresentação. *Varia. Hist.* 25, 357–365. doi: 10.1590/S0104-87752009000200001

Sousa, A. F. L., Queiroz, A. A. F. L. N., Lima, S. V. M. A., Almeida, P. D., Oliveira, L. B., and Chone, J. S. (2020). Chemsex practice among men who have sex with men (MSM) during social isolation from COVID-19: multicentric online survey. *Cad. Saúde Pública.* 36:e00202420. doi: 10.1590/0102-311X00202420

Sousa, A. R., Alves, G. V., Queiroz, A. M., Florêncio, R. M. S., Moreira, W. C., Nóbrega, M. P. S., et al. (2021). Men's mental health in the COVID-19 pandemic: is there a mobilization of masculinities? *Rev Bras Enferm* 74(Suppl.):e20200915. doi: 10.1590/0034-7167-2020-0915

Sousa, A. R., Silva, N. S. B., Lopes, S., Rezende, M. F., and Queiroz, A. M. (2020). Expressions of masculinity in men's health care in the context of the COVID-19 pandemic. *Rev. Cuba .Enferm* 36:e3855.

Sousa, A. R., Teixeira, J. R. B., Palma, E. M. S., Moreira, W. C., Santos, M. B., Carvalho, H. E. F., et al. (2022). Psychological Distress in Men during the COVID-19 Pandemic in Brazil: The Role of the Sociodemographic Variables, Uncertainty, and Social Support. *Int. J. Environ. Res. Public Health* 19:350. doi: 10.3390/ijerph19010350

Spence, J. T. (1984). Gender identity and its implications for the concepts of masculinity and femininity. *Nebr. Symp. Motiv.* 32, 59–95.

Taylo, A. J. (1983). Homosex. Conceptions of masculinity and femininity as a basis for stereotypes of male and female gay people. *Fall* 9, 37–53. doi: 10.1300/J082v09n01_04

Teixeira, J. R. B., Sousa, A. R. d., Silva Palma, E. M., Moreira, W. C., Santana, T. d. S., Barreto, N. M. P. V. (2022). Factors associated with emotion regulation in men with internet access living in Brazil during the COVID-19 pandemic. *Int. J. Environ. Res. Public Health*. 19:3877. doi: 10.3390/ijerph19073877

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The Making and Breaking of Social Ties During the Pandemic. Socio-Economic Position, Demographic Characteristics, and Changes in Social Networks

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Contact restrictions and distancing measures are among the most effective non-pharmaceutical measures to stop the spread of the SARS-CoV2 virus. Yet, research has only begun to understand the wider social consequences of these interventions. This study investigates how individuals' social networks have changed since the outbreak of the pandemic and how this is related to individuals' socio-economic positions and their socio-demographic characteristics. Based on a large quota sample of the German adult population, we investigate the loss and gain of strong and weak social ties during the pandemic. While about one third of respondents reported losing of contact with acquaintances, every fourth person has lost contact to a friend. Forming new social ties occurs less frequently. Only 10–15% report having made new acquaintances (15%) or friends (10%) during the pandemic. Overall, more than half of our respondents did not report any change, however. Changes in social networks are linked to both socio-demographic and socio-economic characteristics, such as age, gender, education, and migration background, providing key insights into a yet underexplored dimension of pandemic-related social inequality.

Keywords: COVID-19, social networks, social inequality, socio-demographic factors, social integration, social ties

INTRODUCTION

The COVID-19 pandemic and ensuing containment measures have had far-reaching implications for the lives of many people around the globe, affecting their health, incomes, and wellbeing. While much research has been devoted to understanding these ramifications, relatively little work has focused on the consequences of the pandemic for social networks, the relationships that define and are the essence of peoples' social lives. The beneficial nature of social ties, often called social capital, has been shown to be of crucial importance for economic, educational and health outcomes (see also Granovetter, 1974; Ferlander, 2007; Frank et al., 2008). Yet, during the pandemic social ties have been mainly understood as channels of contagion (Block et al., 2020; Karaivanov, 2020), and less as channels of support or resilience (Rashid and McGrath, 2020). The COVID-19 containment measures have imposed severe restrictions on in-person contacts and meeting opportunities, possibly threatening the continuation of old and the formation of new ties. While we know that contact restrictions have had detrimental effects on individuals' mental health (Gersons et al., 2020; Kuhn et al., 2020), we know surprisingly little about their potential longer-term effects on peoples' social networks (an exception being: Arpino et al., 2020).

It is important to understand the impact of the pandemic on social networks for a number of reasons: First, under normal circumstances, network changes occur slowly (Wrzus et al., 2013; Fischer and Beresford, 2015). A global pandemic constitutes an exogenous—unforeseen and irreversible—shock and may have sped up network developments. Second, sudden external shocks, such as societal crises, may weaken social ties (Rivera et al., 2010; Hilmar, 2020). Negative network changes may thus undermine social cohesion and limit the capabilities for individual and societal recovery. Third, social network resources are unequally distributed, favoring those in higher socio-economic positions. Individuals with more resources may have been better able to absorb network shocks and prevent a loss of social ties. A number of studies warn that the pandemic may have reinforced existing social inequalities (Ohlbrecht and Jellen, 2020; Engzell et al., 2021; Gauthier et al., 2021). Changes in social networks may be another—yet under-researched—mechanism of exacerbating social inequality, wellbeing and access to resources. This should be particularly true if individuals who already belong to vulnerable groups—are more strongly affected by a loss of network ties.

In this study we thus ask: How have social networks of individuals changed since the outbreak of the COVID-19 pandemic? Who has gained or lost friends or acquaintances? Do these changes vary between individuals with different socio-demographic and socio-economic characteristics?

To answer these questions we use four measures which were specifically designed for this purpose and were fielded in the context of a large topical, multi-purpose, online survey in early May 2021 in Germany. In distinguishing between acquaintances (persons one meets rather regularly, but does not know well) and friends (people one knows well and likes a lot), we can not only provide a rather fine grained-analysis of quantitative network changes during the pandemic, but also gain some insight into the development of so-called weak and strong ties over the course of the pandemic. The timing of the survey, ~14 months after the first lockdown measures had been implemented, allows assessing the longer-term pandemic-related network changes for the first time. In Germany, a first, strict lockdown was imposed between March and May 2020, a second, lenient one in fall 2020, and a third, again strict, one between December 2020 and May 2021 (Hale et al., 2021). During the first and the third lockdown, schools remained closed, home office was mandatory where possible, and most sports, cultural, and leisure facilities remained closed. Moreover, private gatherings of more than five people were placed under a ban. Thus, social life came to a halt, restricting the opportunities for both meeting existing social ties and forming new ties. By collecting our data just at the end of this second long and strict lockdown, we are likely to observe changes due to these lockdowns before social relationships may have recovered again.

These contact restrictions are likely to have implications for the number of people in one's social network. On the one hand, people might have lost ties ("breaking") (see Borkowska and Laurence, 2020). On the other hand, there were also potentials for positive changes, such as the gain of new ties ("making"). One can thus expect to observe four types of network changes

due to the pandemic: First, we assume that a loss of network ties has been common due to contact restrictions and limited opportunities to meet. Moreover, the situational factors which normally enable friendship formation (Fehr, 2008) have been limited by the containment measures, suggesting that friendship formation has been difficult during the crisis. Second, however, given the wave of helping arrangements which emerged during the first lockdown (Carlsen et al., 2020), and the temporarily relaxed restrictions during summer 2020, new ties might have been gained. Third, one could assume that both—gain and loss—may have occurred within the network of the same individual. Finally, some people may have very stable networks which were not affected by the lockdown measures.

Individuals from different socio-demographic and socio-economic groups might have different risks for these network changes. First, people in better socio-economic positions, i.e., higher education and/or income, usually have larger social networks and more resources to maintain these networks (Pichler and Wallace, 2007). On the one hand, this potentially allows cultivating social ties—also at a distance. On the other hand, they also more often worked from home during the pandemic—which suggests that they might have lost contact with colleagues. Employment not only generates resources, but also access to social network, thus, those employed might be better able to maintain their social networks. Second, specific socio-demographic risk factors might affect changes in social networks. Age is a pivotal factor: Social ties usually become more stable as people age (Wrzus et al., 2013). Women more often than men were socialized to feel responsible for organizing a couple's or a family's social ties and they are more likely to engage in pro-social behaviors (Hochschild, 1979; Rossi and Rossi, 1990). Thus, their social network ties might be more vulnerable to a the changed opportunities for socializing. Not least having a migration background may further restrict opportunities of cultivating social ties, e.g., through a language barrier, or because close social ties live far away. On the other hand, diaspora networks are often densely knit and provide comprehensive informal exchange.

METHODS

Our analyses are based on a multi-purpose online survey "Living in exceptional circumstances"[1] Wave 3 (spring 2021) implemented into the Respondi online access panel. It draws on a quota sample of the German adult population, based on region, gender, age, and educational level. Compared to German census data, our sample is broadly comparable. Lower educated respondents are underrepresented (see **Supplementary Table 1**) and people form East Germany were deliberately oversampled therefore we use population-based weights throughout our analyses.

Three waves of data were collected during three different stages of the pandemic. In this study, we rely on data collected

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[1]For documentation of the survey program, please refer to https://www.exc.uni-konstanz.de/en/inequality/research/covid-19-and-inequality-surveys-program/documentation/.

during the third panel wave, in early May 2021. This period captures the end of a long and strict, third, lockdown, which had started before Christmas. The end of the lockdown varied regionally and was tied to the averaged 3-day incidence level of COVID-19 infections in each county, according to a new law, the so-called "federal emergency brake" (Bundesnotbremse). The third panel wave was selected, because only in that wave was it feasible to ask for longer-term network changes due to the pandemic. Overall, we observe 4,027 individuals aged between 18 and 91 years in the third wave, after listwise deletion of cases with missing values, our analytical sample comprises 3,378 persons.

Dependent Variables

The phenomenon under study in this article are changes in individuals' social networks. We measure four types of change in networks during the pandemic, reflecting two dimensions of positive ("making"), respectively, negative ("breaking") change and change of strong (friends), respectively, weak (acquaintances) ties. They were measured with four self-reported dichotomous items (see **Table 1**).

Socio-Demographic and Socio-Economic Factors

Risks for network changes arise from both socio-demographic and socio-economic variables. Socio-demographic factors span individual's gender, age, and immigration history. Gender was measured with a dichotomous variables (1 = Female). Age was measured in three broader groups in order to allow for non-linear effects (18–35, 36–59, 60 years, or older). Germany is ethnically less diverse than many other Western countries, but has a large share of first and second generation migrants (respondent or both parents born abroad), which is another social stratification dimension. We thus create a dichotomous variable indicating whether the respondent him- or herself was born in another country than Germany, or whether both his parents were born outside of Germany (1 = Yes). Socio-economic factors include educational level, income and employment status. Education was measured using information on the highest level of professional education attained, and was recoded into three categories: Low (At most compulsory schooling), Intermediate (A-Levels or Vocational Training), and High (Tertiary Education). We have information on the disposable household income, which was recoded into six categories (<900 Euros, 900–1,499 Euros, 1,500–1,599 Euros, 2,600–3,999 Euros, 4,000–5,999 Euros, 6,000 Euros or more). Employment situation was measured with three categories: Employed, Retired and Economically inactive (the latter including those who are homemaking, permanently ill or disabled, in education, or unemployed).

Additional Control Variables

Finally, we also adjust our models for a number of additional control variables, which could potentially contribute to network change. First of all the regional characteristics may play a role, e.g., with their infrastructure for meeting other (or new) people. Thus, we control for whether our respondents live in an urban or rural area (1 = Urban), and whether they were born in the Eastern part of Germany (former GDR). Further controls include individuals' own COVID-19 health risk profiles, measured with four variables: We control for self-rated health in general (measured on a five-point scale from very bad to very good, whether one belongs to a risk group for severe COVID-19 pathologies (1 = Yes), whether one has been infected with COVID-19 (1 = Yes) or knows someone who has been infected (1 = Yes). Third, potential changes in networks might depend on pre-pandemic network characteristics. We measured them with two summative index variables, including both the frequency of contact and the number of contacts with strong (family, friends) and weak ties (colleagues, people from voluntary associations and churches, other acquaintances). For a total of six groups of potential network partners, we asked for the frequency of contact and in-person meetings before the pandemic (ranging from 1 to 5, from never to almost daily), and summed them up so that higher values indicate more frequent contact with a larger number of different ties. Fourth, life course situations and transitions might play a role. We adjust for whether one lives with a partner or spouse and has children in the household or outside the household. Finally, we asked for seven life course transitions in the domain of education, work, partnership and housing. In addition, we also control for whether he or she worked from home.

Analytical Strategy and Presentation of the Results

A first descriptive analysis is followed by two sets of multivariate analysis of underlying forces that drive network changes. All analyses apply population-based weights. First, we are interested in the four different types of changes separately. Since these were measured as yes-no questions, we apply logistic regression models. Being mainly interested in the effects of socio-demographic (such as gender, age, migration status) and socio-economic factors (such as education, income, and employment status), we estimate three sets of models. The first model only includes each of these explanatory variables separately (bivariate or "raw" effects). The second model estimates the effects of all these six variables simultaneously. Finally, in the third model, we adjust for the control variables (described above) as they may be confounders (e.g., West Germans having higher incomes) or explain parts of the effects of our six core variables (e.g., employment may be more protective of networks if not resuming to working remotely). The results from the first (bivariate) and second models (all socio-demographic and socio-economic variables) are presented in **Figure 2**. The regression tables,

TABLE 1 | Types of network changes.

Item	Gain	Loss
Positive Change ("Making")		
I have gained new acquaintances during the pandemic	✓	
I have gained new friends during the pandemic	✓	
Negative Change ("Breaking")		
I have lost friends during the pandemic		✓
I have lost acquaintances during the pandemic		✓

containing all models including the ones with additional controls can be found in **Supplementary Table 2**.

Second, we are also interested in whether positive and negative changes may co-occur, e.g., someone both losing and gaining ties. For that reason, we collapsed all gains (i.e., either gain of acquaintances, friends, or both) and losses (i.e., either loss of acquaintances, friends, or both) into two dichotomous variables indicating whether one had gained, respectively, lost some ties (1 = yes), independent of whether these were friends or acquaintances. From these variables, we construct a categorical variables indicating whether (1) respondents reported no change at all, (2) respondents reported only gain of ties, (3) respondents reported both gain and loss of ties, and (4) respondents reported only loss of ties. This categorical variable is analyzed using a multinomial logistic regression. The result from this model is presented in **Figure 3**, and the respective regression results can be found in **Supplementary Table 3**.

In **Figures 2**, **3** the results are presented as Average Marginal Effects, which can be interpreted as percentage changes in the likelihood of experiencing a particular network change.

RESULTS

Changes in Network: Frequency and Co-occurrence

Our descriptive analysis of the different types of changes in social networks (**Figure 1**) shows that more than one third of all respondents (37%) report losing ties during the pandemic, while only 17% report gaining new ones. Among those who lose ties, the majority loses both acquaintances and friends. About one in three loses an acquaintance, and about one in four loses a friend. Among those who gain new ties, 15% gain an acquaintance and

10% gain a friend. Nevertheless, a slight majority of respondents does not report any change in their social relationships (55%). As regards co-occurring changes, we find that more people (27%) report only loss than people who report only gains (8%). Less than one in 10 reports both loss and gain (9%). Thus, overall, loss is the dominant trend, and only a small group can compensate this through gain of new ties.

Socio-Demographic and Socio-Economic-Disparities

In the next step, we present the multivariate findings for socio-demographic and socio-economic differences in the four types of change (**Figure 2**). These coefficients were obtained including all socio-demographic and socio-economic variables simultaneously (but not adjusting for additional controls).

Starting with socio-demographic factors, women are more likely to report loss of friends than men (which is robust when adjusting for control variables), but not differ statistically significantly from men for other types of network changes. Older age is associated with lower likelihood of network changes, which applies to gain and loss for both acquaintances and friends. Moreover, these findings are robust when adjusting for controls. Migrants have a higher likelihood of all four types of network changes, both losing and making friends and acquaintances. This is robust when adding control variables, except for finding new acquaintances. For this group, the effects of losing ties is however somewhat stronger, compared to gaining new ties. Overall, socio-demographic characteristics are quite strongly related to network changes during the pandemic.

Regarding socio-economic factors, we find that those with tertiary education are more likely to gain acquaintances, as well as lose friends and acquaintances than those with compulsory
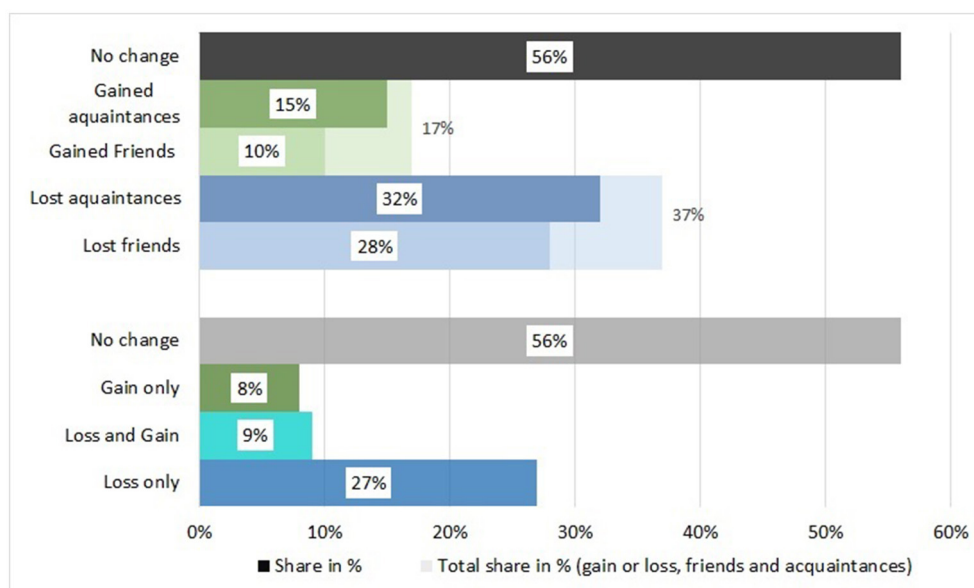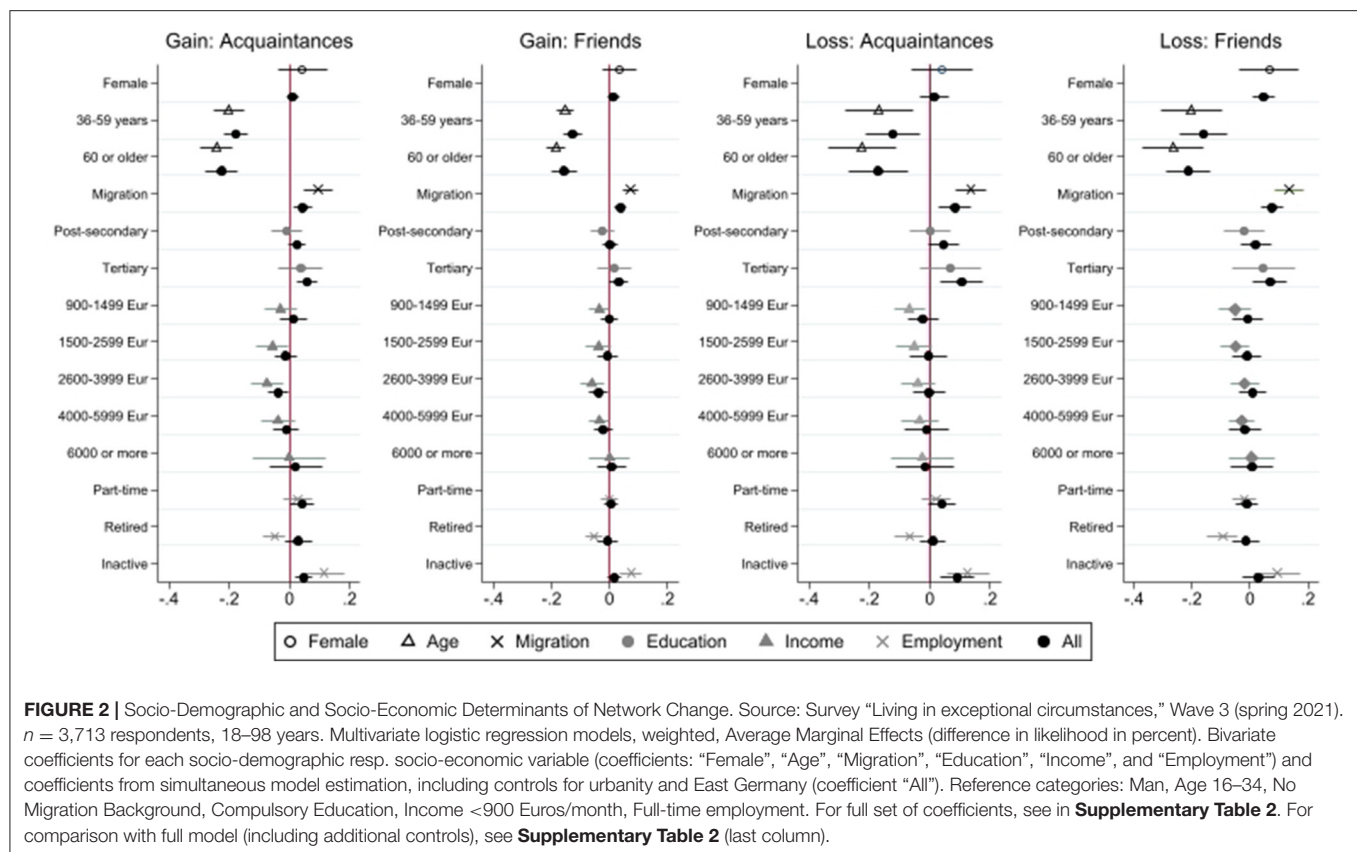

FIGURE 1 | Change in social ties. Source: Survey "Living in exceptional circumstances," Wave 3 (spring 2021). *n* = 3,713 respondents, 18–98 years. Own calculations, applying population weights based on gender, age, education, migration background and region, calculated on the basis of German census data.

FIGURE 2 | Socio-Demographic and Socio-Economic Determinants of Network Change. Source: Survey "Living in exceptional circumstances," Wave 3 (spring 2021). *n* = 3,713 respondents, 18–98 years. Multivariate logistic regression models, weighted, Average Marginal Effects (difference in likelihood in percent). Bivariate coefficients for each socio-demographic resp. socio-economic variable (coefficients: "Female", "Age", "Migration", "Education", "Income", and "Employment") and coefficients from simultaneous model estimation, including controls for urbanity and East Germany (coefficient "All"). Reference categories: Man, Age 16–34, No Migration Background, Compulsory Education, Income <900 Euros/month, Full-time employment. For full set of coefficients, see in **Supplementary Table 2**. For comparison with full model (including additional controls), see **Supplementary Table 2** (last column).

education. Those with intermediate education (e.g., A-Levels or Vocational Training) are also more likely to lose acquaintances, but not friends. These effects are only statistically significant, when controlling for socio-demographic and other socio-economic variables and vanish in the bivariate and the full model. Thus, there seems to be no robust effect of education level on changes in social networks. Similarly, income is not systematically correlated with gain or loss of ties. The group of middle class earners (2,600–3,000 Euros) is slightly less likely to gain ties, but this effect does not hold when adjusting for controls (see **Supplementary Table 2**). Finally, with regard to employment status, we find that economically inactive persons (such as students) are more likely to experience both gain and loss of acquaintances and friends, than full-time employed respondents. People that are retired have a lower likelihood of all four types of network changes in the bivariate models. The effects however vanish, when controlling for age (model 2). Thus, people that are active in the labor market seem to have more stable networks, than people that are inactive, but not than people who are retired. In sum, the effect of socio-economic variables on changes in social networks during the pandemic is rather limited. Only employment status is related to different types of network changes.

- Moreover, the additional controls exhibit some interesting effects themselves (for all results, including full models,

see **Supplementary Table 2**). Interestingly people residing in East Germany have a lower likelihood of losing friends and acquaintances. Both pre-pandemic networks and individual COVID-19 risk profiles structure the opportunities for network changes during the pandemic. We find that more frequent contacts with different types of weak ties increase the likelihood of gaining friends and acquaintances, as well as losing acquaintances, and more frequent contacts with strong ties promote the formation of new ties with acquaintances during the pandemic. With regard to health risks, we find that respondents' poor health increases the likelihood of loss of both acquaintances and friends.

Co-occurrence of Network Changes?

Finally, we ask whether gains and losses may also co-occur, potentially offsetting some of the negative or positive effects of new tie formation or loss of social capital. Again, we are most strongly interested in the disparities between individuals with different socio-demographic and socio-economic characteristics. **Figure 3** shows the Average Marginal Effects from the multinomial logistic regression model including all socio-demographic and socio-economic variables (simultaneous estimation), but not additional controls. For the detailed results, please refer to **Supplementary Table 3**. The coefficients are to be interpreted in relation to the reference category, "No
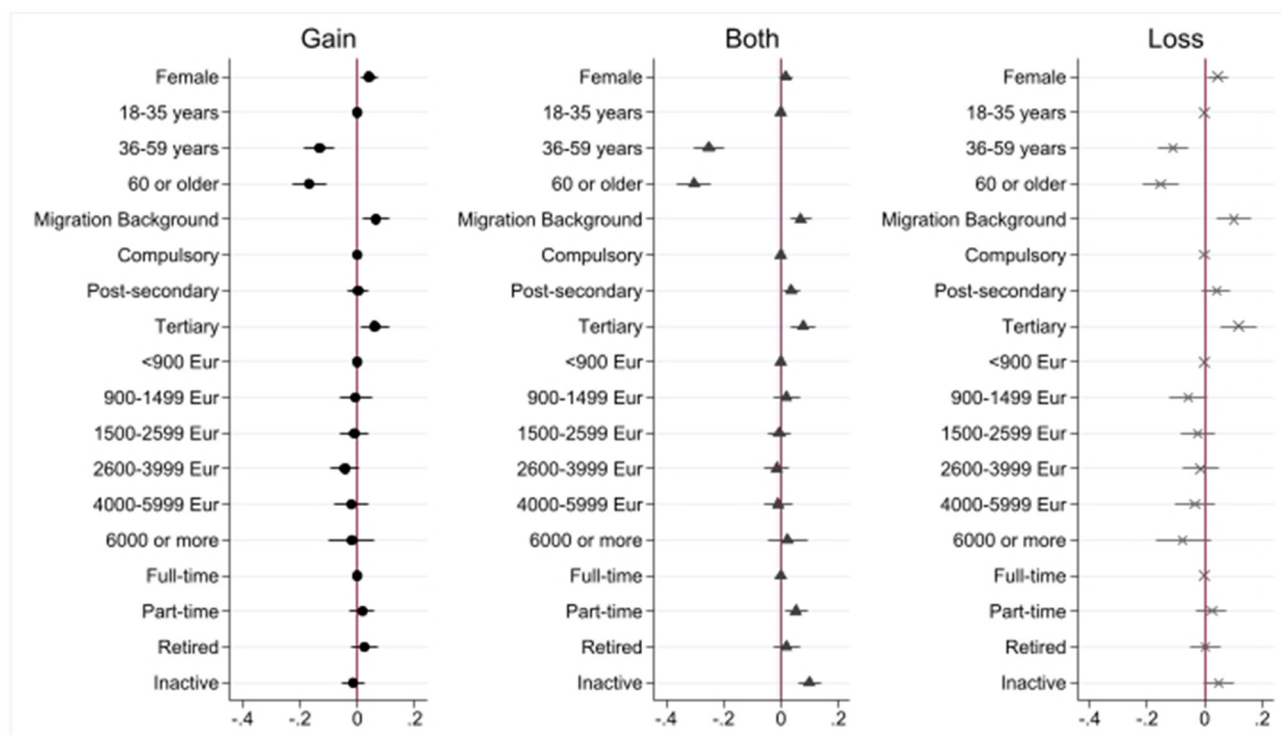
FIGURE 3 | Co-occurring Changes. Source: Survey "Living in exceptional circumstances" Wave 3 (spring 2021). *n* = 3,713 respondents, 18–98 years. Multivariate logistic regression models, weighted, Average Marginal Effects (difference in likelihood in percent). Gain resp. loss of friends and acquaintances jointly modeled (1 = gain/loss of either). For coefficients, see **Supplementary Table 3**.

change." Combining tie changes of both acquaintances and friends, the results are not full comparable to the above models and show a slightly different picture of the overall changes in network ties. Compared to males, females are more likely to report either gain or loss of contacts than men compared to reporting no change. Again, older people are less likely to report network changes than younger people. Moreover, migrants are more likely to report all types of changes than non-migrants. Turning to the socio-economic variables, we find that people with tertiary education have a higher likelihood to report all types of changes than people with lower (at least compulsory) education. While, again, income has no statistically discernible effect, inactive respondents have a higher likelihood to report both changes at the same time, compared to people in full time employment. This also applies to people employed part-time. Thus, the socio demographic variables show robust relationships to network changes. In these more encompassing models, that do not differentiate between friends and acquaintances higher education is also related to all types of network changes.

DISCUSSION

The networks of many people have changed considerably during the COVID-19 pandemic, and—as expected—the contact restrictions have taken their toll: Within only 1 year, almost one in two has experienced a change in their networks. More than one in three has experienced a shrinkage of their networks, and

most people who lost ties lost both acquaintances and friends. At the same time, losses of social ties have hardly been compensated by gaining new ties. However, we also observe positive changes. Despite the aggravating conditions during the various lockdowns in Germany, about one in six has gained new ties. In sum, compared to evidence on network shrinkage in non-pandemic times, the documented changes for the analyzed time-span of 14 months since the outbreak of the pandemic until the survey took place, are considerable (Wrzus et al., 2013).

Yet, unfortunately, there is exists no pre-pandemic study of network changes in the general population that would allow a direct comparison of network changes, as measured in our study. However, in another wave of our survey fielded in April/May 2022, we asked our respondents repeatedly to indicate the types of network changes experienced, and we also asked how network changes compared to pre-pandemic times (more or less frequently, about the same). First analyses on raw, unweighted data from this fourth wave show that after 2 years of the pandemic, between 26 and 33 per cent report having lost ties, while between 15 and 19% report having gained ties. While the figures of loss are very comparable to the figures presented in this article based on data fielded 1 year earlier, the figures for gain in ties are higher. With regard to the subjective assessment whether change of ties had become more or less common, more than two thirds of those who report a loss of ties, indicate that this happened more frequently than before the pandemic. Among the fewer people who gained new ties, only about 40% report

that this happened more frequently than before the pandemic. This suggests that the diminishing effects of the pandemic on social networks have been substantial, exceeding "normal" changes considerably.

Network changes may have longer-term consequences for social inequality, as strong and weak social ties are important for wellbeing, receiving support, coping with crises, but also finding a job and reconciling work and family. This is particularly critical if social network changes occur unequally across social groups, and negative changes predominantly affect those who were already in a vulnerable position before the pandemic. Thus, we analyzed how these network changes differ between socio-demographic and socio-economic groups. With respect to socio-demographics, we found that women are more likely than men to lose friends, and the multinomial models, using an undifferentiated measure of the type of tie, shows that females are more likely to report all types of network changes, including making new contacts. Some literature suggests that this might be due to women being socialized to be "kinkeepers," and typically, they are in charge for organizing close social ties (Rossi and Rossi, 1990). During the pandemic, our first results suggest, it is rather their close, but not their weak ties that were more prone to change than men's.

Young adults generally have more volatile networks and experience more change. Old age protects from loss of ties, but also decreases the likelihood of making new ties. This is in line with previous research according to which networks stabilize as people get older and close network ties are becoming more important, whereas making new ties becomes less important (Carstensen, 1992). Conversely, networks are more volatile among young adults than in mid-adulthood, not least because typically young people experience a higher density of life course transitions in the domains of education, employment, and partnership (Arnett, 2000). Individuals with a migration background have a higher likelihood of experiencing loss and gain of both types of social ties. Thus, migrants seem to have more volatile social networks during the pandemic. For this group the likelihood of losing contacts to friends and acquaintances is somewhat stronger than for finding new ones. Thus, the potential social disintegration of migrants seems to have been aggravated by the pandemic. This has also potential negative implications for migrants' ability to cope with crisis induced hardship compared to non-migrants.

Finally, more highly educated people have more volatile networks in the pandemic compared to people with lower levels of education. The likelihood of losing contacts is higher than of gaining ties in this group, suggesting that higher education is not a buffer against social network changes. Income is not systematically related to network changes during the pandemic. While it is often claimed that the more affluent people have more ties via membership in clubs, leisure and voluntary organizations, these facilities were mostly closed due to the containment measures and therefore restrict the opportunities for cultivating social ties in this group. We found that the retired are better protected

from network changes than people being active in the labor market, while the inactive (such as students) have a higher chance for losing and gaining ties. In sum, rather than socio-economic status (SES) variables, it is socio-demographic variables that are robustly related to network changes during the pandemic.

These findings with regard to socio-demographic differences in network changes imply that the pandemic has not changed social networks more in economically less privileged groups. Considering the effect of tertiary education, we rather find the opposite. Yet, apart from this, the young as well as migrant groups suffer the most network changes, specifically higher levels of losing ties. Our results also suggest the need for future research into the pandemic-related mechanisms why some socio-demographic groups, such as women, the young and migrants, are more likely to lose ties—other than their generally higher network volatility. With regard to gender differences, a number of studies has documented a larger increase in housework and childcare, as well as work-family-stress among women than among men (Kulik and Liberman, 2013; Kuhn et al., 2020). Women more often suffered from a time squeeze than men, which could be an explanation for their limited ability to keep in touch with friends. With regard to age differences, network volatility associated with young adulthood (Arnett, 2000) may have increased due to the difficulty of finding new partnerships or jobs. Future research will be needed to better understand these risks, and to see whether these groups were able to catch up with the forgone opportunities for maintaining old ties and forming new ones after the pandemic.

Given the warnings against a second, mental health, pandemic, and the threatening increasing inequalities, understanding the roots and the long-term consequences of various types of network changes due to the COVID-19 crisis is a pivotal task for research. Our study contributes to this field with a first, systematic investigation into network changes. Our findings suggest that the dissolution of ties may be problematic in the longer run because changes in networks act as a mediating mechanism for wellbeing during the COVID-19 crisis. Social networks are an important buffer against the adverse consequences of crises, and a crucial source of social resilience (Hurlbert et al., 2017; Carlsen et al., 2020). Thus, the chances for recovering from the pandemic ultimately depend on a society's social capital, which the pandemic threatens to undermine. The long-term psychological, social, and economic consequences of broken ties remain to be addressed by future research.

NOMENCLATURE

Resource Identification Initiative

To take part in the Resource Identification Initiative, please use the corresponding catalogue number and RRID in your current manuscript. For more information about the project and for steps on how to search for an RRID, please click here.

DATA AVAILABILITY STATEMENT

The data used for this article are under embargo and will be released *via* Gesis thereafter. For access to a reduced replication data set, please contact the authors directly.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fsoc.2022.837968/full#supplementary-material

REFERENCES

Arnett, J. J. (2000). Emerging adulthood: a theory of development from the late teens through the twenties. *Am. Psychol.* 55, 469–480. doi: 10.1037/0003-066X.55.5.469

Arpino, B., Pasqualini, M., Bordone, V., and Solé-Auró, A. (2020). Indirect Consequences of COVID-19 on People's Lives: Findings From An On-line Survey in France, Italy and Spain. *SocArXiv [Preprint]*. doi: 10.31235/osf.io/4sfv9

Block, P., Hoffman, M., Raabe, I. J., Dowd, J. B., Rahal, C., Kashyap, R., et al. (2020). Social network-based distancing strategies to flatten the COVID-19 curve in a post-lockdown world. *Nat. Hum. Behav.* 4, 588–596. doi: 10.1038/s41562-020-0898-6

Borkowska, M., and Laurence, J. (2020). Coming together or coming apart? Changes in social cohesion during the Covid-19 pandemic in England. *Eur. Soc.* 23, S618–S636. doi: 10.1080/14616696.2020.1833067

Carlsen, H. B., Toubøl, J., and Brincker, B. (2020). On solidarity and volunteering during the COVID-19 crisis in Denmark: the impact of social networks and social media groups on the distribution of support. *Eur. Soc.* 23, S122–S140. doi: 10.1080/14616696.2020.1818270

Carstensen, L. L. (1992). Social and emotional patterns in adulthood: support for socioemotional selectivity theory. *Psychol. Aging* 7, 331–338. doi: 10.1037/0882-7974.7.3.331

Engzell, P., Frey, A., and Verhagen, M. D. (2021). Learning loss due to school closures during the COVID-19 pandemic. *Proc. Natl. Acad. Sci. U.S.A.* 118:e2022376118. doi: 10.1073/pnas.2022376118

Fehr, B. (2008). Friendship formation. In: Sprecher S, Wenzel A, and Harvey J, editors. *Handbook of Relationship Initiation* (New York, NY: Psychology Press), 29–54.

Ferlander, S. (2007). The importance of different forms of social capital for health. *Acta Sociol.* 50, 115–128. doi: 10.1177/0001699307077654

Fischer, C. S., and Beresford, L. (2015). Changes in support networks in late middle age: the extension of gender and educational differences. *J. Gerontol. B Psychol. Sci. Soc. Sci.* 70, 123–131. doi: 10.1093/geronb/gbu057

Frank, K. A., Muller, C., Schiller, K. S., Riegle-Crumb, C., Mueller, A. S., Crosnoe, R., et al. (2008). The social dynamics of mathematics coursetaking in high school. *Am. J. Sociol.* 113, 1645–1696. doi: 10.1086/587153

Gauthier, G. R., Smith, J. A., Garcia, C., Garcia, M. A., and Thomas, P. A. (2021). Exacerbating inequalities: social networks, racial/ethnic disparities, and the COVID-19 pandemic in the United States. *J. Gerontol. B Psychol. Sci. Soc. Sci.* 76, e88–e92. doi: 10.1093/geronb/gbaa117

Gersons, B. P. R., Smid, G. E., Smit, A. S., Kazlauskas, E., and McFarlane, A. (2020). Can a 'second disaster' during and after the COVID-19 pandemic be mitigated? *Eur. J. Psychotraumatol.* 11:1815283. doi: 10.1080/20008198.2020.1815283

Granovetter, M. (1974). *Getting a Job: A Study of Contacts and Careers.* Chicago: University of Chicago Press.

Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., et al. (2021). A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). *Nat. Hum. Behav.* 5, 529–538. doi: 10.1038/s41562-021-01079-8

Hilmar, T. (2020). Culture in network breaks: tie dissolution as a vehicle of justice. *Poetics* 87:101528. doi: 10.1016/j.poetic.2020.101528

Hochschild, A. R. (1979). Emotion work, feeling rules, and social structure. *Am. J. Sociol.* 85, 551–575. doi: 10.1086/227049

Hurlbert, J. S., Beggs, J. J., and Haines, V. A. (2017). "Social networks and social capital in extreme environments," in *Social Capital*, ed J. Field (London; New York, NY: Routledge), 209–231. doi: 10.4324/9781315129457-9

Karaivanov, A. (2020). A social network model of COVID-19. *PLoS ONE* 15:e0240878. doi: 10.1371/journal.pone.0240878

Kuhn, U., Klaas, H. S., Antal, E., Dasoki, N., Lebert, F., Lipps, O., et al. (2020). Who is most affected by the Corona crisis? An analysis of changes in stress and well-being in Switzerland. *Eur. Soc.* 23, S942–S956. doi: 10.1080/14616696.2020.1839671

Kulik, L., and Liberman, G. (2013). Work-family conflict, resources, and role set density: assessing their effects on distress among working mothers. *J. Career Dev.* 40, 445–465. doi: 10.1177/0894845312467500

Ohlbrecht, H., and Jellen, J. (2020). Unequal tensions: the effects of the coronavirus pandemic in light of subjective health and social inequality dimensions in Germany. *Eur. Soc.* 23, S905–S922. doi: 10.1080/14616696.2020.1852440

Pichler, F., and Wallace, C. (2007). Patterns of formal and informal social capital in Europe. *Eur. Sociol. Rev.* 23, 423–435. doi: 10.1093/esr/jcm013

Rashid, T., and McGrath, R. E. (2020). Strengths-based actions to enhance wellbeing in the time of COVID-19. *Int. J. Wellbeing* 10, 113–132. doi: 10.5502/ijw.v10i4.1441

Rivera, M. T., Soderstrom, S. B., and Uzzi, B. (2010). Dynamics of dyads in social networks: assortative, relational, and proximity mechanisms. *Annu. Rev. Sociol.* 36, 91–115. doi: 10.1146/annurev.soc.34.040507.134743

Rossi, A. S., and Rossi, P. H. (1990). *Of Human Bonding: Parent-Child Relations Across the Life Course.* New York, NY: A. de Gruyter.

Wrzus, C., Hanel, M., Wagner, J., and Neyer, F. J. (2013). Social network changes and life events across the life span: a meta-analysis. *Psychol. Bull.* 139, 53–80. doi: 10.1037/a0028601

Gender Differences in the Psychosocial Functioning of Parents During the COVID-19 Pandemic

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The COVID-19 pandemic significantly affected family life, increasing parental stress around health, job losses, reduced salaries, and maintaining domestic life in lockdown and social isolation. The transition to home-schooling and remote work with school and workplace closures caused additional stressors as families began living, working, and educating in one place. This research aims to understand the relationship between the pandemic and parental stress, focusing on family well-being and established characteristics of the family unit that may cause some family members to experience the adverse consequences of the pandemic in more or less profound ways, especially mothers. Previous research shows that mothers carry more family responsibilities than fathers and can experience higher stress levels. This study employed a quantitative cross-sectional online survey to extend our understanding of the interaction between home-schooling, work and home life, and stress levels in a group of 364 parents. In total, 232 mothers and 132 fathers completed the survey. Results revealed mothers were 10 times more likely to be responsible for home-schooling than fathers, and 44% of mothers felt they had no help with home-schooling and were generally more stressed than fathers. These results show that lack of support, managing home-schooling, and being a mother predicted increased stress. 10% of mothers reported leaving their jobs due to pressure added by home-schooling. This study broadens the understanding of the pandemic's impact on gender imbalances in family responsibilities. It emphasises the need for extra consideration for the impact on mothers as we emerge from this pandemic.

Keywords: gender difference, parental stress, COVID-19, family stress and coping, mother

INTRODUCTION

The COVID-19 pandemic significantly affected family life, increasing parental stress around health, job losses, reduced salaries, and maintaining domestic life in lockdown and social isolation. The transition to home-schooling and remote work with school and workplace closures caused additional stressors as families began living, working, and educating in one place (Westrupp et al., 2020; Clark et al., 2020; Riem et al., 2021). The effects of these challenges will likely be long-term partly because of how contextual risk becomes rooted in the structures and processes of family systems. How families handle and cope with pandemic challenges and

the degree of impact these difficulties have on families will likely vary considerably. For some families, the consequences of the pandemic may cause increased psychological distress resulting in greater reliance on less effective parenting practices or behavioural changes in children. At the same time, other families may experience less significant impacts in managing and dealing with the pandemic (Riem et al., 2021).

The impacts of the pandemic on families' well-being are only beginning to be understood. Despite this, one-third of families reported being 'very or extremely' anxious because of family stress resulting from pandemic related confinement (Prime et al., 2020). Prime et al. (2020) argue that studying pandemic related family stress and well-being is part of the social justice mandate of scientific and professional psychology to respond to the suffering of families and children. This helps them deal with hardships, particularly those underrepresented or experiencing marginalisation. Therefore, they argue it is essential for practitioners working with families and children to understand the consequences of the pandemic on these groups.

This article describes the relationship between the pandemic and parental stress, focusing on family well-being and established characteristics of the family unit that may cause some family members to experience the adverse consequences of the pandemic in more or less profound ways. Specifically, it examines the pandemic's effect on families and parental stress relating to home-schooling and how the added responsibility of home-schooling impacts parents' ability to work and parent concurrently and effectively. The following background, methodology, analysis and discussion are designed to add to the growing knowledge base on psychological health. Doing so offers essential findings to inform practitioners and the scientific and academic communities.

COVID-19, the Family Unit and Parental Stress

The social and economic disruptions of COVID-19 are exacerbating parental stress relating to financial insecurity, caregiving burden, reduction in social support outside the family unit, changes to work routines, and the need to meet children's social and educational needs. The pandemic is causing families to face unprecedented adversities, and with this dynamic, there is an essential need for strong family leadership supported by nurturance, guidance and protection. However, this authoritative parenting approach often breaks down in times of anxiety and uncertainty, increasing parental stress and straining the family unit. When parents face heightened stress levels, mental and emotional resources diminish, making positive family leadership more challenging and causing overreliance on less effective parenting methods.

The conceptual framework of this research draws on Prime et al. (2020), using systematic models of human development and family functioning to connect pandemic related social disruption to parental stress. To understand these correlations, the present study examines parental well-being and family processes, such as communication, beliefs, and organisation. Specifically, it looks

at the relationship between parental stress, home-schooling and the ability to work and parent at the same time during COVID-19.

Prime, Wade and Browne developed this framework to link social disruption due to the pandemic to child adjustment using a 'cascading process' relating to the well-being of caregivers and family processes. Still, the framework can also adapt to address similar topics, such as the one in this study. In their framework, Prime, Wade and Browne combine family systems theory, the bioecological model, the family stress model and the developmental system theory. Combining these approaches, they show how pandemic-related disruptions generate higher levels of psychological distress for parents, influencing the quality of relationships between caregivers, parents and children and siblings. These changes in relational dynamics can disrupt children's adjustment.

By drawing on these principles, this current study illustrates that contextual risks (home-schooling, remote work, family dynamics) and social disruption pose significant parental stress risks. The connections between adversity, parental stress and family well-being are not unidimensional. Instead, as Prime, Wade and Browne demonstrate, they operate in a reinforcing system where stress and disruption in one domain cause stress and disruption in another. Existing vulnerabilities in families may exacerbate social disruption and prolong the consequential outcomes of the pandemic. For example, stressors that hinder the functioning of one family member can cause changes to how other family members function. At the same time, reduced parental stress and increased parental and family well-being can safeguard against these stressors (Prime et al., 2020).

COVID-19, Gender Dynamics in the Family Unit and Parental Stress

The pandemic made it necessary for parents to be full-time caretakers and teachers without the ability to rely on help outside the immediate family unit (Pew Research Center, 2015). At the same time, many parents had to maintain paid work, and others had to cope with the consequences of unemployment due to COVID-19. Meanwhile, essential workers had the added stress of finding childcare and the risk of exposing their families to COVID-19. These dynamics altered many dual-earning couples' domestic labour divisions, forcing them to manage a reorganisation of childcare, work, and home-schooling.

Before the global pandemic, mothers in heterosexual relationships did most family-related work, even as breadwinners. In a culture that encourages intensive mothering ideology, COVID-19 exacerbated gender inequality, with home and childcare responsibilities falling more on women. Intensive mothering is an ideology developed from traditional gender norms that impose unrealistic motherhood standards to determine the status of a 'good mother'. This ideology holds that mothers are the 'best' and 'preferred' caregivers and must care for their children's health and development needs. From this perspective, mothering should be 'child-centred, expert-guided, emotionally absorbing, labour-intensive, and financially expensive' (Hays, 1996).

Intensive mothering can decrease mothers' mental health and establish an unequal division of labour. Though this

philosophy focuses on mothers, it creates a 'complementary social script for fathers' (Hays, 1996). Even if parents have similar parenting attitudes, gender norms pressure women to take on most domestic duties. Further to this, research suggests that women and men understand the meaning of being a 'good' parent differently. Men generally define a good parent by the ability to provide financial stability for the family. In contrast, women must often put their needs second to the responsibilities of motherhood, including personal needs, well-being and career (Hays, 1996). These gender dynamics may influence differences in parental stress levels for fathers and mothers, especially during times of crisis, such as the COVID-19 pandemic. Moreover, social theory highlights women's challenges when balancing mothering roles versus work life. Mothers tend to take more responsibility for caregiving and domestic duties than fathers. While men acknowledge the importance of domestic responsibilities, they are prone to ignore them (Thébaud et al., 2019), a trend amplified during COVID-19 (Alon et al., 2020). Baumeister and Leary (1995) find that conforming to social norms is essential for people to feel that they belong. With is, people are motivated to adhere to social norms as they are rewarded when they do and punished when they deviate from them (Baumeister and Leary, 1995). In society, motherhood is idealised as the 'supreme physical and emotional achievement in women's lives' (Phoenix et al., 1991). Being able to meet the expectations and fulfil the 'norms' of motherhood is considered significant for affirming a mother's social identity and her secure sense of self (Gaunt, 2008). To meet these standards and affirm their identity as a mother, women often take ownership of household and childcare duties, carrying out these tasks themselves and setting the standards for how they need to be completed in the home. This phenomenon is known as maternal gatekeeping and is motivated by a fear that they will be socially judged for their housekeeping and childcare abilities if they do not meet the social standard (Gaunt, 2008; Puhlman and Pasley, 2013). Studies indicate that these pressures on mothers are related to higher levels of maternal guilt, burnout, and increased stress levels (Henderson et al., 2016; Borelli et al., 2017; Meeussen and Van Laar, 2018). Research shows that guilt, shame and stress generally involve a social evaluation piece and the fear of being judged within society for failing to reach mothering standards (Gilbert, 1998, 2007; Deonna and Teroni, 2008).

According to human capital theories (Becker, 1985), unequal responsibilities for domestic life have a broader impact than just increasing mothers' psychological stress; they also interfere with a mother's ability to stay engaged in the labour market. Before COVID-19, reduced involvement in domestic tasks enabled fathers to be more committed to the workplace; maternal shame and the cultural expectations of intensive mothering forced women to prioritise domestic tasks, creating disadvantages for women in the labour market (Benard and Correll, 2010). This is seen in fathers spending longer hours at work than mothers and mothers being more likely to reduce their work hours or even quit jobs if work interferes with their family responsibilities (Kaufman and Grönlund, 2019). Consistent with social theories which highlight intensive mothering expectations, mothers are more pressured to miss work when there are problems with childcare or schooling (Maume, 2008). COVID-19 has increased pressure on families; more specifically, home-schooling has added to the pressure felt by working mothers (Clark et al., 2020). Evidence is emerging that guilt and stress are increasing for mothers (Brown et al., 2020). The changing pressures being placed on families during COVID-19 may also be increasing the risk of depression and anxiety among parents. There are growing indications that it is having a negative impact on the psychosocial functioning of families (Clark et al., 2020; Westrupp et al., 2020; O'Sullivan et al., 2021). A study by Malkawi et al. (2020) indicated increased depression, anxiety, and stress levels in mothers during the COVID-19 pandemic compared to fathers. These findings align with previous research that highlights females are more prone to experience depression and anxiety (American Psychiatric Association, 2013), especially in times of stress (Momayyezi et al., 2020). A lack of social support, having children with additional needs and having a more significant number of children and conflict within relationships can increase the risk for maternal depression (Wachs et al., 2009; Rahman et al., 2013; Gelaye et al., 2016). Increased social support and proactive outreach could enhance prevention and more rapid treatment (Almeida et al., 2020). Research shows that the parenting participation of fathers can moderate maternal stress. Fathers can play a protective role, negotiating the impact of maternal stress by reducing the damaging effects of maternal parenting behaviour on family well-being. This has been observed in stressful situations that increase the risk of maternal distress, such as COVID-19 (Papadaki and Giovazolias, 2015).

In 2020 Clark et al. interviewed families, exploring their experiences of COVID-19 pandemic restrictions. Results revealed that working mothers struggled to manage the added burden of home-schooling. There was evidence of increased stress and isolation; mothers were particularly concerned about the longer-term impact of the pandemic on their families and their ability to participate in the labour market. This research extends these findings by collecting survey-based data to understand parental stress during Ireland's second wave of COVID-19 restrictions. The survey aims to understand parental experiences of home-schooling and working (or not) during the pandemic and how these experiences correlate with stress.

The paper tests specific research questions based on the research literature and the study conducted in 2020 by Clark et al. These include:

1. Did parents who worked full-time during the COVID-19 pandemic experience higher levels of stress than parents who worked part-time or who did not work?
2. Did parents who worked full-time during the COVID-19 pandemic find home-schooling harder than parents who worked part-time or who did not work?
3. Does family structure, number of children, home-schooling, and parent type predict parental stress during COVID-19?
4. Did mothers and father differ in their experiences of home-schooling and work, their stress during COVID-19, and their perception of support?
5. What are the experiences of families during COVID-19?

MATERIALS AND METHODS

Design

This study employed a quantitative cross-sectional online survey design to assess the relationships and associations between variables. This design also featured the inclusion of qualitative questions regarding the participant's experiences of home-schooling. An Interpretative Phenomenological Analysis (IPA) approach (Smith and Shinebourne, 2012) was used to analyse the qualitative data obtained in this study.

The survey's methodological design was integral because the qualitative questions provided the researchers with a more in-depth understanding to support the quantitative data further. The survey enabled participants to expand their responses to the quantitative questions by including opportunities for open text answers. The information collected in the qualitative questions added valuable insights to the quantitative data.

Participants

Four hundred and thirty-eight parents completed the online survey. Participants were recruited *via* social media and other networking platforms using snowballing sampling techniques. The data of 334 participants was fully complete and included in the final analysis. Of these 364 participants, 232 were female, and 132 were male. Inclusion criteria for the study were being a mother or father of school-age children and having at least some experience of home-schooling.

Measures

The survey was designed to explore specific areas of the research questions. The sample's demographics focused on several variables, including the number of children being home-schooled, which parent oversaw home-schooling, and family structure (e.g., lone parenting, lone parenting—with family support, co-parenting -both parents living together etc.).

The data collection focused on four areas: home-schooling, education structures and supports, stress, and work–life balance. Several questions accompanied each of these categories. For example, to measure the experiences of home-schooling parents, the survey sought to understand who has the primary responsibility for home-schooling in the home; confidence in home-schooling, confidence in partners' abilities to home-school and help from partners in home-schooling. Regarding education and structures, survey questions concentrated on school supports, online schooling and satisfaction with education moving online. In measuring stress, questions focused on stress levels, time constraints (or not), feelings of letting down their family and guilt. Finally, to explore work–life balance, the survey accounted for hours worked, at home or in office work dynamics, and the impacts of home-schooling on professional life.

Procedure

This study received ethical approval from The Social Research Ethics Subcommittee, Maynooth University (2407411). This study was completed using the Microsoft Forms platform. Before filling out the survey, participants were provided with an information sheet and a consent form before participating in the study. All participants were provided clear and concise information about the nature of the research and what the questionnaire would entail. They were informed that all the information they provided would remain anonymous and nonidentifiable and were reassured of their right not to participate.

Once this was completed, participants could begin filling out the questionnaire. Upon completion, a de-briefing sheet was provided to participants. Once all the data was gathered, it was coded to create a singular SPSS data file for analysis. Responses to the qualitative questions in the survey were analysed separately. These data were stored on a password-protected computer.

Data Analysis

A power analysis was run before the conduction of this study and found that for this test to have sufficient power, 139 participants would be required. This was based on *a priori* sample size calculation assuming a medium effect size, a power of 0.8, 15 predictor variables, and a probability level of 0.05. All statistical analysis was conducted using SPSS version 26. Independent samples *t*-tests, one-way ANOVA, and binomial logistical regression analysis were run to investigate the relationships and associations between variables.

A thematic approach to IPA was used to analyse the qualitative data collected as part of this study. The analysis was guided by the six steps outlined by Smith and Shinebourne (2012):

1. Reading/Re-reading—The research team familiarise themselves with the qualitative data.
2. Coding—Codes are identified and organised into initial themes.
3. Clustering—Common themes and sub-themes are linked together to form the themes.
4. Iteration—The iterative process involves several revisions, including checking themes, sub-themes, and quotes.
5. Narration—A narrative was developed based on the findings. The narration process involves describing the themes and using quotes to illustrate them.
6. Contextualisation—The findings are interpreted within the context of existing literature.

RESULTS

Descriptive Statistics

Table 1 compares the percentage of mothers and fathers who agreed with the following questions. The comparison shows that mothers are 10 times more likely to manage the home-schooling than fathers, and 44% of mothers feel they have no help with home-schooling compared to 17% of fathers. More fathers work full time, and more mothers work part time; however, 18% more mothers work from home. Mothers are three times more likely to report feeling pressure to leave work than fathers due to home-schooling responsibilities. Mothers are more stressed overall and feel like they are letting their families down at higher rates than fathers. 44% of mothers report that their career suffers due to home-schooling compared to only 18% of men.

Impact of Work Type on Stress and Home Schooling

To examine research question one, the study looked specifically at how being full-time or part-time would impact stress and home-schooling. To examine this, a series of independent sample *T*-Tests were performed (**Table 2**). The results show that parents who were not working full time were more confident to home-school and felt better about home-schooling than parents working full-time. Working parents were more stressed overall, reported not having enough time and felt they were letting their families down more than nonworking parents. Nonworking parents reported a better work–life balance than full time working parents (**Figure 1**).

TABLE 1 | A comparison of the percentage of mothers and fathers who agreed with questions.

Category	Question	% Mothers who said yes	% Fathers who said yes
Home-schooling	I have primary responsibility for home-schooling	65	6
	I am confident in my ability to home-school	69	83
	I am confident in my partners' ability to home-school	63	89
	I feel like I have no help home-schooling my children	44	17
Work–life	I work full-time	55	86
	I work part-time	31	1
	I work from home	88	70
	I feel pressure to leave work due to family responsibilities	22	8
	I can easily fit home-schooling around my work	8	44
	I have left my job due to home-schooling	10	2
	I have a good work family-work life balance	11	50
	My career is suffering due to home-schooling	44	18
	I am not working to my full potential due to home-schooling	71	41
Stress	I feel stressed overall	77	56
	I feel guilty about home-schooling	81	78
	I feel like I am letting my family down	57	25
	I feel like I do not have enough time enough time	91	76

Factors Which Predict Parental Stress

Multiple linear regression analysis was used to develop a model for predicting parent stress score from family size, parent type (mother or father), working from home, working full time, managing home-schooling, guilt around home-schooling, work–family life balance, and help with home-schooling. Regression coefficients are shown in **Table 3**. Being a mother, working from home, working full time, managing home-schooling, having a good family–work life balance, and feeling like you had no one to help with homes-schooling predictors had significant ($p < 0.05$) partial effects in the full model. The eight-predictor model was able to account for 42% of the variance in parent stress, $F(8, 308) = 29.03$, $p < 0.001$, $R^2 = 0.42$, 90% CI [−0.56, 0.65].

Different Experiences of Parents

Independent Sample *T*-Tests were performed on several key questions relating to home-schooling, stress and work–life to establish if differences emerged for mothers and fathers. **Table 4** reports the significant results; fathers feel better about home-schooling than mothers. They report having a better family–work life balance than mothers. They report being able to fit home-schooling around their work better than mothers. Conversely, mothers report their career suffering at higher levels than fathers. They feel like they have less help with home-schooling than fathers, they report higher levels of stress overall, and they report not having enough time at higher levels than fathers do (**Figure 2**).

QUALITATIVE ANALYSIS

Three key themes were identified in the qualitative analysis, including concern about the impact of home-schooling on their children, stress, and pressure due to working from home. Each theme interrelates and elaborates on the above data.

TABLE 2 | Means for the different family sizes for each question with significance levels of the one-way ANOVA.

Category	Question	FT work	Not working	*t*-value	*p*-value
Home-school	Confidence to home-school	1.85	2.14	−2.12	0.035
	Feel good about home-school	1.22	1.59	−2.41	0.017
Stress	Stressed overall	3.18	2.81	2.73	0.008
	Feel guilty about home-schooling	2.53	2.01	2.44	0.015
	Letting my family down	2.44	1.92	3.24	0.001
	Have enough time	3.46	2.82	4.74	0.001

FIGURE 1 | Average rating differences for questions relating to home-schooling and stress for full-time parents and parents not working.
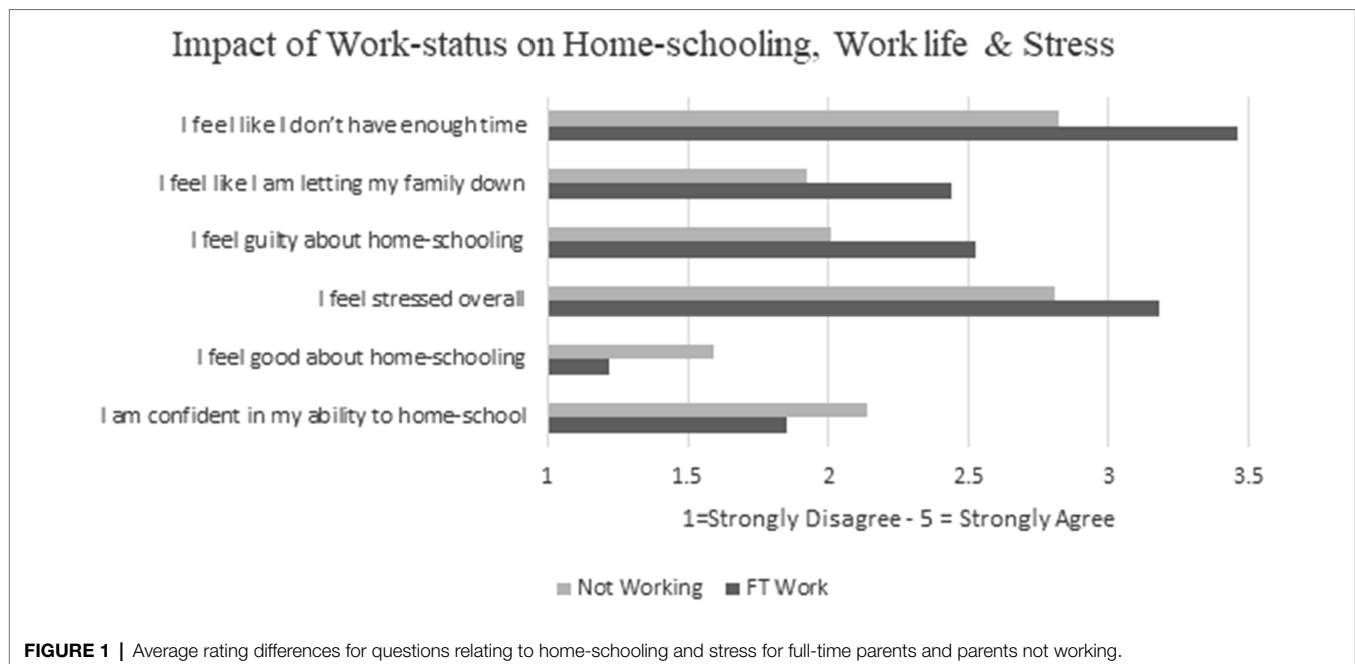
Theme 1: Concern About the Impact of Home-Schooling on Their Children

Parents expressed concern about home-schooling's immediate and long-term impact on their children. In this regard, three sub-themes were identified: 'Mental health difficulties', 'Getting on with it', and 'The schools have been unhelpful'.

Mental Health Difficulties

Respondents are worried about the impact that home-schooling and the lockdown is having on their children's mental health; this is illustrated in the following responses:

> "I help where I can or when needed by my children. Their mental health is suffering more than their education as not seeing friends, no proper routine and all sports are off."
> "A nightmare ... Younger children don't sleep because they are not active during the day... Supporting older children is very tough because they are under huge mental health strain..."
> "My children are suffering as a result of being denied their right to an education. Online learning is an absolute farce, with classes being cancelled, pre-recorded etc. Basically, teaching themselves... They will regress in both schoolwork and sports and socialisation. They miss their friends and are down. Not their normal happy selves at aged 14..."

Parents repeatedly describe highly stressed environments that are having a negative impact on their children. Particularly evident was the emotional strain on both parents and children. Mother's reporting crying most days, alongside their children.

> "Terrible during spring lockdown. Tears every day, mine and/or theirs... As well as working part-time, I'm also a full-time student with classes on Zoom, with mandatory attendance. First day today was so busy, starting work shift at 6.30am for 3.5 hours followed by 4.5 hours of college. Ended up snoozing on sofa at 6.30. Will try harder tomorrow..."
> "Extremely stressful trying to assist my son who has special needs and is suffering from extreme anxiety due to the pandemic and we're living alone."

The concern about mental health consequences stems from several challenges that parents identify as being particularly stressful for their children: the loss of friendships, the lack of sport and activity and the change in routing, including late sleeping. These challenges all merge into a picture of failing families and children missing out on a normal childhood.

Getting on With It

Many parents expressed the view that despite the challenges that home-schooling, and the lockdown were presenting them with, they were 'getting on with it'.

> "We do our best, I don't pressure the kids, they attend every class, and complete all work assigned, it's not as good as school, they would be learning more and benefiting from social interaction, but these are not ordinary times, it will pass"

TABLE 3 | Summary of linear regression analyses for variables predicting parent stress.

Variable	B	SE B	t	p
Number of children	−0.08	0.06	−1.26	0.21
Parent type	−0.29	0.14	−2.06	0.04
Working from home	0.43	0.11	3.78	0.001
Work Full time	−0.25	0.11	−2.16	0.03
I can easily fit home-schooling around my work	−0.17	0.05	−3.54	0.001
I feel guilty about home-schooling	0.04	0.03	1.10	0.27
I have a good family-work life balance	−0.29	0.05	−5.70	0.001
I feel like I have no-one to help me homes-school my child (ren)	0.19	0.04	4.56	0.001
Constant	3.25	0.29	11.16	0.001

TABLE 4 | Independent t-tests mother versus father comparisons.

Variable	Mothers average	Father average	t	p
I am confident in my partners ability to home-school	1.96	2.9	−7.53	0.001
I feel good about home-schooling	1.41	1.83	6.43	0.001
My career is suffering due to home-schooling	2.12	1.53	−3.24	0.022
I feel like I have no help home-schooling my children	2.29	1.42	−3.76	0.001
I can easily fit home-schooling around my work	1.4	1.7	4.70	0.001
I feel like I do not have enough time	3.19	2.92	11.16	0.001
I have a good work family-work life balance	1.59	2.07	5.35	0.001
I am stressed overall	3.05	2.44	2.25	0.025
I feel like I am letting my family down	2.26	1.55	−3.34	0.001

"I don't believe we are home schooling, I am not planning lessons, setting targets etc. We are doing schoolwork at home, the teachers do the heavy lifting. I am not pressuring my children to achieve. We are focusing on good mental health, exercise, creative and fun activities"

"Many positives for my children and my relationship with them. Many challenges also… we have managed to work through them together and accepting that the best we can do is 'good enough'. …government was not going to… provide the necessary supports. That was possibly the most challenging thing to accept…"

The ability of some parents to persevere in challenging times is evident here. Those parents have to work extremely hard to protect their children from the consequences of the pandemic is also apparent.

The Schools Have Been Unhelpful

Many of the respondents expressed the view that the education being provided by their children's schools is inadequate. However, this was not seen across all respondents, and there were clear differences between how families viewed the school's supports. In terms of the people who were afraid of the impact of future pandemic restrictions, we see that they point to a lack of school support as being part of that fear. For example, parents said:

"If support from school had been better with some live classes and supports, I feel it would have greatly increased the learning & happiness of the children. Work has never been busier, I find by the time the kids get up at 9/10 I have 3- or 4-hours work done, it's tough…"
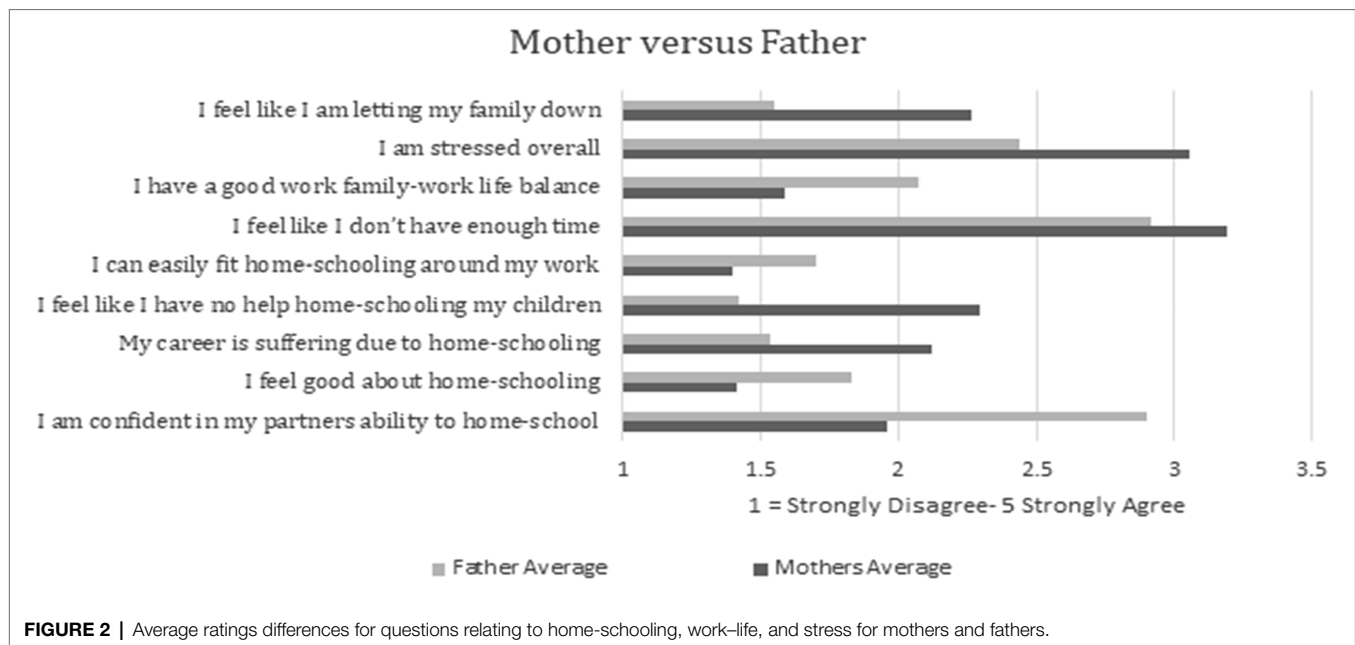
"Awful, kids are upset and miss school. Teachers are not supportive. No interaction with teachers. No zoom classes. Don't get calls back from teachers. Told we can't discuss distance learning at parent teacher meetings. The children have been let down terribly."

This theme emerged in different ways whereby parents were comparing their effort with that of the schools, and some parents point out that they are doing their best to home-school their children and work from home. They do not feel like the schools are matching their efforts

"Miserable. Minimum support from school. One Zoom class a week for a 5- and 8- year-old of half an hour duration. Meanwhile I am expected to deliver a full curriculum. Fails utterly to acknowledge the reality of life in lockdown for working parents"

"Horrific. I am a frontline worker so therefore am not at home to supervise home-school. The dept of education and teachers of Ireland are codding themselves if they think that stressed out working parents can educate the children of Ireland in the same way school does"

While there are parents concerned with the schools' level of support, there were times when parents were positive and happy with the support they received from their children's

FIGURE 2 | Average ratings differences for questions relating to home-schooling, work–life, and stress for mothers and fathers.

school. However, references made to school support were generally negative and reflected the stress and concern parents have for the longer-term impact of the pandemic.

Among the families who are positive about their children's schooling, some indicate that the level of stress from work and family life is too much to bear,

> "The school can't do anymore they are fantastic, but I am exhausted, and my kids can do a lot on their own, I feel low level depressed, I wish my organisation provided more support other than links to websites for help or the eap programme, considering going sick for a few weeks."

Theme 2: Stress

The theme that came up repeatedly across the responses was that parents and children are under considerable stress. Of significance here is that even among those reporting positively, they too report being under stress. Respondents frequently described their family environments as difficult for everyone:

> "It is stressful due to the different ages. The youngest is still in primary school which has its own challenges. However, having 3 teenagers all having to be online at once in separate areas of the house has not been easy"
> "Home-schooling one child with very complex needs demand fulltime care but I need to share that time with his sibling. He is struggling to cope with not having any social interaction or having anything to look forward to"

Throughout the responses, there are curt replies that are indicative of the strain that parents are under. One-word and two-word replies are common, 'Stressful', 'Highly-Stressful', and those indicating parents are having a tough time.

> "Nightmare when I do it because I'm dyslexic."
> "It is one thing I would not like to do in the future as it can be very stressful."

Even among families that expressed the view that home-schooling and the lockdown have been a positive experience, some indicate that they too are finding it stressful:

> "Nice to have them at home when young, learning things myself, enjoying baking, and practical but very stressful with no break from each other at home."
> "Pressure!!!Overwhelming!!! I actually feel sad and I thankfully don't feel like that until the dreaded school closure announcement."

It is clear from the above responses that the pandemic, the lockdown, and the demands of home-schooling, are causing tremendous stress all through society and children are not immune from this.

Theme 3: Pressure Due to Working From Home

The survey data reveal that parents working from home while home-schooling their children are finding the situation difficult. They are likely to express guilt about their inability to carry out their job and home-school their children effectively. There is also evidence that they are coming under increased pressure from unsympathetic employers. This can be seen in these responses:

> "Awful. My daughter misses the social interaction, and it is hard to keep her motivation up. Her school has said interaction with teachers is discretionary and based on teacher's capacity. My job expects me to perform regardless of my capacity and I am struggling to teach and work and do everything alone."

"Would be completely fine if I wasn't working. As it is, it's a nightmare! My employers make no concessions and my daughter just doesn't get the attention or stimulation she needs."

"I can home-school or I can do a good job in my work but not both. Home-schooling has been a challenge the children are losing interest I lack the time to motivate them"

That parents are feeling a deep sense of guilt is also apparent:

"Dreadful. It is just a nightmare while trying to work. The mummies who don't work love it and are sending in heaps of work and WhatsApp messages. I don't know any working mum who doesn't absolutely hate and resent the ridiculous bullshit situation we are in. It is completely nuts and must stop."

"When I spend time it works well. Juggling work and trying to give time to home-schooling is stressful. I need to structure my day better"

"Home-schooling a special needs child who is struggling to manage his anxiety due to the pandemic as well as working from home and studying myself is extremely difficult I unfortunately can't give [100%] to everything which is frustrating as a parent"

These responses indicate that parents working from home are putting themselves under pressure and are being put under pressure by their employers. There is pressure to fill the gap in their children's lives that the absence of school has left, and they are coming under real pressure to prioritise their paid employment at the expense of time spent with their children. This attitude from employers calls into question the notion that the pandemic has had a unifying effect on society. Shouts of 'we are all in this together' ring hollow parents who must deal with a suffering child while your boss threatens to fire them for not giving him a solid eight-hour day from nine to five.

DISCUSSION

This study explored parental stress during the COVID-19 pandemic relating to home-schooling, traditional gender norms, labour divisions in the family unit, and work–life balance. It broadens the knowledge base on the impact of COVID-19 on parental stress and family well-being, fulfilling the social justice mandate of scientific and professional psychology to respond to the suffering of families and children, as discussed by Prime et al. (2020). It also offers essential information for practitioners and scholars working with families and children. It is particularly relevant for those working in the Irish context because, as Guo et al. (2020) found, mental health problems related to parental stress due to COVID-19 are not identical across country contexts. This study aligns with past research showing the close relationship between gender roles, divisions of labour, work–life balance and parental stress during COVID-19 (Thébaud et al., 2019; Clark et al., 2020; Guo et al., 2020; Prime et al., 2020; O'Sullivan et al., 2021; Riem et al., 2021; Forbes et al.,

2022). These studies emphasise the causal relationship between these factors and increased maternal stress due to higher degrees of family-life responsibilities than fathers.

In the present study, mothers reported being the primary caregivers while also managing home-schooling, a trend amplified during COVID-19 (Alon et al., 2020). The initial examination of the distribution of the burden of home-schooling shows that mothers are taking primary responsibility for this, and working parents, especially mothers, have more negative home-schooling experiences than those who do not work.

One element of this study examines if there is a connection between labour market engagement, home-schooling due to COVID-19, and stress-related outcomes due to this dynamic. The data suggest that working parents had higher stress levels, more time constraints, and stronger feelings around disappointing their families than nonworking parents. Nonworking parents experienced less stress and a better overall life balance than full-time working parents and felt more equipped to and better about home-schooling their children. These observations add to the research showing that COVID-19 has increased pressure on families, particularly those with parents working full-time and managing home-schooling (Clark et al., 2020).

These results also support evidence demonstrating that COVID-19 impacts the psychosocial functioning of families, especially among those with full-time working parents (Clark et al., 2020; Westrupp et al., 2020; O'Sullivan et al., 2021). This observation is magnified across the sexes when considering working mothers versus working fathers. The data in this study illustrates that fathers feel better about home-schooling than mothers. They reported having a better family–work life balance and a better ability to structure home-schooling around their work schedules. Conversely, mothers reported their careers are suffering at higher levels than fathers. They feel like they have less help with home-schooling than fathers and have higher parental stress levels overall.

One essential factor that may mitigate the impact of COVID-19 on maternal caregiving is allomaternal care. This type of care refers to childminding by adults other than the mother, including grandparents and fathers. Evidence from research with high-risk families demonstrates the importance of allomaternal support. For instance, long-term adverse effects on maternal depression during a child's infancy diminish when there is father support, suggesting that father involvement may reduce maternal stress. Conversely, if there is low or no father involvement, the risk of mothers abusing or neglecting their children increases. This finding is critical because the reported lower father involvement in labour division in family units, including childcare and home-schooling during the pandemic, could be a predictive factor in the likely long-term effects of the pandemic.

Building on this point, mothers also report higher levels of time constraints than fathers, which aligns with the work of Malkawi et al. (2020), observing increased stress in mothers during the COVID-19 pandemic compared to fathers. Intensive mothering and social theory highlight women's challenges when balancing mothering and work–life (Baumeister and Leary, 1995). The ability to meet the expectations and fulfil the "norms" of motherhood is considered significant for affirming a mother's

social identity (Gaunt, 2008). This study suggests that working mothers feel differently about their home-schooling responsibilities than fathers, and they are more stressed and less satisfied. Fathers report more time for themselves. While they are aware of the burden being placed on mothers, the qualitative research shows that they are leaving the responsibility to the mothers rather than easing the load. It also points to a new shift in gender-parent inequality where mothers are expected to work and manage the "second" shift of housework and must also manage the home-schooling and the worry about the pandemic restrictions mean for their children.

In national and political responses to the pandemic, the potential cost that maternal stress has on family dynamics (Gilbert, 1998, 2007; Deonna and Teroni, 2008) is not being discussed. The longer-term negative consequences occurring developmentally for children living through this period are being ignored. The qualitative research from this study and that of Clark et al. (2020), shows that parents are aware of the pandemic's impact and are stressed about what they perceive as its long-term implications for their children. This research shows how families feel isolated and unsupported by their schools and at times unable to cope with the new normal that COVID-19 presents them with. Without support, families will be left to recover from a complex mixture of fear, stress, and extra work—without any clear plan from those who are formulating policy responses to the crisis.

When accounting for the factors which predict parental stress, it is evident that being a mother was a significant indicator of stress while working from home, working full time, and managing home-schooling also predicted stress levels. Those who had a good family–work life balance, most of which were fathers, had less stress. Importantly, feeling like there was no one to help with home-schooling was a predictor of parental stress. This shows the significant impact of home-schooling on parental stress and how mothers are most at risk of having increased stress levels than fathers. Malkawi et al. (2020) observed increased stress in mothers during the COVID-19 pandemic but could not quantify the factors that contributed to this stress. Our research shows that home-schooling, and having no help were essential contributors to parental stress. When understanding how we emerge from the pandemic and how we shift back to some form of normality, the cost of the crisis and extra burden on mothers must be considered. Being asked to manage home-schooling and the responsibility of the second shift saw 10% of the mothers in our sample leave their jobs.

In comparison, only 2% of the fathers left their jobs due to the demands of home-schooling, meaning that 23 of the working mothers in our sample left work due to the added burden that home-schooling bought into their lives. This represents a substantial number of women who felt pressured to leave their jobs; we also see that 44% of working mothers

said that their careers were suffering due to the added pressure of home-schooling. This finding points to the difficult choices facing many mothers when considering the balance between home and work. In many cases, some families reported stress and fear. The qualitative themes were stark. Parents repeatedly paint pictures of highly stressed environments that harm their children alongside mothers reporting crying most days with their children. This study expands on the research carried out by Clark et al. (2020), showing a correlation between parental stress, home-schooling and family well-being. It further broadens the understanding of the impact of COVID-19, revealing that mothers are bearing the brunt of the home-schooling responsibilities and are experiencing higher stress levels than fathers. The results show significant factors contributing to parental stress that need to be considered as the world emerges from the pandemic. These include family size, availability of support, and work–life factors. We have observed that mothers take primary responsibility for the home-schooling. They have experienced higher stress levels than fathers, and this stress can potentially impact the whole family negatively.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by The Social Research Ethics Subcommittee, Maynooth University (2407411). The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

KO'S conceived the idea, secured ethical approval, and designed the study. SC wrote and edited overall document. NB collected, cleaned and analysed data. LB and NR completed literature review and first draft of document. NJ collected data. HF edited document and analysed data. All authors contributed to the article and approved the submitted version.

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REFERENCES

Almeida, M., Shrestha, A., Stojanac, D., and Miller, L. (2020). The impact of the COVID-19 pandemic on women's mental health. *Arch. Womens Ment. Health* 23, 741–748. doi: 10.1007/s00737-020-01092-2

Alon, T. M., Doepke, M., Olmstead-Rumsey, J., and Tertilt, M. L. (2020). The impact of COVID-19 on gender equality (No. 0898-2937): National Bureau of Economic Research.

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders. 5th Edn*. Washington, DC: Author.

Baumeister, R. F., and Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol. Bull.* 117, 497–529. doi: 10.1037/0033-2909.117.3.497

Becker, G. S. (1985). Human capital, effort, and the sexual division of labor. *J. Labor Econ.* 3, S33–S58. doi: 10.1086/298075

Benard, S., and Correll, S. J. (2010). Normative discrimination and the motherhood penalty. *Gend. Soc.* 24, 616–646. doi: 10.1177/0891243210383142

Borelli, J. L., Nelson, S. K., River, L. M., Birken, S. A., and Moss-Racusin, C. (2017). Gender differences in work-family guilt in parents of young children. *Sex Roles* 76, 356–368. doi: 10.1007/s11199-016-0579-0

Brown, S. M., Doom, J. R., Lechuga-Peña, S., Watamura, S. E., and Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. *Child Abuse Negl.* 110:104699. doi: 10.1016/j.chiabu.2020.104699

Clark, S., McGrane, A., Joksimovic, N., Boyle, N., Burke, L., Rock, N., et al. (2020). You're a teacher you're a mother, you're a worker': gender inequality during Covid-19 in Ireland. *Gend. Work. Organ.* 28, 1352–1362. doi: 10.1111/gwao.12611

Deonna, J. A., and Teroni, F. (2008). Distinguishing shame from guilt. *Conscious. Cogn.* 17, 725–740. doi: 10.1016/j.concog.2008.02.002

Forbes, L. K., Lamar, M. R., Speciale, M., and Donovan, C. (2022). Mothers' and fathers' parenting attitudes during COVID-19. *Curr. Psychol.* 41, 470–479. doi: 10.1007/s12144-021-01605-x

Gaunt, R. (2008). Maternal gatekeeping: antecedents and consequences. *J. Fam. Issues* 29, 373–395. doi: 10.1177/0192513X07307851

Gelaye, B., Rondon, M. B., Araya, R., and Williams, M. A. (2016). Epidemiology of maternal depression, risk factors, and child outcomes in low-income and middle-income countries. *Lancet Psychiatry* 3, 973–982. doi: 10.1016/S2215-0366(16)30284-X

Gilbert, P. (1998). "What is shame? Some core issues and controversies," in *Shame: Interpersonal Behavior, Psychopathology, and Culture.* eds. P. Gilbert and B. Andrews (New York, NY: Oxford University Press), 3–38.

Gilbert, P. (2007). "The evolution of shame as a marker for relationship security: a biopsychosocial approach," in *The Self-Conscious Emotions: Theory and Research.* eds. J. L. Tracy, R. W. Robbins and J. P. Tangney (New York, NY: Guilford Press), 283–309.

Guo, L., Luo, M., Yu, M., Jiang, W., and Wang, H. (2020). The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public – A systematic review and meta-analysis. *Psychiatry Research* 291:113190. doi: 10.1016/j.psychres.2020.113190

Hays, S. (1996). *The Cultural Contraindications of Motherhood.* New Haven: Yale University Press.

Henderson, A., Harmon, S., and Newman, H. (2016). The price mothers pay, even when they are not buying it: mental health consequences of idealised motherhood. *Sex Roles* 74, 512–526. doi: 10.1007/s11199-015-0534-5

Kaufman, G., and Grönlund, A. (2019). Displaying parenthood, (un)doing gender: parental leave, daycare and working-time adjustments in Sweden and the UK. *Fam. Relatsh. Soc.* 10, 213–229. doi: 10.1332/204674319X15683716957916

Malkawi, S., Almhdawi, K., Jaber, A., and Alqatarneh, N. (2020). COVID-19 quarantine-related mental health symptoms and their correlates among mothers: a cross sectional study. *Matern. Child Health J.* 25, 695–705. doi: 10.1007/s10995-020-03034-x

Maume, D. J. (2008). Gender differences in providing urgent childcare Among dual-earner parents. *Soc. Forces* 87, 273–297. doi: 10.1353/sof.0.0101

Meeussen, L., and Van Laar, C. (2018). Feeling pressure to be a perfect mother relates to parental burnout and career ambitions. *Front. Psychol.* 9:2113. doi: 10.3389/fpsyg.2018.02113

Momayyezi, M., Farzaneh, F., and Lotfi, M. H. (2020). Mental health status (depression, anxiety and stress) of employed and unemployed women in Yazd, Iran, 2015. *Health Dev. J.* 7, 239–249. doi: 10.22062/JHAD.2018.91291

O'Sullivan, K., Clark, S., McGrane, A., Rock, N., Burk, L., Boyle, N., et al. (2021). A qualitative study of child and adolescent mental health during the COVID-19 pandemic in Ireland. *Int. J. Environ. Res. Public Health* 18:1062. doi: 10.3390/ijerph18031062

Papadaki, E., and Giovazolias, T. (2015). The protective role of father acceptance in the relationship between maternal rejection and bullying: a moderated-mediation model. *J. Child Fam. Stud.* 24, 330–340. doi: 10.1007/s10826-013-9839-6

Pew Research Center (2015). Analyses of the Decennial Census and Americal Community Surveys Integrated. Available at: http://www.pewresearch.org/ft_dual-income-households-1960-2012-2/ (Accessed May 7, 2022).

Phoenix, A., Woollett, A., and Lloyd, E. (1991). *Gender and Psychology. Motherhood: Meanings, Practices and Ideologies.* Thousand Oaks: Sage Publications, Inc.

Prime, H., Wade, M., and Browne, D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *Am. Phsychol.* 75, 631–643. doi: 10.1037/amp0000660

Puhlman, D. J., and Pasley, K. (2013). Rethinking maternal gatekeeping. *J. Fam. Theory Rev.* 5, 176–193. doi: 10.1111/jftr.12016

Rahman, A., Surkan, P. J., Cayetano, C. E., Rwagatare, P., and Dickson, K. E. (2013). Grand challenges: integrating maternal mental health into maternal and child health programmes.

Riem, M. M., Lodder, P., Guo, J., Vrielink-Verpaalen, M., IJzendoorn, M. H., Bakermans-Kranenburg, M. J., et al. (2021). Predictive models of maternal harsh parenting During COVID-19 in China, Italy, and Netherlands. *Front. Psychol.* 12:722453. doi: 10.3389/fpsyt.2021.722453

Smith, J., and Shinebourne, P. (2012). "Interpretative phenomenological analysis," in *Research designs: Quantitative, Qualitative, Neuropsychological, and Biological. Vol. 2.* ed. APA handbook of research methods in psychology (Washington, DC: American Psychological Association), 73–82.

Thébaud, S., Kornrich, S., and Ruppanner, L. (2019). Good housekeeping, great expectations: gender and housework norms. *Sociol. Methods Res.* 50, 1186–1214. doi: 10.1177/0049124119852395

Wachs, T. D., Black, M. M., and Engle, P. L. (2009). Maternal depression: a global threat to children's health, development, and behavior and to human rights. *Child Dev. Perspect.* 3, 51–59. doi: 10.1111/j.1750-8606.2008.00077.x

Westrupp, E., Bennett, C., Berkowitz, T. S., Youssef, G., Toumbourou, J., Tucker, R., et al. (2020). Child, parent, and family mental health and functioning in Australia during COVID-19: comparison to pre-pandemic data.

Ethnic, racial and regional inequalities in access to COVID-19 vaccine, testing and hospitalization: Implications for eradication of the pandemic

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The COVID-19 pandemic has made visible inequalities as exemplified by unequal access to COVID-19 vaccine across and within countries; inequalities that are also apparent in rates of testing, disease, hospitalization and death from COVID-19 along class, ethnic and racial lines. For a global pandemic such as the COVID-19 to be effectively addressed, there is a need to reflect on the entrenched and structural inequalities within and between countries. While many countries in the global north have acquired more vaccines than they may need, in the global south many have very limited access. While countries in the global north had largely vaccinated their populations by 2022, those in the global south may not even complete vaccinating 70% of their population to enable them reach the so-called herd immunity by 2024. Even in the global north where vaccines are available, ethnic, racialized and poor working classes are disproportionately affected in terms of disproportionately low rates of infection and death. This paper explores the socio-economic and political structural factors that have created and maintain these disparities. In particular we sketch the role of neoliberal developments in deregulating and financializing the system, vaccine hoarding, patent protection and how this contributes to maintaining and widening disparities in access to COVID-19 vaccine and medication.

KEYWORDS

vaccine hoarding, patent protection, neoliberalism, financialisation, inequalities, COVID-19

Introduction

With more than 200 million known cases of COVID-19 and nearly 5 million deaths around the world as of September 2021 (Mancini and Burn-Murdoch, 2021; WHO, 2021), the COVID-19 pandemic presents a major global challenge. Nonetheless, while the pandemic no doubt presents a dark phase for humanity, there are also signs indicating some awakening. In the context of the lockdown implemented by governments in many countries and consequent hardships experienced by the people, mutual help groups for those in distress have emerged, especially among the youth (Wickramanayake, 2020). Bhattacharya (2020) notes how ordinary Italians sang to one another across balconies,

expressing solidarity with neighbors living in isolation and caregivers on the frontlines. Moreover, at government level, welfare reforms appeared to be returning, leading some - for example, Monbiot (2020) - to predict the collapse of the neoliberal character of state-sponsored welfare. Neoliberalism or the economic ideology of capitalism, has, since the 1970s depleted public services, turning service institutions such as healthcare and education into commercial business, focused on profit accumulation for the few at the expense of poorly paid workers, ethnic and racialized groups and has thus aggravated inequalities between citizens and countries (Monbiot, 2017; Ahlberg et al., 2019).

The rise of neoliberalism and the structuring of inequalities

Neoliberalism or the doctrine of the free market and related political and individual freedoms, was perhaps best articulated, by the economist Friedman (1962) who strongly opposed the type of liberal democracy that developed in the middle of the nineteenth century, with its emphasis on equality and social welfare, which he defined as state intervention and paternalism. Neoliberalism is a force explicitly aimed at the decay of the nation state and democratic welfare (Davidson and Saull, 2016). Moreover, it entails extending the doctrine of the free market to embrace every part of public and personal worlds and leads to the transformation of states and governments from being providers of social welfare to promoters of market and competition. Neoliberalism thus implies, as argued by Monbiot (2017), cutting expenditure on social services including education, healthcare, and other social infrastructure; reducing government regulation that can diminish private profits; selling state-owned enterprises, of common goods and replacing it with individual responsibility to work hard to succeed in becoming wealthy. This emphasis on individual responsibility thus creates a cloud to obscure the conditions of those who are for example, as noted by Njoku et al. (2021), already live in poor residential segregated areas with little hope of lifting themselves from poverty.

In the Washington Consensus of 1989, it was agreed by the International Monetary Fund (IMF), World Bank and USA Department of Treasury, that the neoliberal operations of the free market and a reduction of state involvement in welfare needed to be extended to countries in Africa and Latin America (Hurt, 2015). In other words, these international institutions promoted the adoption of market-led development strategies by countries of the global south, with the justification that resulting economic growth would then trickle-down to benefit all their people. The World Bank and the IMF promoted a neo-liberal economic development

model forcing poor countries to institute structural adjustment programs (SAPS), that involved privatizing essential services (including healthcare), as a condition for receiving development aid, whether grants or loans. The assumption then was that leaving market mechanisms to their own devices would ensure competition, leading to economic growth (or at least poverty reduction), and by the 1980s these ideas had largely replaced the language of development. But, contrary to these expectations, the SAPs gave rise to economic policies that induced stagnation and deeper poverty. Bello and Ambrose (2006) argue that the conditionalities imposed by the IMF and the World Bank, that governments of poor countries cut spending on public institutions, cut subsidies to farmers, privatize public services such as health care, education, water and electricity, as a prerequisite for receiving "help" (including loans) is what deepened poverty. Nanda (2002) shows, for example, how in healthcare a user fee, introduced as part of cost recovery within a SAP led to decreased health service utilization in Ghana, Swaziland, Zaire and Uganda. In another twist, while the poor countries were forced to cut subsidies to their farmers, the rich countries in the north not only subsidize their farmers, but also in essence close their markets for products from the poor countries, while at the same time flooding the south with products that push local farmers out of business (Maren, 1997). This shift has been part of health and healthcare being regarded as a market commodity rather than a human right (Mayhew, 2002). Apart from poverty, another major challenge for African countries resulting from these different phases of modernization is the shaping of a leadership that has in turn, destroyed Africa through lack of foresight, mismanagement and corruption (Maathai, 2009), thereby contributing to what Olukoshi (2004) calls the erosion of the state. To have any hope of achieving the international goals around the right to health or addressing increased vulnerability, there is great need for critical reflection on what these neoliberal developments have entailed not only for the poor countries, but also for poor workers, ethnic and racialised groups.

Neoliberalism according to Davis (2013), thus results in a paradox where the poorest people have to find solutions for their collective health care, education, and social security and, should they fail, they are blamed as being lazy. It is this form of neoliberalism that Monbiot (2020) now argues is shifting with power migrating not just from private money to the state but also from the state to the people. But the triumph of the people is far from assured. Briggs et al. (2020) for example, describe current welfare interventions in the UK as the conservative government embracing socialism in order to save capitalism; a position also supported by Sumonja (2021) and Evans-Pritchard (2020). In their study, Briggs et al. (2020), describe how the lockdown suspended daily routines, with schools, pubs, cafes, restaurants and non-essential shops closed and people ordered to stay at home. As a result of the lockdown, it appeared that neoliberalism was being dispensed with, and

significant state intervention in the economy was enacted to support businesses and workers. The government in the UK committed to paying wages (furlough), while mortgage freezes were arranged with banks, and self-employed workers received government assistance. These support measures seem to have lacerated the neoliberal ideology and Briggs and colleagues note what their study participants also reflected:

> ….COVID-19 represents an opportunity to evaluate our individual and collective priorities and envision an alternative future. Many people demonstrated "new hope" for change to what they saw as a politically impotent, unequal and ultimately flawed social system: their subjective dreams revolved around communal solidarity, a greener planet and a fairer society.

In addition to the shift where communities in many parts of the world have mobilized, the lockdown or the new normal of working from home, schooling from home and reduced transport including air travel has, as argued by some, already lowered carbon emission and may improve health (Cicala et al., 2021) or at least has offered a glimpse of an alternative. Roy (2020), on the other hand argues that these shifts are not new because historically pandemics have always forced humans to break with the past and imagine their world anew. In this way, the COVID-19 pandemic is no different in the potential it offers as a gateway to a new world. While no doubt there are positive aspects of the COVID-19 pandemic, there are also challenges and, as Benach (2021. p. 51) argues:

> …. long-term confinement will have a negative impact on the mental and emotional health of the population, with the highly likely emergence of outbreaks of violence related to insecurity and social changes. One example is the case of women who must confine themselves together with their abusers. Another issue is that the virus is likely to remain with us, mutate, recur, or even become more virulent, and …., more severe pandemics may appear….

Whether the long term effects of the pandemic turn out to be progressive or regressive for humanity, there has been evidence of the short-term damage to particular socio-economic groups that has widened inequalities. The potential of what Marshall et al. (2021) call telework (working from home) after the lockdown did not apply to all. In the USA according to Marshall et al. (2021) there is a class difference:

> Households with members who teleworked more frequently reported higher levels of income and education and better health than those in which no one changed their typical in-person work in response to the COVID-19 pandemic.

Moreover, home confinement has, according to OECD. (2021), also worsened population mental health markedly during the pandemic as the prevalence of anxiety and depression increased and even doubled in some countries as a result of isolation and unemployment. Furthermore, as elaborated by Allwood and Bell (2020), inequalities have widened in terms of who suffers from mental health problems. People already living with mental health problems and whose access to care has been interrupted by the pandemic, are at greater risk of worsening mental health.

Women and children who have been even more exposed to trauma and violence at home during the lockdown and people from ethnic groups where the prevalence of COVID-19 has been highest and the outcomes have been the worst have lost out due to the pandemic and the public health precautions that have been adopted. The disruption of employment and livelihoods has increased economic hardship most starkly amongst those with least to lose. These losses have been gendered, with women who have lost their jobs and earnings due to the pandemic becoming completely dependent on their partners, and girls who are stuck at home with no school, facing elevated levels of sexual and physical domestic violence with limited access to protection and treatment services as well as to justice for survivors. According to McCrary and Sanga (2021), domestic violence during the lockdown in USA increased 12% on average and 20% during working hours. Forced migrants to the global north are yet another group that, according to a study by WHO (2020), has low financial means, lacks access to healthcare due to uncertainty around entitlement and fear of deportation, such that care is not sought even in the case of suspected COVID-19 infection. The study reported significant negative impact of the pandemic on forced migrants' access to work, safety and financial means. The description of accumulating inequalities that have been apparent during the pandemic could continue: it is all too apparent that far from being a great leveler, the COVID-19 pandemic and response to it has entrenched rather than undone inequalities. It seems, as argued by Primrose et al. (2020), that political energies have been focused on managing the symptoms of COVID-19 rather than addressing the structural underpinnings of the inequalities that the pandemic highlighted. They note for example, that half of deaths worldwide have occurred in long term care homes, which operate commercially and include low-paid healthcare workers and personal caretakers. These were moreover least supplied with protective equipment and are also one category of workers who work even during lockdown and are therefore likely to be easily infected and also infect others.

During the shock of 2020, as the pandemic unfolded, hopes were then focussed on developing a vaccine and there was cause for optimism that the border-crossing nature of the viral transmission and the world-wide mortality would lead to meaningful global cooperation. Notwithstanding transmission ignoring national borders, vaccine production and distribution has shown stark inequality

between nations. According to Gebrekidan and Apuzzo (2021):

> The rapid development of COVID-19 vaccines, achieved at record speed and financed by massive public funding in the United States, the European Union and Britain, represents a great triumph of the pandemic. Governments partnered with drug makers, pouring in billions of dollars to procure raw materials, finance clinical trials and retrofit factories. Billions more were committed to buy the finished product.

In spite of being largely publicly funded, the COVID-19 vaccines are still privatized and monopolized, leaving pharmaceutical corporations the power to charge excessive prices for vaccines to maximize their profit (Marriot and Maitland, 2021). Furthermore, given the enormous investment by rich and powerful countries, it seems no wonder that vaccine hoarding may constitute a great and longstanding barrier to ever reducing global health inequalities. Where vaccines are available and have been taken up, COVID-19 mortality rates are reduced, implying that vaccines are effective. However, even in those countries where vaccines are available, not everybody has benefitted from them and, as argued by Njoku et al. (2021), racial and ethnic disparities in COVID-19 infection, hospitalization and mortality have not been undone by vaccination in USA. They note that:

> Black or African Americans, Hispanic or Latino persons, and American Indians or Alaska Natives….persons are more likely to become sick with, be hospitalized for, and die from COVID-19 when compared to non-Hispanic Whites.

Two factors are also considered important in explaining these racial and ethnic disparities. The first is the residential segregation where black and other racial and ethnic minority groups are more likely to reside in neighborhoods with increased levels of poverty, less access to credit, employment, housing, transportation, educational and healthcare resources. This means they live in more health-limiting environments compared to Whites. Another factor in the USA in particular is the historical unethical procedures in research on Black people for example, the Tuskegee Syphilis study, which may have increased vaccine hesitancy among the Black people. Besides the racial and ethnic disparity in vaccine access within the rich countries, global disparities need to be addressed if the border-crossing of the virus is to be addressed. As Nyabola (2021) argues, the largest proportion of the global population is not vaccinated due to the effect of international politics, profiteering and domestic complacency. This suggests, as we have argued earlier, that there is need to critically reflect on the structural economic and political developments and their role in maintaining disparities. In the coming section we explore further the issue of vaccine hoarding and patent protection in extending and consolidating COVID-19 vaccine inequality.

Vaccine hoarding and patent protection and global inequality in access to vaccine

According to WHO (2021), the rich countries with just 16% of the world's population have bought up to 60% of the world's COVID-19 vaccine supply, the aim being to vaccinate 70% of their adult population to secure herd immunity. By the end of June 2021, 46% of the people in high-income countries had received at least one COVID-19 vaccine while 20% in middle-income countries and only 0.9% of low-income countries were vaccinated (Rubin and Saidel, 2021). This discrepancy clearly indicates a global inequality in access to COVID-19 vaccines, which according to Ghosh (2021) and Gebrekidan and Apuzzo (2021), is due to a blatant vaccine grab by rich countries and the protection of patent rights by the same rich countries. Some rich countries in the global north have even ordered enough doses to vaccinate their populations ten times over. Canada, with a population of 38 million, has for example, reserved 414 million doses. Vaccine hoarding and, more so, patent protection have prevented wider production and therefore distribution of vaccines at prices that poor countries can afford. There are, according to Rubin and Saidel (2021), two schools of thought in the rich global north on patents. There are those who argue that patent protection is necessary in order to maintain incentives for pharmaceutical companies to innovate and invest in vaccine research and development. This school argues that without patent protection, the pharmaceutical companies would lose market to competitors and adversarial nations such as China. But according to Oxfam (2022), the incredible sums of money that governments have injected into the pharmaceutical corporations have driven asset prices up and with them created billionaire fortunes. Oxfam moreover notes how billionaires and corporations in food, energy, pharmaceuticals and technology sectors reap huge rewards while the cost of living is soaring and hurting many worldwide. Despite this, it is still argued that since poor countries lack infrastructure and expertise for effective domestic production, then they should take aid through voluntary commitments from industry, developed world governments and large NGOs. This, it is argued would be a more effective means to address the vaccine problem in the poor countries. The other school of thought advocates for waiving the patent and argues that removing patent protection is a necessity as companies located in high-income countries hold most, if not all, of the COVID-19 vaccines sold to governments, mostly in the rich global north. The price of these vaccines, combined with export restrictions and the inability of low and middle income, countries to manufacture their own vaccines at a lower price and without fear of litigation from patent holders, limits access to vaccines for the world's most vulnerable communities.

It is clear, as argued by Tran (2021), that the rich countries have mainly taken care of themselves first, without reflecting

on the effects on global equality, let alone instituting effective pandemic precaution. Rich countries have started to issue booster shots, with about one million shots administered per day, which is three times the number of vaccines administered per day in low income countries (Mancini and Burn-Murdoch, 2021). The WHO has called for a moratorium on booster shots in the hopes of achieving 70% vaccination rates across all countries by the middle of 2022. Even countries such as Russia, China and India which have exported vaccines to other countries have done so as a way of building their own international clout rather than waiving the patents to allow production of vaccine by poor countries. This has become a point of competition as rich countries join the fray in shipping some of their hoarded vaccines to few poor countries.

There is thus need for a more expansive global vaccine manufacturing design if access to health is to realistically remain a human rights goal. In October 2020 India and South Africa led a group of low and middle income countries requesting the World Trade Organization (WTO) to waive certain Trade-Related Aspects of Intellectual Property Rights (TRIPS) provisions. However, the member states of the WTO failed to arrive at the required consensus to move forward with the proposed waiver, while the European Union, the United States, the United Kingdom, and other developed countries opposed the waiver request (Tran, 2021). According to Okoth (2022), a new draft agreement was circulated in early May 2022 after negotiations between the European Union (EU) and the United States for discussion at the WTO ministerial conference in Geneva on 12-15 June 2022. However, according to the civil Society organizations under the umbrella of the People's Vaccine Alliance, the process was flawed and untenable, because there was an apparent attempt by the EU to introduce amendments to the WTO text that critics saw as out of step with the original text proposed by India and South Africa at the beginning of the pandemic. South Africa and India, backed by 100 countries, had only called for a simple waiver on COVID-19 vaccine treatments and tests, which could have led to their manufacture in developing countries. There are also concerns that proposed new wording might prevent China, and perhaps Cuba that are capable of producing vaccines, from exporting to countries that need them.

Meanwhile, COVID-19 vaccines Global Access Facility COVAX, a vaccine-sharing scheme, was created to ensure that vaccines would reach all people everywhere. COVAX is led by the World Health Organization, Gavi (a public-private vaccine-promoting alliance) and the Coalition for Epidemic Preparedness Innovations (a foundation that finances research into vaccines for pandemics), and aims to ensure that all participating countries have access to inoculations. All countries in Africa have signed up to the scheme, which now has 190 members. Of these, 92 fall into the low- and middle-income group.

COVAX seeks to maximize the chances of successfully developing COVID-19 vaccines and manufacture them in the quantities needed to end the supply and distribution crisis. Thus, one motivation is humanitarian, but another is to prevent the emergence of new variants resistant to the available vaccines. According to COVAX, the target of distributing two billion doses by the end of 2021 will not be realized. Instead, COVAX expects to supply 1.4 billion doses of the vaccine in 2021, which is a shortfall of nearly a third (Diba et al., 2021). There are two main reasons for this failure. First, according to Horner (2021), some high-income countries in the global north, have started to roll out boosters as well as vaccinating children even before many low-income countries have distributed a first dose to all adults. Second, exports of COVID-19 vaccines from India which was the main supplier, were suspended and its output was redirected to domestic use to deal with a new devastating second wave of the virus in the country. The Serum Institute of India was due to supply COVAX with over a billion doses in 2021, but exports have still not resumed. Global vaccine inequality thus shows no sign of disappearing in the near future.

While the COVAX initiative did not get enough support from high income countries, billions of taxpayers' money from the same countries have been spent to help big pharmaceutical companies like AstraZeneca, Moderna and Pfizer BioNTech develop and produce vaccines. These as well as others, are the same companies that refuse to share their research, knowledge and technology with low income countries which means that other pharmaceutical companies, and especially those in low income countries with smaller budgets, cannot access the advances in science to step up their own vaccine production.

The issue of profit-making by private companies and the impact on healthcare and, ultimately inequalities in health outcomes, is demonstrated by the attempt to manufacture easy to handle and improved ventilators in the USA (Sanger et al., 2020). Although this was a case before the COVID-19 pandemic, it is relevant not just because the ventilator became central in the care of patients with COVID-19, but also because it demonstrates how powerful companies annihilate possible future competitors, and use public funding to support profit accumulation. In this case, the Department of Health and Human Services in USA, signed, according to Sanger et al. (2020), a contract in 2010 with a smaller company called Newport, based in California, but owned by a Japanese medical device company that only made ventilators. The agreement, with an initial payment of $6.1 million, was that the officials from the biomedical research agency would visit the firm making the ventilators every 3 months and the firm would submit monthly reports detailing its financial spending and progress. By April 2012, the Health and Human Service officials testified in Congress that the programme was on schedule for market approval by September 2013 after which, the ventilators

would go into production. This however did not come to be, because the company that had signed the contract with the federal government was bought by a more powerful company called Covidien, which started asking for more funds from the government and an additional $1.4 million was granted. The government officials and executives from rival ventilator companies suspected that Covidien had acquired Newport to prevent it from making a cheaper product that would undermine profits that the larger company could make from selling its existing ventilators. In 2014, Covidien executives told the government officials that they would like to get out of the contract, complaining that it was not sufficiently profitable and the government agreed to cancel the contract. So, by the time of the arrival of COVID-19 at the beginning of 2020, ventilator manufacturing was unchanged compared with 2010.

It appears that the shortfalls noted above are a matter of the institutional power structures. Looking at the issues of vaccine nationalism and patent protection by companies in the rich global north, the problem lies in the political and economic structures and the ways the neoliberal capitalist system has been changing over time. As argued by Sell (2019) financialization and monopoly power are the main features of capitalism today. According to Goldstein (2009), financialization can be seen as a process that alters the fundamental aspects of capitalist micro and macro dynamics. Karwowski and Stockhammer (2017), add that financialization is closely linked to asset price, inflation and correlated with a debt-driven demand regime. The next section reflects on the impact of the changes in neoliberal capitalism as far as dealing with a global pandemic goes.

Changing structural political economy and COVID-19 vaccine inequalities

As noted earlier, Monbiot (2020) argues that the neoliberalism model featuring deregulation, privatization, and the transformation of social protection regimes with faith in free markets is shifting. Accordingly, power is migrating not just from private money to the state but also from the state to the common people which may seem like a return to the Keynesian model of economic and social welfare. But there is need for more critical reflection on just how or in what ways neoliberal capitalism in the twenty-first century, has transformed to create the current vaccine inequalities seen within and between countries, where the rich countries are not just hoarding vaccines, but are also paying the big pharmaceutical companies for the vaccine development while failing to facilitate patent waivers, that would enable middle and low income countries to produce vaccines at lower costs. According to Sell (2019), the failure by rich countries in the global north to respond effectively to the COVID-19 pandemic has exposed the profound power of contemporary capitalism

and thus offers an opportunity to rethink its role in shaping global health in the future. This is to say that for any change in the future, it is important to understand the structural features of the capitalist system that are not usually openly visible and ongoing transformations taking place in the capitalist system are crucial to grasp.

One aspect discussed by Pagano (2012) is the global monopolization of knowledge which creates hierarchical relations among firms and between capital and labor, since the capital-owners of some firms include exclusive ownership of much of the knowledge used in production. This is then supported by trade-related Intellectual Property Rights agreements. Intellectual monopoly capitalism is the dominant form of organization of big business, which as noted by Pagano (2012), has also transformed a world which has been mainly based on open science and open markets into a world of closed science. This transformation of the capitalist system has then closed markets and restricted the investment opportunities for many firms in different countries. Sell (2019) expands on the implications of the transformation of capitalism in the following way:

> Financialized capitalism is a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production. Financial markets, motives, institutions, and elites have increasingly come to dominate the global political economy, affecting everything from production and consumption, to regulation and health. . . .

Some of the challenges arising from financialized capitalism include, according to Sell (2019), capital mobility which has facilitated tax evasion and the possibility of shifting revenue to tax havens or low-tax locations. As a result, this has reduced the tax base for funding programmes such as health care. The shift from commodity production and trade in goods to intangibles has, furthermore, meant that the major share of revenue goes to those who control the intangible assets such as financial products and intellectual property, all of which has also undermined the political power of labor and trade unions (Sell, 2019).

The capitalist transformation described above, informs the perspective presented by Kelly (2021) regarding how the big tech Companies such as Facebook, Netflix, Amazon, Apple, Google, Microsoft and others saw their stock prices soaring to record high during the nearly 2 years of the COVID-19 pandemic. Kelly (2021), describes this as the "black Swan event" where the pandemic pushed companies to send almost all of their white-collar professionals to work from home. Although an unintended benefit, working from home turned out to be a very successful consumption-expansion strategy for the companies mentioned above.

Another source of power for the giant tech companies is that they quietly buy up many companies, with most of

the acquisitions going unreported and unannounced. This, as reported by De Vynck and Zakrzewski (2021), makes it harder to know how companies like Google and Apple shape the markets. A major question for law makers and government executives has been whether companies such as Amazon, Apple, Facebook, Google and Microsoft are too powerful to keep anti-competitive practices over markets. The law makers also worry over the rapid acquisition of other companies because of unforeseen effects on the economy. The US federal government requires that companies report acquisition of other companies worth more than $92 million, but from 2010 to 2019, the giants had together acquired 616 companies which were probably not reported: the giants are so rich they can afford to routinely buy start-up companies in order to obtain skilled employees, win innovative patents or simply eliminate potential competitors. This practice is similar to the case reported earlier, of buying up the small company called Newport which had signed a contract with the US government to produce cheaper and easy to use ventilators, in order to eliminate it. Apart from buying companies in part to stop competition, there is another aspect in what Fernandez and Klinge (2020) describe as corporate financialisation where for example, big pharmaceutical companies make little investment in productive capabilities or in research and development. Instead, they generate profits for shareholders at a scale that is socially unaffordable, and that precludes progressive change, such as supporting healthcare and patients around the world. Fernandez and Klinge further argue that the big pharmaceutical companies have increasingly become dependent on global market conditions of rising debt, dependence on mergers and acquisitions in order to replenish their drug patents. They therefore routinely block pro-health initiatives aimed at promoting the use of trade-related aspects of intellectual property rights' flexibilities to make essential medicines affordable to avoid threatening their profits and reducing shareholder value. Patent protection in turn increases the cost of drugs and reduces access to medicines and vaccines. This can be seen as what Marriot and Maitland (2021) describe as the great vaccine robbery. It is thus clear that major structural and policy reforms are needed to change this situation to enable all to have access to medicines.

Discussion and conclusions

This paper is part of the research topic on the lessons learned from the COVID-19 pandemic so far that could help in building a fairer, healthier, inclusive and sustainable society. We have noted that there are positive trends as a result of the COVID-19 pandemic where communities in many areas have mobilized to support neighbors, healthcare workers and those who have been displaced. Governments have also taken action to support workers who lose their jobs and displaced communities in what Briggs et al. (2020) calls supporting socialism in order to protect capitalism. Even Monbiot (2020), who notes the

shifting power of neoliberalism and community resurgence for collective support, also notes that there is no guarantee that the resurgence of collective action will survive after the pandemic and that the state is needed for providing health, education and an economic safety net, to distribute wealth and prevent private interests becoming too powerful. Sumonja (2021) notes that some neoliberal states around the world are using the fight against COVID-19 pandemic to improve the conditions of the working class.

However, although states may use the pandemic to improve some conditions for the working class, the quest for profitability forces firms to continuously reduce their labor costs, which as Sell (2019) argues, has increased income inequalities. Given the way the financialised capitalism has aggravated income inequalities, the need for states to introduce regulations to change this is of great importance. Some suggest that a way out of this is to introduce regulation in the banking sector including reducing the size of the "too big to fail" banks, imposing taxes on financial transactions to increase public revenue. For pharmaceutical companies, Sell (2019) states the need to curb the abuses of monopoly power through pricing transparency and price reduction for medicines to help increase access to essential medicines. Perhaps the major lesson is what Sumonja (2021) calls emergency Keynesianism to which governments around the world have resorted. However, given that the same governments in the rich global north also pay the pharmaceutical companies to develop vaccines which these countries then hoard, the death of neoliberalism in the near future seems unlikely.

While studying the financialized interests of capital does not necessarily hold interest for medical sociologists, the evidence of this pandemic suggests that we cannot afford not to pay attention.

Author contributions

Both authors have contributed to the work and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

Ahlberg, B. M., Hamed, S., Thapar-Björkert, S., and Bradby, H. (2019). Invisibility of racism in the global neoliberal era: implications for researching racism in healthcare. *Front. Sociol.* 4, 61. doi: 10.3389/fsoc.2019.00061

Allwood, L., and Bell, A. (2020). *COVID-19: understanding inequalities in mental health during the pandemic.* Available online at: https://www.centreformentalhealth.org.uk/sites/default/files/2020-06/CentreforMentalHealth_CovidInequalities_0.pdf

Bello, W., and Ambrose, S. (2006). "Take the IMF off life support," In: CommonDreams.org. Available online at: https://www.tni.org/en/article/take-the-imf-off-life-support

Benach, J. (2021). We must take advantage of this pandemic to make a radical social change: The coronavirus as a global health, inequality and eco-social problem. *Int. J. Health Serv.* 51, 50–54. doi: 10.1177/0020731420946594

Bhattacharya, T. (2020). *Social Reproduction Theory And Why We Need it to Make Sense of the Corona Virus Crisis.* Available online at: https://systemchangenotclimatechange.org/article/social-reproduction-theory-and-why-we-need-it-make-sense-corona-virus-crisis/

Briggs, D., Ellis, A., Lloyd, A., and Telford, L. (2020). New hope or old futures in disguise? Neoliberalism, the COVID-19 pandemic and the possibility for social change. *Int. J. Sociol. Soc. Policy* 40, 831–848. doi: 10.1108/IJSSP-07-2020-0268

Cicala, S., Holland, S. P., Mansur, E. T., Muller, N. Z., and Yates, A. J. (2021). Expected health effects of reduced air pollution from COVID-19 social distancing. *Atmosphere* 12, 951.12080951. doi: 10.3390/atmos12080951

Davidson, N., and Saull, R. (2016). Neoliberalismand the far-right: a contradictory embrace. *Crit. Sociol.* 43, 707–724. doi: 10.1177/0896920516671180

Davis, A. (2013). Recognizing Racismin the Era of Neoliberalism. Available online at: https://truthout.org/article/recognizing-racism-in-the-era-of-neoliberalism/ (accessed March 04, 2018).

De Vynck, G., and Zakrzewski, C. (2021). *Tech Giants Quietly Buy Up Dozens of Companies a Year.* Regulators are finally noticing. Available online at: https://www.washingtonpost.com/technology/2021/09/20/secret-tech-acquisitions-ftc/

Diba, P. B., Mendes, H., Bhattacharya, P., and Badr, H. (2021). *As COVAX Disappoints, Countries Turn to Home-Grown Jabs.* Available online at: https://www.scidev.net/global/features/as-covax-disappoints-countries-turn-to-home-grown-jabs/ (accessed October 30, 2021).

Evans-Pritchard, A. (2020). *Boris Must Embrace Socialism Immediately to Save the Liberal Free Market. Available* online at: https://www.telegraph.co.uk/business/2020/03/20/boris-must-become-socialist-face-nationalising-entire-economy/ (accessed October 30, 2021).

Fernandez, R., and Klinge, T. J. (2020). *Private Gains We Can Ill Afford: The Financialisation of Big Pharma.* Available online at: https://www.somo.nl/wp-content/uploads/2020/04/Rapport-The-financialisation-of-Big-Pharma-def.pdf

Friedman, M. (1962). *Capitalism and Freedom.* Chicago, IL: University of Chicago Press.

Gebrekidan, S., and Apuzzo, M. (2021). Rich Countries Signed Away a Chance to Vaccinate the World. New York Times. Available online at: https://www.nytimes.com/2021/03/21/world/vaccine-patents-us-eu.html

Ghosh, J. (2021). *The Political Economy of COVID-19 Vaccines. Third World Resurgence.* Available online at: https://twn.my/title2/resurgence/2021/347/health1.htm (accessed October 30, 2021).

Goldstein, J. P. (2009). Introduction: the political economy of financialization. *Rev. Rad. Polit. Econ.* 41, 453–457, doi: 10.1177/0486613409341367

Horner, R. (2021). *Covax Misses Its 2021 Delivery Target – What's Gone Wrong in the Fight Against Vaccine Nationalism?* Available online at: https://theconversation.com/covax-misses-its-2021-delivery-target-whats-gone-wrong-in-the-fight-against-vaccine-nationalism-167753 (accessed October 30, 2021).

Hurt, S. R. (2015). *Washington Consensus.* Washington Consensus: Britannica

Karwowski, E., and Stockhammer, E. (2017). Financialisation in emerging economies: Asystematic overview and comparison with Anglo-Saxon economies. *Econom. Polit. Stud.* 5, 60–86. doi: 10.1080/20954816.2016.1274520

Kelly, J. (2021). *Smart Companies Will Win The War For Talent By Offering Employees Uniquely Customized Work Styles.* Forbes (2021). Available online at: https://www.forbes.com/sites/jackkelly/2021/10/11/smart-companies-will-win-the-war-for-talent-by-offering-employees-uniquely-customized-work-styles/

Maathai, W. (2009). *The Challenge for Africa.* New York, NY: Patheon Books.

Mancini, D. P., and Burn-Murdoch, J. (2021). *Global COVID-19 death toll tops 5m but underestimates true figure, say experts.* Financial Times.

Maren, M. (1997). *The Road to Hell: Effects of Foreign Aid and International Charity.* New York, NY: The Free Press.

Marriot, A., and Maitland, A. (2021). *The Great Vaccine Robbery: Pharmaceutica Corporations Chane Excessive Prices for COVID-19 Vaccines While Rich Countries Block Faster and Cheaper Route to Global Vaccination.* Available online at: https://thesubmarine.it/wp-content/uploads/2021/07/The-Great-Vaccine-Robbery-Policy-Brief-final.pdf

Marshall, J., Burd, C., and Burrows, M. (2021). *Working From Home During the Pandemic: Those Who Switched to Telework Have Higher Income, Education and Better Health.* Available online at: https://www.census.gov/library/stories/2021/03/working-from-home-during-the-pandemic.html

Mayhew, S. (2002). Donor dealings: the impact of international donor aid on sexual and reproductive health services. *Int. Fam. Plan. Perspect.* 28, 220–224. doi: 10.2307/3088225

McCrary, J., and Sanga, S. (2021). The impact of the corona virus lockdown on domestic violence. *Am. Law Econ. Rev.* 2021, 1–27. doi: 10.1093/aler/ahab003

Monbiot, G. (2017). *Out of the Wreckage: A New Politics for an Age of Crisis.* London: Verso.

Monbiot, G. (2020). *The Horror Films Got It Wrong. This Virus Has Turned Us Into Caring Neighbours, The Guardian.* Available online at: https://www.theguardian.com/commentisfree/2020/mar/31/virus-neighbours-covd-19

Nanda, P. (2002). Gender dimensions of user fees: implications for women's utilisation of health care. *Reprod. Health Matters,* 10, 127–134. doi: 10.1016/S0968-8080(02)00083-6

Njoku, A., Joseph, M., and Felix, R. (2021). Changing the narrative: Structural barriers and racial and ethnic inequalities in COVID-19 vaccination. *Int. J. Environ. Res. Public Health,*18, 9904. doi: 10.3390/ijerph18189904

Nyabola, N. (2021). *Africa's Vaccine Crisis: It's Not All About Corruption.* Available online at: https://www.aljazeera.com/opinions/2021/7/19/africas-vaccine-crisis-its-not-all-about-corruption

OECD. (2021). *Tackling the Mental Health Impact of the COVID-19 Crisis: An Integrated, Whole-Of-Society Response.* Available online at: https://read.oecd-library.org/view/?ref=1094_1094455-bukuf1f0cmandtitle=Tackling-the-mental-health-impact-of-the-COVID-19-crisis-An-integrated-whole-of-society-responseand_ga=2.36538403.260647015.1633872432-1359285530.1551383259

Okoth, D. (2022). *COVID-19 Vaccine Patent Deal on a Knife-Edge.* Available online at: https://www.scidev.net/global/health/coronavirus/ (accessed October 30, 2021).

Olukoshi, A. (2004). "*Neo-liberal Globalisation and its Social Consequences,*" in Africa and the Process of "Undevelopment," Pambazuka News. p. 165.

Oxfam. (2022). *Profiting From Pain: The Urgency of Taxing the Rich Amid a Surge in Billionaire Wealth and Global Cost-of-Living Crisis.* Available online at: https://www.oxfam.org/en/research/profiting-pain

Pagano, U. (2012). *The Crisis of Intellectual Monopoly Capitalism.* Department of Economics and Statistics, University of Siena, Siena, Italy. Available online at: https://ssrn.com/abstract=2037742

Primrose, D., Chang, R., and Leoppky, R. (2020). Pandemic unplugged: COVID-19, public health and the persistence of neoliberalism. *J. Aust. Polit. Econ.* 85, 17–28.

Roy, A. (2020). *The Pandemic is a Portal.* Financial Times. Available online at: https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fed274c920ca

Rubin, H., and Saidel, N. (2021). *Innovation Beyond Patent Waivers: Achieving Global Vaccination Goals Through Public-Private Partnerships.* Available online at: https://www.brookings.edu/blog/up-front/2021/08/31/innovation-beyond-patent-waivers-achieving-global-vaccination-goals-through-public-private-partnerships/

Sanger, D. E., Kanno-Youngs, Z., and Kulish, N. (2020). *A Ventilator Stockpile, With One Hitch: Thousands Do Not Work*. The New York Times. Available online at: www.nytimes.com/2020/04/01/us/politics/coronavirus-ventilators.html

Sell, S. K. (2019). 21st-century capitalism: structural challenges for universal health care. *Glob. Health,* 15, 76. doi: 10.1186/s12992-019-0517-3

Sumonja, M. (2021). Neoliberalism is not dead – on political implications of COVID-19. *Capital. Class,* 45, 215–227. doi: 10.1177/0309816820982381

Tran, H. (2021). *What Vaccine Nationalism and Diplomacy Tell Us About Future Pandemics*. Available online at: https://www.atlanticcouncil.org/blogs/new-atlanticist/what-vaccine-nationalism-and-diplomacy-tell-us-about-future-pandemics/

WHO. (2020). *ApartTogether Study Assesses Impact of COVID-19 Pandemic on Refugees and Migrants.* Available online at: https://ec.europa.eu/migrant-integration/index.cfm?action=furl.goandgo=/librarydoc/aparttogether-study-assesses-impact-of-COVID-19-pandemic-on-refugees-and-migrants

WHO. (2021). *Coronavirus disease (COVID-19) Weekly Epidemiological Update and Weekly Operational Update.* Available online at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports (accessed October 30, 2021).

Wickramanayake, J. (2020). *Meet 10 Young People Leading the COVID-19 Response in Their Communities.* Available online at: https://www.un.org/africarenewal/web-features/coronavirus/meet-10-young-people-leading-COVID-19-response-their-communities (accessed October 30, 2021).

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The mediating effect of self-efficacy on career aspiration and organizational support with subjective career success among Malaysian women managers during the Covid-19 pandemic

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The lives and jobs of many people have been negatively affected by the Covid-19 pandemic. Lockdowns to curb the pandemic have resulted in many people having to work from home. The question that arises is whether women's jobs are more vulnerable to the crisis. In this regard, it would be useful to understand the factors that affect career success, specifically that of Malaysian women managers. The present study sought to examine the impact of career aspiration and organizational support on subjective career success, as well the mediating role of self-efficacy in these relationships. The participants comprised 146 Malaysian women managers who had completed an occupational self-efficacy scale, career aspiration scale, as well as perceived organizational support and subjective career success inventory. The results of multiple linear regression indicated that those with high levels of career aspiration and perceived organizational support were positively associated with subjective career success. In this connection, self-efficacy mediated both relationships. The findings provided a better understanding of women managers' perception of career success in the service sector.

KEYWORDS

subjective career success, women manager, career aspiration, occupational self-efficacy, perceived organizational support, COVID-19 pandemic

Introduction

The Covid-19 pandemic has wreaked havoc in many economies, resulting in not only the temporary disappearance of some occupations and dramatic growth in others, but also in changes in the status of some occupations and their value proposition (Kramer and Kramer, 2020), causing both employers and employees to seek alternative work

arrangements (Vyas and Butakhieo, 2020). To curb the spread of the virus, most workers have been told to work from home (WFH). A study by Baert et al. (2020) on the impact of the Covid-19 crisis on career outcomes and career aspirations revealed that many employees are in danger of losing their jobs and missing out on promotions. Autin et al. (2020) identify four emerging impacts of the pandemic, viz. unemployment, worker mental health, work-family interface, and employment disparities. It is important that career development professionals examine these impacts so that they can successfully respond to policies and practices to reduce the severity of the impacts. A recent study by Chauhan et al. (2021) revealed that family responsibilities, mentoring and perceived organizational support variables significantly impacted the perceived career success of women; this finding is a wake-up call for women executives to overcome these impediments so as to achieve successful career advancement. Findings from another study showed that perceived organizational support played a positive moderating role in the relationship between proactive career behavior and subjective career success (Agrawal and Singh, 2022). Career success is defined as an accomplishment and positive work-related outcome associated with work experiences over time and the corresponding career goal-setting across the lifespan (Gunz and Heslin, 2005; Hupkens et al., 2021) Much has been written about the definition of career success from two aspects, viz. objective success and subjective success (Heslin, 2005; Gunz and Mayrhofer, 2011; Spurk et al., 2018; Chen et al., 2021). It is generally accepted that objective career success is the measure of how people are perceived by others in relation to their achievements career-wise, while subjective career success is evaluated by how one feels about his or her own degree of career success (Abele and Spurk, 2009). Objective career success indicators include status and rank (hierarchical position), material success (wealth, property, earning capacity), social reputation and regard, prestige, influence, knowledge and skills, friendships, network connections, health and wellbeing (Heslin, 2005; Ng et al., 2005; Ng and Feldman, 2014).

Theories and research on career-related interests and choices (Lent et al., 1994) are of great relevance to the understanding of employees' responses and reactions to the Covid-19 pandemic with regard to career development. In the present study, the Social Cognitive Career Theory (SCCT) by Lent et al. (1994), which is anchored in the general Social Cognitive theory (Bandura, 1986, 2001), was used for the theoretical framework. The SCCT seeks to explain how career success is obtained, and incorporates a variety of factors including interests, abilities, values, and environmental factors. SCCT emphasizes the individual capacity to direct own behavior. The theory helps to explain the individual's decisions on career interest, goals, and actions vis-à-vis the attainment of the desired level of performance that consists of two main aspects, viz. the objective and subjective dimensions. SCCT also examines personal, environmental, and behavioral variables in complex

reciprocal linkages. According to Bandura's general Social Cognitive theory (1986), personal and behavioral variables, as well as the environment, affect career performance. In this study, the individual factor is represented by self-efficacy, the behavioral factor by career aspiration, while the environmental factor refers to perceived organizational support. All these factors are believed to impact career success in three interlocking processes that determine performance attainment, either in the objective or subjective measurement dimension.

Indeed, the Covid-19 pandemic has brought about drastic changes to employment worldwide, with female employees believed to be more adversely affected. There are more challenges for career women (Carli, 2020); they have to cope with flexibility at work as well as housework, caregiving burdens and fears of negative performance evaluation (Thomas et al., 2020). Women are reducing more paid work hours than men and increasing the division regarding the cognitive level of work (Czymara et al., 2020); women also face higher risks of job and income loss as well as increased risks of violence, exploitation, abuse or harassment during times of crisis and quarantine (Mittal and Singh, 2020). Married women employees who have to work from home need also to look after their children and do household chores while attending to office work. According to a recent study, there are emergent changes in work practices and changes for workers, highlighting the impact of the Covid-19 pandemic (Kniffin et al., 2021). Research on career success has focused mainly on engineers, health care workers and financial professionals, while little attention has been paid to women managers during the Covid-19 pandemic. To the best of our knowledge, no study has been conducted on the career success of women managers during the pandemic. Based on the study background, what is the relationship between career aspiration and organizational support with career success among women managers during the COVID-19 pandemic and to what extent does self-efficacy mediate this relationship?

Career success

Subjective career success indicators include pride in one's achievement, intrinsic job satisfaction, self-worth, commitment to work role or institution, fulfilling relationships, and moral satisfaction (Ng and Feldman, 2014; Smale et al., 2019). However, there have been only a small number of studies on career success literature associated with predictors of career success that integrate the three main approaches (viz. the personal and the behavioral aspects, and the environment) simultaneously in one study. Some of the studies focus on only one or two dimensions such as behavioral approaches (Smale et al., 2019), individual approaches (Rigotti et al., 2018), and individual or organizational approaches such as employee workplace (Callanan, 2003; Spurk et al., 2021). Empirical studies on career success show that men and women perceive career

success in different dimensions; women tend to place more emphasis on the importance of balance and relationships, which is a subjective dimension, while men are inclined to focus on material success, which is more toward the objective dimension of career success (Mayrhofer et al., 2008; Afiouni and Karam, 2014; Hartman and Barber, 2020). However, there is a paucity of research on women's career progress as most studies based on the career theory do not specifically show integral gender differences in the measurement dimension related to career advancement (Calinaud et al., 2021).

In this study, the focus was on factors that contributed to the subjective career success of women managers in a Malaysian public university. These women were considered as an under-researched group of employees even though their contributions were very significant and crucial to the development and success of higher learning institutions. Malaysian women managers constituted half of the total managers responsible for the effective operationalisation and administration of many public universities. University managers, also known as "professional staff," represented 50 percent of non-academic staff that facilitated the organization's operations (Gander et al., 2019). In this study, we integrated three main approaches, namely individual, behavioral, and structural in predicting and explaining career success. The aim was to identify issues that limited or enhanced women managers in achieving career success during the Covid-19 pandemic. A better understanding of career success among women managers would help the development of a career intervention model, improve organizational HRD strategies, and formulate policies and programmes that focus on gender differences in the measurement and definition of career success. The aim of this study was to investigate the mediating effect of self-efficacy on career aspiration and organizational support with subjective career success among Malaysian women managers during the Covid-19 pandemic.
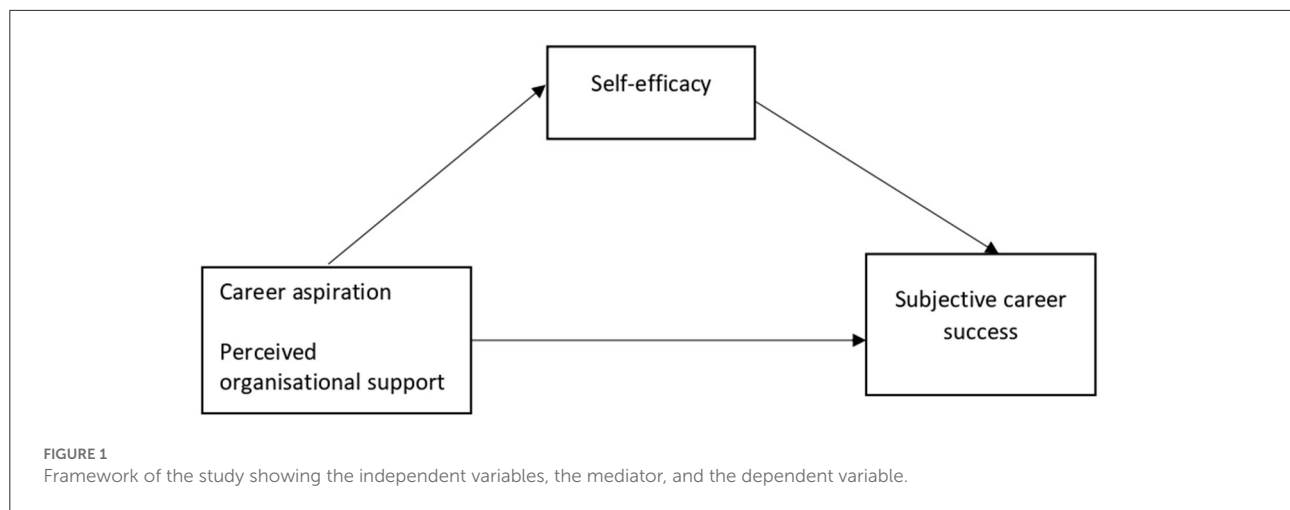
Career aspiration and career success

Career aspiration reflects the urge to step forward in one's career (Strauss et al., 2012). It acts as a catalyst for spearheading career growth, helping the individual strive toward fulfilling career-related goals (Yun and Min, 2015). Career aspiration also reflects the desire to seek opportunities pertaining to leadership, training and managing others, and furthering one's education (Hartman and Barber, 2020). Indeed, career aspiration is a combination of push factors of the individual, helping him or her give full commitment and attention to anything that will help achieve career success. According to some studies on career aspiration (e.g., Datta and Agarwal, 2017), women's career aspiration is reported to be similar as that of men. However, other researchers argue that men and women have different career aspirations, and that their career aspirations change over

time (Yun and Min, 2015). Women with high career aspiration are predicted to show humanistic attitudes related to feminine roles; they have high levels of confidence in playing multiple roles, e.g., as an individuals, part of families and the supervisors in an organization (Kang and Kaur, 2020). In short, career aspiration drives the individual toward desiring excellence in job performance and career outcometo achieve career goals and the high career aspiration leading to high career development opportunities in the organization (Mohd Rasdi et al., 2012; Sharma and Srivastava, 2020). As mentioned above, women's perception of success tends to lean more toward the subjective dimension. Thus, we can expect women's career aspiration to have a positive relationship with subjective career success.

Hypothesis 1: Career aspiration significantly correlates with subjective career success.

Perceived organizational support and career success

High perceived organizational support (POS) reflects the company's high degree of commitment to its employees; it is characterized over the longer term by trust, support, and respect and care (Shanock and Eisenberger, 2006). When employees perceive that they have organizational support, they expect their company will reward them if they put in greater effort to achieve organizational objectives. This line of thinking is supported by the social exchange theory (Blau, 2017), which posits that when employees perceive that their organization values their contribution to the workplace and cares about their wellbeing, they are more likely to feel obligated to engage in behaviors that are beneficial to their organization. Empirical evidence shows that POS is positively related to positive attitudes and behaviors at the workplace, such as employee performance (Li et al., 2019), work engagement (Imran et al., 2020), affective commitment (Nazir et al., 2018), psychological empowerment and job satisfaction (Maan et al., 2020). Other studies reveal that POS decreases not only burnout and turnover intention of employees (Wang and Wang, 2020) but also work-family conflict (Wattoo et al., 2018). Generally, therefore, POS creates a positive work environment for employees. Nevertheless, the influence of POS on the career success of women managers during the COVID-19 pandemic needs to be examined. Hence, in the current study, we investigated the possibility that perceived organizational support would increase career success despite the pandemic. Additionally, we examined whether the relationship between perceived organizational support and subjective career success was mediated by women managers' self-efficacy. Given the positive effect of POS on employee commitment and job satisfaction, it would be logical to suggest that perceived organizational support is related to career success

FIGURE 1
Framework of the study showing the independent variables, the mediator, and the dependent variable.

as well. Nonetheless, as noted earlier, women generally regard career success more from the subjective viewpoint. On the basis of the above, the following hypothesis is proposed.

Hypothesis 2: Perceived organizational support significantly correlates with career success.

Mediating effect of self-efficacy

Self-efficacy is the individual's perception of his or her ability to successfully implement certain tasks. At the workplace, it refers to how confident individuals feel about successfully carrying out their responsibilities. Self-efficacy has been found to be positively related to subjective career success (Riordan and Louw-Potgieter, 2011). In line with SCCT, self-efficacy represents an individual's confidence in his or her ability to accomplish specific tasks (Hackett and Betz, 1981). A study on the effect of gender on occupational self-efficacy has found that both men and women with high occupational self-efficacy set their own path for career advancement (Hartman and Barber, 2020). It is important to note that individuals with high occupational self-efficacy have considerable control over their career outcome, and are able to enhance their career self-management, thus positively impacting career goals and career success (Ballout, 2009). Furthermore, a study on gender differences of self-efficacy (Dan et al., 2018) shows that women with high self-efficacy set challenging goals, sustain high commitment despite experiencing disappointment, increase and maintain efforts to cope with any work-related failure. As a result, they become very confident in accomplishing their tasks, and this increases their chances of career success. On the other hand, women with negative beliefs about their ability or women with low occupational self-efficacy are unwilling to take risks,

do not desire to be highly visible at the workplace, and are negatively self-present (Bandura and Locke, 2003).

According to Abele and Spurk (2009), occupational self-efficacy has a positive impact on both objective and subjective career success. Moreover, self-efficacy mediates innovative behavior and career success (Dan et al., 2018). It is a predictor of career success and performance effectiveness (Ballout, 2009); it helps the individual achieve high job performance and job satisfaction (Hartman and Barber, 2020). Studies show that successful professional women have relatively high self-efficacy (Duffy et al., 2006; Mohd Rasdi et al., 2011). Thus, self-efficacy is expected to have a positive effect on subjective career success.

Hypothesis 3: Self efficacy mediates the relationship between career aspiration and subjective career success.
Hypothesis 4: Self efficacy mediates the relationship between perceived organizational support and subjective career success.

Research framework

As illustrated in Figure 1 which depicts the theoretical framework of this study, the aim was to investigate the effects of both individual and organizational factors in influencing subjective career success of Malaysian women managers, with self-efficacy as a mediator. Two models were elaborated on. In the first one, it was hypothesized that self-efficacy mediated the association between career aspiration and subjective career success. In accordance with the inspection procedures of the mediator effect (Baron and Kenny, 1986), we built a simple mediation model (model 4) of the 3.5 macro in SPSS developed by Hayes (2017) to verify the mediating effect of self-efficacy:

Step 1: Career aspiration (X) is associated with subjective career success (Y);

Step 2: Career aspiration (X) is related to self-efficacy, the mediator variable (M);

Step 3: Self-efficacy (M) influences subjective career success (Y).

To determine whether self-efficacy mediated the relationship between career aspiration and subjective career success, we analyzed the effect of career aspiration on subjective career success, while controlling for self-efficacy.

Next, using a second hypothesized model, we examined the contribution of self-efficacy in mediating the relationship between perceived organizational support (POS) and subjective career success. Specifically, it was assumed that:

Step 1: POS (X) is associated with subjective career success (Y);

Step 2: POS (X) is related to self-efficacy, the mediator variable (M),

Step 3: Self-efficacy (M) influences subjective career success (Y).

This procedure was used to assess if self-efficacy mediated the relationship between perceived organizational support (POS) and subjective career success through the analysis of the effect of POS on subjective career success, while controlling for the mediator.

Methods

Participants and procedures

To test our proposed model, we applied a quantitative approach to examine the mediating effect of self-efficacy on career aspiration and POS in determining the degree of subjective career success. The target participants for our empirical study were women managers of a large public university in Malaysia. A cross-sectional survey method was used to collect the data. This study employed a self-administered online survey to meet the new norms of research practice as necessitated by the unprecedented pandemic. The data were gathered through an electronic survey questionnaire created with Google Forms; the link was distributed to participants *via* their organization's email address. Prior to conducting this study, ethical approval was granted by the ethics committee of the university (JKEUPM-2021-783). In the questionnaire to collect the data, the authors informed the respondents that the information gathered would be confidential and that it would be used only for research purposes. The data were collected from July 2020 until February 2021. A total of 146 questionnaires were used as the source of final data for statistical analysis, taking into consideration the completeness, readability, and consistency of the responses.

The 146 women managers who participated in the study were aged 20 years and above. Participants aged between 31 and 40 years constituted more than half of the total sample (58.2%). It can be concluded that most of the women managers who participated in this study were at the mid-career stage, i.e., at the stage of career growth, establishment, and maintenance. Mid-career managers generally adopt a more stable emotional and psychological approach when dealing with matters pertaining to job undertaking. The respondents were on different levels of service schemes, viz. Administration and Support (56.8%), Social (21.9%), Financial (12.3%), Engineering (4.8%) and Information System (4.1%). Regarding grade of position, the majority (83.6%) of the respondents held senior positions. The demographic profile on job tenure showed that most respondents (73.2%) had worked between 11 and 20 years; 15.8% had worked >10 years; only 11.0% had worked 21 and more years. The data also revealed that 84.1% of the respondents were married and 15.9% were single.

Measures

The career aspiration scale

The Career Aspiration Scale assesses the element of achievement aspiration, educational aspiration, and leadership (Gregor and O'Brien, 2015). To assess career aspiration, we employed the Career Aspiration Scale (Gray and O'Brien, 2007) that comprises 8 items. Sample item: "I aspire to have my contributions at work recognized by my employer". The item was scored on a five-point Likert scale ranging from "Untrue of me" (1) to "True of me" (5). The Cronbach's Alpha of the scale has previously been found to be high ($\alpha = 0.77$) (Strauss et al., 2012). In this study, the Cronbach's Alpha for internal consistency coefficient was calculated as 0.880 for the total score.

The perceived organizational support scale

Perceived organizational support was measured using a short version of the survey of Perceived Organizational Support (Eisenberger et al., 1986). Sample item: *"My organization really cares about my wellbeing."* Each item was rated on a five-point Likert-like scale ranging from "strongly disagree" (1) to "strongly agree" (5). The scale achieved high reliability: $\alpha = 0.97$ (Neves and Eisenberger, 2014). In this study, the internal consistency coefficient was found to be 0.900 for the total score.

The subjective career success inventory

Subjective career success was measured in eight dimensions, viz. (i) authenticity – shaping the direction of one's career according to personal needs and preferences, (ii) growth – growing one's career through the development of new knowledge and skills, (iii) influence – having an impact on

TABLE 1 Means, standard deviations, Cronbach alpha, and correlations of main variables.

Variable	α	M	SD	Range		Inter-correlations			
				Min	Max	1	2	3	4
1. SCS	0.883	4.045	0.480	2.67	5.00	1			
2. Self-efficacy	0.830	4.714	0.682	3.00	6.00	0.435**	1		
3. Career aspiration	0.880	4.088	0.558	2.75	5.00	0.560**	0.482**	1	
4. POS	0.900	3.527	0.532	2.00	5.00	0.574**	0.276**	0.363**	1

**P < 0.01; POS, perceived organizational support; SCS, Subjective career success.

others within the organization and on the organization itself, (iv) meaningful work – engaging in work that is personally or socially valued, (v) personal life – having a career that positively impacts life outside of work, (vi) quality of work – producing a high quality product or providing high quality service, (vii) recognition – being formally or informally acknowledged for your work by others, and (viii) career satisfaction sense – positive feelings toward one's career in general. The instrument, known as the Subjective Career Success Inventory (SCSI), consisted of 24 items adapted from Shockley et al. (2015). Sample item: "The organizations I worked for have recognized me as a good performer." It employed a 5-point Likert scale that ranged from 1 = strongly disagree to 5 = strongly agree. The stem for each item starts with "Considering my career as a whole...". The instrument reported high reliability based on its pilot testing, with α = 0.883.

The self-efficacy scale

Self-efficacy was operationalized in this study as occupational self-efficacy. It refers to one's belief in one's own ability and competence to perform and execute behavior relevant to one's occupation and to make judgments about the consequences of successfully performing specific work-related tasks (Hartman and Barber, 2020). To measure self-efficacy in this study, the Occupational Self-efficacy Scale (OCCSEFF) by Schyns and Von Collani (2002) was employed. Sample item: "I can remain calm when facing difficulties in my job because I can rely on my abilities." The scale consisted of eight items and each item was measured on a six-point Likert scale (1 = Not at all true, 2 = Slightly true of me, 3 = Moderately true of me, 4 = True of me, 5 = Very true of me and 6 = Completely true of me. The internal consistency coefficient calculated for the reliability of OCCSEFF for this study was 0.84.

Data analysis

IBM SPSS Version 25.0 and its plug-in PROCESS macro version 3.4 were used for the analysis of data. Given that there might be a common method variance problem attributed to

both subjects' self-reports and similarities of measurement facets between constructs, the Harman single factor analysis method was used to test the common method bias (Podsakoff and Organ, 1986; Fuller et al., 2016). Descriptive statistics for all the analyzed variables to measure the mean and standard deviation. To answer the research question, Pearson's correlations were used to measure the relationship and multiple linear regression analysis were used. The SPSS macro-programme PROCESS v. 3.4 (Hayes, 2018) was employed to test the hypothesized mediation models. The mediation analysis is a regression-based approach that can investigate how and if an independent variable (X) exerts an effect on a dependent variable, postulating the impact of one or more intervening variables (M) positioned between X and Y; in other words, M could be considered as the means by which X has an influence on Y (Hayes, 2018). Therefore, a first single mediation (Model 4) was created to analyse the effect of self-efficacy on the association between career aspiration and subjective career success. Next, the second model analyzed the effect of self-efficacy on the association between perceived organizational support and subjective career success using the mediation model (Model 4). Finally, the indirect effects were estimated following Preacher and Hayes (2004) recommendation of bootstrapping. The 95% bootstrap confidence interval (based on 5000 resamples) was used and all variables were standardized in the analysis. Hayes (2018) emphasizes the usefulness and power of the bootstrapping procedure in mediation analyses as it indicates the significance of the indirect effect when zero is not included in the confidence interval (CI).

Results

The means, standard deviations, internal consistencies, and correlations were computed for the study variables, as reported in Table 1. Internal consistency (Cronbach's alpha) for all the variables ranged between α = 0.830 and α = 0.900. All significant relationships between the variables were in the expected direction. Career aspiration was found to be positively and significantly correlated with subjective career success (r = 0.560, p < 0.01). According to Hypothesis 1, subjective career

TABLE 2 Multiple linear regression for independent variables on subjective career success ($n = 146$).

Variable	Unstandardized Beta		Std. Beta	t	p
	β	Std. error			
Career aspiration	0.287	0.061	0.334	0.4704	0.000
POS	0.368	0.058	0.408	6.314	0.000
Self-efficacy	0.114	0.048	0.162	2.350	0.020

$P < 0.001$, β, standardized regression coefficient; t-value, test statistics of β; R = 0.701, R^2 = 0.492, Adjusted R^2 = 0.481; POS, Perceived organizational support.

success was positively associated to career aspiration in this sample of women managers. Next, perceived organizational support was positively related to subjective career success ($r = 0.574$, $p < 0.01$). Thus, Hypothesis 2 was accepted. Self-efficacy was also found to be positively and significantly correlated with subjective career success ($r = 0.435$, $p < 0.01$). Hence, high scores on career aspiration, perceived organizational support, and self-efficacy predicted a strong association with subjective career success of the women managers.

The data were further analyzed using the multiple regression analysis with the forced enter method (Table 2) to determine the contributions of career aspiration, perceived organizational support, and self-efficacy to variations in subjective career success among women managers. It was found that career aspiration ($\beta = 0.334$, $p = 0.000$), perceived organizational support (POS) ($\beta = 0.408$, $p = 0.000$) and self-efficacy ($\beta = 0.162$, $p = 0.020$) significantly influenced subjective career success of the women managers who participated in this study [$F(3, 142) = 45.845$, $p < 0.001$]. The largest beta coefficient was 0.408 for POS, making it the strongest contribution in explaining subjective career success. The coefficient of determination, $R^2 = 0.492$, suggested that 49% of the variance in subjective career success among women managers was explained by the three independent variables, viz. career aspiration, perceived organizational support, and self-efficacy.

Mediation analysis

The PROCESS plug-in (Hayes, 2018) was used to perform the mediation analysis, with career aspiration and perceived organizational support as independent variables, subjective career success as a dependent variable, and self-efficacy as a mediation variable (Model 4). First, the variables were standardized. Controlling for the mediating role of self-efficacy on the relationship between career aspiration and perceived organizational support in relation to subjective career success, both were tested using Model 4 of the plug-in PROCESS 3.5 macro in SPSS developed by Hayes (2017). Table 3 shows the first

TABLE 3 Testing the mediating effects of self-efficacy.

Regression equation		Goodness of Fit		Significance		
Outcome	Predictor	R^2	F	β	se	t
First variable						
Self-efficacy		0.232	42.628			
	Career aspiration			0.589	0.089	6.605
SCS		0.349	38.394			
	Career aspiration			0.392	0.062	5.928**
	Self-efficacy			0.151	0.054	2.797**
Second variable						
Self-efficacy		0.076	11.815			
	POS			0.353	0.102	3.446
SCS		0.412	50.279			
	POS			0.443	0.060	7.374
	Self-efficacy			0.210	0.046	4.495

**P < 0.001; SCS, Subjective career success; POS, Perceived organizational support.

mediation analysis results which indicated that career aspiration directly and positively predicted subjective career success ($\beta = 0.392$, $t = 5.928$, $p < 0.001$). In addition, career aspiration positively predicted individuals' levels of self-efficacy ($\beta = 0.589$, $t = 6.609$, $p < 0.001$). Self-efficacy had a significant predictive effect on subjective career success ($\beta = 0.151$, $t = 2.797$, $p < 0.001$). See Table 3 for the goodness of fit and significance of outcomes and predictors in the tests for the mediating effects of self-efficacy. For the analysis of statistical power, the R^2s in our F-test were 0.232 (self-efficacy as the outcome) and 0.3494 (subjective career success as the outcome). According to the standard for R^2 value proposed by Cohen (2013), the statistical power for career aspiration and self-efficacy relationship was large effect size ($R^2 = 0.350$) and statistical power for career aspiration, self-efficacy and subjective career success relationship was medium effect size.

Next, for the second mediation analysis, the results showed that perceived organizational support directly and positively predicted subjective career success ($\beta = 0.443$, $t = 7.374$, $p < 0.001$). In addition, perceived organizational support positively predicted women managers' levels of self-efficacy ($\beta = 0.353$, $t = 3.446$, $p < 0.001$) that had a significant predictive effect on subjective career success ($\beta = 0.210$, $t = 4.495$, $p < 0.001$). For the analysis of statistical power, the R^2s in our F-test were 0.076 (self-efficacy as the outcome) and 0.412 (subjective career success as the outcome). According to the standard for R^2 value proposed by Cohen (2013), the statistical power for POS and self-efficacy relationship factor was small effect size ($R^2 = 0.02$) and statistical power for POS, self-efficacy and subjective career success relationship was large effect size.

TABLE 4 Bootstrap analysis of mediating effects of self-efficacy.

| Path | (β) | SE | Percentage of total effect | Bootstrapping BC percentile 95% CI | |
				LL	UL
Career aspiration factor					
Total effect	0.481	0.059	100%	0.364	0.599
Direct effect:	0.392	0.062	81%	0.261	0.523
CA → SCS					
Indirect effect:	0.089	0.042	19%	0.017	0.183
CA → SE → SCS					
Perceived organizational support factor					
Total effect:	0.518	0.061	100%	0.396	0.639
Direct effect:	0.443	0.060	86%	0.324	0.562
POS → SCS					
Indirect effect:	0.074	0.028	14%	0.023	0.134
POS → SE → SCS					

SCS, Subjective career success; CA, Career aspiration; SE, Self-efficacy; POS, Perceived organizational support; BC, Bootstrap confidence; CI, Confidence interval, Indirect effect is significant if 0 value falls outside the lower bound and upper bound of BC Percentile 95% CI.

The significance of the mediating effect was tested with a bootstrap method in the sampling process. PROCESS can construct bias-corrected percentile and Monte Carlo Confidence Interval (CI) for indirect effects (Hayes, 2017). The determination of mediation effect is based on "zero" (0) value location in confidence interval (CI) (Hayes, 2017), if CI does not contain the "zero" (0) value, it means the indirect or mediation effect is statistically significant.

Table 4 shows that the bias-corrected 95% percentile of CI (β = 0.089, CI = 0.017, 0.183) for career aspirations did not include a zero value. These findings hence showed that the indirect effect of career aspiration on subjective career success through the mediator (self-efficacy) was statistically significant, thereby supporting Hypothesis 3. The total effect, direct effect, and total indirect effect for the first mediation analysis were 0.481, 0.392, and 0.089, respectively. The direct effect of career aspiration on subjective career success was 0.392, accounting for 81% of the total effect and the total indirect effect "career aspiration → self-efficacy → subjective career success" accounted for 19% of the total effect.

Next, the bias-corrected 95% percentile of CI (β = 0.074, CI = 0.023, 0.134) mediation analysis of self-efficacy in the relationship between POS and subjective career success also did not include a zero value. These findings thus showed that the indirect effect of POS on subjective career success through the mediator (self-efficacy) was statistically significant, thereby supporting Hypothesis 4. The total effect, direct effect, and total

indirect effect were 0.518, 0.443, and 0.074 respectively. The direct effect of POS on subjective career success was 0.518, accounting for 86% of the total effect and the total indirect effect "POS → self-efficacy → subjective career success" accounted for 14% of the total effect.

Discussion

The present study focused on the relationship between career aspiration and POS in relation to subjective career success among women managers during the COVID-19 pandemic. Based on the context-process-outcome model and the theory of social cognitive career, a mediation model with self-efficacy as a mediating variable was constructed. Using data from an online survey of 146 women managers, we had two main findings. First, there was a significant positive correlation between career aspiration and perceived organizational support in relation to subjective career success. Second, our analysis also indicated that self-efficacy had a mediating role in the relationship between career aspiration and perceived organizational support with regard to subjective career success; this suggests that enhancing positive self-beliefs such as self-efficacy helps to boost career aspiration and improves subjective career success of women managers. This finding is supported by emerging evidence that career success can be attributed to an individual's action to ensure career development (Abramo et al., 2014).

Furthermore, the present study adds to theoretical contributions of occupational self-efficacy, career aspiration, and perceived organizational support in relation to the attainment of career success. The social cognitive career theory (Brown and Lent, 2004) explains self-efficacy as a mediator and its influence on women managers' career success, along with outcome expectancies of career development. The present findings reflected the theory's structure, with evidence that Malaysian women managers' occupational self-efficacy mediated the relationship of career aspirations and perceived organizational support vis-à-vis career success. This outcome extends previous research that shows the impact of self-efficacy and career success of women managers (Schyns and Von Collani, 2002; Ballout, 2009; Hartman and Barber, 2020).

Contribution of career aspiration, perceived organizational support, and self-efficacy on career success

In summary, the study results highlight the relevance of the variables used to predict career success. By exploring the interrelationships of career aspiration, perceived organizational support, and self-efficacy to variations in subjective career success among women managers, this study seeks to expand research concerning these variables. Our findings show that

subjective career success was positively correlated with career aspiration, perceived organizational support, and self-efficacy. Perceived organizational support (POS) was the strongest predictor of subjective career success. This finding implies that as the level of support offered by the organization increases, subjective career success of the employee also increases. In other words, the higher women managers perceive support from their organization, the more likely they will achieve subjective career success. A possible reason for this might be that the employees are concerned about the extent to which the organization values their contributions and cares about their wellbeing, especially during the COVID 19 pandemic. During this period of working from home, many employees experience insecurity and uncertainty about career development. According to Guan et al. (2020), organizations and governments should take the necessary steps to ensure that career development of individuals is continued. Considering the importance of POS, exchange relations based on reciprocity norms are important in helping to reinforce employee interpersonal relationships within organizations (Eisenberger et al., 2001). Next, the cultures of a particular country can have a great influence on the organization's work culture and practices. Malaysia, generally regarded as a collectivist community with collectivist minds (Lau et al., 2017), fosters strong relationships, where every member of a group takes responsibility for other group members and values highly cooperative or helping behavior and extra-role behavior (Hussain et al., 2017). In such a collectivist country, women managers in this study perceive organization support in terms of being appreciated for their contributions. They feel that their wellbeing is cared for because the Malaysian culture is more collectivistic, respectful of hierarchy and elders, relationship-oriented and cooperative rather than competitive (Merriam and Mohamad, 2000). The results of this study are also in consonance with reports from other studies which find that POS significantly predicts subjective career success of service personnel (e.g., Guan et al., 2016; Dose et al., 2019). Moreover, POS signals important cues to employees that they are valued and possess career potential; these cues are then likely to elicit favorable affective reactions, including higher levels of career satisfaction and a stronger sense of career success. This study further confirms the viewpoint that POS is an important factor that impacts subjective career success (Guan et al., 2017; Erogluer et al., 2020), and extends previous findings related to the pandemic situation, indicating that POS during the pandemic period is a critical factor in career success for employees. As mentioned by Guan et al. (2017), to retain their workforce, companies should recognize and understand the perceptions employees have of their career success.

Evidence from research suggests that interventions related to POS could contribute to employees' career development such as career commitment, career values, and more specifically career success. In this respect, Kurtessis et al. (2017) suggest that POS initiates a social exchange process wherein employees feel obligated to help the organization achieve its goals and objectives, and that increased efforts on the organization's behalf will lead to greater rewards. Furthermore, POS also fulfills socio-emotional needs, resulting in greater identification and commitment to the organization, an increased desire to help the organization succeed, and greater psychological wellbeing among the staff. In line with SCCT, these findings support the notion that environment factors such as POS contribute significantly to subjective career success. In line with past research, POS enhances career success because the resources, information, support and such like facilitate task accomplishment; it also provides access to developmental experiences (Seibert et al., 2001; Forret and Dougherty, 2004). According to Erogluer et al. (2020), employees would have a greater sense of value when they know that their colleagues and managers support them. Undoubtedly, POS plays a critical role in employees' subjective career success.

The second important predictor of subjective career success was career aspiration. The findings in this study indicated that career aspiration was positively related with subjective career success. This implies that as the level of aspiration in career of employees increases, subjective career success of the employee also increases. This is probably because when women managers had a genuine interest and desire to advance their careers, they would trigger more positive attitudes to achieve subjective career success. The present finding is similar with that of a study by Otto et al. (2017) where individuals with strong achievement motivation had higher effort levels for achieving success in their careers. The current COVID-19 pandemic has had a pervasive effect, and the past 2 years have witnessed unprecedented changes at the workplace, switching from the conventional work setting to a new norm of teleworking such as "work from home" (WFH), leading to concerns about "career shock." Despite the challenges, the women managers in this study continued to excel in their work and strived toward meeting job requirements. One possible explanation is that women are generally endowed with skills in adaptability and flexibility, and with increased independence/autonomy when teleworking, women are able to strike a balance between work and family time (Lim and Teo, 2000). From the cultural perspective decades ago, women in Malaysia were mainly occupied with house chores, but now they are also key players in the workforce. The Malaysian workforce composition shows that there is increased involvement of women in the nation's labor force (Department of Statistics, 2018). This reflects a higher level of career aspiration among women and commitment to their careers. The current study suggests that the higher the level of women managers' career aspiration, the more likely they would experience subjective career success. This study further confirms the viewpoint that career aspiration is an important factor influencing subjective career success for women (Li and Huang, 2017), and this applies even during the pandemic situation.

Mediating effect of self-efficacy

The results of the mediation analysis showed that perceived organizational support (POS) and career aspiration during the pandemic impacted subjective career success through self-efficacy. The women managers in this study were found to have high levels of self-efficacy. Such women have high levels of confidence in their ability and competence to perform and execute behaviors relevant to their occupation and make judgments about the consequences of their decisions (Hartman and Barber, 2020). Self-efficacy, one of the important factors in determining career success among women managers, helps them successfully perform tasks that contribute to their career growth and organizational development.

The results also showed that self-efficacy played a mediating role in the relationship between career aspiration and subjective career success. A high-level of self-efficacy is associated with a high level of career aspiration and subjective career success. This study elucidates the main mechanisms underlying career aspiration and career success, and thereby answers the call made by recent researchers for more studies to explain how subjective career success develops (Rossenkhan et al., 2020). Drawing upon SCCT (Lent et al., 1994), we incorporated self-efficacy as a mediator in our conceptual model and then evaluated the respective effects using the bootstrap method in the sampling process. We found that self-efficacy enhanced subjective career success, and in return, through perceptions of success, self-efficacy was strengthened. The results confirmed that self-efficacy served as a significant mediator in the relationship. Thus, women managers who possess higher confidence and sense of self-worth are more likely to create successful outcomes when they have high career aspiration and are able translate it into action at their workplace. Moreover, efficacious people set more challenging goals for themselves and tend to improve their performance further (Stajkovic and Luthans, 1998). Such people have a greater likelihood of rising to the top in their organization. This supports previous studies that examined the positive role of self-efficacy in improving career aspiration and subjective career success (Chughtai, 2018; Rigotti et al., 2018).

Furthermore, another proposed mediating model of self-efficacy was supported by the data in this study. Results showed that POS had a positive effect on career success through self-efficacy. A plausible explanation is that when women managers had a greater level of self-esteem and self-worth, they were more likely to achieve success in career advancement. Also, when they perceived that they had support from their organization, their socio-emotional needs were met and they experienced greater psychological wellbeing. Women managers with high self-efficacy had more confidence in overcoming setbacks; they set higher career goals, and mobilized all useful resources to achieve those goals. Organizational support has also been found to predict increase in one's self-efficacy within organizational settings (Caesens and Stinglhamber,

2014). According to Bandura (1986), self-efficacy beliefs reflect the intrinsic motivation of employees and stimulate them to improve their work performance. Sung and Connor (2017) postulate that efficacious individuals have an earnest desire to succeed in achieving their goals; they may even inspire others to improve their work behaviors. Hence, for women managers, high levels of perceived organizational support and self-efficacy helped strengthen their perception of career success. This supports previous research which has found that organizational support enhances self-efficacy, and in turn, strengthens the effort to achieve subjective career success (Dan et al., 2018).

Limitations, implications, and recommendations

This study has some limitations. Our objectives focus on examining the mediating effect of self-efficacy on the relationship of subjective career success with career aspiration and perceived organizational support of only Malaysian women managers. This study employed a quantitative research method and used a self-administered questionnaire for collecting data from women managers. Future studies should collect data more comprehensively, selecting women managers from different sectors with qualitative methods of study. As aspiration and self-efficacy are crucial for practitioners, future researchers should include individual factors such as personality. The results from this study will help organizations better understand the predictors of the career success of women employees. Another practical implication is that the findings of this study provide some useful insight into the role of self-efficacy in the relationship of subjective career success with career aspiration and organizational support. Management could provide more organizational support to facilitate the development of successful careers for women employees.

Conclusions

Organization should tailor the support extended to employees, especially women employees. This study provides further evidence to defend the argument that supportive management helps enhance employees' self-efficacy beliefs. We describe and assess the relationship between career aspiration and career success practices. Our findings indicate that when perceived organizational support and the need for compliments and recognition are met, women managers would develop positive emotional attitudes and strive to achieve organizational goals. In terms of contributions, our study shows that subjective career success of women is positively correlated with career aspiration and perceived organization support, and that this relationship is mediated by self-efficacy. Our findings also provide a better insight for management regarding employees'

career success and their commitment to the organization in a non-western context, specifically in a developing county and culturally unique context such as Malaysia.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

Author contributions

SH and NM contributed to the conception and design of the study. SH, NM, and SM organized the database,

performed the statistical analysis, and wrote sections of the manuscript. NM and SH wrote the first draft of the manuscript and SH its English version. All authors contributed to the manuscript revision, read, and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

Abele, A. E., and Spurk, D. (2009). The longitudinal impact of self-efficacy and career goals on objective and subjective career success. *J. Vocat. Behav.* 74, 53–62. doi: 10.1016/j.jvb.2008.10.005

Abramo, G., D'Angelo, C. A., and Rosati, F. (2014). Career advancement and scientific performance in universities. *Scientometrics* 98, 891–907. doi: 10.1007/s11192-013-1075-8

Afiouni, F., and Karam, C. (2014). Structure, agency, and notions of career success. *Career Dev. Intl.* 19, 548–571. doi: 10.1108/CDI-01-2013-0007

Agrawal, S., and Singh, S. (2022). Predictors of subjective career success amongst women employees: moderating role of perceived organizational support and marital status. *Gender Manage.* 37, 344–359. doi: 10.1108/GM-06-2020-0187

Autin, K. L., Blustein, D. L., Ali, S. R., and Garriott, P. O. (2020). Career development impacts of COVID-19: Practice and policy recommendations. *J. Career Dev.* 47, 487–494. doi: 10.1177/0894845320944486

Baert, S., Lippens, L., Moens, E., Sterkens, P., and Weytjens, J. (2020). *How Do We Think the COVID-19 Crisis Will Affect Our Careers (if any remain)? IZA Discussion Paper No. 13164.* Bonn: Institute of Labor Economics.

Ballout, H. I. (2009). Career commitment and career success: Moderating role of self-efficacy. *Career Dev. Intl.* 14, 655–670. doi: 10.1108/13620430911005708

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annu. Rev. Psychol.* 52, 1–26. doi: 10.1146/annurev.psych.52.1.1

Bandura, A., and Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *J. Appl. Psychol.* 88, 87–99. doi: 10.1037/0021-9010.88.1.87

Baron, R. M., and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Pers. Soc. Psychol.* 51, 1173–1182. doi: 10.1037/0022-3514.51.6.1173

Blau, P. (2017). *Exchange and Power in Social Life.* Abingdon-on-Thames: Routledge. doi: 10.4324/9780203792643

Brown, S. D., and Lent, R. W. (2004). *Career development and Counseling: Putting Theory and Research to Work.* Hoboken, NJ: John Wiley and Sons.

Caesens, G., and Stinglhamber, F. (2014). The relationship between perceived organizational support and work engagement: The role of self-efficacy and its outcomes. *Eur. Rev. Appl. Psychol.* 64, 259–267. doi: 10.1016/j.erap.2014.08.002

Calinaud, V., Kokkranikal, J., and Gebbels, M. (2021). Career advancement for women in the British hospitality industry: The enabling factors. *Work Employment Soc.* 35, 677–695. doi: 10.1177/0950017020967208

Callanan, G. A. (2003). What price career success? *Career Dev. Int.* 8, 126–133. doi: 10.1108/13620430310471032

Carli, L. L. (2020). Women, gender equality and COVID-19. *Gender Manage.* 35, 647–655. doi: 10.1108/GM-07-2020-0236

Chauhan, J., Mishra, G., and Bhakri, S. (2021). Career success of women: Role of family responsibilities, mentoring, and perceived organizational support. *Vision* 26, 105–117. doi: 10.1177/09722629211024887

Chen, H., Jiang, S., and Wu, M. (2021). How important are political skills for career success? A systematic review and meta-analysis. *Int. J. Human Resource Manage.* 2021, 1–27. doi: 10.1080/09585192.2021.1949626

Chughtai, A. (2018). Authentic leadership, career self-efficacy and career success: A cross-sectional study. *Career Dev. Int.* 23, 595–607. doi: 10.1108/CDI-05-2018-0160

Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences.* New York, NY: Routledge. doi: 10.4324/9780203771587

Czymara, C. S., Langenkamp, A., and Cano, T. (2020). Cause for concerns: Gender inequality in experiencing the COVID-19 lockdown in Germany. *Eur. Soc.* 23, S68–S81. doi: 10.31235/osf.io/bxm9g

Dan, X., Xu, S., Liu, J., Hou, R., Liu, Y., and Ma, H. (2018). Relationships among structural empowerment, innovative behaviour, self-efficacy, and career success in nursing field in Mainland China. *Int. J. Nurs. Pract.* 24:e12674. doi: 10.1111/ijn.12674

Datta, S., and Agarwal, U. A. (2017). Factors effecting career advancement of Indian women managers. *South Asian J. Business Stud.* 6, 314–336. doi: 10.1108/SAJBS-07-2016-0062

Department of Statistics. (2018). *Employed Persons by Marital Status and State, Malaysia.* Available online at: https://www.data.gov.my/data/ms_MY/dataset/employed-persons-by-marital-status-and-state-malaysia

Dose, E., Desrumaux, P., and Bernaud, J. (2019). Effects of perceived organizational support on objective and subjective career success via need satisfaction: A study among French psychologists. *J. Employment Counseling* 56, 144–163. doi: 10.1002/joec.12130

Duffy, J. A., Fox, S., Punnett, B. J., Gregory, A., Lituchy, T., Inés Monserrat, S., et al. (2006). Successful women of the Americas: The same or different? *Manage. Res. News* 29, 552–572. doi: 10.1108/01409170610708998

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., and Rhoades, L. (2001). Reciprocation of perceived organizational support. *J. Appl. Psychol.* 86, 42–51. doi: 10.1037/0021-9010.86.1.42

Eisenberger, R., Huntington, R., Hutchison, S., and Sowa, D. (1986). Perceived organizational support. *J. Appl. Psychol.* 71, 500–507. doi: 10.1037/0021-9010.71.3.500

Erogluer, K., Bekmezci, M., and Orçanl,i, K. (2020). The mediating effect of subjective career success in the impact of perceived organizational support on the intention to remain. *Open J. Business Manage.* 8, 2205–2225. doi: 10.4236/ojbm.2020.85135

Forret, M. L., and Dougherty, T. W. (2004). Networking behaviors and career outcomes: Differences for men and women? *J. Organ. Behav.* 25, 419–437. doi: 10.1002/job.253

Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., and Babin, B. J. (2016). Common methods variance detection in business research. *J. Bus. Res.* 69, 3192–3198. doi: 10.1016/j.jbusres.2015.12.008

Gander, M., Girardi, A., and Paull, M. (2019). The careers of university professional staff: A systematic literature review. *Career Dev. Int.* 24, 597–618. doi: 10.1108/CDI-07-2018-0191

Gray, M. P., and O'Brien, K. M. (2007). Advancing the assessment of women's career choices: The career aspiration scale. *J. Career Assessment* 15, 317–337. doi: 10.1177/1069072707301211

Gregor, M. A., and O'Brien, K. M. (2015). Understanding career aspirations among young women. *J. Career Assessment* 24, 559–572. doi: 10.1177/1069072715599537

Guan, Y., Deng, H., and Zhou, X. (2020). Understanding the impact of the COVID-19 pandemic on career development: Insights from cultural psychology. *J. Vocat. Behav.* 119:103438. doi: 10.1016/j.jvb.2020.103438

Guan, Y., Jiang, P., Wang, Z., Mo, Z., and Zhu, F. (2017). Self-referent and other-referent career successes, career satisfaction, and turnover intention among Chinese employees. *J. Career Dev.* 44, 379–393. doi: 10.1177/0894845316657181

Guan, Y., Yang, W., Zhou, X., Tian, Z., and Eves, A. (2016). Predicting Chinese human resource managers' strategic competence: Roles of identity, career variety, organizational support and career adaptability. *J. Vocat. Behav.* 92, 116–124. doi: 10.1016/j.jvb.2015.11.012

Gunz, H., and Mayrhofer, W. (2011). Re-conceptualizing career success: A contextual approach. *Zeitschrift für ArbeitsmarktForschung* 43, 251–260. doi: 10.1007/s12651-010-0049-z

Gunz, H. P., and Heslin, P. A. (2005). Reconceptualizing career success. *J. Organ. Behav.* 26, 105–111. doi: 10.1002/job.300

Hackett, G., and Betz, N. E. (1981). A self-efficacy approach to the career development of women. *J. Vocat. Behav.* 18, 326–339. doi: 10.1016/0001-8791(81)90019-1

Hartman, R. L., and Barber, E. G. (2020). Women in the workforce. *Gender Manage.* 35, 92–118. doi: 10.1108/GM-04-2019-0062

Hayes, A. F. (2017). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach (2nd ed.).* Guilford Publications.

Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Commun. Monogr.* 85, 4–40. doi: 10.1080/03637751.2017.1352100

Heslin, P. A. (2005). Conceptualizing and evaluating career success. *J. Organ. Behav.* 26, 113–136. doi: 10.1002/job.270

Hupkens, L., Akkermans, J., Solinger, O., and Khapova, S. (2021). The dynamics of subjective career success: a qualitative inquiry. *Sustainability* 13:7638. doi: 10.3390/su13147638

Hussain, G., Ismail, W. K. W., and Javed, M. (2017). Comparability of leadership constructs from the Malaysian and Pakistani perspectives. *Cross Cult. Strategic Manage.* 24, 617–644. doi: 10.1108/CCSM-11-2015-0158

Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., and Ilyas, S. (2020). Impact of perceived organizational support on work engagement: Mediating mechanism of thriving and flourishing. *J. Open Innovation* 6:82. doi: 10.3390/joitmc6030082

Kang, L. S., and Kaur, G. (2020). Personal cognitive factors affecting career aspirations of women working in financial sector in India. *Vision* 24, 419–430. doi: 10.1177/0972262920931344

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., et al. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *Am. Psychol.* 76, 63–77. doi: 10.1037/amp0000716

Kramer, A., and Kramer, K. Z. (2020). The potential impact of the COVID-19 pandemic on occupational status, work from home, and occupational mobility. *J. Vocat. Behav.* 119:103442. doi: 10.1016/j.jvb.2020.103442

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., and Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *J. Manage.* 43, 1854–1884. doi: 10.1177/0149206315575554

Lau, P. Y. Y., Tong, J. L. T., Lien, B. Y. H., Hsu, Y. C., and Chong, C. L. (2017). Ethical work climate, employee commitment and proactive customer service performance: Test of the mediating effects of organizational politics. *J. Retail. Consumer Services* 35, 20–26. doi: 10.1016/j.jretconser.2016.11.004

Lent, R. W., Brown, S. D., and Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *J. Vocat. Behav.* 45, 79–122. doi: 10.1006/jvbe.1994.1027

Li, C., Naz, S., Khan, M. A., Kusi, B., and Murad, M. (2019). An empirical investigation on the relationship between a high-performance work system and employee performance: Measuring a mediation model through partial least squares–structural equation modeling. *Psychol. Res. Behav. Manag.* 12, 397–416. doi: 10.2147/PRBM.S195533

Li, Y., and Huang, S. (2017). Hospitality service climate, employee service orientation, career aspiration and performance: A moderated mediation model. *Int. J. Hospital. Manage.* 67, 24–32. doi: 10.1016/j.ijhm.2017.07.012

Lim, V. K., and Teo, T. S. (2000). To work or not to work at home-an empirical investigation of factors affecting attitudes towards teleworking. *J. Manag. Psychol.* 15, 560–586. doi: 10.1108/02683940010373392

Maan, A. T., Abid, G., Butt, T. H., Ashfaq, F., and Ahmed, S. (2020). Perceived organizational support and job satisfaction: A moderated mediation model of proactive personality and psychological empowerment. *Future Business J.* 6, 1–12. doi: 10.1186/s43093-020-00027-8

Mayrhofer, W., Meyer, M., Schiffinger, M., and Schmidt, A. (2008). The influence of family responsibilities, career fields and gender on career success. *J. Manag. Psychol.* 23, 292–323. doi: 10.1108/02683940810861392

Merriam, S. B., and Mohamad, M. (2000). How cultural values shape learning in older adulthood: the case of Malaysia. *J. Adult Educ. Q.* 51, 45–63. doi: 10.1177/074171360005100104

Mittal, S., and Singh, T. (2020). Gender-based violence during COVID-19 pandemic: A mini-review. *Front. Global Women's Health* 1, 1–17. doi: 10.3389/fgwh.2020.00004

Mohd Rasdi, R., Garavan, T. N., and Ismail, M. (2012). Networking and managers' career success in the Malaysian public sector. *Eur. J. Train. Dev.* 36, 195–212. doi: 10.1108/03090591211204715

Mohd Rasdi, R., Ismail, M., and Garavan, T. N. (2011). Predicting Malaysian managers' objective and subjective career success. *Int. J. Human Resource Manage.* 22, 3528–3549. doi: 10.1080/09585192.2011.560878

Nazir, S., Qun, W., Hui, L., and Shafi, A. (2018). Influence of social exchange relationships on affective commitment and innovative behavior: Role of perceived organizational support. *Sustainability* 10:4418. doi: 10.3390/su10124418

Neves, P., and Eisenberger, R. (2014). Perceived organizational support and risk taking. *J. Manag. Psychol.* 29, 187–205. doi: 10.1108/JMP-07-2011-0021

Ng, T. W., Eby, L. T., Sorensen, K. L., and Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Pers. Psychol.* 58, 367–408. doi: 10.1111/j.1744-6570.2005.00515.x

Ng, T. W., and Feldman, D. C. (2014). Subjective career success: A meta-analytic review. *J. Vocat. Behav.* 85, 169–179. doi: 10.1016/j.jvb.2014.06.001

Otto, K., Roe, R., Sobiraj, S., Baluku, M. M., and Garrido Vásquez, M. E. (2017). The impact of career ambition on psychologists' extrinsic and intrinsic career success. *Career Dev. Int.* 22, 23–36. doi: 10.1108/CDI-06-2016-0093

Podsakoff, P. M., and Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *J. Manage.* 12, 531–544. doi: 10.1177/014920638601200408

Preacher, K. J., and Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behav. Res. Methods Instruments Comp.* 36, 717–731. doi: 10.3758/BF03206553

Rigotti, T., Korek, S., and Otto, K. (2018). Career-related self-efficacy, its antecedents and relationship to subjective career success in a cross-lagged panel study. *Int. J. Hum. Resource Manage.* 31, 2645–2672. doi: 10.1080/09585192.2018.1460858

Riordan, S., and Louw-Potgieter, J. (2011). Career success of women academics in South Africa. *South Afr. J. Psychol.* 41, 157–172. doi: 10.1177/008124631104100205

Rossenkhan, Z., Au, W. C., and Ahmed, P. K. (2020). Unbundling subjective career success: A sequential mediation analysis. *Eur. Business Rev.* 33:e0197. doi: 10.1108/EBR-09-2019-0197

Schyns, B., and Von Collani, G. (2002). A new occupational self-efficacy scale and its relation to personality constructs and organizational variables. *Eur. J. Work Organizational Psychol.* 11, 219–241. doi: 10.1080/13594320244000148

Seibert, S. E., Kraimer, M. L., and Liden, R. C. (2001). A social capital theory of career success. *Acad. Manage. J.* 44, 219–237. doi: 10.5465/3069452

Shanock, L. R., and Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *J. Appl. Psychol.* 91, 689–695. doi: 10.1037/0021-9010.91.3.689

Sharma, L., and Srivastava, M. (2020). A scale to measure organizational stress among women workers in the garment industry. *Eur. J. Train. Dev.* doi: 10.1108/EJTD-04-2019-0060

Shockley, K. M., Ureksoy, H., Rodopman, O. B., Poteat, L. F., and Dullaghan, T. R. (2015). Development of a new scale to measure subjective career success: A mixed-methods study. *J. Organ. Behav.* 37, 128–153. doi: 10.1002/job.2046

Smale, A., Bagdadli, S., Cotton, R., Dello Russo, S., Dickmann, M., Dysvik, A., et al. (2019). Proactive career behaviors and subjective career success: The moderating role of national culture. *J. Organ. Behav.* 40, 105–122. doi: 10.1002/job.2316

Spurk, D., Hirschi, A., and Dries, N. (2018). Antecedents and outcomes of objective versus subjective career success: Competing perspectives and future directions. *J. Manage.* 45, 35–69. doi: 10.1177/0149206318786563

Spurk, D., Hofer, A., and Kauffeld, S. (2021). Why does competitive psychological climate foster or hamper career success? The role of challenge and hindrance pathways and leader-member-exchange. *J. Vocat. Behav.* 127:103542. doi: 10.1016/j.jvb.2021.103542

Stajkovic, A. D., and Luthans, F. (1998). Social cognitive theory and self-efficacy: Goin beyond traditional motivational and behavioral approaches. *Organ. Dyn.* 26, 62–74. doi: 10.1016/S0090-2616(98)90006-7

Strauss, K., Griffin, M. A., and Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *J. Appl. Psychol.* 97, 580–598. doi: 10.1037/a0026423

Sung, C., and Connor, A. (2017). Social-cognitive predictors of vocational outcomes in transition youth with epilepsy: Application of social cognitive career theory. *Rehabil. Psychol.* 62, 276–289. doi: 10.1037/rep0000161

Thomas, R., Cooper, M., Cardazone, G., Urban, K., Bohrer, A., Long, M., et al. (2020). *Women in the Workplace 2020.* New York, NY: McKinsey and Company.

Vyas, L., and Butakhieo, N. (2020). The impact of working from home during COVID-19 on work and life domains: An exploratory study on Hong Kong. *Policy Design Practice* 4, 1–18. doi: 10.1080/25741292.2020.1863560

Wang, Q., and Wang, C. (2020). Reducing turnover intention: Perceived organizational support for frontline employees. *Front. Business Res. China* 14, 1–16. doi: 10.1186/s11782-020-00074-6

Wattoo, M. A., Zhao, S., and Xi, M. (2018). Perceived organizational support and employee well-being. *Chin. Manage. Stud.* 12, 469–484. doi: 10.1108/CMS-07-2017-0211

Yun, S., and Min, S. (2015). Analysis on occupational preference, career, aspiration and career attitude maturity of middle and high school students. *Indian J. Sci. Technol.* 8:664. doi: 10.17485/ijst/2015/v8iS7/70469

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