Received: 28 July 2022 | Accepted: 14 January 2023

DOI: 10.1111/soru.12424

SPECIAL ISSUE ARTICLE

Sociologia Ruralis Journal of the European Society for Rural Sociology

ESRS

Continuity, change and new ways of being: An exploratory assessment of farmer's experiences and responses to public health restrictions during the COVID-19 pandemic in a rural Irish community

Alexis O'Reilly BA[1,2] | **David Meredith PhD**[2] | **Ronan Foley PhD**[1] | **Jack McCarthy PhD**[2]

[1]Geography Department, Maynooth University, Maynooth, Ireland

[2]Rural Economy Development Programme, Teagasc, Ashtown, Dublin, Ireland

Correspondence
Alexis O'Reilly, Geography Department, Maynooth University, Maynooth, Co. Kildare, Ireland.
Email: alexis.oreilly.2014@mumail.ie

Funding information
This research was funded by Teagasc through the Walsh fellowship.

Abstract

Farming occupations are, in the Global North, generally solitary, and a growing body of research identifies this as one of the factors that underpins low levels of wellbeing and poor mental health amongst farmers. The primary public health response to the coronavirus disease 2019 (COVID-19) pandemic focused on reducing transmission of the virus by limiting interactions of people. This article seeks to assess the impact of these restrictions on farmer's experience of isolation and how it shaped their wellbeing. Applying a broad socio-ecological framework, we analyse change, continuity and shifts in social and economic relations and their spatial reconfiguration during the COVID-19 pandemic as recounted in semi-structured, qualitative interviews. We found that while COVID-19 has disrupted socio-spatial relations, including key sites of socialisation for farmers and rural communities, occupational isolation was viewed as a positive feature of farming as was working in nature. Familial and informal networks of

support were important throughout the pandemic, while novel engagements with communication technologies facilitated both change and continuity of social and economic interaction. Whilst these findings are broadly positive, the reconfiguration of, particularly, economic relations is viewed as accelerating the turn towards service delivery using technology and, consequently, further reducing opportunities for social interaction.

KEYWORDS
COVID-19 public health restrictions, farmer wellbeing, Ireland, rural isolation, socio-spatial relations

INTRODUCTION

The international literature points to the impact of COVID-19-induced changes on human wellbeing, directly as a pathogen and because of the disruption to social and economic networks that it precipitated (Weinberger et al., 2020; Twenge & Joiner, 2020). These disruptions were associated with the introduction of public health guidelines and regulations that sought to limit personal interaction as a means of reducing or eliminating the spread of the virus (Meredith et al., 2020). Older people and those with pre-existing health conditions that increase the risk of experiencing the most adverse outcomes of infection were advised to minimise contact with others (Hernández et al., 2020). Whilst these restrictions generally applied to all populations regardless of location, rural populations, older people and those living alone were considered to be at particular risk of experiencing social and emotional loneliness and reduced wellbeing resulting from increased social and physical isolation (Amerio et al., 2020; Herron et al., 2021; Van Beek & Patulny, 2022). In this context, farmers who, in Ireland and many other developed countries, are characterised by a relatively old age profile, were considered a potentially vulnerable group (Meredith et al., 2020). This construction of vulnerability needs to be critically assessed in light of the fact that farmers, unlike many groups in society, were deemed 'essential workers' and asked to keep working as normal throughout the pandemic whilst complying with prevailing public health regulations or recommendations. Furthermore, farmers generally spend time outdoors whilst working and, consequently, they are immersed in natural 'green space', which is viewed as being both therapeutic and protective of mental health and wellbeing (Ahmadu et al., 2021). This conclusion is supported by recent research that found that nature contact buffered the negative effects of lockdowns and other public health restrictions on mental health (Pouso et al., 2021).

Counterbalancing, and possibly outweighing, the potential benefits of being a farmer during the pandemic, they, like the rest of society, were impacted by the closure or restricted access to in-person retail, banking and social services and engagement in associated cultural practices. These impacts need to be considered against the backdrop of wellbeing and mental health issues confronted by farmers and farm workers internationally (Bossard et al., 2016; Roy et al., 2013) and in Ireland (Brennan et al., 2022; Van Doorn et al., 2019). In the UK, the Royal Agricultural Benevolent

Institution (2021) found that 36% of the farming community is probably or possibly depressed and levels of isolation are high. This growing body of literature highlights that, contrary to popular perception, farmers are disproportionately affected by poor physical and mental health (Brumby et al., 2012; Patel, 2005; Younker & Radunovic, 2021).

To explore the experiences and impacts of public health restrictions on farmers, we draw on a broad socio-ecological model (SEM) to evaluate the disruptive impacts of the COVID-19 pandemic in terms of continuity, change and new forms of social and spatial networks that shape health and wellbeing for Irish farmers. Drawing on an SEM of health, we can identify social and occupational, including economic, relations that connect individuals, communities and agencies or institutions within place(s) that act to enable health and wellbeing but which are also subject to external shocks and disruptions, that is, changes to the governance of public health (Bronfenbrenner, 1979; Kilanowski, 2017). Socio-ecological approaches understand farmers as operating within a series of nested individual, environmental, social and economic systems that are enmeshed through intersections between biological processes and human relations (Massey, 1994). The SEM model foregrounds the significance of the relational nature of socioeconomic processes and how these are structured by personal, societal, political, policy and governance structures and processes, that is, the model highlights that farmers affect and are affected by a complex range of social influences and nested environmental relationships. The SEM recognises that these influences and relationships are fluid and can cross multiple levels. Whilst it is easy to envisage disruption and specific changes to such social or economic practices arising from the introduction of public health restrictions, we are also interested in exploring the durability/resilience of farmer's responses, and the role, if any, of communications technologies in keeping the networks alive.

There is an emerging body of research that assesses the impact of the COVID-19 pandemic on farmers and rural communities (see this special issue and a special issue in the *Journal of Agromedicine*: https://www.tandfonline.com/toc/wagr20/25/4). To date, however, there is relatively little research exploring how farmers navigated the pandemic and the impacts on their wellbeing resulting from disruption to, as well as reconfiguration of, social and economic processes associated with the COVID-19 pandemic. We present the results of qualitative research with representative farmers living in the Border Region of Ireland, a rural region that experienced high levels of COVID-19 infection (Lima, 2021). Our article considers how farmers experienced and navigated social isolation from March 2020 to May 2021 and their perceptions of how public health restrictions affected their wellbeing and that of the wider farming community. We assess these experiences through their accounts of isolation, changes to everyday social and economic practices and the impact of technology in remaking the place of important economic, social and cultural practices. In addition to reporting their own experiences, each of the participants was in a position to reflect on the experiences of other farmers within their local area and social and professional networks.

SOCIAL ISOLATION AND WELLBEING

Of key concern in this study is the importance of social isolation and its corollary, social contact, as critical to understanding wellbeing of farmers living in rural areas. Holt-Lunstad et al. (2015) defined social isolation as an objective condition based on a pervasive lack of social contact or communication, participation in social activities or having a confidant (see also Gardiner et al., 2018; Poscia et al., 2018, for similar perspectives). This reflects a view that isolation represents a material deficit in social supports. Heylen (2010) presents an alternative perspective of social

isolation manifesting in loneliness and that this needs to be considered within the context of each person's expectations. Systematic reviews of the literature on COVID-19 and loneliness have found that loneliness has been a significant issue during the pandemic and that loneliness is positively associated with poor mental health symptoms (Pai & Vella, 2021). We take both these perspectives of isolation, that is, material and subjective, into consideration throughout the article by exploring both impacts and experiences.

SOCIAL ISOLATION AND FARMING

While farmers live predominantly in rural regions and often spend long periods working alone, the role of isolation as a factor in determining farmers' wellbeing is contested within the literature as an element that may accentuate or attenuate isolation of farmers. While farmers in Norway were found to have more frequent symptoms of anxiety and depression, compared to other workers in their region, they did not have poorer social networks (Torske et al., 2016). In contrast to this finding, research conducted in Australia identified isolation as playing a negative role in farmers' wellbeing, with farmers living in more remote rural communities found to have poorer wellbeing than non-farmers living in the same community (Brew et al., 2016). Qualitative research with Australian farmers also found isolation to be a factor in exacerbating other stresses inherent to farming and furthermore that greater sense of isolation for farmers was linked to maladaptive coping strategies (Brew et al., 2016). In Quebec, Canada, survey data collected from younger farmers found 60% to be at risk of isolation (Parent et al., 2012), whilst qualitative research in Manitoba, Canada, found isolation to be a common theme in discussions for farmers in distress (Sturgeon & Morrissette, 2010). Whilst these findings relate to spatial contexts that may capture the impacts of extreme remoteness, research undertaken in geographically smaller countries also finds that farmers are at increased risk of isolation. Perceval et al. (2017) investigating farmer's suicide, found isolation and loneliness to be key stressors, noting that poor mental health further deepened social withdrawal and isolation. So, whilst geographic isolation can be an issue for rural populations in general, there are also occupational factors that need to be considered amongst farming populations, that is, there is a need to consider a broader set of interrelated socio-spatial and occupational factors.

Qualitative research undertaken with farmers in Australia found that geographical isolation created a sense of anxiety and vulnerability as essential services were not easily accessed. In addition, farming itself was seen as an isolating occupation, and these factors were found to compound cultural and social factors that limited help-seeking (Perceval et al., 2018). Research by Parent (2012) identified a broader set of factors that may influence levels of isolation including education, household structure, relations with neighbours, financial pressures and working hours. These factors were seen to be more important than geographical isolation, that is, isolation and the impact of isolation is not simply one of geography.

There is evidence that developments in agriculture, particularly mechanisation, automation and digitisation are contributing to farmers working alone for longer periods, and that this may exacerbate the issue of isolation (Gallagher & Sheehy, 1994). The replacement of farm labour with capital and increases in the scale and intensity of farms have led to some farmers, particularly owner-operators, working alone for longer periods. These developments may limit farmers' opportunities to connect socially during their working day and outside of it (Lobley et al., 2005; Reed et al., 2002; Wheeler et al., 2023). The COVID-19 pandemic has been a catalyst for greater adoption of, particularly, communications technologies that facilitate farmers to engage

in online/remote trading (Marren, 2021). In recognition of the changing farming landscape and a digital skills gap in agriculture. there have been initiatives to provide training for farmers in communication technology (Agriland Team, 2022). The longer-term impacts of this turn to communication technology and their social impacts are unknown. Will it reduce isolation, allowing for geographically isolated farmers to connect with greater ease? Will it increase isolation as farmers engage less with one another in spaces such as in-person marts that have a social role? Or will a digital divide leave a cohort of farmers unable to adapt to changes in service delivery that are increasingly mediated by communication technologies?

THE CHANGING SPACES OF FARMER'S LIVES IN IRELAND

This section briefly outlines changes to farming in Ireland over the course of decades that, following the introduction of public health restrictions, exposed farmers to higher levels of social isolation. Farming in Ireland was historically labour-intensive, operated at busy seasons under a *méitheal* or cooring system of collaboration between farmers, who assisted with labour on neighbouring farm enterprises (Cush & Macken-Walsh, 2016; Scheper-Hughes, 2001). This took place based on reciprocity and was key to kinship relations in rural areas. These events were of both material and cultural importance, providing space not only for work to be completed but also for farmers to connect socially and invigorate and reinforce community relations. Since, at least, the 1950s traditional *méitheal* practices have weakened and their dissolution has been identified as contributing to a crisis of rural social life and a condition of anomie and distress (Scheper-Hughes, 2001). This weakening of social ties reflects changes to the structure of farming in Ireland, which has, over several decades, evolved from traditional mixed farms, that is, combining crop and livestock production, to specialised livestock enterprises that are predominantly focused on the production of either beef or dairy products (Crowley et al., 2008).

Persistent low economic returns to beef enterprises have seen many, though not all, farmers in this sector taking up off-farm employment, a side benefit of which is greater opportunities for social interaction (Dillon et al., 2016; Meredith, 2011). This contrasts with dairy enterprises that, since the removal of milk quotas in 2013, resulted in rapid increases in the average herd size and a substantial increase in the workload of dairy farmers (Beecher et al., 2019). These changes resulted in an increase in the social significance of agricultural co-op stores and, particularly, livestock marts. In addition to fulfilling basic economic needs of farmers, they became important social spaces to meet peers and also enact sets of practices associated with being a (good) farmer resulting in the accrual of cultural capital (Burton et al., 2020). Live animals were historically traded at fair days, gatherings that were important economic and social events in rural Ireland (Lennon, 1988) before being replaced by live auctions in purpose-built marts. This transition was advocated by farmer representative organisations, as the mart was seen to increase competition, improve prices and was more transparent as the animals were weighed (Curtin & Varley, 1982). Whilst the core business of marts is facilitating and organising the buying and selling of animals, they play an increasingly important social role where farmers have opportunities to meet, share a meal and catch up on local news, policy and agri-political developments. Internationally, and in Ireland, the significance of livestock marts has been noted, particularly by health service providers, as locations to reach farmers who are considered 'hard to reach', that is, there are few other sites where farmers gather (Nye et al., 2022; Van Doorn et al., 2019). In this context, the closure of 'in-person' livestock marts, and to a lesser extent of farm supply stores, as part of a suite of public health restrictions introduced following the onset of the COVID-19 pandemic, closed off important

social outlets for farmers and increased the risks of loneliness and isolation. These were replaced with online alternatives, including the 'Mart Eye' App (Marren, 2021), which sought to provide digital solutions that met farmers' economic needs. A range of other farm services moved to 'click and collect systems' to supply farms with equipment, fertiliser and animal feed. This involved farming supply stores receiving orders online or by phone and arranging a sale remotely.

A consideration of the social impact of COVID-19 with respect to farmers in Ireland necessitates a consideration of how restrictions affected routines of religious practice in Ireland, particularly those rituals of death and mourning. Ireland is predominantly Catholic, and while religious practice is declining, mass attendance in 21st-century Ireland has been noted as one of the highest in Europe (Fahey et al., 2005). The decline in attendance at weekly mass (religious observance) has undermined a once important occasion where farmers' social status within the rural community was demonstrated. The continued observance of some religious practices, particularly the rituals associated with death, has been characterised as being as much a social practice, connected to community cohesion, as a religious practice and particularly so for older people (Inglis, 2007).

The significance of the COVID-19 pandemic's impact on expressions of grief and mourning in Ireland have been noted (O'Mahony, 2020). In rural Ireland, rituals of mourning engage the broader community (Toolis, 2017). These traditionally take the form of removals from the undertakers at which wider members of the community paid their condolences to the bereaved family, followed by gatherings of family, friends and neighbours in the bereaved household that precede the funeral, known as *wakes*. Wakes in Ireland have been the subject of historical research, but there is little research on their role in contemporary rural Irish communities (Kuijt et al., 2021). In practice, they continue to be social occasions at which there is an expectation that members of the bereaved persons extended family, neighbours, friends and social network gather to offer social and emotional support to the family through the sharing of stories of the bereaved. Public health restrictions prescribed these communal rituals and placed severe limitations on the numbers attending funeral masses and burials. These restrictions affected farmers in the same way as they affected all other members of the community; however, social rituals associated with death and, more generally, religious observance are likely to have had a significant impact on farmers' opportunity to engage in communal activities and potentially contributed to increased social isolation.

The remainder of the article presents a preliminary exploration of farmers' experiences of the impact of public health restrictions and assesses their impact on their material and subjective isolation and overall wellbeing. In doing so, we consider what has changed, what has remained and what new ways of connecting and being connected emerged. In the next section, we outline the methods and data, including a brief introduction to and explanation as to why the Border Region was selected, before presenting the results and our discussion and conclusions.

DATA AND METHODS

This article draws on four qualitative semi-structured interviews that were conducted as part of a wider study of rural isolation amongst farmers that contributes to the literature by identifying themes for future studies. The relatively small sample size is a reflection of the challenges faced by qualitative research encountered during the COVID-19 pandemic.

An interview schedule was developed based on the review of the literature presented above and informed by public discourse regarding the impacts of public health restrictions on farmers contained in the agricultural media and rural communities as reflected in Dail (the Irish

Parliament) contributions. Initial topics included the impacts of public health restrictions on farming and social life, the use of communication technology, the importance of work and exposure to green space, fears of illness/transition, social interactions and community cohesion. An iterative process of coding the data was undertaken by the lead author to associate participant responses to the initial questions with these topical areas and, subsequently, to identify themes. Two of the co-authors assessed the coding and interpretation of the participant interviews. Emergent themes were identified through iterative discussion and reference to a number of bodies of literature by all authors.

The research participants are drawn from the Border Region in the Republic of Ireland. This region includes five counties from Donegal in the North West to Louth on Ireland's East coast. Whilst the region is proximal to Dublin and Belfast, many rural areas within the region experience relatively poor accessibility to major towns and cities (Department of Environment, 2002) leading to some localities being relatively isolated from both regional and national population and economic centres. The Border Region is of particular interest to studies of the experiences and impacts of public health restrictions. High numbers of COVID-19 infections were recorded in the region, compared to the rest of the country (Lima, 2021; O'Connor et al., 2021), and three of the five counties that comprise the region, Cavan, Donegal and Monaghan, were subject to localised lockdowns. Leitrim and Louth are the other two counties that make up this region. Farming in the region is characterised by relatively small farms that are predominantly focused on beef or dairy production, with sheep rearing largely limited to upland areas, for example, the Cooley Mountains in the east of the region and western parts of County Donegal.

For this article, four representative interviews were selected for analysis. These interviews were conducted as part of a wider study that explores farmer wellbeing in Ireland. The interviews were selected on the grounds that the participants provided high-quality materials and insights across a range of issues and themes regarding their experiences of public health restrictions and the resulting impacts on themselves; they reflect farmers differing in age, gender and farm enterprise (Table 1); and finally, they were in a position to represent the experiences of the wider community.

Ethics approval for this research was granted by Maynooth University Social Research Ethics Committee. The farmers interviewed ranged in age from 40s to 80s. One farmer is older and lives alone, and for this reason, he could be considered at higher risk of isolation. The research participants have been assigned a random name as a means of foregrounding their individuality as opposed to the practice of numbering the respondents, for example, Farmer 1, which has the impact of reducing them to an occupational identity. Two farmers, Sorcha and Brian, have younger children and experienced specific challenges due to school closures. Variation in farm system is also important as dairy farming (Conor and James) is labour-intensive, and beef farming often involves the farmer working alone. The two beef farmers, Sorcha and Brian, also had different business models with one selling cattle directly to a factory and another more often selling animals through marts to other farmers. All four of the farmers participating in the study live on the site of their farms in rural areas. A gender difference was noted in that one farmer interviewed is female and responsibility for childcare was a prominent theme in this interview. This points to the need for further research to assess gendered experiences of the public health restrictions associated with COVID-19.

Whilst the interviews were ultimately conducted in person, participants were offered the choice of undertaking the interview using virtual means if they wished. The interviews took place as Ireland emerged from its third lockdown in the spring of 2021. This lockdown was in place following a very substantial increase in the number of cases following the Christmas period. During this period, the most stringent restrictions had been lifted, such as stay-at-home orders.

TABLE 1 Key characteristics of research participants

Farmer	Age	Gender	Farmer enterprise	Off-farm work	Employees	Household structure	Date of interview
Brian	50–60	Male	Beef	None	No employees; works alone	Lives with his wife and young children	21 April 2021
Conor	50–60	Male	Dairy	None	No employees; works on farm alongside son	Lives with his wife and adult children	11 May 2021
Sorcha	40–50	Female	Beef	Working off-farm in the agricultural sector	No employees; works alone	Lives with her husband and young children	23 May 2021
James	70–80	Male	Dairy	Retired from off-farm employment	No employees; works on farm alongside nephew	Lives alone	16 April 2020

Notwithstanding this, precautions were taken to limit the risk of exposure to COVID-19 with the interviewer maintaining a distance of 2 m from the interview participant, sanitising hands and wearing a KN95 facemask. Given the focus of the interview, that is, on experiences and impacts of public health restrictions on personal and community wellbeing, the interviewer kept a list of health and wellbeing supports in digital and paper copy on hand during interviews to be offered to any participant who expressed distress during or after the interview or who requested information on services available. Symptoms were based on information available from Irelands Health Service Executive. Signs that a participant may be distressed include speaking about trouble sleeping, excessive worries, feelings of hopelessness, trouble concentrating or loss of interest or motivation for things they normally enjoy (Mental Health–Helping Someone Else, 2022) or if any participant requested a copy. Participants were not offered any financial remuneration or material incentive for their participation in the study. All interviews were conducted by the lead author of this article.

RESULTS AND ANALYSIS

We outline the key findings of our study informed by analysis of the interview data. These are organised around three primary themes: disruption, continuity and new ways of being. Understanding the coming apart or endurance of key features of farming life as well as the emergence of new practices is key to our analysis of farmers' wellbeing in Ireland during the COVID-19 pandemic. Disruptive change speaks to the breakdown in working and social routines and patterns of life precipitated by the COVID-19 pandemic. The theme of continuity focuses on the features of farming life that were consistent throughout the pandemic and highlight the durability and resilience of both social and economic aspects of farming. The final segment considers new ways of

being, and adaptations, particularly those associated with the use of communication technology, required of farmers that supported, and continue to do so, economic and social practices.

Changing spaces of socialisation

Navigating public health restrictions was discussed in detail by the research participants in terms of their impacts on professional, social and community spheres. The fluidity in their discussion of these categories of impact reflects the enmeshing of all three in the day-to-day practices of being a farmer and member of a rural community. Places and practices that formed the focus of much of the discussions included gatherings at livestock marts, farmer or community meetings, pubs, funerals and wakes. In addition to discussing the impacts and implications of the restrictions on their lives and businesses, the participants' contributions reflect concerns that the processes of change had uneven social and economic impacts, with some, particularly older farmers living alone, viewed as more severely affected than others. Interestingly, whilst all research participants spoke of the impacts on their level of social engagement, three of the participants did not necessarily consider themselves to be isolated. Instead, there was a substantial focus on the isolation of other members of their communities. This perspective is reflected in a number of contributions below. Conor exemplifies this when discussing his experiences of isolation resulting from the limitations on social interaction but felt it is not as severe as with others:

> Yeah, to a point, except for a phone call, you wouldn't be meeting people like you know. Maybe talking to them in the mart… I was a person who went to a lot of meetings… and you do miss all them things because you met a lot of people and talked to people and had a bit of banter and know what's going on you know, so I would miss going to several different things you know. You wouldn't be meeting a lot of people I have to say *that*.

Conor went on to express concern for a demographic of farmers that he felt were at risk of isolation and poorer wellbeing at this time, particularly those living alone. This was, in his view, compounded for older people who were considered to be at risk of increased isolation due to efforts to protect themselves from the virus.

> I went over there to visit two elderly neighbours and if they got it and you had been there, you'd be really, it would be very hard. That's why people are so afraid like.

Similarly, whilst Brian did not consider himself to be isolated, he expressed concern for older farmers who may have lost social outlets, such as the mart. He notes that an aspect of isolation was driven by people attempting to maintain their distance, that is, to 'protect' vulnerable populations by not visiting:

> But for other farmers who were used to going to marts, and it was part of their social outlet, it is hard on them you know. Probably when you have a family … it is not so bad, but for a man living on his own, it is probably lonesome enough. He can't, people don't call to him …, or maybe elderly people used to [have] people call to them and they can't call now you know, and I feel too like I have elderly neighbours around here that I can't call into them or to talk to them you know.

Sorcha also reflected on this point. In her off-farm job, she regularly meets a cohort of isolated farmers who she identified as particularly vulnerable in this period. Asked if the farmers she described would have an opportunity to meet people during the pandemic, Sorcha felt that they did not and went on to explain the implications of the disruptions to conventional (in-person) interaction that enabled social contact were lost:

> So, all their social outlets are completely shut, the postman is firing the letters from the road nearly,… People who called round to them now are afraid to bring anything into them. So, I'd say all their social outlets are completely gone like, do you know?

Similar to Brian and Conor, Sorcha also pointed out that the absence of in-person marts would severely impact this group of farmers. She highlighted that the role of marts extended beyond economic and social functions to provide a basic health and nutritional role through the mart canteen:

> They [older farmers] might go to two marts in the week and that would be the meals for the week, the rest of the time they are eating bread.

Sorcha also pointed to the isolation arising from changes to religious services during this period. This was a common theme in interviews with particular attention given to the impact of COVID-19 restrictions on rituals of death and mourning in rural areas. There was a pronounced theme of community isolation in descriptions of bereavement and the disruptions to the performance of communal rituals associated with death, including the wake (visiting the house of the bereaved prior to the funeral) and accompanying the funeral cortege to the church, the religious service, which were limited to 15 persons,[1] and grieving, that is, supporting the family of the bereaved in the weeks and months afterwards. Conor notes that:

> It's sad too if someone dies [and] you can't go to the funeral. That is very, very tough. It's so lonesome to go past a house and there's nobody there. We were so used to big crowds [at funerals], maybe it was overdone, but for them families it's very tough like you know. For some family that lost a loved one it's… okay you can send a message online now and all that, but that's the only thing you can do when someone dies. It's very tough.

The coming together of people to participate in the funeral cortege was also the cause of anxiety and guilt for Conor, who felt a tension between the desire to show respect for the dead in the community and the responsibility not to spread the virus:

> There was a tragedy [in the local community] where someone was killed, and you went along to the church and stood around because I knew him so well. But then you feel that you are doing wrong because you can be too close to people… you feel like you're not comfortable, you feel like if you were too close to somebody and if something happened after… there's a fear on you, you know.

There was also a sense of a more general unravelling of social connections and the depth of connectedness in rural communities. This perspective was reflected in comments by Brian:

> There are things definitely that if, things that would have happened in the local area and you might not hear it for months. Whereas in normal times, you would have been at a meeting, and it would be discussed, or you'd hear it mentioned; or someone might be sick or things that the rural people are interested in and you wouldn't hear those.
>
> Interviewer: Yeah, yeah it's a bit less connected, yeah?
>
> Brian: Bit less connection, Yeah exactly, yeah, yeah. Things that would have been talked about face to face, but 'people wouldn't just feel it appropriate to pick up the phone and ring about it.

This exchange illustrates the centrality of personal interaction in the communication of local or community news, which helps maintains social connections. It is evident that the COVID-19 pandemic and associated public health restrictions had an atomising effect and contributed to a sense of dislocation. It is interesting to note that technology, in this instance a phone, was insufficient to maintain connectedness and cohesiveness. Brian stressed that the absence of incidental connections like this was not a '*life or death*' issue but, in spite of significant improvements, technology cannot replicate or reproduce the experience of sharing local news through in-person contact. This perspective was also reflected in the interview with Conor who pointed out that conversations with neighbours were less frequent and more functional when in-person contact was not possible:

> You'd speak to them on the phone an odd time like you don't really unless you have some business with them or something like that. It's not the same as it was. I suppose when you have family and that it is not as bad but for some that hasn't it would be a very lonely time. Phones are all right but for some people who are hard of hearing I say it would be a lonely time for them.

The perceived weakening of social bonds during the pandemic was also articulated by James who described the impact he sees on engagement with his local religious community and views this as a negative development. He speaks about the withdrawal from religious practice evident in practitioners not collecting envelopes used to donate money to the parish. This also reflects a weakening in social norms, practices and communal ties:

> Where you go in there to (the local chapel), the amount of envelopes that wasn't lifted, half of them wasn't lifted. It's going to affect the church when this is over and then you have an element of people who didn't care … you need the church; you need a priest

The reference to 'envelopes' relates to the donation of monies or 'dues' to the church upkeep and the priest. It would be expected that church goers would make a regular donation. That 'half' the envelopes were not 'lifted', that is, returned with money, speaks of how not only was there a physical rupture between the congregation and the church but also in the relationship and sense of obligation between the congregation and the priests in the parish.

Durability and resilience: Continuity in farmer's support networks

There were also unique features of farming practices that endured and were seen as positively contributing to wellbeing. Whilst the onset of the pandemic resulted in the introduction of a range of restrictions on mobility, face-to-face interaction and, associated with this, requirements for many workers to work from home, essential workers, including farmers, were required to continue working as usual. For some essential workers, this translated into higher levels of stress and deterioration in mental health (Bond et al., 2021). For farmers, however, the interviews highlight a heightened sense of the value in nature and working outdoors, an appreciation for the space and freedom that farmers enjoyed during the pandemic, the benefits of a steady routine and the relative financial security that many other workers lacked. In addition to meeting or contributing to their personal and farm enterprise financial needs, the continuity in working routines was considered to be an important aspect of life that protected wellbeing during the period covered by this research. The farmers interviewed expressed a sense of security relative to people who worked with someone else, or where they did work with people, the design of farm buildings ensured high levels of ventilation[2] and were viewed as contributing to a safer working environment. Working with animals and in an outdoor environment were important to the farmers interviewed, and this feature of their occupational environment was brought acutely into focus during the pandemic. Whilst working alone and strict regulations may be seen as generally negative characteristics of farming (Rose et al., 2022), these may have equipped farmers to cope with or endure the COVID-19 pandemic.

Brian described changes to his farm enterprise, which he operates alongside a nephew, to adapt to COVID-19 and take precautions against contracting the virus. In spite of the changes, he emphasised the continuity in working life through maintenance of pre-COVID routines. In general, Brian felt that the pandemic seemed to have less of an impact on his occupation, compared to other workers. Public health restrictions were not considered disruptive and resulted in only slight changes in terms of health and safety practices. When asked if working outside was a side of farming that he enjoyed he replied:

> Ah yeah, like I didn't find any difference in the COVID.

This was also the case for Conor. While he operates an intensive dairy enterprise, he felt that during the COVID-19 pandemic, adjusting to the public health requirements and restrictions did not require '*really major changes*'. One of his sons continued to help on the farm, while the other son, living away from home, stopped returning on the weekends. Working alongside his son who lived in the same household meant social distancing at work was not necessary. He describes his interactions with delivery and creamery workers as being straightforward and easily compatible with social distancing requirements. This he contrasted with other workers who were at a greater risk of being exposed to COVID-19:

> Yeah, you are out in the fresh air. That is a benefit. Compared to someone who is working in factory like there is a lot higher risk.

The continuation of daily and seasonal routines was seen as particularly important to the interviewees. At one level, this was linked with having something to occupy one's time with, that is, James spoke about the importance of a working routine for him:

> Do you know, if I hadn't something to do, it would drive me mental because from when I was knee high, I was working. I need the wee bit of work, that's the way I am guided.

Sorcha made the same point but in relation to recovering from COVID-19:

> I find it hard enough to isolate as I was. But I put on my wellies every day and I'm out to the yard every day and out the field every day and I wanted to go for a walk, I went around the land. Do you know? I passed time that way.

She also reflected on the experiences of others as a way of understanding the benefits of living in a rural area and being a farmer:

> [I] couldn't imagine somebody with COVID-19 sitting in a flat five stories up in a different country. Maybe having no family network around them and maybe being told. 'Oh, you have COVID you have to stay in your room for 2 weeks like'.

For Brian also, in spite of the large number of COVID-19 cases in the locality, he felt himself to be safe, relative to many other people in the community and his occupation as a farmer was important in contributing to this greater sense of security:

> It was probably one of the biggest benefits of the activity that goes on in farming is that … 95% of the time, you're a lone worker and look it the other 5%; maybe people come into the yard, or you have contractors working or that. But definitely, it would be a chance in 10,000 that you'd be in a confined area working with them. During the summer, there maybe, there was certain situations for you to be in close proximity to people, but they were very, very seldom…you're in open air yards and sheds, which would be designed for ventilation anyway. Like you know, ventilation for the cattle. So basically, you'd feel quite safe in those situations. There was no situation where I ever thought that you could be in danger here, and I'm quite happy with that.

Brian pointed out that he knew of no farmers who had contracted COVID-19 because of their occupation. For Brian, farming offered a lifestyle that was positive and less stressful, compared to other occupations. The proximity of living and working in the same location was also viewed as a positive aspect of family farming:

> I never had to do it, but I can imagine the daily commute and added stress to their [i.e., people who have to commute to work] day like, as well you know. So, look [there are] plenty of stresses in farming, but bumper-to-bumper traffic isn't one of them.

The interviewees highlighted what they saw as the positives of isolation and working alone/being your own boss. Farmers describing the precautions they took when working with others stressed the extent of control over how these were organised in terms of with whom, when and where they worked with others. It may be that this greater authority over their own working space combined with less frequent contact with others lessened anxieties related to contracting COVID-19. Drawing on contributions from Brian, we see a nuanced conceptualisation of autonomy that is balanced

between extensive EU and national regulations and legislation governing farming practices and food production and his autonomy as a farmer:

> To certain extent you're your own boss. There are an awful lot of government rules and regulations or EU mostly rules and regulations that have to be adhered to, but [farming] has the benefit of being your own boss, you know, yeah.

This suggests, and it requires further research, that the 'burden' of regulation is counterbalanced by a range of personal benefits that are associated with enduring patterns of working life that are critical to the wellbeing of farmers. Of course, we also have to keep in mind that prices for agricultural commodities were strong for much of this period in Ireland resulting in farmers experiencing a higher level of financial security relative to some other sectors of the economy.

Whilst two of the interviewees have school-going children, only Sorcha spoke about the additional stresses of home schooling, particularly the challenges of managing access to unreliable and low-speed broadband for each of her children, whilst also continuing to work from home. The loss of social opportunities for her children was replaced with new, on-farm activities. Lambs were bought as pets and feeding them became part of the daily routine for her children in the absence of the normal classroom setting. For Sorcha, having a farm was a positive resource at a time when it was difficult to occupy her children:

> It was definitely great to have it, it was definitely a blessing.

Asked what had helped her cope with the COVID-19 crisis over the past year, and Sorcha felt again that living on a farm was very important. The good weather also allowed her and her family to enjoy time outdoors. Consistent with others interviewed, she felt that her lifestyle and routine as a farmer were less affected than others during the pandemic:

> I didn't find a huge change in it but, I'd say for an awful lot of [non-farm] people, it was massive change.

Adaptation and new ways of being

Despite that sense of continuity and resilience among farmers interviewed, COVID-19 represented a significant rupture in pre-existing social and occupational practices and relations. There was an evident breakdown in the points of connection such as in-person marts (important materially and socially) and social and religious gatherings, which meant new connections had to be formed to adapt to the social and economic limitations arising from public health restrictions. These were evident in the ways that working with others was re-organised and the adoption of technologies that helped create new social and economic connections. The precautions taken by James on farm to deal with the COVID-19 pandemic are reflective of a number of adaptations. He continued to work alongside his nephew whilst maintaining a physical distance from him. In his interview, he describes in detail how they milk the cows, scrape the slats, calf cows and assist the vet with injecting animals while taking precautions against the virus. Much of this involved separating the responsibilities for jobs, staggering work so that they are not close to each other or, when it was essential to work in proximity, wearing gloves and a mask. This he described as 'simple practice, keep your distance, wash your hands'. Asked if he has been impacted by the closure of marts, he

spoke about how his nephew sells bull calves, to a dealer who exports them, and this is done on the farm itself. He also outlined how his nephew took on responsibility for organising and managing the sale of calves online. This was also a practice noted by Brian who also spoke about the move to online marts being positive for farmers' working lives and for their farm enterprise. Buying and selling cattle remotely allowed them greater convenience and comfort. It was also seen to bring with it financial benefits. Brian quickly adapted to the technological developments to allow remote sales and was impressed by the capacity for stakeholders in agriculture to adapt rapidly to COVID-19 and the restrictions:

> I picked up the 'Mart Eye' there [and] it was great. I'd say they upped [the marts] their game. Maybe inside of the 14 days they went from something as a concept to been run of the mill at that stage, you know all over Ireland, so it was great I was thinking it was great to see some businesses stepping up to the bar.

He sees online marts as being very convenient for many farmers and allowing for a greater flexibility. He also sees the benefits following the lifting of restrictions, particularly for those with off farm jobs:

> A lot of people are part time farmers and it suited them great. They [can] during their tea break or lunch break, be there [at the mart]. They can actually watch the trades online and they are delighted with it they can buy their stock and [organise for someone to collect them]…

Brian was heavily involved in farmer politics and had previously used meetings as an opportunity to learn about developments in farming but does not see the move online as being a negative:

> You're nearly picking up as much information on these media platforms, like Agri Land or Farmers Journal Online. Or that type of thing as you would in any these meetings, so yeah, the knowledge is basically being disseminated now online as opposed to [having] to be there in the human form, right?

Technology was also used by farmers to connect socially during the pandemic, this took a number of forms. James has been using his smartphone more often since the onset of the pandemic and uses social media but primarily to send direct messages to relations who live abroad. He spoke about accessing online religious services masses from the local parish, every afternoon that he was not engaged in farm work, and sees this an important resource:

> I watch it (mass online) anytime I'm here. I see funerals here. It's a god send, I'm delighted now.

Discussion and conclusion

The purpose of this research was to undertake an exploratory investigation into the impact of the COVID-19 pandemic on farmers in Ireland, how they adapted and to consider how these developments affected their wellbeing. Prominent also was their experience not just as farmers but also as members of their broader rural community.

A sense of isolation and loneliness during the COVID-19 pandemic has been linked with poorer wellbeing while the presence of social support has been linked to less frequent symptoms of anxiety, depression and distress (Ni et al., 2020; Serralta et al., 2020; White & Van Der Boor, 2020). The data gathered highlight that, amongst the interviewees, isolation and loneliness were not significant issues for them personally and that there were many positive aspects to farming that supported their wellbeing. They did, however, express concern for others in their communities, particularly older, male farmers that are living on their own and pointed to a greater sense of isolation amongst the wider community of farmers that was exacerbated by public health restrictions. Associated with this, participants highlighted an unravelling of social bonds. This was viewed as a negative development and a longer-term threat to individual and community wellbeing.

The interviewees highlighted the critical role of familial and kinship bonds in sustaining farming communities during the pandemic and presented a range of examples of adaptive strategies that enabled them to continue working, including the alteration of how work was done on the farm and greater use of online services. This confirms the findings of Cush and Macken-Walsh (2016) who identified the important role of intergenerational collaboration in Irish farming. In additional to new divisions of labour, and similar to most other economic sectors and groups in society, technology was at the heart of some adaptive practices applied by the interviewees during this period. These enabled them to continue both social and professional relations following the closure of key places, that is, marts and churches. This included the use of social media apps, to maintain contact via mobile phone with friends and neighbours, Zoom to observe religious services and participate in meetings, and apps such as MartEye to continue operating their enterprise through the pandemic. The need for rapid uptake of communication technology presented challenges for older farmers with less experience in using it; previously, this was overcome with the assistance of informal networks of support available to them. The social structure of farming in Ireland, which commonly consists of multigenerational family farms, allowed a younger generation involved in the farm enterprise to assist and to demonstrate the value of their knowledge of communication technologies. This raises interesting questions regarding the extent to which intergeneration collaboration has shifted perspectives within families regarding what constitute useful or valuable skills and, associated with this, the implications for generational renewal.

The adoption of communication technologies to maintain or sustain economic and social activities were viewed as positively supporting wellbeing. These findings are consistent with Canale et al. (2022) who identified online communication during the lockdown as positive for wellbeing through a 'reconstruction and reorganization' (p. 736) of shared values, which inspired altruistic and prosocial reactions. The interviewees did, however, comment that communication using technology lacked depth, was more functional or transactional and, in general, was more tenuous than in person. While they made use of these resources, they also noted a reduction in the quality of social relationships outside of the immediate family. This is an interesting point that requires further research to draw out the potential implications for social isolation within rural and farming communities resulting from the ongoing digital transition of economic and social activities.

We found COVID-19 in Ireland to not be a calamitous event for the farmers interviewed. The impact on existing socio-ecological networks was limited, as the resources within those networks allowed for rapid adaptation to changing situations whilst also supporting wellbeing. A key aspect of this conclusion was the reflective nature of the responses of the interviewees who compared their personal situation to others in their community or in other places. This is seen as critical to engendering a perspective that highlighted the many positives of farming and rural life that get lost in comparisons that focus on rural needs or deprivations. For the farmers interviewed,

positive features of the occupation including working in green space, interaction with animals, a relative autonomy and degree of independence in decision-making were accentuated during the COVID-19 pandemic. These findings are reflective of the literature on green space and its relationship with positive health (Hunter et al., 2019). Our findings also support research that has found interaction with animals during the COVID-19 pandemic to be positive for wellbeing and limit loneliness (Ratschen et al., 2020; Shoesmith et al., 2021). Working alone was also reframed as a positive feature of farming in the view of many, allowing for comparatively fewer changes to work practices and a greater sense of personal security. Ongoing research by the authors of this article seeks to establish if levels of loneliness and isolation amongst farmers, compared to non-farmers, changed over the course of the pandemic and whether they have returned to their original levels since public health restrictions were lifted. It would be useful to understand if similar experiences have been recorded amongst farm populations internationally with a view to identifying means of reducing loneliness and maintaining wellbeing of farmers.

Whilst the interviewees highlighted many positives resulting from the pandemic, the data gathered point towards deeper tectonic shifts in the community life of rural Ireland. Responses to the pandemic represent something of a contradiction; on the one hand, there were greater levels of volunteering, but on the other, it amplified the weakening of the community and local spheres through greater penetration of virtual and remote services. This contradiction is evident in contributions above that highlight the benefits of apps such as Mart Eye whilst also noting the implications for vulnerable farmers of the closure of marts to in-person sales and gatherings. While measures taken to adapt to the necessity of being physically distanced during the pandemic were temporary in nature, the remaking of spatial networks and the associated breakdown in traditional spaces of commerce and social life may be a precursor to the life of rural Irish communities to come. Key sites of social life and commerce such as marts and religious services are being remade. One farmer interviewed spoke of the declining community life that he has been experiencing over the years, speaking of neighbours who work long hours and commute long distances daily. In this respect, the COVID-19 pandemic may have accelerated or 'expedited' processes already in motion.

The durability of pre-existing farming networks is a key finding of this study. The advent of the COVID-19 pandemic in Ireland resulted in a wave of panic buying of key items, including food (Wallace, 2020). While this abated with time and there was no serious disruptions to food chains, the COVID-19 pandemic focused minds on the fragile nature of global supply chains that were previously taken for granted. Farmers were among those occupations in Ireland classed as essential during the pandemic, underlining the indispensable nature of this work, a theme that arose frequently in interviews. It may be that the critical role of farming during the COVID-19 pandemic temporarily repositioned farming with respect to the rest of society. This contrasts with previous research that found some farmers felt that their occupation, with greater workload and lower pay, is held in less esteem to other occupations (Ni Laoire, 2005). Research is required amongst consumers and citizens to develop a much deeper understanding of how farmers and farming are perceived following the pandemic. This information is critically important to agriculture and food policy stakeholders as measures are designed and implemented to reduce the climate and ecological impacts of farming whilst simultaneously maintaining the social benefits.

ACKNOWLEDGEMENTS

We would like to express our appreciation to the participants in this study who engaged with the research at a time of heightened concern for their own health and that of their families and

communities. We would also like to thank and acknowledge the input of the reviewers who took the time to develop constructive feedback that has greatly improved the article.

Open access funding provided by IReL.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of the research reported.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Alexis O'Reilly BA https://orcid.org/0000-0001-5564-1671
Jack McCarthy PhD https://orcid.org/0000-0002-7062-0948

ENDNOTES

[1] This resulted in significant social challenges given that farm families are slightly larger than the average and the 15 person limit could result in siblings being unable to attend the funeral service. It was possible to stand (physically distanced) outside of the church. Physical contact including hugging, kissing and shaking hands was prescribed.

[2] Primarily to reduce the spread of animal diseases.

REFERENCES

Agriland Team. (2022) Free digital skills programme for farmers. Agriland. [Accessed 10th January 2023]. Available at: https://www.agriland.ie/farming-news/free-digital-skills-programme-for-farmers/

Ahmadu, M., Herron, R.V., Allan, J.A. & Waddell, C. M. (2021) Identifying places that foster mental health and well-being among rural men. *Health & Place*, 71, 102673.

Alston, M. & Kent, J. (2008) The Big Dry: the link between rural masculinities and poor health outcomes for farming men. *Journal of Sociology*, 44(2), 133–147. https://doi.org/10.1177/1440783308089166

Amerio, A., Aguglia, A., Odone, A., Gianfredi, V., Serafini, G., Signorelli, C. & Amore, M. (2020) COVID-19 pandemic impact on mental health of vulnerable populations. *Acta Biomedica*, 91(9-S), 95–96. 10.23750/abm.v91i9-S.10112.

Beecher, M., Gorman, M., Kelly, P. & Horan, B. (2019) Careers in dairy: adolescents perceptions and attitudes. *The Journal of Agricultural Education and Extension*, 25(5), 415–430. https://doi.org/10.1080/1389224X.2019.1643745

Brennan, M., Hennessy, T., Meredith, D. & Dillon, E. (2022) Weather, workload and money: determining and evaluating sources of stress for farmers in Ireland. *Journal of Agromedicine*, 27(2), 132–142. https://doi.org/10.1080/1059924X.2021.1988020

Brew, B., Inder, K., Allen, J., Thomas, M. & Kelly, B. (2016) The health and wellbeing of Australian farmers: a longitudinal cohort study. *BMC Public Health [Electronic Resource]*, 16(1), 1–11. https://doi.org/10.1186/s12889-016-3664-y

Bronfenbrenner, U. (1979) *The ecology of human development: experiments by nature and design*. Cambridge: Harvard University Press.

Brumby, S., Chandrasekara, A., McCoombe, S., Kremer, P. & Lewandowski, P. (2012) Cardiovascular risk factors and psychological distress in Australian farming communities. *Australian Journal of Rural Health*, 20(3), 131–137. https://doi.org/10.1111/j.1440-1584.2012.01273.x

Bond, A.E., Wagler, K. & Anestis, M.D. (2021) Essential workers: past month suicidal ideation and COVID-19 stress. *Journal of Clinical Psychology*, 77(12), 2849–2859. https://doi.org/10.1002/jclp.23276

Bossard, C., Santin, G. & Guseva Canu, I. (2016) Suicide among farmers in France: occupational factors and recent trends. *Journal of Agromedicine*, 21(4), 310–990. https://doi.org/10.1080/1059924X.2016.1211052

Burton, R.J., Forney, J., Stock, P. & Sutherland, L.A. (2020) *The good farmer: culture and identity in food and agriculture*. New York: Routledge.

Canale, N., Marino, C., Lenzi, M., Vieno, A., Griffiths, M.D., Gaboardi, M., Giraldo, M., Cervone, C. & Massimo, S. (2022) How communication technology fosters individual and social wellbeing during the COVID-19 pandemic: preliminary support for a digital interaction model. *Journal of Happiness Studies*, 23(2), 727–745. https://doi.org/10.1007/s10902-021-00421-1

Crowley, C., Walsh, J. & Meredith, D. (2008) *Irish farming at the Millennium–a census atlas*. Maynooth, Co. Kildare: NIRSA.

Curtin, C. & Varley, A. (1982) Collusion practices in a West of Ireland livestock mart. *Ethnology*, 21(4), 349–357. https://doi.org/10.2307/3773765

Cush, P. & Macken-Walsh, Á. (2016) Farming 'through the ages': joint farming ventures in Ireland. *Rural Society*, 25(2), 104–116. https://doi.org/10.1080/10371656.2016.1225833

Department of Environment (DoE). (2002) National Spatial Strategy for Ireland 2002-2020: People, places and potential. Department of Environment, Heritage and Local Government. Available at: https://npf.ie/wp-content/uploads/Completea-1.pdf. [Accessed 27th January 2023].

Dillon, E., Moran, B. & Donnellan, T. (2016) Teagasc National Farm Survey 2016 Results. Available at: https://www.teagasc.ie/media/website/publications/2017/NFS-2016-Final-Report.pdf. [Accessed 27th January 2023].

Fahey, T., Hayes, B. & Sinnott, R. (2005) *Conflict and consensus: a study of values and attitudes in the Republic of Ireland and Northern Ireland*. Dublin: IPA.

Gardiner, C., Geldenhuys, G. & Gott, M. (2018) Interventions to reduce social isolation and loneliness among older people: an integrative review. *Health & Social Care in the Community*, 26(2), 147–57. https://doi.org/10.1111/hsc.12367

Gallagher, A.G. & Sheehy, N.P. (1994) Suicide in rural communities. *Journal of Community & Applied Social Psychology*, 4(3), 145–155.

Herron, R.V., Newall, N.E.G., Lawrence, B.C., Ramsey, D., Waddell, C.M. & Dauphinais, J. (2021) Conversations in times of isolation: exploring rural-dwelling older adults' experiences of isolation and loneliness during the COVID-19 pandemic in Manitoba, Canada. *International Journal of Environmental Research and Public Health*, 18(6), 3028. https://doi.org/10.3390/ijerph18063028

Hernández, B., Sexton, D., Moriarty, F., Cosgrave, N., O'Halloran, A., McGarrigle, C., Scarlett, S. & Anne Kenny, R. (2020) High-risk categories for COVID-19 and their distribution by county in Republic of Ireland-evidence from the TILDA study. Trinity College Dublin, The Irish Longitudinal Study on Ageing. Available at: https://tilda.tcd.ie/publications/reports/pdf/Report_Covid19Multimorbidity.pdf. [Accessed 27th January 2023].

Heylen, L. (2010) The older, the lonelier? Risk factors for social loneliness in old age. *Ageing 1010 and Society*, 30(7), 1177–1196. https://doi.org/10.1017/S0144686X10000292

Holt-Lunstad, J., Smith, T.B., Baker, M., Harris, T. & Stephenson, D. (2015) Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227–237. https://doi.org/10.1177/1745691614568352

Hunter, R.F., Cleland, C., Cleary, A., Droomers, M., Wheeler, B.W., Sinnett, D., Nieuwenhuijsen, M.J. & Braubach, M. (2019) Environmental, health, wellbeing, social and equity effects of urban green space interventions: a meta-narrative evidence synthesis. *Environment International*, 130, 104923. https://doi.org/10.1016/j.envint.2019.104923

Inglis, T. (2007) Catholic identity in contemporary Ireland: belief and belonging to tradition. *Journal of Contemporary Religion*, 22(2), 205–220. https://doi.org/10.1080/13537900701331064

Journal of Agromedicine. (2020) Available at: https://www.tandfonline.com/toc/wagr20/25/4nav=tocList? [Accessed 11th January 2023].

Kilanowski, J.F. (2017) Breadth of the socio-ecological model. *Journal of Agromedicine*, 22(4), 295–297.

Kuijt, I., Chesson, M.S., Morrow, S., Ó Giolláin, D. & Lash, R. (2021) The good death and the materiality of mourning: nineteenth-to twentieth-century coastal Ireland. *International Journal of Historical Archaeology*, 25(2), 333–374. https://doi.org/10.1007/s10761-020-00557-5

Lennon, J. (1988) Fairs and assemblies in Ireland. "*Before I Forget…*": *Journal of the Poyntzpass and District Local History Society*, (2), 55–62.

Lima, V. (2021) The pandemic one year on: trends and statistics between three waves of the COVID-19 pandemic in Ireland. Available at: https://publicpolicy.ie/downloads/papers/2021/Trends_and_Statistics_Between_Three_Waves_of_the_COVID19_Pandemic_in_Ireland.pdf. [Accessed 30th January 2023].

Lobley, M., Potter, C., Butler, A., Whitehead, I. & Millard, N. (2005) *The wider social impacts of changes in the structure of agricultural businesses*. Centre for Rural Policy Research, University of Exeter, CRR Research Report No. 14.

Massey, D. (1994) Introduction to part I: space and social relations. In: Massey, D (Ed.) *Space, place, and gender* Minneapolis, MN: University of Minnesota Press, pp. 19–24.

"Mental Health–Helping Someone Else". HSE. (2022) Mental health–helping someone else. HSE. [Accessed 24th November 2022]. Available at: www2.hse.ie/mental-health/helping-someone-else/

Marren, D. (2021) COVID-19 leaves marts fit for the future. Available at: https://www.farmersjournal.ie/covid-19-leaves-marts-fit-for-the-future-641771. [Accessed 4th February 2022].

Meredith, D. (2011) Recent trends in employment and unemployment: assessing the impact of the economic downturn on part-time farmers. *Administration*, 59, 81–100.

Meredith, D., McNamara, J., Van Doorn, D. & Richardson, N. (2020) Essential and vulnerable: implications of COVID-19 for farmers in Ireland. *Journal of Agromedicine*, 25(4), 357–361. https://doi.org/10.1080/1059924X.2020.1814920

Ni Laoire, C.N. (2005) 'You're not a man at all!': masculinity, responsibility, and staying on the land in contemporary Ireland. *Irish Journal of Sociology*, 14(2), 94–114. https://doi.org/10.1177/079160350501400206

Ni, M.Y., Yang, L., Leung, C.M.C., Li, N., Yao, X.I., Wang, Y., Leung, G.M., Cowling, B.J., Liao, Q. (2020) Mental health, risk factors, and social media use during the COVID-19 epidemic and cordon sanitaire among the community and health professionals in Wuhan, China: cross-sectional survey. *JMIR mental health*, 7(5), e19009

Nye, C., Winter, M. & Lobley, M. (2022) The role of the livestock auction mart in promoting help-seeking behavior change among farmers in the UK. *BMC Public Health [Electronic Resource]*, 22(1), 1–15.

O'Connor, C., O'Connell, N., Burke, E., Dempster, M., Graham, C.D., Scally, G., Zgaga, L., Nolan, A., Nicolson, G., Mather, L. & Barry, J. (2021) Bordering on crisis: a qualitative analysis of focus group, social media, and news media perspectives on the Republic of Ireland-Northern Ireland border during the 'first wave' of the COVID-19 pandemic. *Social Science & Medicine*, 282, 114111.

O'Mahony, S. (2020) Mourning our dead in the COVID-19 pandemic. *Bmj*, 369, m1649.

Pai, N. & Vella, S.L. (2021) COVID-19 and loneliness: a rapid systematic review. *Australian & New Zealand Journal of Psychiatry*, 55(12), 1144–1156.

Parent, D. (2012) Social isolation among young farmers in Quebec, Canada. Producing and reproducing farming systems: new modes of organisation for sustainable food systems of tomorrow.

Patel, V. (2005) Poverty, gender and mental health promotion in a global society. *Promotion & Education*, 12(2) (suppl), 26–29.

Perceval, M., Ross, V., Kõlves, K., Reddy, P. & De Leo, D. (2018) Social factors and Australian farmer suicide: a qualitative study. *BMC Public Health [Electronic Resource]*, 18(1), 1–7. https://doi.org/10.1186/s12889-018-6287-7

Perceval, M., Kolves, K., Reddy, P. & De Leo, D. (2017) Farmer suicides: a qualitative study from Australia. *Occupational Medicine*, 67(5), 383–388. https://doi.org/10.1093/occmed/kqx055

Poscia, A., Stojanovic, J., La Milia, D.I., Duplaga, M., Grysztar, M., Moscato, U., Onder, G., Collamati, A., Ricciardi, W. & Magnavita, N. (2018) Interventions targeting loneliness and social isolation among the older people: an update systematic review. *Experimental Gerontology*, 102, 133–44. https://doi.org/10.1016/j.exger.2017.11.017

Pouso, S., Borja, Á., Fleming, L.E., Gómez-Baggethun, E., White, M.P. & Uyarra, M.C. (2021) Contact with blue-green spaces during the COVID-19 pandemic lockdown beneficial for mental health. *Science of The Total Environment*, 756, 143984. https://doi.org/10.1016/j.scitotenv.2020.143984

Ratschen, E., Shoesmith, E., Shahab, L., Silva, K., Kale, D., Toner, P., Reeve, C. & Mills, D.S. (2020) Human-animal relationships and interactions during the Covid-19 lockdown phase in the UK: investigating links with mental health and loneliness. *PLoS ONE*, 15(9), e0239397. https://doi.org/10.1371/journal.pone.0239397

Reed, D.B. & Claunch, D.T. (2002) Behind the scenes: spousal coping following permanently disabling injury of farmers. *Issues in Mental Health Nursing*, 23(3), 231–248. https://doi.org/10.1080/016128402753542983

Rose, D.C., Shortland, F., Hall, J., Hurley, P., Little, R., Nye, C. & Lobley, M. (2022) The impact of COVID-19 on farmers' mental health: a case study of the UK. To be published in *Journal of Agromedicine*. [Preprint]. Available from: https://doi.org/10.1080/1059924X.2022.2137616. [Accessed 30th January 2023].

Roy, P., Tremblay, G., Oliffe, J.L., Jbilou, J. & Robertson, S. (2013) Male farmers with mental health disorders: a scoping review: male farmers' mental health disorders. *Australian Journal of Rural Health*, 21(1), 3–7. https://doi.org/10.1111/ajr.12008

Scheper-Hughes, N. (2001) *Saints, scholars, and schizophrenics: mental illness in rural Ireland, updated and expanded*. Berkeley, CA: University of California Press.

Serralta, F.B., Zibetti, M.R. & Evans, C. (2020) Psychological distress of university workers during COVID-19 pandemic in Brazil. *International Journal of Environmental Research and Public Health*, 17(22), 8520. https://doi.org/10.3390/ijerph17228520

Shoesmith, E., Shahab, L., Kale, D., Mills, D.S., Reeve, C., Toner, P., Santos de Assis, L. & Ratschen, E. (2021) The influence of human–animal interactions on mental and physical health during the first COVID-19 lockdown phase in the UK: a qualitative exploration. *International Journal of Environmental Research and Public Health*, 18(3), 976. https://doi.org/10.3390/ijerph18030976

Sturgeon, R. & Morrissette, P.J. (2010) A qualitative analysis of suicide ideation among Manitoban farmers. *Canadian Journal of Counselling and Psychotherapy*, 44(2), 191–207.

The Royal Agricultural Benevolent Institution. (2021) The Big Farming Survey. The health and wellbeing of the farming community in England and Wales in the 2020s. Available at: https://rabi.org.uk/wp-content/uploads/2021/10/RABI-Big-Farming-Survey-FINAL-single-pages-No-embargo-APP-min.pdf. [Accessed 30th January 2023].

Toolis, K. (2017) *My father's wake: how the Irish teach us to live, love and die*. New York: Hachette Books.

Torske, M.O., Hilt, B., Glasscock, D., Lundqvist, P. & Krokstad, S. (2016) Anxiety and depression symptoms among farmers: the HUNT study, Norway. *Journal of Agromedicine*, 21(1), 24–33. https://doi.org/10.1080/1059924X.2015.1106375

Twenge, J.M. & Joiner, T.E. (2020) US Census Bureau-assessed prevalence of anxiety and depressive symptoms in 2019 and during the 2020 COVID-19 pandemic. *Depression and Anxiety*, 37(10), 954–956. https://doi.org/10.1002/da.23077

Van Beek, M. & Patulny, R. (2022) 'The threat is in all of us': perceptions of loneliness and divided communities in urban and rural areas during COVID-19. *Journal of Community Psychology*, 50(3), 1531–1548. https://doi.org/10.1002/jcop.22732

Van Doorn, D., Richardson, N., Meredith, D., McNamara, J., Osborne, A. & Blake, C. (2019) Farmers have hearts: Baseline Survey Results. Available at: https://www.teagasc.ie/media/website/publications/2020/Farmers-Have-Hearts—Summary-Baseline-Report.pdf. [Accessed 30th January 2023].

Wallace, M. (2020) Michael Wallace agri-food sector | UCD COVID-19 responses. Available at: www.ucd.ie/research/covid19response/news/michaelwallaceagri-foodsector/[Acessed 30th January 2023]

Weinberger, D.M., Chen, J., Cohen, T., Crawford, F.W., Mostashari, F., Olson, D., Pitzer, V.E., Reich, N.G., Russi, M., Simonsen, L., Watkins, A. & Viboud, C. (2020) Estimation of excess deaths associated with the COVID-19 pandemic in the United States, March to May 2020. *JAMA Internal Medicine*, 180(10), 1336–1344. https://doi.org/10.1001/jamainternmed.2020.3391

Wheeler, R., Lobley, M., McCann, J. & APhillimore, A. (2023) 'It's a lonely old world': developing a multidimensional understanding of loneliness in farming. *Sociologia Ruralis*, 63(S1), 11–36. https://doi.org/10.1111/soru.12399

White, R.G. & Van Der Boor, C. (2020) Impact of the COVID-19 pandemic and initial period of lockdown on the mental health and well-being of adults in the UK. *BJPsych Open*, 6(5), e90. https://doi.org/10.1192/bjo.2020.79

Younker, T. & Radunovich, H.L. (2021) Farmer mental health interventions: a systematic review. *International Journal of Environmental Research and Public Health*, 19(1), 244. https://doi.org/10.3390/ijerph19010244

How to cite this article: O'Reilly, A., Meredith, D., Foley, R. & McCarthy, J. (2023) Continuity, change and new ways of being: An exploratory assessment of farmer's experiences and responses to public health restrictions during the COVID-19 pandemic in a rural Irish community. *Sociologia Ruralis*, 63(S1), 95–115. https://doi.org/10.1111/soru.12424