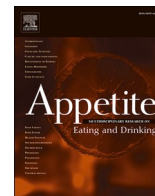




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A qualitative exploration of the impact of COVID-19 on individuals with eating disorders in the UK

SiennaMarisa Brown¹, Marie-Christine Opitz¹, A. Imogen Peebles¹, Helen Sharpe^{*}, Fiona Duffy, Emily Newman

School of Health in Social Science, University of Edinburgh, Teviot Place, EH8 9AG, Edinburgh, UK

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ABSTRACT

COVID-19 may have substantial impact on the mental health at a population level, but also has the potential to significantly affect those with pre-existing mental health difficulties such as eating disorders. This qualitative study explores the impact of COVID-19 and associated public health measures on adults with eating disorders within the UK. We conducted 10 in depth interviews with adults (24–38 years) with a self-reported eating disorder during lockdown. Data were analysed using an inductive thematic analysis approach. We identified core themes related to social restrictions (social isolation, changes in accountability to others, and increased responsibility for self and others), functional restrictions (lack of routine and structure, a need to intentionally plan activity, a desire for secrecy particularly around food shopping) and restrictions in access to mental health services. Overall, the impact of the lockdown was experienced as a catalyst for either increased disordered eating behaviours or for a drive for recovery, depending on individual circumstances going into these restrictions. This study is the first in depth interview approach with adults with mixed eating disorder presentations in the UK during COVID-19. Findings have important implications for post lockdown intervention care and practice.

1. Introduction

Coronavirus disease 2019 (COVID-19) is a global pandemic with far-reaching consequences for the physical and mental health of the population, leading to the World Health Organisation (WHO) declaring it a Public Health Emergency of International Concern in January 2020. The significant morbidity and rapid spread of the virus has led to the activation of various levels of public health measures, including “lockdowns” in a high proportion of countries and physical distancing measures to prevent transmission, resulting in unprecedented impact on social interactions, employment and the world economy. While the impact of the pandemic, and associated management, on mental health is not yet fully known, the potential for psychological distress is significant, as a result of the effects of social isolation, the economic fallout, grief and trauma for survivors (Reger, Stanley, & Joiner, 2020). Initial reports indicate increased levels of distress and anxiety among the general population (Wang et al., 2020) and specific concern has been noted for the potential impact on vulnerable populations, including those with pre-existing mental health difficulties (Holmes et al., 2020).

One particularly vulnerable group in this context may be those with eating disorders. The effects of the COVID-19 lockdown on individuals with an eating disorder could be broad ranging. While there may be potential for some protective consequences – e.g., reduced interpersonal triggers such as face-to-face body-based social comparisons (Cooper et al., 2020), increased opportunity of support from loved ones (Murphy, Calugi, Cooper, & Dalle Grave, 2020), or services embracing new technology in the delivery of psychological therapies (Murphy et al., 2020) – the overwhelming concern within the field is the potential for severe, adverse impacts (Weissman, Bauer, & Thomas, 2020). Initial small-scale pilot data from Spain indicates worsening of the mental health of individuals with an eating disorder including a deterioration in eating disorder symptomology for one third of respondents (Fernández-Aranda et al., 2020). In addition, in a large-scale survey in Australia conducted within the first few weeks of the pandemic, a significant proportion of individuals who self-identified as having an eating disorder (n = 180) reported an exacerbation of restricting, binge eating, purging and exercise behaviours, relative to before COVID-19 (Phillipou et al., 2020).

Rodgers et al. (2020) outline three pathways that may either

* Corresponding author.

E-mail address: helen.sharpe@ed.ac.uk (H. Sharpe).

¹ joint first authorships.

precipitate the development of disordered eating during the pandemic, or exacerbate existing difficulties. The first involves the impact of disruption and restrictions to daily activities as a result of public health interventions aimed at reducing transmission of COVID-19. This includes public restrictions on exercise, grocery shopping and concerns around scarcity of specific foods which may be highly provoking for individuals with rigid and inflexible exercise or eating patterns, for example, by increasing the perceived need to stockpile food, and associated risk of binge episodes (Touyz, Lacey, & Hay, 2020). This pathway also highlights the potential for reduced social support, including restrictions in access to treatment as a consequence of limitations placed on traditional face-to-face treatment as a result of social distancing (Touyz et al., 2020) and restructuring and reorientation of health services to prioritise the management of COVID-19 (Davis et al., 2020). The second pathway (Rodgers et al., 2020) proposed that social distancing may lead to an increased use of social media and consequently enhanced exposure to harmful eating and appearance-related content (e.g. review by Holland & Tiggemann, 2016), and to stressful and traumatic world events which has been shown to negatively impact eating behaviours (Rodgers, Franko, Brunet, Herbert, & Bui, 2012). The final pathway relates to fear of contagion, which may in turn lead to an increase in restrictive eating patterns and orthorexia-based cognitions, alongside increased levels of general stress and emotional distress, increasing the risk of disordered eating patterns (Rodgers et al., 2020). Other authors also highlight the potential financial impact of the pandemic, inclusive of reduced capacity for carers to support individuals with eating disorders, due to the need to increase working hours (Davis et al., 2020) or the impact on food insecurity on financial ability to purchase “safe” or binge foods (Touyz et al., 2020; Weissman et al., 2020).

These theoretical pathways provide a useful framework to explore the potential impact of COVID-19 and its management on those with eating disorders. Given the rapidly changing environment, to date these mechanisms and pathways are largely hypothesised, with relatively little literature based on those with lived experience of an eating disorder. There are increasing calls for researchers to understand the psychological, social and neuro-scientific effects of the COVID-19 pandemic on mental health in collaboration with those with lived experience (Holmes et al., 2020). In this study we therefore aim to contribute to this growing body of work by exploring the experience of adults affected by eating disorders during the COVID-19 pandemic in the UK using in-depth interviews.

2. Methods

This study is reported in line with the COREQ guidance (Consolidated criteria for REporting Qualitative research) (Tong, Sainsbury, &

Craig, 2007). Ethical approval was provided by the University of Edinburgh (Ref: STAFF181, 05/06/20).

2.1. Participants and sampling

Purposive sampling was used to recruit adults living in the UK who self-identified as experiencing an eating disorder. Due to international differences in how governments approached the pandemic, our study only included UK residents. Advertisements for the study were posted on social media, mainly Twitter and Facebook. All advertisements provided a study link to a participant information sheet, to inform potential participants about the aim of the study, to verify eligibility criteria and to obtain informed consent to be contacted. Participants were asked to provide an email address to be contacted to schedule a one-time interview alongside brief demographic information.

In total, 44 individuals noted an interest in the study of whom 15 consented to take part, met the eligibility criteria and provided a valid email address to be contacted. Of these, two opted out of the study and three did not respond to email communication. Therefore, in-depth interviews were conducted with ten adults (see Table 1). The sample size allowed for in-depth exploration into a novel area and generated rich data adequate for the purpose of the study (Braun & Clarke, 2019; Vasileiou, Barnett, Thorpe, & Young, 2018).

Interviewers had no prior relationship to interviewees, except for one participant who knew the interviewers from a previous eating disorder awareness event. Nine participants identified as female; one identified as non-binary. The mean age of participants was 29.6 years, ranging from 24 to 38 years, and all participants identified as White. Five participants lived in England, five in Scotland. Five participants lived alone at the time of the interview, two participants lived with family, one with a roommate, one with a partner, and one with a partner and family. All participants identified with disordered eating behaviours for more than two years. Six participants mainly identified with Anorexia Nervosa, two with Eating Disorders Not Otherwise Specified and one with Bulimia Nervosa.

2.2. Data collection

Participants were contacted via email to arrange a one-on-one Skype interview with one of two female interviewers (SMB (MSc) and MCO (MSc), both PhD students in the field of eating disorders at the time of the interviews). Skype interviews were audio-recorded and transcribed verbatim by three researchers (SMB, MCO and IP). No field notes were taken during the interviews. The purpose of the study was fully disclosed to all participants prior to the study and interviewees had the opportunity to enquire about the researchers' motivations and interests in this

Table 1
Participant demographics.

Participant ^a	Age (years) ^b	Gender	Ethnicity	Location	Eating disorder ^c	Living situation
Alex	25	Non-binary	White	Scotland	OSFED/EDNOS ^d	Alone
Ava	40	Female	White	England	AN ^e	Romantic partner and family
Isabella	25	Female	White	Scotland	BED ^f	Alone
Sophia	25	Female	White	England	AN	Room mates
Charlotte	30	Female	White	Scotland	AN	Family
Evelyn	35	Female	White	England	Other ^g	Alone
Camila	30	Female	White	England	OSFED/EDNOS	Alone
Jessica	30	Female	White	Scotland	AN	Alone
Scarlett	30	Female	White	Scotland	AN	Romantic partner
Abigail	25	Female	White	England	AN	Family

^a All participant names are pseudonymised.

^b Age has been rounded to nearest 5 years.

^c Eating disorders had been experienced for over 2 years for all participants.

^d Otherwise Specific Feeding or Eating Disorder/Eating Disorder Not Otherwise Specified.

^e Anorexia Nervosa.

^f Binge Eating Disorder.

^g Other was reported in the demographics survey but it is worth noting that this participant reported an official diagnosis of Anorexia Nervosa during the interview.

research topic subsequent to the interview. A semi-structured interview schedule was used, which was provided to participants beforehand if they requested it or wanted more information on the types of questions being asked. The schedule was pilot tested by each interviewer and focused on the general impact of COVID-19 and resulting lockdown measures, as well as the specific impact on eating behaviours, food purchasing and exercise behaviours. In addition, participants were asked about how the media had impacted their mental well-being during lockdown and how their support systems were impacted by the restrictions. Interviews lasted between 45 and 120 min. All participants were debriefed after completion of the interview and provided with external support resources. Transcripts were not returned to participants for comments or corrections due to the time-sensitive nature of the research. Specific ethical considerations arose from the social context of the lockdown, most notably that participants may already have been under increased stress and traditional services may have been reduced. That said, some participants noted an indirect benefit of the study in that it provided a point of social contact in an otherwise relatively isolated period.

2.3. Context and timing

In the UK, “lockdown” was enforced on 26th March 2020 where all UK residents were asked to stay at home unless purchasing basic necessities, for medical need, essential key worker travel to work or one form of exercise a day. Restrictions on outdoor activities (e.g., exercise) started to ease in mid-May 2020, and non-essential businesses remained closed until mid-end June (specific dates vary across the UK). Interviews were conducted from 14th May to 4th June 2020 (i.e., during the end of full lockdown and beginning of first easing measures).

2.4. Theoretical position and analysis

This study was informed by Houston’s (2001) illustration of critical realism, which recognises human subjectivity, while acknowledging that personal meaning is shaped by social structures. In the present context, the COVID-19 pandemic and resulting lockdown measures can be seen as structures and powers that actuate specific psychological mechanisms. These mechanisms in turn cause so-called tendencies (e.g., behaviours, thoughts, feelings). Our main analytical goal was to understand and explain these tendencies, considering underlying psychological mechanisms and structures (Houston, 2001).

Positioning us as researchers within the framework of critical realism involves questioning our own assumptions, to better understand how those participating in our study interpret their own actions, thoughts and feelings (e.g., Manicas, 2009). Firstly, all researchers involved in this project experienced the lockdown measures in the UK first-hand. All authors are mental health researchers in the field of eating disorders, which constitutes an ‘insider conflict’ (Aguinis & Henle, 2002; Holian & Coghlan, 2013). One of the authors has lived experience with disordered eating behaviours. Therefore, we must acknowledge the impact of assumed knowledge, use of vernacular and assumed shared beliefs on our research, which may have had an influence on how we expected participants to feel during this time, how we guided the interview, and how we interpreted responses.

All transcripts were coded line-by-line using NVivo (QSR International, Melbourne, Australia) and a thematic analysis was conducted in accordance with the steps outlined by Braun and Clarke (2006), using an inductive approach. Three researchers (SMB, MCO, IP) analysed four transcripts each to identify preliminary themes, and to explore consistency between researchers. During two meetings, the researchers discussed identified themes in the context of critical realism. Subsequently, preliminary themes were grouped and, if necessary, adapted. This process was followed by a second analysis phase, which focused on the identification of common underlying structures, psychological mechanisms and resulting tendencies. Prevalent “patterned responses” (Braun

& Clarke, 2006, p. 10) were identified to investigate meaningful structures across all data sets. Initial analyses were reviewed among the researchers and three overarching themes were determined as coherently representing the complexity of the data. Eventually, all researchers were familiar with all transcripts and two further meetings were used to finalise the thematic analysis by clearly defining all themes and sub-themes. Participants did not provide feedback on the findings.

3. Results

Across all interviews, the impact of the lockdown could be described as a catalyst for either disordered eating behaviours or the effort to recover. Participants who were managing better during lockdown attributed their coping skills to comparatively better personal circumstances at the onset of lockdown and expressed concern about the possibility of being in lockdown during a severe phase of disordered eating.

We identified three main themes of underlying lockdown structures: social restrictions (changes in how people were socialising), functional restrictions (changes in daily routines around work, shopping etc.) and restrictions in access to professional support (for an overview, see Fig. 1).

3.1. Social restrictions

Social distancing measures were introduced during lockdown to contain the spread of the virus. When asked specifically about the relative impact of different aspects of the COVID-19 pandemic, it was clear that restrictions in social interactions were the most decisive overarching structure influencing participants’ mental well-being. Under this theme we identified tendencies related to participants experiencing social isolation, changes in accountability to others meaning increases or decreases in disordered eating behaviours, and participants needing to take on more responsibility for themselves and others.

3.1.1. Social isolation

The COVID-19 public health restrictions had a significant impact on most participants’ social interactions, especially for those living alone. Loneliness was a prevalent theme in all interviews, as illustrated by Sophia:

“Times when I would normally kind of be doing something potentially social or something like that over the weekend ... Obviously with more free time, I might have gone back to see my parents—that [...] feeling, of like, existential loneliness felt incredibly desperate and really quite painful. But it was ... It came in bursts to begin with, and I think as lockdown has gone on, it’s that feeling of real painful loneliness.” (Sophia)

The “existential” loneliness together with Sophia’s social anxiety made her feel desperate for social contact, but incapable of reaching out. The lockdown measures required additional efforts to socialize and therefore left those isolated who felt not able to initiate social interactions.

Consequently, more time could be spent on familiar thought patterns. Being socially isolated while struggling with an eating disorder was linked with the tendency to become even more focused on food and disordered eating behaviours:

“Whereas, since lockdown, because I live alone ... I’m on my own in the house because there’s nobody else around and I’ve got my house full of food, I have more and more preoccupied thoughts about food.” (Evelyn)

Thoughts about food became prominent as they could take up time and mental space which previously would have been spent on social interactions and activities. With limited scope for action, pre-existing

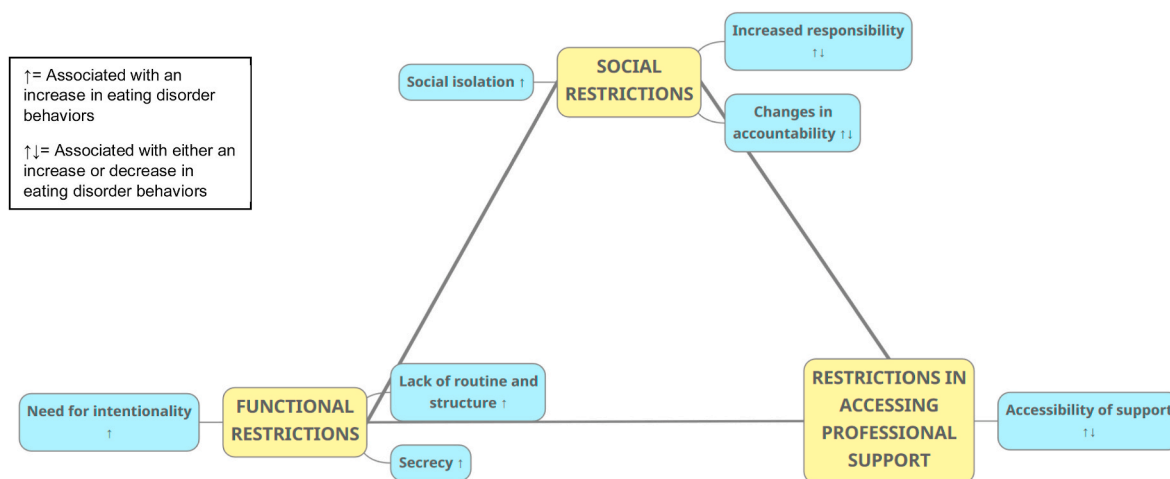


Fig. 1. Thematic map.

problems were therefore emphasized. One participant compared the first weeks of confinement during lockdown with being back in hospital, while two other participants described their realisation that the lockdown only highlighted how socially isolated they had been before. Becoming aware of this loneliness was seen as painful, but experiencing this social isolation due to external circumstances made it more apparent that enhanced social support would be helpful:

“Sometimes I think I found I couldn’t manage the intensity of what I was going through [with the eating disorder] ... I’ve lost relationships because of it. Now I feel like I’ve got a [...] a very small [support system] compared to how I feel like I would need. But I feel like I could do with a lot more.” (Scarlett)

3.1.2. Changes in accountability

Depending on their living situation, participants in this study either experienced an increase in or decreased accountability to others for their behaviours during lockdown. Even though feelings towards accountability were ambivalent, participants had the tendency to associate an increase in accountability with improvements in eating pathology. Working from home without face-to-face social contacts led one of the participants to actively engage in her eating disorder:

“And there were more days of not eating the week before lockdown. I of course wasn’t allowed in work and it was before they’d realise that, “Oh! You can do your job from home!” And ... I just ... I didn’t eat for that entire week because it was like, ‘Hey! I’m not accountable! No one else is here! This is the dream!’ ... Which is very dysfunctional! But it was absolutely ... ‘This is all I’ve ever wanted!’ with my ‘eating disorder brain’. [...]” (Camila)

Allowing herself to give into the eating disorder was perceived as a form of relief by Camila. In addition, describing it as “the dream” makes it obvious that the desire to restrict had been present before the lockdown period; yet only the isolation made it possible to act on these desires. At the same time, Camila was aware of how harmful this behaviour was for herself.

Conversely, living with a partner at home increased a sense of accountability for others:

“I’m very busy at work. And no one pays any attention to what I am eating, in my job. Whereas when I am at home with my partner, erm ... and we eat together, it’s much more difficult for me to *not* eat. Because he will ask me to eat a meal with him, or a snack with him [...]. I don’t think that he’s – he’s perhaps as aware of that happening as I am. So, he just wants to eat lunch together.” (Ava)

Both Camila and Ava described how they engage in disordered eating behaviour when an opportunity presents itself. The lockdown measures, however, had opposite effects on each, because for Camila it became *more possible* and for Ava it became *less possible* to avoid scrutiny by others. All participants showed a high level of self-awareness for their disordered eating behaviours and how they previously or currently engage in them. An ambivalence towards accountability was experienced by most participants, which reflected a tension between both distress and relief associated with disordered eating behaviours. Even though accountability was seen as helpful, not being accountable (due to being alone) was also associated with feelings of safety by one of the participants:

“Like – if I was going to my work every day, I wouldn’t be able to like exercise this much in the morning or I could, but I would have to get up super early. And I’ll be out of the house longer and people will expect me to eat lunch and they’ll expect me to not just eat salads and my mum will expect me to go out with her more [...] like there’s lots of more expectations of ... I suppose less opportunity to hide and be quite like safe and withdrawn.” (Jessica)

The social restrictions of the lockdown are therefore an opportunity to evade expectations for recovery. This, however, was associated with anxiety regarding a future post-lockdown, when it wouldn’t be possible to actively engage in certain behaviours anymore.

“[...] I used to slightly be anxious about coronavirus, but now I’m just anxious about where it’s going to go from here. I’ve kind of gotten used to those thoughts. Now, I’ve got future worries about how I’m gonna go back out into the world” (Abigail)

3.1.3. Increased responsibility

Due to the social distancing measures, participants had less or modified professional support and communicated with their friends and family primarily via phone and online. Having had experiences of continued recovery was therefore an opportunity to claim responsibility for certain accomplishments.

“I *hope* that I won’t slip back into that habit [not eating lunch], because I think actually, I’m doing quite well now. [...] and it will be nice if I could take responsibility for that myself as well, really.” (Ava)

Again, the conditions appeared to influence how participants coped with the increased responsibility for themselves and others. Ava was working towards recovery before the lockdown was introduced and received additional support from her partner. Other participants were

living on their own or had to take on additional responsibilities due to the pandemic. Charlotte, who was taking care of her two younger brothers due to her mother being part of the high-risk population, described how buying foods for others increased her preoccupation with food and compensated for not eating the food herself:

“[...] I am buying a lot of food just like for my brothers, because I am doing all the shopping because my mum is not here. I am buying so much food. [...] – and a lot of it I am doing because I know that I can't eat it. Like I am – I just buy everything, [...] it's not even pleasure, I just don't know, I am obsessed with it. Like I hate food shopping, I absolutely hate it. But I spend - I have never spent so much money on food shopping in my life.” (Charlotte)

Charlotte's compulsion to buy food for others but not for herself shows that her additional caring responsibilities refocused preoccupied thoughts around food to affect her feeding practices rather than her own eating.

Heightened responsibility was experienced by most participants, but resulting behaviours and cognitions differed depending on their living situation, eating disorder progression and how readily accessible additional support was during the first weeks of lockdown.

3.2. Functional restrictions

The lockdown not only limited people's social interactions, but also the way they could organise their daily life. Many activities such as the commute to and from work, meal time routines and food shopping had to be altered, meaning participants had to build up new routines. Related to these functional restrictions, we identified tendencies associated with this lack of structure, becoming increasingly 'intentional' in planning social activities and exercise, and managing a desire for anonymity/secretcy in the context of food purchasing.

3.2.1. Lack of routine and structure

All participants referred to rigid behaviour when describing their disordered eating behaviour. Routine and structure were not only seen as important, but also essential to being able to cope with dysfunctional thoughts and behaviours. The lockdown disrupted established routines and heightened participants' need for introducing new structures and routines into their lives:

“So ... So, my eating routines have changed probably for the better. Because I'm with my partner more. Erm ... Yeah. I think ... [pause] Erm ... [pause] I-I think I have struggled a lot with ... Worry about not getting food that I feel comfortable eating.” (Ava)

Not being able to access certain kinds of foods was one of the most prevalent concerns expressed by participants in our study. Usually, eating routines had to involve foods participants felt safe to eat. Ava's ability to change her routines required the support of her partner as well as facing her fears of not being able to rely on the access to her safe foods.

Maintaining both daily routine and structure functions to both perpetuate and mitigate disordered eating psychopathologies. Most respondents referred to these behaviours, especially in relation to times and environments associated with eating. Jessica referred to this in terms of social cues and expectations from colleagues:

“Yeah because I see what was keeping me in my routine was having people around me, so like some people at my work knew so they'd be like 'It's lunch time!' and like we would all be all over so we might not eat together but like because -and we would eat at our desks and stuff as we were working, but because people said like it's lunchtime like it was easier to do things in a routine when you've got more of a routine. Whereas like, the whole day just seems the same even if you're working, even if you've got meetings or whatever, it's not, the day is split so like yeah.” (Jessica)

Although Jessica continued to work during lockdown, externally stipulated routines were not available anymore. Meal time routines especially were highly dependent on structured work environments. Similarly, participants referred to a lack of routines making disordered eating habits more severe. Without pre-lockdown routines and structures, Charlotte did not feel compelled to mitigate maladaptive eating behaviours:

“I don't know, like I think – there's just always like just that thing that like I go to in my life that as soon as things like kind of change and go a bit crazy like it's my kind of go to and the – and my brain is automatically like, 'Ok, well, like, let's just stop it then forever, d'you know - let's just cut down, or let's do this or ...'. There was definitely change or it was quite slow at first it wasn't like let's stop eating altogether it was just like let's cut back a bit and see how that works.” (Charlotte)

Charlotte identified the introduction of lockdown as a trigger for her disordered eating explaining that she usually counteracts overwhelming change by engaging in familiar behaviours. Even though these behaviours were not new, previous routines had acted as coping mechanisms to ensure regular meals.

As established routines and structures were inevitably impacted due to the lockdown, participants reported being disconcerted by having to deconstruct rigid regimens to adjust to the current situation. For Sophia, the lack of physical boundaries distinguishing work and leisure has been unpleasant:

“But, it has been kind of strange, and I personally have actually hated working from my flat. I really, really like to implement those physical boundaries around saying, “Okay, I'm going to work now” - treating study like work, going to the library, getting to my lectures and then I come back to the flat. 'Fine. This is where you don't work. This is where I chill out. I rest. So, that's been very difficult.” (Sophia)

3.2.2. A need for intentionality

Prior to the lockdown, participants' daily routines were to some extent externally regulated and offered diverse opportunities to socialize, without actively choosing to do so. Having to compensate for this new type of confinement and a more sedentary lifestyle led participants to introduce more intentional, consciously-planned activities or to intensify their exercise routines, which were in some instances perceived as compulsive.

“Yeah, because now it is like exercise for exercise sake, whereas like before it was like a social thing. I was doing that with people, and I was going to the gym to see people and then I was going running with people and now it's just like I need to exercise because I am in the house sitting still being lazy all day.” (Jessica)

Jessica described how other people at the gym were aware of her eating disorder, checked up on her and made sure that she stopped exercising when she felt out of control. Now, during lockdown, her work-outs intensified up to the point of causing her physical pain. However, she felt like only this intentional effort helped her cope with the lack of incidental physical activity that she associated with her previous daily activities.

Having to *schedule* all social interactions further meant that participants had to actively reach out for support if needed. Abigail described how her problems with communication were always part of her eating disorder and part of why she missed the casualness of social interactions before lockdown:

“[...] It's harder to bring things up if today I'm struggling ... Before, it was a lot easier in-person to pass it by in conversation rather than make such a big deal out of it. That's what I feel like it is now — just a lot of emphasis rather than just notice I'm not very well. [...] But,

when I'm with some people I know, I find it hard to open up, and they usually can tell a lot by my body language and behaviours. That's probably a big reason why I have an eating disorder and still do ... 3It's a way of communicating, isn't it? If I'm not okay and people can't see that, I find it hard then to communicate how I am, or if I need help or something without being in person." (Abigail)

The intention to socialize across distinct environments within participants' daily routines became increasingly apparent once interaction frequencies changed and environments became more static. For Evelyn, unintentional social interactions grew more apparent after day-to-day schedules were disrupted:

"I don't really have a 'social life' so to speak, before lockdown anyway. But the thing that has changed is I'm not having the little interactions I would have been having before with other people at the swimming pool or with my yoga teacher, or with colleagues in the office at work. So, I'm not having any of these interactions." (Evelyn)

Not being able to socialize with other people through organized activities highlighted Evelyn's dependence on such activities in order to interact with other people.

Overcompensating for both a lack in activity and a perceived inability to purposefully ask for support are therefore the result of fewer opportunities to engage in daily rituals. Participants discussed replacing typical daily lower intensity exercise with more moderate and vigorous exercise once lockdown restrictions were implemented:

"Erm ... Yeah, I think I – I think I started running properly, erm ... at the beginning of lockdown. Because I think, for me, I couldn't ... Not being able to go out for long walks in [the national park] or wherever was really difficult. So, I think I just felt like I needed something to replace that – to try and keep myself ... stable." (Ava)

The lockdown measures forced Ava to deliberately choose an activity that she could carry out in the allotted time frame and in proximity to her home. Ava described how starting to run had been "risky" considering her eating disorder history, but the only way to feel settled.

Similarly, Camila reported utilizing the 'one form of exercise per day' mandate by attempting to exercise as much as possible in the allotted opportunity for physical activity:

"[...] I can only get out once a day. I'll have to make the most of it. I'll have to run. There can't be any, 'Fuck it. I'm not doing it. I feel like shit.' You have to get out. You have to do it. And then ... Thinking of days when I felt I really had to compensate. It would be walking a long way to the shops. And then ... Yeah. It was a bit of a grey area, in terms of, "Should I really be out for three, four hours running [...]?" Erm ... Probably not." (Camila)

Focusing on only one form of exercise a day meant that Camila deliberately made up for missed opportunities by over exercising. The restriction limiting the opportunity to exercise outside intensified her thoughts and behaviours regarding exercise.

For most participants, interrupted routines and structures impacted rigid behaviours that served various functions regarding eating pathology. Intentionality across social interactions and exercise regimes became increasingly evident as the lockdown prevented access to work environments, altered social interactions, and increased perceived sedentary behaviours. However, situations differed based on individual motivations behind established routines, which either mitigated or exacerbated disordered eating behaviours, perception of sociality, and exercise habits.

3.2.3. Secrecy

Concern around being recognised in shops and whether or not disordered eating behaviours were noticeable was raised by some participants. Anxiety surrounding others' assumed options on deemed 'non-

essential' food purchases, frequency going to supermarkets, and detectability of disordered eating symptoms contributed to a want to maintain secrecy.

For two respondents who identified with binge eating disorder and Other Specified Feeding and Eating Disorders (OSFED) respectively, heightened awareness of food purchasing behaviours impacted food purchasing behaviours. Isabella referred to frequenting different shops to possibly prevent shop staff from noting perceived inappropriate purchases during lockdown:

"The fear of being recognised is what has made me feel very anxious about going to the shops, so I tend to switch stores every two or three days just to make sure that people don't recognise me and they don't know who I am and I can be free to purchase whatever I want to purchase! It's a bit of an awkward concept." (Isabella)

Isabella illustrated her shame and anxiety regarding her shopping habits as she constructed methods to avoid being recognised when food shopping. Her preoccupation with others' reactions to her purchasing frequency and habits acted as an additional restriction on her freedom.

Shame was also evident in discussions around food purchasing and possible staff recognition. Shopping behaviours that perhaps once seemed nondescript now seemed more conspicuous:

"That guilt going to the shops. The 'beige food trolley', which ... And it's even better because at eight o'clock, it's yellow sticker shopping. And [...] key workers get straight in. So, you get a full range of the entire binge foods that you could want! Or, what I would use. And then, because of where I live ... Well, it's a tourist town. And the shop is normally really, really busy. Loads of tourists struggle to even buy milk. Now, eight o'clock I can go and be the only person in. And if I'm on full-blown 'binge mode', 'This is what is happening!' ... The shop assistants know me. And, if I bump into people and they recognise me, and then it's this whole thing, 'Oh ... I was in here two days ago doing this ... ' So, that's been hard ..." (Camila)

For Camila the introduction of new shopping regulations caused an inner conflict. Being a frontline worker, it became possible to access a greater amount of food to engage in disordered eating behaviours. However, the capacity for maintaining secrecy around her food shops was limited by an increase in visibility. Not being able to blend in with other people caused Camila distress as it exposed her unusual shopping behaviour.

Depending on participants' living situation, hiding certain behaviours became a way to avoid friends' and relatives' concerns or help:

"I don't [talk about my eating disorder now], because I don't want, I don't want anyone to stop me either, like I kind of do – but I also don't." (Jessica)

Living alone allowed Jessica to decide how much she was willing to share about her eating disorder. Keeping her disordered eating behaviours a secret meant that she was able to defer a confrontation about engaging in harmful activities.

For those sharing the household with a partner, not being able to keep certain behaviours hidden was a cause of anxiety, because they were forced to accept how disordered their behaviours had been.

"I used to do nearly all of our food shopping. And ... my partner would just let me get on with it, because I did the food shopping. Erm ... whereas – because he's wanted to make sure we've had enough of things, and he knows that I'm not likely to judge that very well, erm ... he's started doing the online shopping, or checking it before ... before we place the order and adding loads of things ... which makes me really anxious. Because [...] I just - I hate it. [...] but also, it kind of is making me realize how ... perhaps ... disordered some of my habits were. [...] a lot of the ... stuff around food during lockdown has made me really anxious. Erm ... but I also do think it's - it's

teaching me ... erm ... where I'm still really maintaining quite rigid control. Erm ... perhaps without realising it." (Ava)

3.3. Restrictions in accessing professional support

As support services had to adapt in relation to health and safety concerns, some participants highlighted new and continued barriers to support, while one participant viewed increased online communication as beneficial.

3.3.1. Accessibility of support

All participants mentioned comparisons between personal health concerns and overall health concerns surrounding the COVID-19 pandemic when discussing their thoughts on available supportive resources. For Isabella, receiving medical assistance during lockdown was a mixed experience. Compared to others who needed medical attention and resources during this time, they believed their situation was not as critical, but nevertheless required more attention than was offered:

"A couple of days ago, I was in hospital and they offered me psychiatric help, and they told me that I was technically allowed to receive it, but I wasn't 'bad enough' to be in the psychiatric ward or be followed-up by a psychiatrist or a psychologist. I do understand that there are much bigger problems going on, but I felt like I wasn't 'sick enough' ... Nobody should feel like they're not 'sick enough' to be taken care of. I feel like I've kind of been let down by the whole system at this point, and I haven't been able to talk to a therapist. I wasn't able to start a new round of therapy because, at this point, I finished my journey with the whole clinic...[...] And it's not very clear how I should approach my GP or how I should try to find a new counsellor." (Isabella)

Isabella discussed her experience as having left her feeling disillusioned and without support. The management of care and access to it was confusing and frustrating at a stage in which it was most needed. Being turned away by services at this point may have increased her sense of being undeserving of support.

Many participants mentioned not necessarily wanting more help, as they believed others were in greater need for support at the moment, due to COVID-19. Most mentioned their belief that receiving more support may take away health providers from perceived more important cases:

"To be honest, I feel lucky to have the support that I do, and, like you said, I am also really, really aware that there are people all over the country who are struggling with lockdown who don't have any support whatsoever. I think my main feeling around it is, to be honest, I feel undeserving of weekly hour long mental health support when everybody's struggling with their mental health at the moment ... I certainly don't think that I would want more." (Evelyn)

In the above extract, Evelyn reported being grateful for the support she received, though this was coupled with guilt for receiving care over others. The belief that others may not be able to access care prevented her from considering whether further support would have been useful.

Similarly, Alex referred to the resources and support others affected by COVID-19 required, and stated that anxiety and age restrictions prevented them from seeking additional support:

"So, yeah, it's like the only support that I get, because of COVID-19 I daren't ask my GP for more support ... GP, the access is there but it is much, much, much more difficult because it has to be telephone call, there's no text-based service. I can't text, I can't email, I can't book appointments online ... It makes it much more inaccessible for me. So it exists, but it is not one I can use. I also do the fun thing of being ever so slightly too old for some of the support offered by BEAT because a lot of that is 18–25 and I am [older than 25] ..." (Alex)

Alex described feeling unable to access support in part owing to adaptations to services made to reduce the spread of COVID-19. The adaptations to modes of therapy and the introduction of telehealth were a disincentive as they were perceived as anxiety inducing. In addition, support provided outside of the traditional services was unavailable because of age restrictions.

Conversely, some participants had different experiences regarding streamlined medical care and support services, and online options during lockdown. Compared to previous practical contact with service providers, Jessica expressed preference for adapted and restructured eating disorder support services:

"I think it has been really good that support services have had to adapt to using digital technology. Before, everyone had been really quite resistant to like online communication I think, like how long has it taken for any medical records to even be digital ... I think that actually there's a few benefits in it, like no one would choose for this to happen but at the same time I hope that things don't go back to the way they were, where everyone had to physically turn up to buildings to access a service." (Jessica)

Frequenting specific facilities that are associated with eating disorder services caused Jessica embarrassment as it forced her to disclose her need for support. However, not everyone possesses the resources to equally benefit from online alternatives. Jessica had a space where she could talk freely about her support needs without being overheard or disturbed by family or flatmates. Once again, the potential for positive outcomes was dependent on available resources.

4. Discussion

This study is the first using an in-depth interview approach with adults with mixed eating disorder presentations in the UK during the COVID-19 pandemic. Our results suggest the impact of the COVID-19 lockdown in the UK can be described as a catalyst for either the exacerbation of disordered eating behaviours, or for eating disorder recovery. The findings highlighted the structures of social and functional restrictions, as well as restrictions in accessibility to professional support, to be crucial determinants of mental well-being in this group. Personal experiences of disordered eating during lockdown were seen as either facilitated or limited by these restrictions, depending on participants' living and work situation, as well as their eating disorder progression.

The introduction of lockdown measures was consistently associated with negative mental health outcomes as reported by the participants in this study. However, social isolation and a lack of scrutiny enabled participants to seek reassurance in familiar behaviours such as restrictions or binge eating. Consequent feelings of ambivalence towards lockdown measures were in line with participants' feelings towards recovery. Ambivalence in eating disorder recovery has previously been described as "a state of dynamic stability" (Bell, 2013) due to conflicting motivations in long-term eating disorder pathology. Participants in this study described feeling safe or proactive while engaging in disordered eating or excessive exercise, even if they were working towards recovery and recognised that their mental health was affected by their behaviours. Being externally restricted through the lockdown measures might have reinforced the ambivalent perception of agency in the context of disordered eating behaviours (Shohet, 2007).

Ambivalent feelings were further related to participants' conception of the perceived future post-lockdown. The introduction of lockdown was followed by multiple amendments which will eventually allow UK residents to return to their workplaces. The easing of restrictions is thereby associated with as much, if not more, uncertainty as the introduction of the social distancing measures. Established lockdown routines continuously need to be adapted, which was seen as highly anxiety-inducing for most participants in our study. Being able to defer

confrontations and to actively engage in disordered eating behaviours led participants to feel in control. Simultaneously, giving in to certain behaviours and thoughts was experienced as a loss of control. Regardless of whether or not participants managed to cope with the imposed restrictions, a future post-lockdown will require continuous efforts to reintegrate into structured work and social environments. Future studies will have to assess the long-term impact of these challenges and a persisting uncertainty on eating behaviours and exercise routines.

Our findings partially aligned with the pathways proposed by Rodgers et al. (2020). The disruption to usual life and the resulting influence on meal patterns, routines, and physical activities had a considerable impact on the lives and eating disorder symptoms of participants. Social isolation and removal of social support led to an increased sense of loneliness and resulted in impact on accountability (Akey & Rintamaki, 2014), their routines and sense of responsibility. Participants reported having to redesign and restructure the usual aspects of their lives which heightened participants' awareness of their behavioural intentions, seeking to reintroduce the incidental aspects of day to day life into the new mode of living during the COVID-19 pandemic. Participants' responsibility for themselves and intentionality in planning their own actions were highlighted as being key mechanisms influencing their eating disorder behaviours.

In contrast, Rodgers et al.'s (2020) second and third pathways – concerning increasing in detrimental media exposure and health concerns were less apparent in our findings. Regarding health anxiety, participants voiced concern primarily regarding the threat of the virus for others such as the elderly or vulnerable loved ones rather than towards themselves, often feeling undeserving of professional support as others were viewed as needing it more in the pandemic context.

One key, and novel, finding of this study was the lockdown associated with COVID-19 being experienced as a catalyst for recovery from disordered eating behaviours for some, whilst being related to increased difficulties for others. Previous authors have highlighted that COVID-19 may precipitate or exacerbate disordered eating behaviours (e.g. Weissman et al., 2020). However, reported experiences in our study reveal the potential of the pandemic to improve eating disorder symptomatology through its focus on self-efficacy and risk management. Motivations for continuous recovery were risk avoidance in the context of COVID-19, and a sense of achievement of managing without professional support. That said, not all participants were in a position to experience this; severe eating disorder pathology before and during lockdown was not associated with reported improvements in eating disorder management. Individual perceptions of negative impact were highly dependent on how participants conceptualised current eating disorder symptoms, which was generally ambivalent and differed between expected short-term and long-term impact.

4.1. Strengths and limitations

Throughout the pandemic, recommendations and guidance rapidly changed; thus, capturing the experience of a particular period during the pandemic was challenging. The interviews were performed between 14th May and 4th June, with four interviews being conducted after the first amendment to lockdown restrictions was implemented in Scotland and England. However, lockdown restrictions were still seen as significantly impacting participants' lives and capturing this change might have enabled us to identify additional feelings of uncertainty due to changing circumstances.

In addition, only White, predominantly female participants volunteered to take part in this study, limiting the generalizability of our research findings. Regarding pathology, we were able to interview participants with a wide range of eating disorder behaviours. Even though most participants identified with Anorexia Nervosa, our findings are based on various clinical pictures, which enriched our analysis. Due to time constraints, we did not request feedback from participants on their transcripts or the results. Member checking as a way of ensuring

validity is not without criticism (e.g. Morse et al., 2015), and there may be ethical issues with asking participants to revisit a distressing experience (Birt, Scott, Cavers, Campbell, & Walter, 2016). Nevertheless, the analysis may have been enriched by the consideration and inclusion of respondents' perspectives.

Finally, all interviews were guided by a semi-structured interview schedule to ensure consistency among interviewers and interviews, while allowing for flexibility in the data collection. The interviews were not of a fixed length meaning participants were able to use this semi-structured format to focus or elaborate on experiences that were important to them.

5. Conclusion

Social, functional, and professional support-related restrictions were three main themes of underlying lockdown structures inductively identified from 10 interviews with individuals with an eating disorder. The tendencies identified related to social isolation, accountability, increased responsibility, lack of routine and structure, intentionality, and secrecy all reflect Rodgers et al.'s (2020) first pathway of the COVID-19 pandemic's impact of disruption and restrictions to established daily routines and interactions. Exploring how existing professional support services can best adapt to help those with eating disorders manage these difficulties would be valuable going forward.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.appet.2020.104977>.

Author contributions

S.B. and M.O. conducted the interviews. S.B., M.O., and I.P. transcribed the interviews and analysed the results. All authors contributed to the overall design of the study and writing the manuscript. All authors have approved the final article.

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Ethical statement

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