

Investigating the experiences of individuals in recovery from problem substance use and their perceptions of the COVID-19 pandemic

Journal:	Drugs and Alcohol Today
Manuscript ID	DAT-01-2021-0003.R2
Manuscript Type:	Research Paper
Keywords:	Qualitative, COVID-19, Recovery, Substance use, Isolation, Lived experience

SCHOLARONE™ Manuscripts

2
3
4
5
6
7
/
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Purpose: This research explores how enforced forms of social isolation arising from the first COVID-19 lockdown influenced experiences of problem substance use, relapse, and coping strategies for recovery in individuals engaging with harm reduction recovery services.

Design: A qualitative semi-structured interview design was adopted for this research. Seven participants were recruited from a harm reduction recovery organisation. During their initial interview, participants volunteered information regarding their experience of the first lockdown due to emerging concerns of the COVID-19 pandemic. Participants completed a second semi-structured interview at the end of the first lockdown regarding their experience of enforced isolation during this time.

Findings: Three themes identified from the analysis were (1) Isolation resulting in hindered Human Capabilities, (2) Adjusting to a new normal: an individual experience, and (3) Unexpected benefits to recovery resulting from isolation. While some participants reported boredom, loneliness, and relapse events, others reported that the national response to the virus did not adversely affect them as they had already adjusted to living in a state of anxiety, isolation, and uncertainty. These findings illuminate both negative, neutral, and positive aspects of substance use recovery throughout the COVID-19 lockdown as well as highlighting the complex and individualised role that social connectedness plays in relapse occurrence.

Originality: Participants reported differences in how they were affected by the pandemic, leading to theoretical implications for the effect of social isolation on recovery. For this reason, individuals with a history of dependency should be considered potentially vulnerable to the effects of enforced isolation and should be supported accordingly.

Keywords: Qualitative, COVID-19, Substance use, Recovery, Isolation

Introduction

From March 23rd to June 15th, 2020, England entered the first of several lockdowns to

counter the spread of COVID-19. During this national lockdown, citizens were advised not to

- leave their home for all but essential reasons (including shopping for necessities, exercise,
- seeking medical assistance, or work that could not be done in the home) (Cabinet Office,
- 2021). It has been speculated that the Coronavirus pandemic presents unique challenges for
- people with substance use disorders and their recovery, including greater risk of morbidity,
- decreased access to services, and experiencing increased strain on their mental health
- (Volkow, 2020). During the first lockdown, services initially struggled to offer support at a
- time when they were desperately needed. In response to service reductions caused by social
- distancing closures, recovery services began offering virtual support options which presented
- numerous challenges in regards to privacy, accessibility, and logistics (Bergman et al., 2021).
- The pandemic and its response all undermine core capabilities as suggested by Nussbaum for
- a dignified human life in her Human Capabilities Approach (HCA) (Nussbaum, 2011). These
- capabilities include freedom of movement, having good health, having emotional attachments
- to things and people outside ourselves, and maintaining meaningful and respectful social
- affiliations (Nussbaum, 2011; Melander et al., 2018). The importance of an individual's
- social environment in either facilitating growth and integration or preventing it is a hallmark
- of other psychological theories of motivation, including Self-determination theory (SDT).
- This posits that core conditions of human functioning include autonomy, competence, and
- relatedness (Ryan and Deci, 2000). Previous literature has indicated that isolation appears to
- have a deep and invasive impact on the self-esteem of individuals in recovery and that this
- isolation may obstruct capabilities and feelings of autonomy (Buchanan, 2004; Xiong and Jia,
- 2019).
- Isolation, discrimination, and feelings of powerlessness reinforce problem drug using
- behaviour whether through direct effects to mental and physical health or through indirect
- effects such as increased levels of stress (Buchanan, 2004; Copeland et al., 2018). Similar
- attributes have also been suggested as relapse indicators for adults in high risk circumstances
- including situations related to anxiety, interpersonal conflict, depression, loneliness, or social
- isolation (Barrick and Connors, 2002). It is thought that social integration is vital for
- sustained recovery due to its significant correlation with mental health, quality of life, and
- well-being with loneliness and self-esteem being two likely mediators (Boeri et al., 2016;
- Cao and Liang, 2020). For this reason, belonging to one or more social networks is linked
- with better recovery outcomes (Mawson et al., 2015; Weston, Honor and Best, 2018).
- Previous literature has demonstrated that mental illness and problem substance use often
- result in the erosion of close social networks (Zschau et al., 2016). Moreover, the individual
- belief of not belonging to the wider community also compound feelings of isolation and
- loneliness in this population (Copeland et al., 2018). Ideas of purpose and belonging have
- been embedded in the service delivery model of mutual aid and peer based recovery services
- to promote ideas of greater community assimilation (Best, Gow and Taylor, 2011). These
- support systems have been shown to increase service engagement in the short term and
- reduce dependency in the long term by improving an individual's relationships and
- increasing their sense of belonging and self-worth (Timpson et al., 2016; Connell et al.,
- 2020). Since communication and connection are established recovery principles, it is
- therefore unsurprising that practitioners and the general public alike expressed concern about
- how individuals who have a history of problem substance use would cope with enforced
- isolation or restrictions brought about by the COVID-19 pandemic.

This paper examines how the enforced isolation inherent in COVID-19 policies influenced experiences of dependency and relapse. It uses both HCA and SDT to frame and understand the impact of enforced isolation on recovery outcomes.

Methods

2.1 Design

Ethical approval for this study was obtained from the University of Worcester as well as the host organisation's research ethics committee. Written informed consent was collected from participants at the start of the study. In light of participants being potentially vulnerable and in accordance with ESRC guidelines, consent to participate was seen as an ongoing, open-ended, and voluntary process (ESRC, 2010). Considering these potential vulnerabilities, power differentials between participants and the lead researcher were acknowledged and discussed in hopes of placing the participant in a position of power to drive the direction of the study and to feel no undue coercion to participate (Worthington et al., 2016). Participants were recruited to take part in a Photovoice study investigating experiences of substance use recovery (Wang and Burris, 1997). During their first semi-structured Photovoice interview, participants volunteered information regarding how they were coping during the first lockdown. Participants were contacted at the end of the first lockdown to complete a second semi-structured interview regarding their experience of enforced isolation during this time.

2.2 **Participants**

Eight individuals were recruited to participate in this study, although one subsequently withdrew citing stress from the pandemic. Prior to COVID-19, all participants had access to recovery groups that met once a week as well as individual face-to-face sessions with practitioners. Of the seven participants, two were women (Kizzy and Sammy) and five were men (Mark, Ted, Oscar, Lawrence, and Fox) with ages ranging from early twenties to late forties. All participants were recruited directly from distinctive recovery groups that aligned with their stage of recovery. At the time of their first interview, three participants had been involved with recovery services for less than six weeks (Sammy, Ted, and Kizzy), two for six months or less (Mark and Oscar), and two for almost one year (Lawrence and Fox). Study participation was open to all people who had engaged with the organisation's service, regardless of their stage or time in recovery. The aim was to have an inclusive sample of individuals at different stages of the recovery process.

2.3 Data Collection

Data collection was conducted in collaboration with a harm reduction recovery organisation in the South West of England. In March 2020, participants were recruited to participate in a Photovoice study investigating their experiences of recovery. Participants had been in contact with the lead researcher for almost two months as they were lead through workshops and group meetings to prepare them for their initial semi-structured Photovoice interview. As a result of this study occurring simultaneously to the first COVID-19 lockdown, participants spoke at length regarding their reaction to the emerging pandemic. Due to the unforeseen collection of data surrounding COVID-19, the decision was made to conduct second semistructured telephone interviews in July 2020 with a specific focus on participants' experience of lockdown. Consistent with previous literature, Telephone interviews were shown to have similar pace, timing, and depth as face-to-face interviews and both interviews were recorded

- with participants' consent (Sturges and Hanrahan, 2004; Irvine, Drew and Sainsbury, 2013).
- 2 The first interview contained accounts of participants' initial perception of the COVID-19
- 3 lockdown while the second interview asked specific questions regarding their experience of
- 4 enforced isolation and how this had impacted their recovery.

2.4 Data Analysis

- 6 Following familiarisation with the data, interviews were analysed using an inductive
- 7 approach to reflexive Thematic Analysis (Braun and Clarke, 2020). A constructivist
- 8 paradigm of analysis was adopted which dictates that time and place are constructed and
- 9 renegotiated on an ongoing basis (Guba, 1990). The lead researcher began a full transcription
- and coding of both interviews after they occurred. This was followed by familiarisation with
- the data and the generation of initial codes with a focus on participants' experience of the
- 12 COVID-19 pandemic. While themes were developed from both the first and second
- interview, analysis focused primarily on the second as it directly pertained to the experiences
- of the pandemic. NVivo qualitative software was used to support data handling. A reflective
- journal was used by the lead researcher to capture personal responses and reactions overtime
- 16 (Koch, 2006). This journal provided a log of reflections and enabled the researcher to capture
- and account for responses, decisions, and strategies both in the field and during analysis. The
- research team read and discussed data from the reflective journal and transcriptions as a
- group, agreeing on key themes as they were developed.

21 3 Results

- 22 The findings are presented here in accordance with key themes identified within the focused
- thematic analysis. The three identified themes are (1) Isolation resulting in hindered Human
- Capabilities, (2) Adjusting to a new normal: an individual experience and (3) Unexpected
- benefits to recovery resulting from isolation.

3.1 Isolation and hindered Human Capabilities

- 27 The isolation of lockdown affected all participants differently; more than half of the sample
- 28 (five of seven participants) reported that they found it to be a lonely experience, which
- 29 exacerbated existing mental health concerns. They felt that their inability to engage with
- activities in a way which they perceived as 'normal' compromised their ability to live a
- meaningful life as postulated by HCA (Nussbaum, 2011). In some instances, the lack of
- 32 structure and loneliness resulted in a relapse event. Those who were able to avoid a relapse
- event contributed this to having existing links with community services.
- One participant; Mark (Pseudonyms appear throughout) said that while he initially viewed
- 35 the lockdown as an interesting and novel experience, he found himself feeling lonelier as
- time progressed. When asked how isolation had affected him during lockdown, he said:

"The first four weeks seemed a bit of a novelty. But the longer it went on, my mental health got worse.
 It was a different kind of low then what I've experienced before. I felt like I was counting the days down. And I was telling myself "oh, yeah, next week they might let us out." So, yeah I felt like shit to

be honest."

- 1 It was especially hard for participants who had just achieved certain recovery goals to be
- 2 suddenly confronted with additional obstacles. Another participant, Kizzy, reported similar
- 3 feelings of loneliness, which resulted in a relapse event. For Kizzy and Mark, activities and
- 4 socialisation were a crucial part of recovery and to lose the human capability of social
- 5 affiliation meant that life ceased to be as meaningful.
- 6 This was also true for participants who were forced to shield due to existing health concerns.
- 7 One participant, Fox, did not leave his flat for several weeks and relied on community
- 8 members to provide necessities. The initial shock of isolation was particularly difficult for
 - him and left him struggling to understand how this would affect his recovery. He said:

"I had been making good progress in rebuilding my life. I started to feel that what I was doing meant something to other people and that validated my life. I was trying to rebuild a credible and rewarding life and get my self-respect back. Suddenly, with lockdown all of that stopped immediately. It was like being smashed against a steel wall. All that positivity that I had been building up so diligently over the preceding months went downhill instantly, and I was devastated... I found myself going quietly mad with a daily diet of daytime TV."

- 18 For Fox, a disruption to services was not just about the support he was receiving but the
- 19 perception that his life would cease to be purposeful (Nussbaum, 2011). Rather than simply
- 20 receiving support, Fox was becoming someone who was able to give back to the community
- via volunteering. Previous literature on the SDT model of behaviour change has found
- 22 positive associations between an increase in autonomous self-regulation and abstinence from
- substances, so it is understandable that Fox felt that an attack to his new found autonomy
- would have profoundly negative effects on his recovery (Williams et al., 2009).
- 25 Four participants, including Fox, mentioned how they were grateful they had established
- supportive community links prior to lockdown and how they felt this put them at an
- 27 advantageous position to be able to cope. Fox described how this helped him feel less
- isolated through this period:

"I live by myself, so I was a bit isolated anyway and that was the other thing about all these voluntary roles which I sought out. I had to seek them out and I'm glad I did because otherwise my phone wasn't going to ring, no one was going to knock on the door."

For many individuals, the services which they access during recovery are their only sources of social connection, rendering them essential for a full and dignified life according to the HCA (Venkatapuram, 2014). However, even participants who were heavily integrated into recovery support services were affected by the loneliness and boredom of lockdown. One participant, Ted, who lived in a dry house at the time reported a house wide relapse as it was no longer possible to evict individuals who failed drug tests. He said:

"They couldn't kick us out cause (sic) of Corona. So, we took advantage of that. As soon as the lockdown happened the council and the government said they can't kick people out for six months. So,

everybody found that out and just used that as a pass to use...If the lock down didn't happen, I wouldn't have been using. It was out of boredom. Because nothing was open."

While Ted reported that he was no longer using at the time of his second interview, he said that he had struggled throughout lockdown to occupy his time and find something to do. In combination, boredom and recovery can be dangerous and many individuals in recovery go to great lengths to fill their time to avoid this (Kaplan, Salzer and Brusilovskiy, 2012). Not having the freedom to alleviate this boredom left Ted and others feeling lonely, isolated, and

hopeless, hindering capabilities of achieving value and meaning (Nussbaum, 2011).

Adjusting to a new normal: an individual experience

Throughout the pandemic, many services attempted to replicate normal delivery by offering

clients virtual and telephone support. While some participants enjoyed the ease of access

provided by these services, others indicated a strong desire to resume face-to-face delivery.

This desire for socialisation and in person engagement led some in the sample to disregard

lockdown policies to prioritise their mental health needs and regain engagement with others.

While the idea of virtual meetings did not immediately appeal to all participants; everyone

reported attempting them. Most reported that virtual meetings could not replace the social

element found within group meetings and they were anxiously anticipating a return to face-

to-face groups. However, for others they were not seen as a bad alternative. One participant,

Lawrence, appreciated that he could easily access meetings from the comfort of his home.

Engaging with virtual meetings allowed him to maintain a sense of normality throughout the

pandemic by continuing to engage with mutual aid groups. However, he also conceded that

the convenience of virtual meetings would not appeal to everybody and that there were issues

with this service delivery model, which precluded some individuals from accessing support.

He said:

"I know some people have struggled. I can think of one guy, he lapsed, and I know it's because he doesn't have data on his phone, he couldn't get to a physical meeting. So, I know it has affected other people who will remain nameless."

For individuals who may have limited social contact outside of their immediate surroundings, face-to-face meetings provide a safe space they can rely on to gain positive social capital (Salehi et al., 2019). It is hard to replicate this same level of social connection in a virtual environment and so individuals who do not respond to this method of service delivery may be especially affected. This is particularly true if service users do not have access or knowledge of the technology that would enable them to attend virtual meetings.

Kizzy, who primarily attributed her relapse to isolation, reported that she made the decision to break lockdown to prioritise her struggling mental health. Mark reported a similar decision during this time and opted to meet with his sponsor in a park. While both expressed concern for the virus, a desire for socialisation and face-to-face contact led them to attempt to replicate normality amid the pandemic in order to regain a life they perceived as meaningful

(Melander et al., 2018). Kizzy spoke about the judgment she felt from others due to

prioritising her mental health. She said:

"I don't really feel guilty. I feel like other people are very judgmental and sort of trying to shame, like 'Corona shame' ... I'm trying not to get too stressed. Like I'm not panicked about the virus it's more all the stuff that it affects and the result of other people panicking. And all the misinformation. Or the fact that there really isn't much information that can be counted on."

The lack of reliable COVID-19 information as described by Kizzy has posed a serious problem in designing and implementing public health interventions and likely contributed to the stress she experienced (Kulkarni *et al.*, 2020). The uncertainty and lack of control inherent in the proliferation of misinformation are themselves major triggers for stress which is the most predictable factor in sustaining substance use and triggering relapse (Gielen *et al.*, 2016). In line with SDT, it is likely that these social-environmental conditions diminished Kizzy's self-motivation and positive psychological adjustment (Bartholomew *et al.*, 2011). When describing her experience self-isolating, Kizzy said:

"It's all very well self-isolating but when you live on your own and you have mental health problems, at some point you're going to need human contact. And like face-to-face is just better. And it's not like I've been throwing parties or anything. I've been respectful, I've been distanced."

Kizzy also described how her mental health was affected by receiving messages that she perceived as hostile from neighbours threatening to inform her housing association that she was breaking lockdown. She described how she was particularly sensitive to these sorts of messages due to her history of being vulnerably housed. In line with SDT, Kizzy had taken steps throughout her recovery to increase the level of independence she felt over her life (Ryan and Deci, 2002). The impact of lockdown caused Kizzy to experience a lack of control over her environment, increasing her feelings of dissatisfaction. SDT argues that developing a sense of autonomy and competence is critical to sustain positive health behaviours and this desire for autonomy may have led Kizzy and Mark to attempt to replicate some form of pre-COVID normality (Sharma and Smith, 2011; Richards, Pearson and Witkiewitz, 2020).

*3.*3

3.3 Unexpected benefits to recovery resulting from isolation.

- Although many participants reported that isolation had affected them negatively, two study participants reported unexpected benefits to their daily lives. They characterised the isolation
- 32 period as 'peaceful', resulting in a reduction of stress levels. These participants reported
- 33 pleasure at having additional time to connect with loved ones, along with feeling relief that
- public consumption of alcohol was less prevalent. Participants who reported these
- 35 unexpected benefits were already adjusted to lives characterized by isolation, so the impact of
- 36 the virus did not substantially impact their daily lives.
- Oscar was one participant who reported enjoying the quiet and serene nature of lockdown. He said:

"I've thoroughly enjoyed the peace and quiet. It was just what I needed. Living in the city I find very stressful anyway, it's just constant noise and an intense environment to live in. So, for the first time in years to have no cars anywhere, no people in the part where I live, I actually loved it."

Oscar reported that the lockdown experience did not massively affect his recovery because he felt he already lived in a state of isolation. In the last few years, he had cycled in and out of treatment and lost several close relationships because of his drug use. It is of interest to note that while Oscar expressed his enjoyment of lockdown, he was also one of three participants to relapse during this time. According to Oscar, he attributed his relapse event not to isolation and service disruption but to wanting relief for his poor physical health. However, it is likely that his declining physical health was affected by the pandemic, indicating that the impact on his subsequent relapse was both direct and indirect. He believed lockdown had a positive effect on his recovery as it motivated him to improve his physical health to be at lessened risk for COVID-19 complications.

Similarly, Lawrence described how he felt that the lockdown experience was equalising in that it offered people without mental health issues a glimpse into feelings of anxiety familiar to those who have experienced dependency. He explained:

"A lot of us people in recovery have suffered anxiety in the past. So, we're kind of in our element because it's like, yeah... welcome! This is how we feel all the time! It's just people are starting to really panic about this, that, and the other and we're all kind of like 'Duh'.

This is how we feel about things, you know?"

Lawrence also mentioned that he was communicating with loved ones more than ever which resulted in higher feelings of social connectedness. Consistent with Lawrence's experience, previous literature indicates that higher degrees of social connectedness have a positive effect on recovery outcomes and the ability to lead a dignified human life as postulated by the HCA(Nussbaum, 2011; Mawson *et al.*, 2015; Boeri *et al.*, 2016). As well as increasing his emotional wellbeing, Lawrence also reported that he felt safer and more secure during this time due to alcohol consumption being less visible. He said:

"I think it's actually helped my recovery more than anything. All the pubs were shut. Going through the parks and stuff they weren't full of drinking. Let's just say, drinking wasn't in the public domain, so I felt safer. It seemed easier for me to control."

It is possible that Lawrence felt an increased sense of satisfaction as a consequence of enhanced feelings of belonging and control over his social environment (Bartholomew *et al.*, 2011). It is also possible that feelings of peace, calm, and safety were especially important to the recovery outcomes of Oscar and Lawrence because of the challenges of their lives prior to engagement with recovery services. Although they represent a small portion of the sample, their experience is consistent with literature which demonstrates the positive effects feelings of safety and security can have on the quality of life of individuals seeking help with problem drug use (Best, 2012).

25

4 Discussion

2 The first UK COVID-19 lockdown impacted key factors known to be important in recovery

- from problem substance use, such as physical health, stability, engagement with purposeful
- 4 activity, and positive community networks (Kaplan, Salzer and Brusilovskiy, 2012; Osborne
- 5 et al., 2020). This led to speculation, particularly in the media, that the lockdown period
- 6 would be difficult for those dealing with dependency issues. However, despite this, our
- 7 research indicates that the lockdown had individual and dynamic effects on recovery with
- 8 both negative, neutral, and positive impacts for different people.
- 9 This study has found that the enforced isolation of lockdown had a negative effect on
- participants who felt more depressed and alone, hindering their ability to lead a full and
- meaningful life as espoused by the HCA. This is consistent with literature which stipulates
- that loneliness has been associated with both mental and physical health problems, including
- substance use (Ingram et al., 2020). While not everyone who is isolated becomes lonely,
- people with substance use problems may be more vulnerable due to stigma and a
- rearrangement of social networks once they engage with recovery services. Literature
- suggests that recovery is dependent on the formation of strong social networks, yet many in
- this sample offered a description of recovery as an isolating and lonely experience (Kawachi
- 18 et al., 2004; Zschau et al., 2016) During COVID-19, it has been argued that prolonged stay at
- 19 home efforts are likely to severely increase isolation, social disconnection and loneliness
- 20 (Zixin and Wang, 2020). This research supports these arguments, but also highlights the
- 21 individualised impact of these conditions on recovery. As described by SDT, individuals
- develop conditions of autonomy and competence in different ways which will impact their
- 23 experience of recovery differently (Sharma and Smith, 2011).
- 24 This research also offers a glimpse into participants' perceptions of the virtual delivery of
 - services. These findings indicate a willingness on behalf of participants to engage with virtual
- service. However, the desire to resume face-to-face contact suggests that participants found
- 27 the social connection of in person meetings important for their recovery outcomes. As
- services continue to increase virtual support options in a post-COVID world, it is important
- 29 for practitioners to remember the perceived benefit of social capital in a recovery context
- 30 (Timpson et al., 2016). In line with the HCA, the socio-economic resources an individual has
- at their disposal should be considered when deciding to offer virtual services (Nussbaum,
- 32 2011).
- 33 This research also demonstrates the importance of services and meaningful activities to
- individual recovery outcomes. Indeed, ongoing engagement in activities perceived by the
- individual as meaningful have been shown to have a positive effect on recovery (Groshkova
- and Best, 2011). Two out of the three participants who experienced a relapse during
- 37 lockdown associated this with the lack of structure and ensuing loneliness, which intensified
- feelings of isolation. However, it is an important distinction that not all of the sample felt
- 39 negatively impacted by these changes to services. This implies that recovery is a highly
- 40 individualised process where some have the capacity to adapt autonomously to altered
- support while others do not. Therefore, it's important not to make assumptions about how
- 42 people will benefit from the support they are offered. Additionally, the psychological burden
- of isolation has the potential to undermine any resilience gained through previous
- engagement with recovery social networks (Chen, 2020). This jeopardizes both the mental
- and physical health of service users as well as increasing the likelihood for relapse.

- Perhaps the most surprising finding from this study was not that loneliness and isolation
- 2 affected recovery outcomes, but that two participants reported that the peaceful nature of
- 3 isolation reduced their stress levels. While this is a small portion of the sample, this leads to
- 4 the questioning of existing media narratives of substance use and recovery characterising the
- 5 experience as catastrophic and challenging. Recovery, like all phenomenon, is a complex and
- 6 individualised experience that people will encounter in different ways. This research does not
- 7 intend to discount the heightened focus on mental health and wellbeing throughout the
- 8 pandemic, but instead put these discourses into a more nuanced perspective. Many
- 9 individuals in recovery already live in contained social worlds so the experience of lockdown
- 10 has been an extension of isolation to which they may have already adapted.

4.1 Limitations

- 12 Several study limitations should be recognized. It should be acknowledged that this study
- only represents the experiences of the first COVID-19 lockdown, and it would be beneficial
- 14 to continue to follow participants longitudinally to see if their perceptions changed during
- subsequent lockdowns. There also exists the possibility that this sample is not representative
- of all individuals in recovery. Individuals in recovery are a heterogenous group and as with
- most qualitative research studies, the sample was generated from respondents who made
- themselves available (Foster-Fishman et al., 2005; Groshkova and Best, 2011). This is a
- 19 limitation that is difficult to overcome, and it is important to recognize the potential issues of
- 20 generalizability.

4.2 Conclusion

- As services continue to increase virtual support options, this research sheds light on the
- potential impact to participants who appreciated the convenience of virtual services but also
- desired to resume face-to-face services. This indicates the possibility that a hybrid model of
- service delivery may be effective in the future if the needs of individuals are considered.
- Future research might examine this in more detail to explore how virtual service delivery
- 27 may contribute to feelings of isolation. As the situation with the Coronavirus pandemic
- continues to unfold, the long-term effects of enforced isolation on this population should be
- 29 further researched and considered. Additionally, individuals with a history of problem drug
- 30 use should be considered potentially vulnerable to the effects of enforced isolation and
- 31 supported accordingly. These findings highlight both negative, neutral, and positive aspects
- of substance use recovery throughout the COVID-19 lockdown as well as demonstrating the
- complex and individualized role that social connectedness plays in relapse occurrence.

5 References

- 4 Barrick, C. and Connors, G. J. (2002) Relapse prevention and maintaining abstinence in older
- 5 adults with alcohol-use disorders', *Drugs and Aging*, 19(8), pp. 583–594. doi:
- 6 10.2165/00002512-200219080-00004.
- 7 Bartholomew, K. J. et al. (2011) Self-determination theory and diminished functioning: The
- 8 role of interpersonal control and psychological need thwarting', *Personality and Social*
- 9 Psychology Bulletin, 37(11), pp.1459–1473.doi:10.1177/0146167211413125.
- Bergman, B. G. et al. (2021) Online recovery support meetings can help mitigate the public
- health consequences of COVID-19 for individuals with substance use disorder', *Addictive*
- 12 Behaviors. Elsevier, 113 (September 2020), p. 106661.doi:10.1016/j.addbeh.2020.106661.
- 13 Best, D.(2012) Addiction Recovery: A Movement for Social Change and Personal Growth in
- *the UK*.Pavilion Publishing.
- Best, D., Gow, J. and Taylor, A.(2011) 'Recovery from Heroin or Alcohol Dependence: A
- Qualitative Account of the recovery experience in Glasgow', *Journal of Drug Issues*, 41(3),
- 17 pp. 359–377.
- Boeri, M. et al. (2016)'I don't know what fun is': examining the intersection of social capital,
- social networks, and social recovery', *Drugs and Alcohol Today*, 16(1), pp.95–105. doi:
- 20 10.1108/DAT-08-2015-0046.
- Braun, V. and Clarke, V. (2020) One size fits all? What counts as quality practice in
- 22 (reflexive) thematic analysis?', Qualitative Research in Psychology. Routledge, 00(00), pp.1–
- 23 25. doi:10.1080/14780887.2020.1769238.
- Buchanan, J.(2004) 'Tackling problem drug use: A new conceptual framework', Social Work
- 25 in Mental Health, 2(2–3), pp.117–138. doi:10.1300/J200v02n02 08.
- 26 Cabinet Office.(2021)*National lockdown:Stay at Home*.
- 27 Cao, Q. and Liang, Y. (2020) Perceived social support and life satisfaction in drug addicts:
- Self-esteem and loneliness as mediators', *Journal of Health Psychology*, 25(7), pp.976–985.
- 29 doi: 10.1177/1359105317740620.
- 30 Chen, L. K.(2020) Older adults and COVID-19 pandemic: Resilience matters', Archives of
- *Gerontology and Geriatrics*. Elsevier, 89(May), p.104124.
- 32 doi:10.1016/j.archger.2020.104124.
- Connell, M. J. O. et al. (2020) 'Enhancing outcomes for persons with co-occurring disorders
- through skills training and peer recovery support skills training and peer recovery support',
- 35 Journal of Mental Health, 29(1), pp.6–11. doi:10.1080/09638237.2017.1294733.
- 36 Copeland, M. et al. (2018) 'Different Kinds of Lonely: Dimensions of Isolation and Substance
- 37 Use in Adolescence', Journal of Youth and Adolescence, 47(8), pp. 1755–1770.

- 1 doi:10.1007/s10964-018-0860-3.
- 2 ESRC(2010)Framework for Research Ethics (FRE), Social Research. Available at:
- 3 http://www.esrc.ac.uk/about-esrc/information/research-ethics.aspx.
- 4 Foster-Fishman, P. et al. (2005) 'Using methods that matter: The impact of reflection,
- 5 dialogue, and voice', American Journal of Community Psychology, 36(3–4),pp. 275–291.
- 6 doi: 10.1007/s10464-005-8626-y.
- 7 Gielen, N. et al. (2016) 'How patients perceive the relationship between trauma, substance
- 8 abuse, craving, and relapse: A qualitative study', *Journal of Substance Use*, 21(5), pp.466–
- 9 470.doi:10.3109/14659891.2015.1063717.
- 10 Groshkova, T. and Best, D. (2011) 'The Evolution of a UK Evidence Base for substance
- 11 Misuse Recovery', *Journal of Groups in Addiction and Recovery*,6(1–2), pp.20–37.
- 12 Guba, E. (1990) The Paradigm Dialouge. SAGE Publications Inc.
- Ingram, I. et al. (2020) Loneliness among people with substance use problems: A narrative
- systematic review', *Drug and Alcohol Review*, (2019).doi:10.1111/dar.13064.
- 15 Irvine, A., Drew, P. and Sainsbury, R.(2013) Am I not answering your questions properly?'
- 16 Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face
- 17 interviews', *Qualitative Research*, 13(1), pp.87–106. doi:10.1177/1468794112439086.
- 18 Kaplan, K., Salzer, M. S. and Brusilovskiy, E. (2012) Community participation as a predictor
- of recovery-oriented outcomes among emerging and mature adults with mental illnesses.',
- 20 Psychiatric Rehabilitation Journal, 35(3),pp.219–229. doi:10.2975/35.3.2012.219.229.
- 21 Kawachi, I. et al. (2004) 'Commentary: Reconciling the three accounts of social capital',
- 22 International Journal of Epidemiology, 33(4), pp. 682–690. doi:10.1093/ije/dyh177.
- Koch, T. (2006) Establishing rigour in qualitative research: the decision trail', *Journal of*
- 24 advanced nursing, 53(1). doi:10.1111/j.1365-2648.2006.03681.x.
- Kulkarni, P. et al. (2020) Covid-19-infodemic overtaking pandemic? Time to disseminate
- facts over fear', *Indian Journal of Community Health*, 32(2), pp.264–268.
- 27 Mawson, E. et al. (2015) 'Social identity, social networks and recovery capital in emerging
- adulthood: A pilot study', Substance Abuse Treatment, Prevention, and Policy, 10(45), pp.1–
- 29 12. doi:10.1186/s13011-015-0041-2.
- 30 Melander, C. et al. (2018) 'Human capabilities in advanced dementia: Nussbaum's
- 31 approach', *International Journal of Older People Nursing*, 13(2), pp.1–10.
- 32 doi:10.1111/opn.12178.
- Nussbaum, M. C. (2011) Creating Capabilities: The Human Development Approach. The
- 34 Belknap Press of Harvard University Press.
- Osborne, B. et al. (2020) Substance Use and Co-occurring Physical Health Problems: File
- Review of a Residential Drug and Alcohol Treatment Service.', *Journal of Dual Diagnosis*,
- 37 16(2), pp.250–259.

- 1 Richards, D. K., Pearson, M. R. and Witkiewitz, K. (2020) 'Understanding alcohol harm
- 2 reduction behaviors from the perspective of self-determination theory: a research agenda',
- 3 Addiction Research and Theory. Taylor & Francis, 0(0), pp.1–6.
- 4 doi:10.1080/16066359.2020.1863378.
- 5 Ryan, R. M. and Deci, E. L.(2000) 'The darker and brighter sides of human existence: basic
- 6 psychological needs as a unifying concept', *Psychological Inquiry*,11,pp.319–338.
- 7 Ryan, R. M. and Deci, E. L. (2002) Overview of self-determination theory: An organismic
- 8 dialectical perspective', in *Handbook of Self-Determination Research*. Rochester, NY:
- 9 University of Rochester Press, pp.3–33.
- Salehi, A. et al. (2019) 'Bonding and bridging social capital in the recovery of severe mental
- illness: a synthesis of qualitative research', *Journal of Mental Health*. Taylor & Francis,
- 12 28(3), pp.331–339.doi:10.1080/09638237.2018.1466033.
- Sharma, M. and Smith, L. (2011) 'Self determination theory and potential applications to
- alcohol and drug abuse behaviors', *Journal of Alcohol and Drug Education*, 55(2), pp.3–7.
- 15 Sturges, J. and Hanrahan, K. (2004) Comparing telephone and face-to-face qualitative
- interviewing: a research note', *Qualitative Research*, 4(1),pp.107–118.
- 17 Timpson, H. et al. (2016) 'Once you've been there, you're always recovering': exploring
- experiences ,outcomes, and benefits of substance misuse recovery', *Drugs and Alcohol*
- *Today*,16(1),pp.29–38. doi:10.1108/DAT-08-2015-0042.
- Venkatapuram, S. (2014) 'Mental disability, human rights and the capabilities approach:
- Searching for the foundations', *International Review of Psychiatry*, 26(4),pp.408–414. doi:
- 22 10.3109/09540261.2014.926867.
- Volkow, N. (2020) COVID-19: Potential Implications for Individuals with Substance Use
- 24 Disorders, National Institute on Drug Abuse. Available at:https://www.drugabuse.gov/about-
- 25 nida/noras-blog/2020/04/covid-19-potential-implications-individuals-substance-use-
- disorders.
- Wang, C. and Burris, M. A.(1997) 'Photovoice: Concept, Methodology, and Use for
- 28 Participatory Needs Assessment', *Health Education and Behavior*, 24(3), pp.369–387.
- 29 doi:10.1177/109019819702400309.
- Weston, S., Honor, S. and Best, D. (2018) 'A tale of two towns: A comparative study
- 31 exploring the possibilities and pitfalls of social capital among people seeking recovery from
- 32 substance misuse', *Sheffield Hallam University*, 53(3), pp.490–500.
- Williams, G. . et al. (2009) The importance of supporting autonomy and perceived
- 34 competence in facilitating long-term tobacco abstinence.', Annals of Behavioral Medicine,
- 35 37, pp.315–324. doi:10.1007/ s12160-009-9090-y.
- Worthington, C. et al. (2016) The ethics of community-based research with people who use
- drugs: results of a scoping review', *BMC Medical Ethics*, 17(1), pp.1–13.
- 38 doi:10.1186/s12910-016-0108-2.
- 39 Xiong, H. and Jia, J. (2019) 'Situational Social Support and Relapse: An Exploration of

- Compulsory Drug Abuse Treatment Effect in China', International Journal of Offender
- *Therapy and Comparative Criminology*, 63(8), pp.1202–1219.
- doi:10.1177/0306624X18815243.
- Zixin, L. and Wang, S. (2020) Prevalence and predictors of general psychiatric disorders and
- loneliness during COVID-19 in the United Kingdom', Psychiatry Research.
-) 'The Hit. Networks', 24415589633. Zschau, T. et al. (2016) 'The Hidden Challenge: Limited Recovery Capital of Drug Court
- Participants' Support Networks', Journal of Applied Social Science, 10(1), pp.22–43.
- doi:10.1177/1936724415589633.

1.