A qualitative exploration of the experience and attitudes of exercise professionals using telehealth for people with mental illness

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Bibliographic Citation

McKeon, G., Fitzgerald, C., Furzer, B., Rosenbaum, S., Stanton, R., Lederman, O., Harvey, S. B., & Wright, K. (2022). A qualitative exploration of the experience and attitudes of exercise professionals using telehealth for people with mental illness. The Journal of Mental Health Training, Education and Practice, 18(1), 14–29. https://doi.org/10.1108/JMHTEP-07-2021-0084

Abstract

Purpose: Physical activity is an important component of treatment for people living with mental illness and exercise practitioners are well placed to deliver these interventions. In response to the COVID-19 pandemic and associated lock-down regulations, exercise professionals have rapidly adapted to the online delivery of services to continue care for their clients. To date, the research surrounding the delivery of exercise sessions via telehealth for this population has been scarce. Therefore, the current qualitative study sought to explore how exercise professionals working in mental health have adapted to telehealth, the barriers and facilitators they have experienced and the implications for the future. **Design/Methodology/Approach:** A qualitative study using semi-structure interviews was conducted. Interviews were audio recorded, transcribed, and analysed using reflexive thematic analysis. **Findings:** Nine exercise physiologists working in mental health settings in Australia participated in the interviews. Two main themes were explored. The first related to the implementation of telehealth and was divided into four sub-themes; i) service delivery, ii) accessibility and suitability, iii) technology barriers and facilitators, iv) adaptations to exercise prescription. The second theme related to attitudes and was categorised into two sub-themes; i) attitudes toward telehealth and ii) future recommendations. **Practical implications:** Telehealth appears to be a feasible and well accepted platform to deliver exercise sessions for people with mental illness and this study provides guidance for clinicians including service and training recommendations. **Originality:** This is the first study to examine the experiences of exercise physiologists working in mental health and using telehealth.

Key Words: Telehealth, mental health, exercise, exercise physiology

Introduction

The 2019 novel coronavirus pandemic (COVID-19) is an international public health emergency and the situation is continuing to evolve globally. The disease has drastically altered people's lives, exacerbated existing health inequalities and increased the risk of poor mental health (The Lancet Infectious, 2020). This elevated risk of poor mental health is especially high for those with pre-existing mental health disorders (Druss, 2020).

While there are many uncontrollable pandemic related stressors (e.g., financial insecurity, fear of contracting the disease) that have contributed to increased rates of mental distress (Newby, O'Moore, Tang, Christensen, & Faasse, 2020), one modifiable determinant of mental health is physical activity. Although necessary to reduce the spread of COVID-19, social distancing regulations and quarantine measures, such as curfews, and restricted access to public parks and commercial gyms have reduced opportunities for physical activity therefore increasing sedentary behaviour (Stanton et al., 2020; Stockwell et al., 2021). This is concerning given physical inactivity and sedentary behaviour are well-known risk factors for depression and anxiety (Schuch et al., 2019; Teychenne, Costigan, & Parker, 2015; Zhai, Zhang, & Zhang, 2015).

Meta-analytic research has repeatedly demonstrated that increases in physical activity levels produces meaningful reductions in symptoms of mental ill health (Ashdown-Franks et al., 2019; Firth et al., 2020). Physical activity has therefore been recognised as an important evidence-based component of treatment for people living with mental disorders (Brendon Stubbs et al., 2018). Physical activity also has well-known benefits for quality of life and physical health and can reduce the risk of numerous comorbidities including obesity, cardiovascular disease, and metabolic syndrome (Garber et al., 2011), which commonly occur at higher rates among individuals with psychiatric disorders than in the general population (De Hert, Detraux, & Vancampfort, 2018).

When physical activity interventions are supervised by an exercise professional (e.g., exercise physiologist or physiotherapist) they are more effective for engaging and supporting people with mental illness compared to unsupervised sessions (B. Stubbs et al., 2016). Undoubtedly, physical distancing during the COVID-19 pandemic creates an additional challenge to providing evidence-based exercise support to people with mental illness at a time when exercise support is more important than ever. Since the COVID-19 pandemic, exercise professionals have been forced to quickly adopt other methodologies, such as online service delivery, to continue care. However, there

has been little guidance or precedence to follow regarding the adoption of online or telehealth services (Leone, Eddison, Healy, Royse, & Chockalingam, 2021). Telehealth is defined by the World Health Organisation as the remote delivery of health services using information and communication technologies (Organization, 2017). In the context of exercise physiology, Exercise and Sports Science Australia (ESSA; the peak accrediting body for tertiary-trained exercise professionals) have defined telehealth as the "Delivery of technology-based exercise and sports science services supporting wellness, prevention, health management and performance improvement (ESSA, 2020)." Examples of synchronous, or live, telehealth include mobile or landline telephone, Skype, Facetime, Zoom or other video conferencing software. In response to the COVID-19 pandemic, the Australian government has responded to social distancing restrictions by urgently placing subsidies on additional health services (i.e., Medicare) including telehealth services with allied health professionals which includes exercise physiologists. Normally this would require time, planning and gradual implementation; however, in these extenuating circumstances a more rapid and forced approach to implementation has occurred.

To date, evidence surrounding the application of telehealth exercise interventions for people living with mental illness is scarce (Lederman et al., 2021). Practitioners working with people with mental illness are seeking resources and guidance for delivering safe and effective evidence-based telehealth exercise interventions for people with mental illness. Therefore, this timely qualitative study aims to 1) explore how exercise professionals working in mental health in Australia have adapted to telehealth, 2) the facilitators and barriers to adoption of telehealth they have experienced and 3) the implications for professionals and continuation of services in the future.

Methods

Participants

Members of the ESSA Mental Health Special Interest Group (SIG) were invited to participate in this study through a post containing the study advertisement on the group's Facebook page. The ESSA Mental Health SIG had 874 members as of August 2020, working across a range of different clinical settings (e.g., private practice, hospitals). All those who made contact with the research team and expressed interest were invited to take part, providing they met study eligibility criteria of; i) 18 years of age or older, ii) a practicing exercise physiologist working with patients with mental illness iii) using some form of telehealth (e.g., video call, phone call) to deliver exercise sessions and iv) currently practicing in Australia.

Eligible participants were invited to take part in a 30-minute, semi-structured interview via teleconference software (i.e., Zoom). The semi-structured interview guide was a-theoretical however was developed based on the relevant literature and reviewed by all co-authors for suitability and coverage. The co-authors had different research and clinical backgrounds including exercise physiology and psychiatry. The final interview guide (see supplementary material 1) comprised 14 questions covering three broad topics, i) How have exercise professionals adapted their services to telehealth for people with mental illness? ii) What are the facilitators and barriers to adoption of telehealth that have been experienced? iii) Is there a future for telehealth in this population? Participants were encouraged to guide the direction of the conversation, and probing questions were used when necessary, to explore an answer in more detail, to clarify an issue, or to explore new ideas. This study was approved by the UNSW HREC committee (HC200493). All participants provided verbal informed consent.

Analysis

Data analyses were performed using a qualitative analysis software program, NVivo 12.1 (QSR International, Melbourne, Australia). Data from interviews were transcribed verbatim and read independently by two researchers (GM and CF). In line with recent recommendations in the literature, qualitative data collection was ceased when authors considered that pragmatic saturation had been reached (Braun & Clarke, 2021; O'reilly & Parker, 2013). A reflexive thematic analysis method was utilised for data analysis, allowing for the description and coding of phenomena (i.e., themes) relating to participants' experiences of using telehealth. An reflexive thematic analysis approach was key to understanding participant perceptions and experiences, and an inductive development of themes resulted (i.e., the creation of themes based on participant insight rather than any established theory) (Braun & Clarke, 2019; Braun, Clarke, & Weate, 2016). This method allowed for information to be synthesised from participants without imposing preconceived ideas from researchers and allowed for diversity in responses. Meaning units were identified, recorded, and initially positioned (by the first author) within a theme structure. To support the conclusions made by the first author, a series of 'critical friends' discussions were held among four co-authors who are all Accredited Exercise Physiologists (GM, CF, KW, BF) regarding theme coverage and structure. During this process, meaning units were re-allocated from the lead author's original coding to ensure thematic precision, some meaning units were deleted on the basis of a lack of meaningful content, and theme definitions were edited to ensure they adequately captured each theme.

Results

Nine exercise physiologists (67% female) working in mental health settings were interviewed between September and November 2020. Participant characteristics are provided in Table 1. Approximately half (56%) were working in private practice while the remainder worked within various community mental health settings. Exercise physiologists had been working in their current role between 7 months and 6 years. On average, participant interviews lasted for 23.5mins and the audio recordings yielded 58 pages of 12pt (Arial) single-spaced text, resulting in 209 meaning units. Meaning units were assigned to themes within two broad categories, namely 'implementation of telehealth' and 'attitudes toward telehealth'. An overview of themes (including definitions) within each of these broad categories is presented in Table 2. Where meaning units are reported, names have been changed and any identifying information has been removed.

INSERT TABLE 1

INSERT TABLE 2

Theme 1: Implementation

Four themes were categorised as implementation, namely; i) service delivery, ii) accessibility and suitability, iii) technology barriers and facilitators, iv) adaptations to exercise prescription. Additional raw data (i.e., meaning unit examples) are presented in the supplementary material.

Service delivery

Participants primarily reported that they had not used telehealth as part of regular clinical practice prior to the COVID-19 pandemic and were forced to quickly adopt the new delivery platform due to COVID-19 restrictions on face-to-face services. The majority of participants had not received any prior training and utilised a variety of telehealth platforms for the delivery of service (e.g., Zoom, Cliniko, and health network specific platforms). One participant indicated, for example, *"Yeah I mean it's been a bit of a hit the ground running, it's been a learning curve and interesting but I think it's provided us an opportunity to keep some sort of engagement at a time when we couldn't see people face to face."(Participant 5)* The type of services delivered via telehealth included a mix of assessments, one-on-one exercise sessions and group exercise/education sessions.

Overall, participants liked that telehealth allowed for the continuity of their patients' care and felt that they could still maintain a high quality of service, which was highlighted by a participant who stated, *"I'm really satisfied that we're still able to provide a high standard of care."(Participant*

4) However, several participants raised the issue of variability in adherence rates to sessions. Some participants reported improvements in adherence due to the convenience of being at home, for example one participant stated*, "So cancellations have been down and if we've had anyone that's meant to be coming in here and they're feeling a little bit unwell, or they are like going to cancel because they don't really want to be around people or whatever it might be, that they've opted then for telehealth instead of cancelling their appointment all together."(Participant 3)*. In contrast, other participants found adherence rates dropped with one participant citing *"It's a bit easier for clients to cancel on a session I think because it's easy to just say well "oh no you're just at home so it doesn't matter if I can't make the session." (Participant 8)* This was supported by another participant who reported it is easy for the client to disconnect from the session if they experience emotional distress and more difficult for the participant to provide support, *"I guess another big one is with our mental health patients when they are feeling quite down they can just click off, they can totally just switch off from the device where in person they still have to connect. I've had a few times when they've been quite upset, heightened emotions and they have just ended the call."(Participant 9)*

Accessibility and suitability

An emerging topic that participants spoke of was the ability for telehealth to increase access to services. Participants saw telehealth as a possible means to remove geographical barriers for rural and remote patients, with one participant noting, *"It's a great way to broaden our clientele into areas with clients you wouldn't normally access"(Participant 9)* In addition to rural and remote patients, participants also reported increased accessibility by those experiencing high levels of symptoms and difficulty leaving the house. An example of this was noted by a participant working with young people, *"For a lot of our young consumers, they do experience a lot of, and adults also, they experience a lot of barriers to attending appointments and coming out of the house, so to them it was actually a preference to a lot of them to be able to see the participant from within their own homes."(Participant 7)* However, this was also raised as a concern, *"I guess in my own mind was sort of conflicted by that because sure, they might have that preference, and I noticed that for a lot of our mental health clients they actually enjoyed the first part of that period of isolation because it was an excuse for them to just be isolated and everyone else was doing it so it became normal, but as a result there is a risk that their mental health would deteriorate, and they are not working on those psychosocial and functional outcomes which we want them to."(Participant 7)*

Moreover, a number of participants reported difficulty getting clients to return face-to-face. One participant noted, *"So I've found that all of our people who have any kind of mental health*

[problem] in the telehealth sort of circumstances really love it, but it's really hard to get them then back in. So we've got a couple of schizophrenic patients and that sort of thing and it's been really hard to go ok alright well we're now going to see if we can transition you back to face to face, because it's around their goals of social engagement and community participation and things like that, but they are really happy in their own little bubble and being in their home space that we've continued with the telehealth and then maybe done a couple of home visits and slowly started to transition where we can so we're doing a bit of alternating and stuff there"(Participant 3). While participants commonly reported increased access as one of the benefits of telehealth, participants reported that this mode of delivery may not be suitable for everyone. For example, some participants reported that they would have concerns delivering this type of service to clients with psychotic symptomology. One participant described, *"With psychosis there might be some issues around like you know paranoia and people looking inside other people's homes, and there is that confidentiality issue where – when you are on video, when you're not in the workplace, it really is a step inside someone's life when you see inside someone's home… some people found that a little bit challenging to gather" (Participant 7)* Participants also suggested that people with cognitive, hearing or intellectual disabilities may not be suitable for telehealth since they may require more visual and tactile cues.

Technology

Participants noted multiple technology related issues and raised this as a one of the main barriers to implementation. Access to reliable internet was raised as an issue by many participants and was identified as a greater barrier for certain groups including older adults and people living in rural and remote locations. For example, *"I guess there's just general ones [barriers] like the internet lag… which is really challenging with the older clients as well, not understating the platforms that we use. That's been a big one."(Participant 9)* With similar notions echoed by other participants regarding client's access to appropriate technology *"For me, personally it's my more rural clients who don't have access to higher levels of technology. Some of them don't have smart phones."(Participant 4)* Moreover, participants highlighted other technology related concerns including mistrust among some people with severe mental illness*, "but other people in that first episode psychosis program, we have some people that are a bit resistant to technology, whether it be because of paranoia or other things, and so some people engaged really well, some people didn't."(Participant 5)* In order to overcome the inevitable technological challenges, participants reported utilising a number of strategies including contingency plans and staff training. One participant stated, *"mainly a barrier has been the technology - so making sure the staff were set up*

so it ran smoothly, I found when that didn't happen it really affected how the clients perceived telehealth. And then also the other way around, if they weren't set up properly or weren't sure on how to use it I would say that was the biggest barrier"(Participant 1) Similarly, another participant expressed *"we try and talk them through hot spotting their phone instead of using their internet, and we have had some where we've just ended up reverting to a phone conversation rather than video."(Participant 6)*

Adaptations to exercise prescription

Participants reported making adaptations to their exercise prescription compared to face-to-face delivery. The first adaptation repeatedly reported was not being able to provide physical cues and a hands-on approach to exercise prescription. Participants noted, *"The complexity of my exercise prescription has probably decreased since COVID only because I'm quite limited to my office space or I've got a gym set up in my home which I can go out and utilise and show different patterns of movement, but some people are limited in their space at home as well."(Participant 4).* There were mixed opinions regarding how changes to exercise prescription impacted the quality of service. Some stated that not being able to provide physical cues reduced the quality of their service, while others reported making modifications with no impact on the quality. *"I don't think the quality's changed, I think the focus has shifted for sure, like I said it's been more health promotion, basic resources, education."(Participant 5)*

Another benefit discussed was the ability to design and prescribe a home program for someone, with a participant stating, *"I think that one of the real positives for some of our clients is it's actually so much better if what we're trying to achieve is a home exercise program you're seeing them in that context rather than showing them some stuff in your clinic and hoping that they can translate it." (Participant 6)* However, this was balanced with participants raising that there is an inability to perform routine physical health checks (e.g., blood pressure, heart rate)*, "I think the biggest risk there is that we aren't able to give our physical health screens to the same extent at the moment…So we're still doing their kind of subjective questions that we can do, but yeah some of that objective measuring has been difficult."(Participant 5)* Interestingly, client safety was not raised as an issue and participants reported that they would be comfortable dealing with any adverse events online.

Theme 2: Attitudes

The second theme that emerged was attitudes to telehealth which were categorised into two sub themes i) participant attitudes to the use of telehealth and ii) recommendations for the future.

Participants' attitudes

Overall, the attitudes of exercise physiologists toward the adoption of telehealth were positive, and all participants reported seeing a role for telehealth in the future. One participant reported, *"I really enjoyed it. We still do it [telehealth].. and I personally loved it. I think it's the same with the clients, once we worked out a few of the kinks it was a great response overall for using Telehealth."(Participant 1)* This same participant also stated*, "I think at the beginning it will seem hard and impossible, but once you find something that works it is really beneficial and it's actually just so smooth now - I don't even think about telehealth that much to be honest.*" Some suggested that willingness and acceptance by participants to deliver telehealth was an important component of telehealth adoption. For example, one participant noted, *"The trend that I've seen - the ones that have managed to implement telehealth services reasonably well are the ones that have been excited about the opportunity and looking for ways to deliver a good telehealth service, rather than those that are looking for a way to use telehealth as a stop gap substitute for their existing services."(Participant 6) Others raised concerns around the ability to build rapport initially and the fatigue that trying to do so via telehealth can lead to. For example, "I was very hesitant to use telehealth for a number of reasons but particularly when I came to the role, I was meeting everyone for the first time so it was very difficult to build that rapport particularly within mental health [setting]."(Participant 2) Another participant stated "I did find that using telehealth was equally exhausting for the participant, I don't know whether that is because you're trying more to convey a message when you know it could be done a lot more casually."(Participant 7)*

Recommendations for the future

When discussing the future of telehealth, it was repeatedly suggested that it would be best to be able to offer both telehealth and face-to-face options to clients. For example, one participant reported, *"My personal preference would be to continue with a blend of both telehealth and face to face, just because we've got so many regional clients where our office is Melbourne based, but we don't have scope at the moment to go sort of regional Victoria, and it's just meant that we've had such a greater scope and access to a greater area and people with less access….from the mental health perspective I think it's nice to give people that option that they could even start with telehealth and we could progress to face to face, I think that might be a stepping stone that people*

would feel comfortable with."(Participant 8) A desire for training on the use of telehealth emerged as common theme. One participant noted, *"I want to continue some training with some of the staff, because I think a lot forget about how important communication is over telehealth in terms of visuals, verbals, sometimes they're throwing 18 million cues, sometimes they're sitting there instead of joining in - I think there's a few things that you can do as well to make the environment more fun. So I think training could look like a practical side and then a communication side*."(Participant 1) However, suggestions differed with respect to where this training should occur (e.g., workplace, university).

Discussion

Semi-structured interviews with nine exercise physiologists working in mental health revealed that participants overall have positive attitudes toward the use of telehealth. This study provides insight into the opportunities and barriers to the adoption of telehealth for participants and end users. With participants believing telehealth offers opportunities for improving access, there appears to be a desire to integrate telehealth into routine practice post COVID-19. These views reflect similar recommendations by physiotherapists delivering telehealth services for other clinical populations who suggested a combination of face-to-face and home based training (Timmerman et al., 2017). The identified benefits of telehealth services address some of the long-held concerns surrounding inequity in the health care sector, such as a lack of access for people in regional areas. Telehealth can overcome common access barriers while preserving clinical supervision and individualised exercise prescription (Timmerman et al., 2017). In order for the delivery of telehealth to continue to improve and evolve, and not follow a cycle of interest and then abandonment as seen after previous disasters, agreements of payment and government supportive legislation are needed (Torous & Wykes, 2020).

While the attitudes toward telehealth were positive among exercise physiologists, the interviews also revealed some of the broader challenges that need to be considered when implementing a telehealth service including accessibility and suitability barriers, technological challenges and modifications to exercise prescription. Participants reported an inability to perform objective physical health assessments (e.g., blood pressure) which may be of concern given the high rates of physical health comorbidities in people living with mental illness and consequential importance of regular screening (Firth et al., 2019). Additionally, participants expressed concern regarding patient's resistance to return to face-to-face services once restrictions eased and believed

this would cause patients to miss out on additional psychosocial benefits obtained by getting dressed, leaving the house and having to socialise.

Considering these findings, screening participants for their suitability for telehealth should be conducted on a case-by-case basis, taking into account individual needs and circumstances. Screening may include; i) Does the participant want to use telehealth? ii) Does the participant have access to the appropriate equipment and sufficient internet to effectively engage? iii) Will the participants level of cognition, communication, hearing, vision or mental health symptomology impact their ability to engage, and if so how can this be mitigated? iv) Does the participant have an appropriate environment (e.g., private room) for telehealth? Other important considerations for allied health professionals previously recommended in the literature include questions regarding the urgency of care and opportunities for continuity of care, the quality of service that can be delivered via telehealth and the safety of the patient (AHP Australia., 2020). Given participants repeatedly reported having to make changes to their usual exercise prescription and some reporting that this reduced the quality of their service, the efficacy of telehealth delivered exercise physiology remains unknown and a non-inferiority trial comparing telehealth to face to face is recommended.

Implications

The interviews informed potential strategies for exercise physiologists working in mental health using telehealth. Firstly, practices and community services implementing telehealth should consider the need for training to upskill and improve the confidence of staff in the use of telehealth platforms for exercise delivery and how to assess patient suitability. This training should be provided in house or by education providers within the workplace and could be combined with psychologists/ psychiatrists or other allied health professionals including physiotherapists or occupational therapists. From this research it is not clear the best delivery method or optimal timing for training, however we also suggest that students should be exposed to telehealth at university as part of clinical placement. A previous training program delivered online for physiotherapists to manage osteoarthritis via telehealth included self-directed learning modules, mock video consultation and audited practice consultations which led to greater confidence and high acceptability (Jones et al., 2021) found that In addition to training, telehealth guidelines are needed to help standardise approaches and improve the delivery of services and improve patient outcomes.

Secondly, where possible administration support is recommended for a more fluid transition to telehealth for both clients and health professionals. Administration support when clients first join

a session may help to overcome some of the technological barriers. Additionally, technical support addressing the needs of patients is also suggested (e.g., familiarisation with software/equipment also appeared to be valuable to minimise disruption). In addition, having a contingency plan in place in case of technology failures is recommended. Participant and patient readiness to change also was discussed as an important component of adoption success. Therefore, telehealth should not be considered a temporary stop-gap, but rather as a sustainable alternative mode in which individuals can safely access healthcare. Exercise physiologists in this study mostly reported that they had not used telehealth prior to the COVID-19 pandemic, likely since government support in Australia was not provided for this type of service delivery. Therefore, government support schemes (e.g., Medicare in Australia), and private health insurance must be financially supported in order for patients and exercise physiologists to be able to continue to utilize and promote its use.

Much of the existing literature suggests telehealth should only be adopted for follow-up appointments and so more research is needed to understand considerations including appropriate and safe compensatory measures when there is limited or no capacity to conduct in person assessments (Leone et al., 2021). For example, if a client has or is at high risk of physical health comorbidities, supporting them to conduct regular physical health checks (e.g., blood pressure) at home should be considered. Previous reviews have suggested considering the use of wearable technology for telemonitoring/screening to collect, transform and assess patient health data such as respiratory rate, heart rate, or blood oxygen level (Bokolo, 2021). However, it is important to note that some patients may not have access and the reliability and validity of assessments may be limited (Düking, Fuss, Holmberg, & Sperlich, 2018; Nelson et al., 2020).

Limitations

While effort was made to capture a broad sample of exercise professionals, our sample's views may not be representative of all exercise physiology participants working in the mental health sector. For example, those who participated in the interviews were all currently using telehealth. It would be useful to gather the perspectives of participants who were not able to implement telehealth to understand why they weren't currently utilising this modality. In addition, participants were from different states across Australia and therefore in different levels of COVID-19 lock downs so their experiences may have been different.

Conclusion

Despite some of the challenges experienced by exercise physiologists, telehealth appears to be a feasible and well accepted platform for the delivery of exercise physiology sessions for people

living with mental illness. Telehealth may improve inequities and inefficiencies in the delivery of mental health care for some populations by removing geographic and accessibility barriers. This study represents practice-based evidence that may help guide current and future practice. Evaluating the effectiveness of telehealth exercise interventions compared to in-person interventions is needed to advance knowledge on this topic. Future research should also consider patients experiences and attitudes toward telehealth.

References

Ashdown-Franks, Garcia, Firth, Joseph, Carney, Rebekah, Carvalho, Andre F., Hallgren, Mats, Koyanagi, Ai, et al. (2019). Exercise as Medicine for Mental and Substance Use Disorders: A Meta-review of the Benefits for Neuropsychiatric and Cognitive Outcomes. *Sports Medicine*.

Australia., Allied Health Professions. (2020). *Telehealth Guide for allied health professionals*.

Bokolo, Anthony. (2021). Implications of telehealth and digital care solutions during COVID-19 pandemic: a qualitative literature review. *Informatics for Health and Social Care, 46*(1), 68-83.

Braun, Virginia, & Clarke, Victoria. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589-597.

Braun, Virginia, & Clarke, Victoria. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative research in sport, exercise and health, 13*(2), 201-216.

Braun, Virginia, Clarke, Victoria, & Weate, Paul. (2016). Using thematic analysis in sport and exercise research. *Routledge handbook of qualitative research in sport and exercise*, 191-205.

De Hert, Marc, Detraux, Johan, & Vancampfort, Davy. (2018). The intriguing relationship between coronary heart disease and mental disorders. *Dialogues in clinical neuroscience, 20*(1), 31-40.

Druss, Benjamin G. (2020). Addressing the COVID-19 Pandemic in Populations With Serious Mental Illness. *JAMA Psychiatry, 77*(9), 891-892.

Düking, Peter, Fuss, Franz Konstantin, Holmberg, Hans-Christer, & Sperlich, Billy. (2018). Recommendations for Assessment of the Reliability, Sensitivity, and Validity of Data Provided by Wearable Sensors Designed for Monitoring Physical Activity. *JMIR Mhealth Uhealth, 6*(4), e102.

ESSA. (2020). *Exercise and Sports Science Australia Telepractice Policy Statement*

Firth, J., Siddiqi, N., Koyanagi, A., Siskind, D., Rosenbaum, S., Galletly, C., et al. (2019). The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. *Lancet Psychiatry, 6*(8), 675-712.

Firth, J., Solmi, M., Wootton, R., Vancampfort, D., Schuch, F., Hoare, E., et al. (2020). A meta-review of "lifestyle psychiatry": the role of exercise, smoking, diet and sleep in the prevention and treatment of mental disorders. *World Psychiatry, 19*(3), 360-380.

Garber, Carol Ewing, Blissmer, Bryan, Deschenes, Michael R., Franklin, Barry A., Lamonte, Michael J., Lee, I-Min, et al. (2011). Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory, Musculoskeletal, and Neuromotor Fitness in Apparently Healthy Adults: Guidance for Prescribing Exercise. *Medicine & Science in Sports & Exercise, 43*(7), 1334-1359 1310.1249/MSS.1330b1013e318213fefb.

Jones, Sarah E., Campbell, Penny K., Kimp, Alexander J., Bennell, Kim, Foster, Nadine E., Russell, Trevor, et al. (2021). Evaluation of a Novel e-Learning Program for Physiotherapists to Manage Knee Osteoarthritis via Telehealth: Qualitative Study Nested in the PEAK (Physiotherapy Exercise and Physical Activity for Knee Osteoarthritis) Randomized Controlled Trial. *J Med Internet Res, 23*(4), e25872.

Lederman, Oscar, Furzer, Bonnie, Wright, Kemi, McKeon, Grace, Rosenbaum, Simon, & Stanton, Rob. (2021). Mental Health Considerations for Exercise Practitioners Delivering Telehealth Services. *Journal of Clinical Exercise Physiology, 10*(1), 20-28.

Leone, Enza, Eddison, Nicola, Healy, Aoife, Royse, Carolyn, & Chockalingam, Nachiappan. (2021). Exploration of implementation, financial and technical considerations within allied health professional (AHP) telehealth consultation guidance: a scoping review including UK AHP professional bodies' guidance. *BMJ Open, 11*(12), e055823.

Nelson, Benjamin W., Low, Carissa A., Jacobson, Nicholas, Areán, Patricia, Torous, John, & Allen, Nicholas B. (2020). Guidelines for wrist-worn consumer wearable assessment of heart rate in biobehavioral research. *npj Digital Medicine, 3*(1), 90.

Newby, Jill M, O'Moore, Kathleen, Tang, Samantha, Christensen, Helen, & Faasse, Kate. (2020). Acute mental health responses during the COVID-19 pandemic in Australia. *PloS one, 15*(7), e0236562.

O'reilly, Michelle, & Parker, Nicola. (2013). 'Unsatisfactory Saturation': a critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative research, 13*(2), 190-197.

Organization, World Health. (2017). *Global diffusion of eHealth: making universal health coverage achievable: report of the third global survey on eHealth*: World Health Organization.

Schuch, Felipe B, Stubbs, Brendon, Meyer, Jacob, Heissel, Andreas, Zech, Philipp, Vancampfort, Davy, et al. (2019). Physical activity protects from incident anxiety: A meta-analysis of prospective cohort studies. *Depression and anxiety, 36*(9), 846-858.

Stanton, Robert, To, Quyen G., Khalesi, Saman, Williams, Susan L., Alley, Stephanie J., Thwaite, Tanya L., et al. (2020). Depression, Anxiety and Stress during COVID-19: Associations with Changes in Physical Activity, Sleep, Tobacco and Alcohol Use in Australian Adults. *International Journal of Environmental Research and Public Health, 17*(11).

Stockwell, Stephanie, Trott, Mike, Tully, Mark, Shin, Jae, Barnett, Yvonne, Butler, Laurie, et al. (2021). Changes in physical activity and sedentary behaviours from before to during the COVID-19 pandemic lockdown: a systematic review. *BMJ Open Sport; Exercise Medicine, 7*(1), e000960.

Stubbs, B., Vancampfort, D., Rosenbaum, S., Ward, P. B., Richards, J., Soundy, A., et al. (2016). Dropout from exercise randomized controlled trials among people with depression: A meta-analysis and meta regression. *J Affect Disord, 190*, 457-466.

Stubbs, Brendon, Vancampfort, Davy, Hallgren, Mats, Firth, Joseph, Veronese, Nicola, Solmi, Marco, et al. (2018). EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). *European Psychiatry, 54*, 124-144.

Teychenne, Megan, Costigan, Sarah A., & Parker, Kate. (2015). The association between sedentary behaviour and risk of anxiety: a systematic review. *BMC Public Health, 15*(1), 513.

The Lancet Infectious, Diseases. (2020). The intersection of COVID-19 and mental health. *The Lancet Infectious Diseases, 20*(11), 1217.

Timmerman, JG, Dekker-van Weering, MGH, Stuiver, MM, Groen, Wim G, Wouters, MWJM, Tönis, TM, et al. (2017). Ambulant monitoring and web-accessible home-based exercise program during outpatient follow-up for resected lung cancer survivors:

actual use and feasibility in clinical practice. *Journal of cancer survivorship, 11*(6), 720-731.
Torous, John, & Wykes, Til. (2020). Opportunities From the Coronavirus Disease 2019 Pandemic for Transforming Psychiatric Care With Telehealth. *JAMA Psychiatry, 77*(12), 1205-1206.
Zhai, Long, Zhang, Yi, & Zhang, Dongfeng. (2015). Sedentary behaviour and the risk of depression: a meta-analysis. *British Journal of Sports Medicine, 49*(11), 705-709.

Table 1. Participant description

Participant	Gender (M/F)	Population	Practice setting	
1	F	Predominantly mental health and also cardiovascular, cancer and musculoskeletal	University clinic	WA
2	F	Youth mental health (15-25 year olds)	Community	VIC
3	F	Mental health work, predominantly posttraumatic stress disorder	Private practice	QLD
4	M	Life insurance/work cover	Private practice	VIC
5	F	Youth mental health (16-25 year olds), predominantly early psychosis	Community	VIC
6	M	Mental health and oncology	Private practice	VIC
7	M	Psychosis - early (young people) and enduring (adult)	Community	NSW
8	F	Predominantly mental health and a mix of clinical populations	Private practice	VIC
9	F	Life insurance/work cover, predominantly posttraumatic stress disorder case load	Private practice	VIC

Table 2. Overview of theme names and descriptions

Theme	Sub-themes	Theme Description
Implementation	Service delivery	Type of services being delivered via telehealth and how. E.g., one-on-one sessions, group classes and through what platform.
	Accessibility and suitability	Accessibility of telehealth is related to the degree to participants believes the use of telehealth will increase contact. Suitability refers to the populations that telehealth is suggested to be appropriate for.
	Adaptations to exercise prescription	Differences between usual face-to-face exercise prescription and telehealth.
	Technology	Barriers of technology and strategies used to deal with this.
Attitudes to telehealth	Participants' attitudes toward using telehealth	The overall impressions and views of participants toward the feasibility and implementation of telehealth.
	Recommendations for the future of telehealth	Participants' recommendations for the use of telehealth beyond COVID-19.