



ORIGINAL ARTICLE

Connection and recovery in the COVID-19 age: An analysis of changes in goal-setting throughout the pandemic by consumers living with enduring mental illness

Christopher Patterson¹ | Michelle Roberts¹ | Taylor Yousiph¹ | Georgia Robson² | Kelly Lewer¹ | Elissa-Kate Jay¹ | Lorna Moxham¹

¹Faculty of Science, Medicine and Health, University of Wollongong, Wollongong, New South Wales, Australia

²Faculty of the Arts, Social Science & Humanities, University of Wollongong, Wollongong, New South Wales, Australia

Correspondence

Christopher Patterson, School of Nursing, University of Wollongong, Wollongong, NSW 2522, Australia.

Email: cpatters@uow.edu.au

Abstract

Goal-setting is a tool that empowers consumer recovery. Though the pandemic has affected consumer goal-setting, the nature and extent of this impact have not been examined in a recovery setting. The aim of this study is to assess whether the recovery goals of individuals with serious mental illness changed in association with the COVID-19 pandemic. In this mixed-methods design, data were collected from a purposeful sample of consumers ($n_{\text{TOTAL}}=355$) aged 19–67 years ($M_{\text{AGE}}=44.56$, $SD=13.05$) attending *Recovery Camp*, a 5-day therapeutic-recreation programme for individuals living with severe mental illness (e.g., PTSD, schizophrenia). Consumer-set goals were examined across 5 programmes prior to March 2020 ($n_{\text{PRE}}=126$) and 11 following ($n_{\text{POST}}=229$). Goals were set on day one, with attainment self-scored on day five. Chi-squared goodness-of-fit tests compared goal proportions per domain; tests of independence assessed changes in goals pre- and post-pandemic. Six goal domains were identified: *Approach-Based Recovery*, *Avoidance-based Recovery*, *Novel Physical Activities*, *Relationships*, *Health*, and *Recreation/Relaxation*. Irrespective of the pandemic, goal attainment was consistently high across all programmes (86.56%). *Approach-based Recovery* goals were predominant pre-pandemic, but were significantly reduced post-pandemic ($p=0.040$). Goals related to *Relationships* and *Novel Physical Activities* took precedence throughout the pandemic. Post-COVID-19, consumer recovery goals reveal increased desire for connection, novelty-seeking, and positive behavioural change.

KEYWORDS

COVID-19, goal setting, mental health, recovery, therapeutic recreation

INTRODUCTION

The understanding of the recovery process for individuals living with mental illness has shifted from symptom resolution to emphasizing individual resilience, improved quality of life, and enhanced function (Jacob, 2015; Tabak et al., 2015). Literature suggests that the clinical view of recovery, with its focus on symptom reduction, is often not synonymous with the perspective

of the consumer, for whom this process is akin to a journey (Marynowski-Traczyk et al., 2017; Yarborough et al., 2015). An integral factor in consumer-led mental health recovery is goal-setting, the process of identifying and working towards clearly defined targets or objectives that the individual desires to achieve (Rose & Smith, 2018). Effective goal-setting has been identified as a robust factor in increasing well-being, strengthening rapport and alliance in therapeutic relationships, and

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2023 The Authors. *International Journal of Mental Health Nursing* published by John Wiley & Sons Australia, Ltd.



promoting recovery for individuals experiencing mental ill health (Clarke et al., 2009; Smith et al., 2011). Indeed, goal setting and attainment are identified as integral features of recovery (Stewart et al., 2022).

In the context of mental-health recovery, goal-setting is most effective when individuals determine goals within their personal recovery vision (Clarke et al., 2009). The self-determined nature of individual goal-setting has the potential to imbue consumers with feelings of control and confidence, empowering them to achieve their personal recovery aims (McGuire et al., 2015; Stewart et al., 2021). Ownership of the goal-setting process is significant; however, studies such as the one presented in this paper are important to provide insights for those supporting individuals in their journey of recovery. It is important to develop knowledge of consumer goal setting and attainment in recovery and the contextual influences on this.

BACKGROUND

Studies that have focussed on goal-setting for consumers have done so in various contexts. Settings that prioritize a consumer-led approach to goal achievement are particularly well-placed to facilitate effective goal-setting. Such an approach is typical in recovery-oriented practice, as this model supports the active role of consumers in their recovery journey, often in collaboration with health practitioners (Maybery et al., 2015; Stewart et al., 2021). Tabak et al. (2015) examined goal attainment amongst consumers living in residential settings, finding that relationships and self-care were the most commonly set goals. In an integrated health plan setting providing inpatient and outpatient services, Yarborough et al. (2015) commented on the fluid nature of recovery in the lives of consumers, with goals of recovery commonly centred around a sense of self-control over their illness and regaining what they had lost, such as relationships and self-esteem. Similarly, Rose and Smith (2018) investigated recovery goal-setting for consumers in community mental health settings, with the highest proportion of consumer goals set about relationships. This is echoed throughout the literature, with consumer goals frequently related to physical and psychological health outcomes and connection through relationships in the context of recovery (Maybery et al., 2013; Moxham et al., 2017; Slade, 2009). The attainment of these goals is heavily dependent on the goal planning process, goal specificity, its relevance to the intervention in achieving these personalized goals, and support from health professionals in creating a collaborative goal setting process (Boeykens et al., 2022; Franklin et al., 2019). Evidently, much of the research around goal attainment for consumers has occurred in a clinical or community setting, as elicited above, with little evidence on goal setting within a specific intervention or non-traditional space.

The onset of the COVID-19 pandemic triggered considerable emotional, physical, and psychological disruptions, characterized by life-altering stressors (Alomari et al., 2021; Fisher et al., 2020). The onset of these changes, coupled with the unpredictable nature of the pandemic, has presented as major obstacles to goal attainment (Fisher et al., 2020). While individuals still cared about the goals they had made (Labib et al., 2022), the disruption to major life domains resulted in a perceived loss of control over goal attainment (Hamm et al., 2022).

Considering the disturbance of the COVID-19 pandemic, meaningful activities that promote recovery, including activities that foster connection and have a nature-based outdoor element, can contribute to the attainment of personalized goals as well as increased happiness and life satisfaction (Hendryx et al., 2008; Labib et al., 2022). One such meaningful activity includes that of *Recovery Camp*, a strengths-based therapeutic recreation (TR) camp that brings together both individuals with serious and enduring mental illness and future health professionals (Moxham et al., 2017). A previous study outlines the degree to which participants met their personalized goals at the completion of *Recovery Camp* (Moxham et al., 2017). This paper presents a follow-up study investigating the type of goals set by individuals and their level of attainment across 16 camps ranging from prior to, as well as throughout, the COVID-19 pandemic.

MATERIALS AND METHODS

Aims

The present study aimed to identify the types of goals set by consumers in the context of *Recovery Camp* and examine the extent to which consumers report achieving their goals. Additionally, this inquiry sought to determine whether the nature and attainment of consumer goals changed in association with the course of the COVID-19 pandemic.

Participants and setting

In total, 355 individuals (182 females, 171 males, 2 non-binary) were recruited as part of their attendance on *Recovery Camp* programmes between April 2019 and December 2022. The age of the participants ranged from 19 to 67 years ($M=44.56$, $SD=13.05$). *Recovery Camp* is a 5-day recovery-oriented programme facilitated by mental health practitioners for individuals living with severe mental illness. The programme is framed as an empowering, immersive experience, with health practitioners and consumers sharing meals and engaging collaboratively in novel TR activities such as rock climbing and abseiling. Consumers attending *Recovery Camp* live



in the community and are in stable mental health at the time of the programme. Diagnoses include but are not limited to Schizophrenia, Bipolar Disorder, Anxiety, PTSD, Depression, and Dissociative Identity Disorder. Written informed consent was obtained prior to data collection, with the opportunity for questions or support provided by professional mental health facilitators present at each *Recovery Camp* programme. Ethical approval was obtained from the relevant institutional ethical board (approval no. 2019/ETH03767).

Procedure

Participation in the study involved each consumer writing up to five individual goals on a provided 'goal sheet' during the first morning of the programme. Participants completed the task individually in approximately 15 min in a shared quiet space; any participants with questions or those requiring assistance with literacy were able to indicate this and receive support from a member of the mental health facilitation team. The task was deliberately kept open-ended, with consumers' invited to think about the 5 days of the recovery programme ahead and set goals for what they would like to achieve and do. The goal sheets were collected. On the final morning of the programme the goal sheets were re-distributed to participants, who were invited to reflect on their programme experiences and indicate the extent to which each goal had been attained (1 = Not at all achieved, 2 = Somewhat achieved, 3 = Mostly achieved, 4 = Completely achieved). After collecting the sheets, participants were debriefed and thanked for their contribution.

Data analysis

Thematic analysis

There were several stages to the thematic data analysis. Firstly, written participant responses ($n=1577$) were digitized in a de-identified format. This included recording each goal and the extent (1–4) to which it had been attained. Incomplete goal sheets ($n=3$) were removed from the analysis due to the participants departing *Recovery Camp* early and not scoring the goal attainment level.

In the first stage of the thematic analysis, two members of the research team independently coded the data based on Braun and Clarke's framework for qualitative analysis (Braun & Clarke, 2006). This analytical process was descriptive in nature and involved coding the central concept of each goal into a general 'theme'. In the second stage, the preliminary goal themes were reviewed collaboratively by the researchers for shared features. This procedure of thematic analysis is a method rather than a methodology, with refinements being a central feature of the dynamic process. Conceptual overlap,

themes-within-themes (subthemes), and any notable deviations were considered in the final reviewing stages. The researchers then re-coded the goal types as per stage five of the process (Braun & Clarke, 2006).

Six central goal domains emerged in the thematic analysis. The most frequently set goal type across all *Recovery Camp* programmes was *Approach-based Recovery*. Approach-based recovery encompasses goals that foster movement towards a desired outcome (Bailey, 2019). This is illustrated by statements such as '*I want to grow in confidence*', '*be more patient*', and '*help new people on camp*'. The second-most frequently occurring theme, *Relationships*, was characterized by goals, such as '*make new friends*', '*listen to other people's stories*', and '*connect with others*'. *Novel Physical Activities* emerged as the third most-set goal theme, relating to physical activities typically outside the consumer's normal experience (e.g., rock climbing, abseiling). The *Relaxation/Recreation* theme incorporated goals set by consumers such as '*having fun*', as well as nature-based goals such as '*enjoying nature*'. The theme of *Physical Health* encompassed participants' identification of goals related to the development of healthy physical habits. The theme involved goals such as '*I want to eat healthy*', and '*smoke less*' and '*sleep well*'. *Physical Health* goals also included intentions such as losing weight or being more active. The final theme was *Avoidance-based Recovery*. Goals set in this domain were characterized by movement away from undesired outcomes (Bailey, 2019), commonly expressed through goal statements such as '*Be less anxious*', '*Stop worrying all the time*', and '*Be less paranoid*'.

Statistical analysis

To examine whether goal setting changed in association with the COVID-19 pandemic, data collected on *Recovery Camp* programmes from May 2019 to January 2020 were classified as 'pre-COVID' ($n=6$ camps). Data from December 2020 to December 2022 programmes were coded as 'post-COVID' ($n=10$ camps). In this context, the term 'post-COVID' indicates any *Recovery Camp* programme delivered following the onset of the COVID-19 pandemic in Australia in March 2020 and all programmes during the following 2-year period. This time frame involved mandatory intermittent lockdown protocols characterized by the closure of schools, business, restaurants, etc., as well as periods with relaxed public health protocols in which programmes such as *Recovery Camp* were permitted. A chi-squared goodness-of-fit test was used to investigate differences in goal theme proportions, while chi-squared tests of independence were used to determine whether these proportions significantly changed in association with the COVID-19 pandemic. Post-hoc power analyses conducted using G*power software (v3.1) indicated that the recruited sample size, alpha threshold of 0.05, and $df=5$ yielded 95% statistical



power for chi-squared analyses to detect moderate effects ($1-\beta=0.951$) (Faul et al., 2009).

RESULTS

Six central goal domains emerged via thematic analysis. Table 1 displays the themes in descending order of their frequency across all *Recovery Camp* programmes.

A chi-square goodness of fit test revealed that the proportions of goals set per domain were not equally distributed, $\chi^2(5, N = 355)=276, p<0.001$. Comparison of the observed-versus-expected goal count for each domain showed that the greatest proportion of goals were set in association with the themes of *Approach-Based Recovery*, *Novel Physical Activities* and *Relationships*. In contrast, a smaller proportion of goals were set in the domains of *Physical Health*, *Relaxation/Recreation* and *Avoidance-based Recovery*. Analysis of consumer-reported goal attainment showed that at least 75% of goals were achieved in each domain. Overall, the most achieved goals at *Recovery Camp* related to *Relationships* (95.10% ‘mostly’ or ‘completely’ achieved), *Relaxation/Recreation* (92.13% ‘mostly’ or ‘completely’ achieved), *Novel Physical Activities* (87.99% ‘mostly’ or ‘completely’ achieved), and *Approach-based Recovery* (82.81% ‘mostly’ or ‘completely’ achieved).

A chi-squared test of independence identified a significant decrease in the proportion of *Approach-based Recovery* goals set on *Recovery Camps* after the onset of the pandemic, $\chi^2(5, N = 355)=11.70, p=0.040$. Cramer's *V* indicated an effect size of 0.09, which can be considered small-to-moderate in size (Snedecor & Cochran, 1980). In place of this decrease, goals related to *Novel Physical Activities* and *Relationships* were observed to increase for consumers attending *Recovery Camp* post-pandemic. These changes are depicted in Figure 1.

Figure 2 depicts consumer goal setting across all *Recovery Camps* for the most commonly set themes of *Novel Physical Activities*, *Approach-based Recovery* and *Relationships*. The changes in these domains regarding consumers' goal setting are notable following the onset of the COVID-19 pandemic in Australia. *Approach-based Recovery* goals decrease from this time point; goals

relating to *Novel Physical Activities* and *Relationships* are then observed to increase.

DISCUSSION

The present study sought to investigate the recovery goals set by individuals living with severe mental illness while attending a TR programme called *Recovery Camp*. Additionally, the study aimed to examine changes in consumer goal setting in association with the COVID-19 pandemic.

Our findings show that goal attainment was relatively high across all six goal types, indicating that *Recovery Camp* provides an environment conducive to consumer goal attainment. Consumers achieved personal goals most successfully in relation to *Relationships*, which typically involved wanting to actively engage in positive conversations, social connections, and building healthy relationships. In the *Social Identity Approach* (1982), Turner proposed that group relations and connections instil a fundamental understanding of personal identity and an individual's role within a community. This underpins a universal human need for connection as a route to identity formation and meaning-making (Cruwys et al., 2014; Martino et al., 2017). Consumers on *Recovery Camp* identified goals in association with this theme as integral amidst the wider context of the pandemic, an era marked by increased social isolation, distress, and the exacerbation of mental health symptomology (Fernandez et al., 2021; Pancani et al., 2021). While government-mandated lockdowns quarantined the public from the virus, they also separated individuals from everyday social engagement. Social identity formation has the potential to create a ‘meaning of life’ for individuals living with depression (Cruwys et al., 2014). The person-centred practice of *Recovery Camp* fosters an environment in which consumers and pre-registration nurses engage in the programme side by side. Such relationships can contribute to a greater likelihood of recovery compared to those with poor social relationships (Holt-Lunstad et al., 2010). Furthermore, connectedness is an integral factor in mental-health recovery, as outlined in the CHIME framework (Connectedness,

TABLE 1 Goal themes across all *Recovery Camps*.

Goal theme	Frequency % (n)	Example
Approach-based recovery	26.5 (412)	“Communicate when I'm angry”
Relationships	22.3 (347)	“Meet new people”
Novel physical activities	19.9 (309)	“Try abseiling”
Relaxation/recreation	13.9 (216)	“Enjoy time in nature”
Physical health	12.1 (188)	“Drink more water each day”
Avoidance-based recovery	5.3 (83)	“Be less anxious”
Total	100% (1555)	

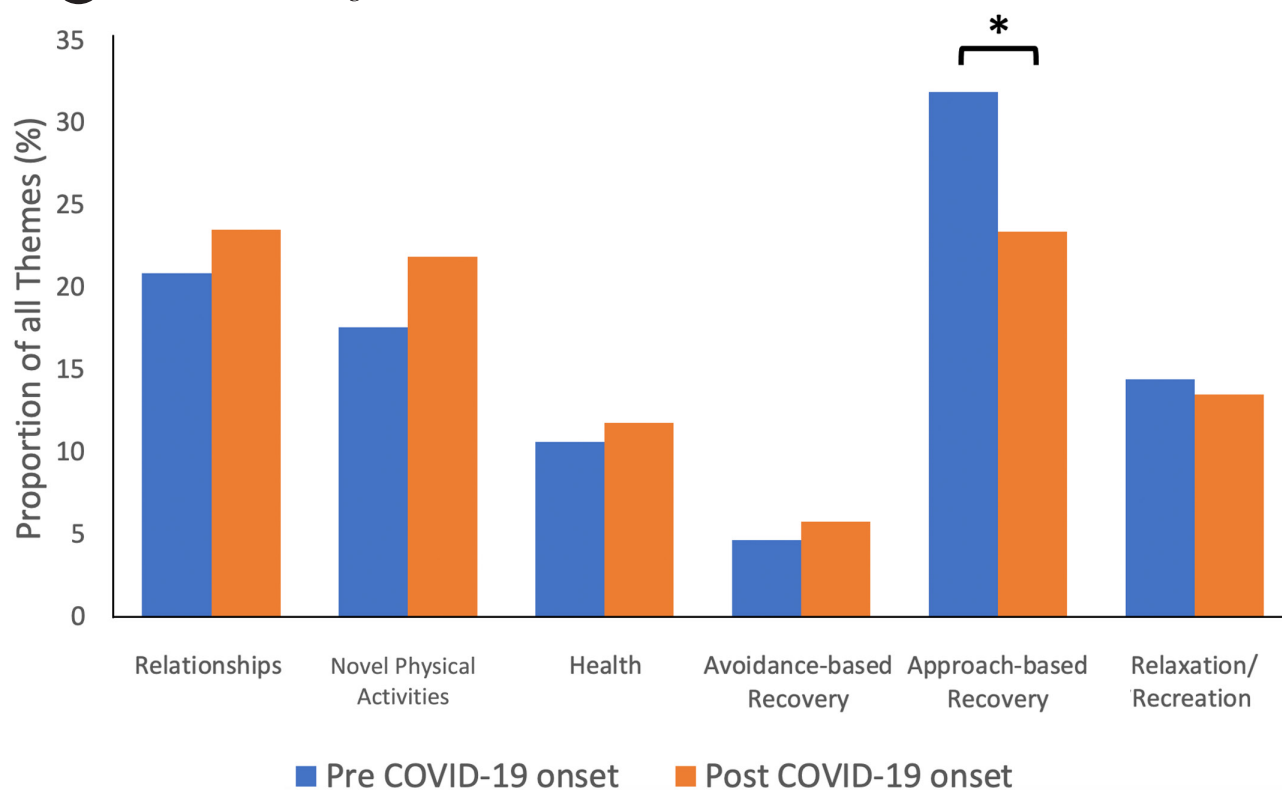


FIGURE 1 Goal themes and their change in proportion pre- and post- the onset of the COVID-19 pandemic. $*p < 0.05$.

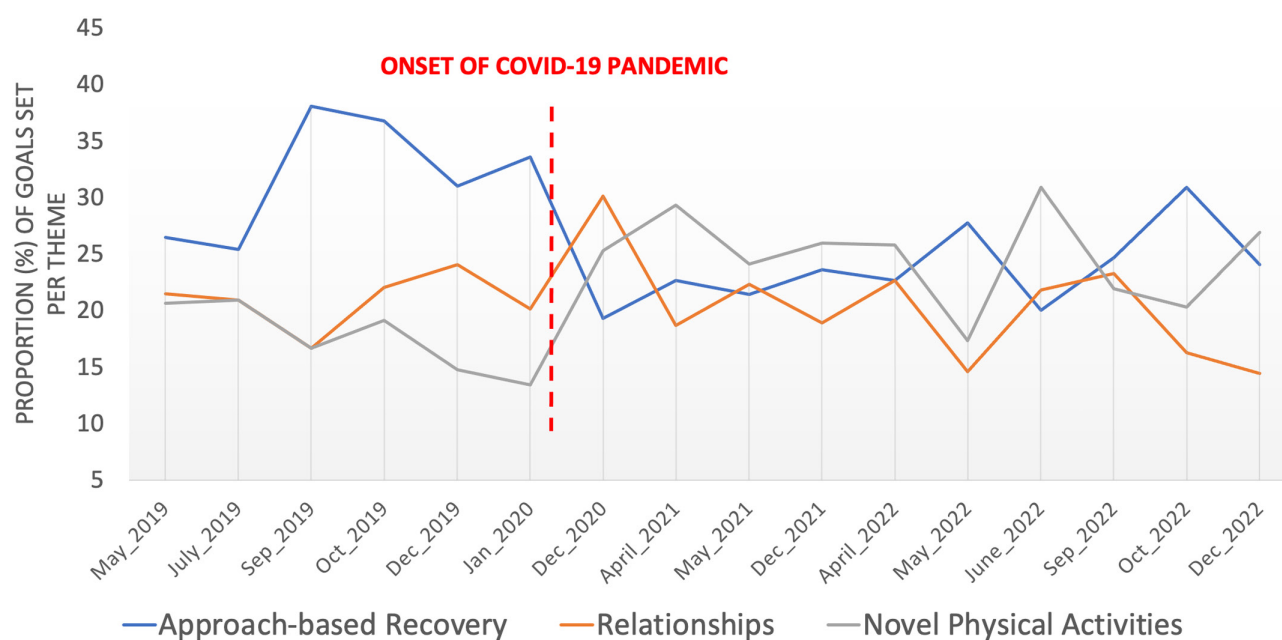


FIGURE 2 Following the onset of the COVID-19 pandemic in Australia, *Approach-based Recovery* goals significantly decrease. The importance to consumers' of goals relating to *Novel Physical Activities* and *Relationships* is evident in their subsequent increase.

Hope & Optimism, Identity, Meaning, Empowerment) for recovery (Leamy et al., 2011; Recovery Place, 2023). Social relationships and community participation have been linked with greater mental wellbeing (Ding

et al., 2015), and these findings strengthen the case for programmes and interventions that connect people with supportive, respectful, and allied relationships for mental health recovery.



The natural and recreation-based setting of *Recovery Camp* featured in goal setting underscoring its significance to consumers. Captured in the theme of *Relaxation/Recreation*, goals of this type were the second-most attained. Goals within this theme are often identified as an intentional aspect of one's recovery vision, with a specific emphasis on incorporating nature and recreational activities. In contrast with traditional hospital-based recovery settings, *Recovery Camps* are delivered at venues where consumers recreate together amidst Australian bushland. The programme facilitates involvement in therapeutic, team-based recreational activities within the natural environment – with this previously identified as connected to consumers' experiences of recovery and empowerment (Picton et al., 2019). Research investigating the effect of nature on mental health has revealed robust benefits to viewing and spending time in natural environments, such as outdoor parks, nature reserves, and national parks (Astell-Birt et al., 2023; Roberts et al., 2022). Being in nature is associated with improvements in individual mood and impulse inhibition, reduced physiological stress, and both short- and long-term positive effects noted on depression and anxiety (Bratman et al., 2012; Jimenez et al., 2021). Iwasaki et al. (2017) propound that engagement in leisure inspires strength and a deeper sense of meaning for individuals living with mental illness. Findings from this study support the idea that goal setting and goal attainment in nature-based locations, particularly those with a focus on recreation, may play a supportive role in the recovery process for individuals.

In addition, recreation like that occurring in the context of this study facilitates the incorporation of novel and adventurous physical activities, such as zip-lining, canoeing, abseiling, and rock-climbing. These activities provide an opportunity for consumers to step outside their comfort zone and challenge themselves in a supportive and non-threatening team environment. Goals relating to *Novel Physical Activities* were highly set in the present study, in agreement with previous findings (Moxham et al., 2017). This goal type increased further during the pandemic, with *Novel Physical Activities* goals predominant on 6 of 10 post-COVID *Recovery Camps*. Though outside the scope of the present analysis, it may be reasonable to speculate that scarce social engagement during the pandemic, coupled with the adventurous nature of the team-based activities, resulted in a motivated, novelty-seeking mindset amongst consumers. Such *Novel Physical Activities* can be considered relationship-adjacent; they are nature-based activities that are challenging, promote opportunities to overcome obstacles, and foster supportive relationships (Maier & Jette, 2016). In studies focusing on adventure-related outdoor activities, participation has been found to result in increased self-efficacy (Mutz & Müller, 2016), increased confidence (Patterson et al., 2017), and autonomy (MacKenzie et al., 2021).

The prevalence and attainment of *Approach-based Recovery* goals across all *Recovery Camp* programmes indicated that consumers prioritize striving for change in their recovery journey and frame this change as an *additive* process they desire to engage in. *Approach-based Recovery* goals typically involve movement *towards* a desired outcome (Sherratt & MacLeod, 2013). They enact change and generate more positive emotions than avoidance-based goals, which typically centre on reducing undesirable thoughts or behaviours (Bailey, 2019; Wollburg & Braukhaus, 2010).

Approach-based goals tend to support the notion of mental health recovery by moving towards greater personal meaning (Clarke et al., 2012). A decrease in *Approach-based Recovery* goals post-pandemic may be reflective of the priorities of consumers in the post-pandemic period. Clarke et al. (2012) identify that individuals further along in their recovery journey are more likely to set *Approach-based Recovery* goals. Considering the profound and immediate stress of the COVID-19 pandemic on individuals living with mental illness (Friis-Healy et al., 2022), self-efficacy related to goal setting, attainment, and personal recovery became less important (Ritchie et al., 2021). Alongside this, a lack of accessibility to services that equip individuals with the resources to achieve their goals is severely impaired (Munindradasa et al., 2021). In its place, there appears to be an increased need for connectedness to promote resilience in the face of pandemic-related stressors (Gizdic et al., 2023) and engagement with nature to help relieve anxieties associated with the restrictiveness of the pandemic (Wicks et al., 2023). Despite the observed decrease in goals set in this domain, noting the high achievement of *Approach-based* goals may benefit recovery-oriented practitioners as they support consumers in their recovery amidst the varying successes of avoidant-versus-approach behavioural goals.

Limitations

Consumers attending *Recovery Camp* are affected by a wide range of factors that likely influence their personal aims and goal attainment. These may include family and support network factors, relationships, employment status, living situation, stage of recovery journey, participant motivation, confidence, and self-efficacy (Rose & Smith, 2018). However, these variables are outside the scope of the present study. Future research in this area would benefit from collecting such data on *Recovery Camp* and examining whether consumer goals, and their attainment, vary in association with these factors. Additionally, the time point recognized as the onset of the COVID-19 pandemic in Australia reflects the first identified community-based transmission of the virus in March 2020 (Parliament of Australia, 2020). The authors recognize the likelihood of many influences at



various stages throughout both time periods outlined in the present study; however, we feel the broad nature of social function has been reasonably encapsulated by our decision. It should also be noted that the sample of participants in this study reside in Australia, potentially reducing the generalizability of these goal-setting behaviours to individuals living with serious mental illness in other countries.

CONCLUSION

The present study adds to the literature highlighting the importance of consumer-led goal attainment when subscribing to a recovery-based model of care for individuals living with mental illness. Recognizing the impact of the pandemic is vital to providing effective mental health care and is now particularly important given the shifting nature of consumers' goals in response to COVID-19. The high rates of goal achievement at *Recovery Camp*, in addition to the shifting importance of these goals in the post-lockdown era, provide support for integrating elements of TR activities into traditional treatment programmes for individuals living with mental illness.

RELEVANCE FOR CLINICAL PRACTICE

Post-COVID-19, consumer recovery goals reveal an increased desire for connection, positive behavioural change, and increased novelty-seeking. These results educate mental health practitioners, particularly nurses, in supporting the recovery aims and goal-directed behaviour of consumers' in their care. This is particularly relevant given the differing goal attainment rates; for example, *Avoidance-based Recovery* goals displayed low attainment, whilst *Relationships* and *Approach-Based Recovery* goals were consistently highly attained. An awareness of the shift in consumer goals in the post-pandemic period, can aid mental health nurses in collaboration with consumers, to create individualized recovery goals.

AUTHOR CONTRIBUTIONS

Christopher Patterson: Conceptualization, Methodology, Reviewing, and Editing. Michelle Roberts: Methodology, Software, Data Curation, Formal Analysis, Writing – Original draft preparation. Taylor Yousiph: Software, Data Curation, and Formal Analysis, Writing – Original draft preparation. Georgia Robson: Software, Data Curation. Kelly Lewer: Writing – Reviewing and Editing. Elissa-Kate Jay: Writing – Reviewing and Editing. Lorna Moxham: Supervision, Conceptualization, Methodology, Reviewing, and Editing.

ACKNOWLEDGEMENTS

Nil acknowledgements. Open access publishing facilitated by University of Wollongong, as part of the Wiley - University of Wollongong agreement via the Council of Australian University Librarians.

FUNDING INFORMATION

Nil funding to disclose.

CONFLICT OF INTEREST STATEMENT

Recovery Camp is research and social impact program that has been supported by the University of Wollongong to explore its potential as a social enterprise. Authors C. Patterson and L. Moxham are directors of Recovery Camp Pty. Ltd.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICAL APPROVAL

Ethical approval was obtained from the relevant institutional ethical board (approval no: 2019/ETH03767).

ORCID

Taylor Yousiph  <https://orcid.org/0000-0001-6746-7914>

REFERENCES

- Alomari, A., Hunt, L., Lord, H., Halcomb, L., Middleton, R., Fernandez, R. et al. (2021) Understanding the support needs of Australian nursing students during COVID-19: a cross sectional study. *Contemporary Nurse*, 57(3–4), 258–268. Available from: <https://doi.org/10.1080/10376178.2021.1997147>
- Astell-Birt, T., Feng, X., Hipp, A., Gatersleben, G., Adlakha, D., Marselle, M. et al. (2023) Need and demand for nature prescriptions to protect cardiovascular and mental health: a nationally-representative study with insights for future randomised trials. *Heart, Lung and Circulation*, 32, 114–123.
- Bailey, R.R. (2019) Goal-setting and action planning for health behaviour change. *American Journal of Lifestyle Medicine*, 13(6), 615–618. Available from: <https://doi.org/10.1177/155982761729634>
- Boeykens, D., Boeckxstaens, P., De Sutter, A., Lahousse, L., Pype, P., De Vriendt, P. et al. (2022) Goal-oriented care for patients with chronic conditions or multimorbidity in primary care: a scoping review and concept analysis. *PLoS One*, 17(2), e0262843. Available from: <https://doi.org/10.1371/journal.pone.0262843>
- Bratman, G.N., Hamilton, P.J. & Daily, G.C. (2012) The impacts of nature experience on human cognitive function and mental health. *The Year in Ecology and Conservation Biology*, 1249(1), 118–136. Available from: <https://doi.org/10.1111/j.1749-6632.2011.06400.x>
- Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. Available from: <https://doi.org/10.1191/1478088706qp0630a>
- Clarke, S., Oades, L.G. & Crowe, T.P. (2012) Recovery in mental health: a movement towards well-being and meaning in contrast to an avoidance of symptoms. *Psychiatric Rehabilitation Journal*, 35(4), 297–304. Available from: <https://doi.org/10.2975/35.4.2012.297.304>



- Clarke, S.P., Oades, L.G., Crowe, T.P., Caputi, P. & Deane, F.P. (2009) The role of symptom distress and goal attainment in promoting aspects of psychological recovery for consumers with enduring mental illness. *Journal of Mental Health*, 18(5), 389–397. Available from: <https://doi.org/10.3109/09638230902968290>
- Cruwys, T., Haslam, A., Dingle, G.A., Haslam, C. & Jetten, J. (2014) Depression and social identity: an integrative review. *Personality and Social Psychology Review*, 18(3), 215–238. Available from: <https://doi.org/10.1177/1088868314523839>
- Ding, N., Berry, H.L. & O'Brien, L.V. (2015) One-year reciprocal relationship between community participation and mental well-being in Australia: a panel analysis. *Social Science & Medicine*, 128, 246–254. Available from: <https://doi.org/10.1016/j.socscimed.2015.01.022>
- Faul, F., Erdfelder, E., Buchner, A. & Lang, A.-G. (2009) Statistical power analyses using G*power 3.1: tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160.
- Fernandez, R., Sikhosana, N., Green, H., Halcomb, E.J., Middleton, R., Alananzeh, I. et al. (2021) Anxiety and depression among healthcare workers during the COVID-19 pandemic: a systematic umbrella review of the global evidence. *BMJ Open*, 11(9), e054528. Available from: <https://doi.org/10.1136/bmjopen-2021-054528>
- Fisher, J.R.W., Tran, T.D., Hammarberg, K., Sastry, J., Nguyen, H., Rowe, H. et al. (2020) Mental health of people in Australia in the first month of COVID-19 restrictions: a national survey. *Medical Journal of Australia*, 213(10), 458–464. Available from: <https://doi.org/10.5694/mja2.50831>
- Franklin, M., Lewis, S., Willis, K., Rogers, A., Venville, A. & Smith, L. (2019) Controlled, constrained, or flexible? How self-management goals are shaped by patient-provider interactions. *Qualitative Health Research*, 29(4), 557–567. Available from: <https://doi.org/10.1177/1049732318774324>
- Friis-Healy, E.A., Farber, E.W., Cook, S.C., Cullum, K.A., Gillespie, C.F., Marshall-Lee, E.D. et al. (2022) Promoting resilience in persons with serious mental health conditions during the coronavirus pandemic. *Psychological Services*, 19(Suppl 1), 13–22. Available from: <https://doi.org/10.1037/ser0000594>
- Gizdic, A., Baxter, T., Barrantes-Vidal, N. & Park, S. (2023) Social connectedness and resilience post COVID-19 pandemic: buffering against trauma, stress, and psychosis. *Psychiatry Research Communications*, 3(2), 100126. Available from: <https://doi.org/10.1016/j.psycom.2023.100126>
- Hamm, J.M., Tan, J.X.Y., Barlow, M.A., Delaney, R.L. & Duggan, K.A. (2022) Goal adjustment capacities in uncontrollable life circumstances: benefits for psychological well-being during COVID-19. *Motivation and Emotion*, 46, 319–335. Available from: <https://doi.org/10.1007/s11031-022-09941-6>
- Hendryx, M., Green, C.A. & Perrin, N.A. (2008) Social support, activities, and recovery from serious mental illness: STARS study findings. *The Journal of Behavioural Health Services and Research*, 36, 320–329. Available from: <https://doi.org/10.1007/s11414-008-9151-1>
- Holt-Lunstad, J., Smith, T.B. & Layton, J.B. (2010) Social relationships and mortality risk: a meta-analytic review. *PLoS Medicine*, 7(7), 1–20. Available from: <https://doi.org/10.1371/journal.pmed.1000316>
- Iwasaki, Y., Messina, E. & Coyle, C. (2017) Role of leisure and meaning-making for community-dwelling adults with mental illness. *Journal of Leisure Research*, 47(5), 538–555. Available from: <https://doi.org/10.18666/jlr-2015-v47-i5-5305>
- Jacob, K.S. (2015) Recovery model of mental illness: a complementary approach to psychiatric care. *Indian Journal of Psychological Medicine*, 37(2), 117–119. Available from: <https://doi.org/10.4103/0253-7176.155605>
- Jimenez, M.P., DeVille, N.V., Elliott, E.G., Schiff, J.E., Wilt, G.E., Hart, J.E. et al. (2021) Associations between nature exposure and health: a review of the evidence. *International Journal of Environmental Research and Public Health*, 18(9), 4790. Available from: <https://doi.org/10.3390/ijerph18094790>
- Labib, S.M., Browning, M.H.E.M., Rigolon, A., Helbich, M. & James, P. (2022) Nature's contributions in coping with a pandemic in the 21st century: a narrative review of evidence during COVID-19. *The Science of the Total Environment*, 833, 155095. Available from: <https://doi.org/10.1016/j.scitotenv.2022.155095>
- Leamy, M., Bird, V., Le Boutillier, C., Williams, J. & Slade, M. (2011) Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis. *The British Journal of Psychiatry*, 199(6), 445–452. Available from: <https://doi.org/10.1192/bjp.bp.110.083733>
- Mackenzie, S.H., Hodge, K. & Filep, S. (2021) How does adventure sport tourism enhance well-being? A conceptual model. *Tourism Recreation Research*, 48(1), 3–16. Available from: <https://doi.org/10.1080/02508281.2021.1894043>
- Maier, J. & Jette, S. (2016) Promoting nature-based activity for people with mental illness through the US “exercise is medicine” initiative. *American Journal of Public Health*, 106(5), 796–799. Available from: <https://doi.org/10.2105/AJPH.2016.303047>
- Martino, J., Pegg, J. & Frates, E.P. (2017) The connection prescription: using the power of social interactions and the deep desire for connectedness to empower health and wellness. *American Journal of Lifestyle Medicine*, 11(6), 466–475. Available from: <https://doi.org/10.1177/1559827615608788>
- Marynowski-Traczyk, D., Moxham, L. & Broadbent, M. (2017) Emergency department registered nurses' conceptualisation of recovery for people experiencing mental illness. *Australasian Emergency Nursing Journal*, 20(2), 75–81. Available from: <https://doi.org/10.1016/j.aenj.2017.04.002>
- Maybery, D.J., Goodyear, M.J., Reupert, A.E. & Harkness, M.K. (2013) Goal setting within family care planning: families with complex needs. *The Medical Journal of Australia*, 199 (3 Suppl), S37–S39. Available from: <https://doi.org/10.5694/mja11.11179>
- Maybery, D., Reupert, A. & Goodyear, M. (2015) Goal-setting in recovery: families where a parent has a mental illness or dual diagnosis. *Child and Family Social Work*, 20(3), 354–363. Available from: <https://doi.org/10.1111/cfs.12084>
- McGuire, A.B., Lysaker, P.H. & Wasmuth, S. (2015) Altered self-experience and goal-setting in severe mental illness. *American Journal of Psychiatric Rehabilitation*, 18(4), 333–362. Available from: <https://doi.org/10.1080/15487768.2015.1089800>
- Moxham, L., Taylor, E.K., Patterson, C., Perlman, D., Brighton, R., Heffernan, T. et al. (2017) Goal-setting among people living with mental illness: a qualitative analysis of recovery camp. *Issues in Mental Health Nursing*, 38(5), 420–424. Available from: <https://doi.org/10.1080/01612840.2016.1271067>
- Munindradasa, A., Blashki, G., Hall Dykgraaf, S., Desborough, J. & Kidd, M. (2021) General practitioner management of mental health during the COVID-19 pandemic. *Australian Journal of General Practice*, 50(7), 472–477. Available from: <https://doi.org/10.31128/AJGP-11-20-5745>
- Mutz, M. & Müller, J. (2016) Mental health benefits of outdoor adventures: results from two pilot studies. *Journal of Adolescence*, 49, 105–114. Available from: <https://doi.org/10.1016/j.adolescence.2016.03.009>
- Pancani, L., Marinucci, M., Aureli, N. & Riva, P. (2021) Forced social isolation and mental health: a study on 1006 Italians under COVID-19 lockdown. *Frontiers in Psychology*, 12, 1–10. Available from: <https://doi.org/10.31234/osf.io/uacfg>
- Parliament of Australia. (2020) *COVID-19: a chronology of state and territory government announcements (up until 30 June 2020)*. Available from: https://www.aph.gov.au/About_Parliament/Parliamentary_departments/Parliamentary_Library/pubs/rp/rp2021/Chronologies/COVID-19StateTerritoryGovernmentAnnouncements



- Patterson, C., Moxham, L., Taylor, E.K., Perlman, D., Brighton, R., Sumskis, S. et al. (2017) Effect of immersive workplace experience on undergraduate nurses' mental health clinical confidence. *International Journal of Mental Health Nursing*, 26(6), 620–628. Available from: <https://doi.org/10.1111/inm.12288>
- Picton, C., Fernandez, R., Moxham, L. & Patterson, C. (2019) Experiences of outdoor nature-based therapeutic recreation programs for persons with a mental illness: a qualitative systematic review protocol. *JBIM Database of Systematic Reviews and Implementation Reports*, 17(12), 2517–2524.
- Recovery Place. (2023) *CHIME framework*. Available from: www.therecoveryplace.co.uk/chime-framework/
- Ritchie, L., Cervone, D. & Sharpe, B.T. (2021) Goals and self-efficacy beliefs during the initial COVID-19 lockdown: a mixed methods analysis. *Frontiers in Psychology*, 11, 559114. Available from: <https://doi.org/10.3389/fpsyg.2020.559114>
- Roberts, M.M., Schira, M.M., Spehar, B. & Isherwood, Z.J. (2022) Nature in motion: the tuning of the visual system to the spatio-temporal properties of natural scenes. *Journal of Vision*, 22(6), 7. Available from: <https://doi.org/10.1167/jov.22.6.7>
- Rose, G. & Smith, L. (2018) Mental health recovery, goal-setting and working alliance in Australian community-managed organisation. *Health Psychology Open*, 5(1), 1–9. Available from: <https://doi.org/10.1177/205510291877467>
- Sherratt, K.A.L. & MacLeod, A.K. (2013) Underlying motivation in the approach and avoidance goals of depressed and non-depressed individuals. *Cognition and Emotion*, 27(8), 1432–1440. Available from: <https://doi.org/10.1080/02699931.2013.786680>
- Slade, M. (2009) *100 ways to support recovery: A guide for mental health professionals*. Available from: https://healthsciences.unimelb.edu.au/_data/assets/pdf_file/0003/33917/16/100-Ways-to-Support-Recovery-Rethink-Slade.pdf [Accessed 29th September, 2022].
- Smith, L., Nguyen, T., Seeto, C., Saini, B. & Brown, L. (2011) The role of non-clinicians in a goal setting model for the management of allergic rhinitis in community pharmacy settings. *Patient Education and Counseling*, 85(2), e26–e32.
- Snedecor, G.W. & Cochran, W.G. (1980) *Statistical methods*, Vol. 191, 7th edition. Iowa: Iowa State University Press, p. 47.
- Stewart, V., McMillan, S.S., Hu, J., Ng, R., El-Den, S., O'Reilly, C. et al. (2022) Goal planning in mental health service delivery: a systematic integrative review. *Frontiers in Psychiatry*, 13, 1057915. Available from: <https://doi.org/10.3389/fpsyg.2022.1057915>
- Stewart, V., McMillan, S.S., Roennfeldt, H., El-Den, S., Ng, R. & Wheeler, A.J. (2021) Exploring goal planning in mental health service delivery: a systematic review protocol. *BMJ Open*, 11, 1–5. Available from: <https://doi.org/10.1136/bmjopen-2020-047240>
- Tabak, N.T., Link, P.C., Holden, J. & Granholm, E. (2015) Goal attainment scaling: tracking goal achievement in consumers with serious mental illness. *American Journal of Psychiatric Rehabilitation*, 18(2), 173–186. Available from: <https://doi.org/10.1080/15487768.2014.954159>
- Wicks, C.L., Barton, J.L., Andrews, L., Orbell, S., Sandercock, G. & Wood, C.J. (2023) The impact of the coronavirus pandemic on the contribution of local Green space and nature connection to mental health. *International Journal of Environmental Research and Public Health*, 20(6), 5083. Available from: <https://doi.org/10.3390/ijerph20065083>
- Wollburg, E. & Braukhaus, C. (2010) Goal-setting in psychotherapy: the relevance of approach and avoidance goals for treatment outcome. *Psychotherapy Research*, 20(4), 488–494. Available from: <https://doi.org/10.1080/10503301003796839>
- Yarborough, B.J.H., Yarborough, M.T., Janoff, S.L. & Green, C.A. (2015) Getting by, getting back, and getting on: matching mental health services to consumers' recovery goals. *Psychiatric Rehabilitation Journal*, 39(2), 97–104. Available from: <https://doi.org/10.1037/prj0000160>

How to cite this article: Patterson, C., Roberts, M., Yousiph, T., Robson, G., Lewer, K., Jay, E.-K. et al. (2024) Connection and recovery in the COVID-19 age: An analysis of changes in goal-setting throughout the pandemic by consumers living with enduring mental illness. *International Journal of Mental Health Nursing*, 33, 166–174. Available from: <https://doi.org/10.1111/inm.13232>