Running head: Identity and recovery in chronic mental health

The recovery model in chronic mental health: A community-based investigation of social identity processes

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Abstract

The recovery model has been enormously influential in shaping mental health services globally over the last decade. However, empirical research on its outcomes and psychological mechanisms is sparse. This community-based case study utilised both semi-structured qualitative interviews and quantitative survey methods to investigate perceptions of recovery, identity, and wellbeing among people with chronic and severe mental illness attending recovery-oriented support groups. Consistent with a social identity approach and the recovery model, to the extent that people identified as "in recovery", they reported better recovery outcomes (e.g., sense of purpose) and reduced psychological distress. Furthermore, recovery identity more strongly predicted recovery outcomes than it did psychological distress. Both the quantitative and qualitative data pointed to collective efficacy (i.e., group-based empowerment) as a key mediator of these outcomes. These findings are consistent with the recovery model and speak to the utility of a social identity approach for conceptualising its efficacy. However, these findings also speak to the need for further evaluation of *how* and *when* recovery-oriented mental health services achieve their intended goal of improving quality of life for people with chronic and severe mental illness.

Keywords: well-being; social identity; chronic mental illness; mental health recovery; collective efficacy

1. Introduction

Prior to the 1980s, mental health policy and practice emphasized the pathology and dependency of people with mental health conditions (Thornicroft & Tansella, 2002). Those with severe mental health conditions were often confined to institutions (Fakhoury & Priebe, 2002). However, during the 1980s, countries around the world began to move towards a new understanding of mental health. The *recovery* model arose primarily from grassroots mental health consumer groups who pushed for health services globally to adopt the model, in a process that has been likened to the civil rights and feminist movements (Beckwith, Bliuc, & Best, 2016; Jacobson & Greenley, 2001).

The recovery model supports a fundamental shift from the medical use of the word recovery, which has traditionally meant being symptom-free or "cured". Instead, this new perspective conceptualizes recovery as:

> *A way of living a satisfying, hopeful, and contributing life even with limitations caused by the illness. Recovery involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of mental illness* (Anthony, 1993, p.13).

The recovery model calls for continued reform of mental health services to better support people on their terms. A secondary aim is to challenge the fear and stigma that has historically been (and continues to be) attached to mental health issues. The recovery model advocates that everyone, regardless of how chronic or severe their mental illness, should be able to experience positive identity, hope, empowerment, wellbeing, social inclusion and a meaningful life (Ellison et al., 2018; Leamy et al., 2011). Critical to the experience of recovery is the sense of a journey shared with others – and of a shared identity which is positive and non-stigmatized (Beehler, Clark, & Eisen, 2014; Cruwys et al., 2014; Tew et al., 2012). The recovery model seeks to develop recovery identity through diverse group-based activity programs (Williams, Dingle, Calligeros, Sharman, & Jetten, 2019), often facilitated by peer workers who have a lived experience of mental illness (Eisen et al., 2012).

1.1 The recovery model in practice

Approximately 2-3 percent of adults have chronic and severe mental illness such as psychosis, complex trauma, and personality disorders (DHA, 2013; Whiteford et al., 2013). In most developed countries they are typically supported to live in the community, with the recovery model being a central guiding force in major system reform (Frost et al., 2017). However, these reforms have not been straightforward and many complexities remain (Davidson et al., 2005; Slade et al., 2014). Recovery frameworks are deliberately broad, meaning there is variability in how health services interpret them. There has been criticism, for instance, that some organizations pay lip-service to recovery rhetoric, without engaging in genuine recovery-oriented practice (Happell & Scholz, 2018; NSWCAG, 2009;).

The recovery model has substantial and global influence, and preliminary data is supportive (Jørgensen et al., 2015; Resnick & Rosenheck, 2008; Slade et al., 2015). However, quantitative evaluations have been scarce (Slade & Hayward, 2007; Warner, 2010). Although some perceive that evidence-based practice (often viewed as the domain of the medical model) and the recovery model are incompatible, this has been challenged (Davidson et al., 2009; Lester & Gask, 2006; Mueser, 2012; Torrey et al., 2005).These researchers note that both models are built on the value of improving the mental health care system. One consequence of the lack of scientific research on the recovery model is the failure to apply theoretical frameworks that might shed light on *how* and *when* the recovery model might be most beneficial. Here we seek to contribute to the empirical literature on the recovery model, drawing upon an influential social psychological theory: the social identity approach.

1.2 The social identity approach to recovery

Given the central role of both identity and social inclusion to the recovery model, the social identity approach stands out as a particularly relevant theoretical framework. This approach, which draws together social identity theory (Tajfel & Turner, 1979) and self-categorization theory (Turner,

Hogg, Oakes, Reicher, & Wetherell, 1987) is a dominant framework for understanding how social groups can influence an individual's identity.

Central to the social identity approach is the principle that an individual's self-concept may be derived not only from their personal identity (e.g., how their behaviour, achievements, and attitudes are different from others) but also from the social categories to which an individual belongs (Turner & Oakes, 1997). When a person subjectively self-defines in terms of particular group membership, this *social identity* becomes a reference point that informs their thoughts, feelings and actions (for reviews, see Brown, 2000; Hornsey, 2008; Reicher et al., 2012).

The *social identity approach to health* (Haslam et al., 2018; Haslam, Jetten, Postmes, & Haslam, 2009) argues that because our social identities fundamentally shape our psychology and behaviour, they have important implications for health. Research has found, for instance, that having strong and positive social identities predicts better depression recovery (Cruwys et al., 2013), better quality of life following brain injury (Jones et al., 2011), and fewer visits to primary care (Cruwys et al., 2018). These effects on health are large and robust. Meta-analyses suggest that social relationships are more protective against premature death than regular exercise or quitting smoking (Holt-Lunstad, Smith, & Layton, 2010), and interventions that increase social identification benefit both physical and mental health (Steffens et al., 2019). Researchers have sought to understand *why* social identities have these powerful health benefits. Experimental evidence suggests that social identities provide *psychological resources*, such as meaning, purpose, and support, which buffer individuals against threats to health (Greenaway, Cruwys, Haslam, & Jetten, 2016; Jetten et al., 2015; Junker et al., 2019). Notably, these are some of the same variables that have been posited to explain the benefits of the recovery model (Leamy et al., 2011).

While this prior work demonstrates the relevance of social identity processes to mental health, the link between social identity and the recovery model has only been investigated in the context of addiction. Transitioning from a substance-user identity to a recovery identity is protective

and predicts considerable variance in relapse and wellbeing (Dingle et al., 2015a; Dingle et al., 2019) For example, Buckingham, Frings, and Albery (2013) found that greater preference for a recovery identity over a substance-user identity was associated with lowered relapse and reduced substance among Alcoholics Anonymous and Narcotics Anonymous groups. The Social Identity Model of Recovery (Best et al., 2016) places central importance on the development of a *recovery identity*. Empirical evidence is supportive, albeit exclusively in the addiction context rather than mental health recovery more broadly (Bathish et al., 2017; Dingle et al., 2015b; Mawson et al., 2015).

A distinct but compatible program of addiction research has focused on the psychological resources that flow from recovery identity to enable positive change. Summarised in the Social Identity Model of Cessation Maintenance, these resources include collective efficacy, self-esteem, social support, normative control, and contextualism (Frings & Albery, 2015). Research has provided support for some of these pathways, and the link between recovery identity and abstinence appears particularly robust (Frings et al., 2016; Frings, Wood, Lionetti, & Albery, 2019). However, the utility of this framework in the context of mental health is yet to be demonstrated.

One mediator proposed by the social identity approach that may be particularly relevant to the mental health context is *collective efficacy*; the degree to which a person believes that the group as a whole is able to succeed and effectively reach its goals (following van Zomeren, Postmes, & Spears, 2008). This would seem to be pertinent to the goals of recovery in the context of severe and chronic mental health, which centre on hope, sense of purpose, and goal fulfilment. That is, although the recovery literature has not examined collective efficacy explicitly, related concepts such as empowerment and agency are central to recovery informed practice (Ellison et al., 2018). Furthermore, some researchers have argued that one of the main ways the recovery model achieves beneficial outcomes is by bringing people together to collectively challenge stigma and societal barriers to wellbeing (Tew et al., 2012). Outside of the mental health context, there is a large body of work indicating that collective efficacy is central to the emergence of collective action to achieve

positive social change (McNamara, Stevenson, & Muldoon, 2013; Muldoon et al., 2017; van Zomeren et al., 2008). Thus, we posited that identifying with a recovery group enables positive outcomes because it has capacity to engender a belief that, by working together, the group indeed has the ability to make these ideals a reality.

1.3 The Current Study

We undertook an investigation of the recovery model in an Australian recovery-oriented community mental health service. Our overarching research aim was to develop a more complete understanding of what recovery identity *is* and *does* for people in community mental health services. To achieve this, we drew upon the theoretical framework of the social identity approach to explore the mechanisms through which a recovery-oriented service might achieve its goals, with a focus on the link between wellbeing, recovery, and identity processes. We used a mixed method approach (Creswell & Plano Clark, 2017) including both a quantitative survey and qualitative interviews with mental health consumers. In keeping with a recovery orientation, the interviews also offered the researchers and the wider community an opportunity to hear, synthesise, and represent the stories of consumers in their own words. The interviews further enabled a more nuanced and detailed understanding of what concepts like recovery identity and collective efficacy actually meant to consumers, and their conceptualisation of the role of recovery-oriented groups in supporting their wellbeing.

In this study, we were interested in wellbeing as conceptualised by two distinct mental health frameworks. First, a traditional treatment framework operationalises mental health as the absence of symptoms, and to assess this we included the K10 to assess psychological distress. The K10 is one of the most common tools to assess mental health utilised in primary care to determine suitability for referral to specialist mental health professionals and has population norms available (Coombs, Stapley, & Pirkis, 2011). Second, we sought to assess mental health as operationalised within the recovery model. A central tenet is that a person can live a fulfilling and meaningful life without

being symptom free, and indeed, recovery-oriented services are not primarily oriented towards symptom reduction. As a result, we might expect *stronger* effects of recovery identification on recovery outcomes such as sense of purpose and role engagement. To assess these recovery outcomes, we used the validated Individual Recovery Outcomes Counter (I.ROC; Monger et al., 2013).

Our hypotheses were:

H1. Recovery identification would be negatively associated with psychological distress (H1a) and positively associated with recovery outcomes (H1b).

H2. Recovery identification would explain more variance in recovery outcomes than in psychological distress, such that consistent with the recovery model, people are able to live a "full and fulfilling life" in spite of ongoing symptoms of mental ill-health.

H3. Recovery identification will predict wellbeing (better recovery outcomes, less psychological distress) to the extent that it supports the emergence of collective efficacy.

2. Methods

2.1 Participants and design

Participants were 68 adults with chronic and severe mental illness recruited from a recovery-oriented Australian metropolitan community mental health service. The service was funded to provide case management, homeless out-reach, and in-home support options to clients aged 18 years and older with severe mental health issues. One of the primary services offered by the community mental health service was recovery-oriented group-based support, which was the focus of our investigation. This included a diverse array of free group programs including the internationally popular Hearing Voices group (Escher & Romme, 2012; Ruddle, Mason, & Wykes, 2011), structured support groups such as Wellness Recovery Action Planning (WRAP; Cook et al., 2012), and creative arts groups (Williams et al., 2019). While the content of each group program differed, all groups run by the community mental health service had in common that they were informed by

the national recovery framework in both their development and delivery (Australian Government Department of Health and Ageing, 2013). All groups shared the aims of enhancing understanding of recovery and increasing individual capacity to manage mental health challenges and wellbeing needs. They also sought to promote a language and culture of hope and optimism, value lived experience, and challenge stigmatizing attitudes.

Each group was conducted by two trained facilitators. Where possible, at least one facilitator was a peer worker, who drew upon their lived experience of a mental health issue. Groups were conducted face to face and typically ran for two hours every week, for a period of eight weeks, with a maximum of 8-10 clients in attendance. Clients could be referred to the group program through several pathways, including their case manager at the service, their general practitioner, an external organization, or a self-referral.

2.2 Procedure

The research was conducted collaboratively by the authorship team, which included a peer worker from the service. Clients were informed verbally about the study during the first session of each group and invited to participate in the survey at the end of the group's first or second session. Participants received a $10 shopping voucher. In most cases, the group in which recruitment took place was not participants' only experience of the recovery-oriented service; 44% had participated in a prior group and 18% in a concurrent group. Therefore, although participants were newly commencing the specific group where they were recruited, they were mostly established clients of the recovery-oriented community mental health service. As such, they had prior opportunity to develop an understanding of the recovery model and to have developed a recovery identity and its benefits.

In the final group session, participants were also invited to complete an individual semi-structured interview. Six interviews were conducted by either the second author and another group facilitator, both of whom had extensive training in community mental health. The interviews took

approximately 30 minutes and were conducted in a private room at the service. All participants were offered the opportunity to read through their transcriptions and make any amendments.

2.3 Measures

The study was designed to be brief and simple due to the complex mental health issues in the sample and varying levels of cognitive function and literacy. Surveys were completed independently by each participant with pen and pencil at the end of the session. The facilitator was available to support participants as needed and clarify any questions.

2.3.1. Demographic questions. Participants answered a series of demographic questions, including age, gender, housing situation, service involvement, current primary mental health concern, and additional mental health supports.

2.3.2 Recovery identification. The Single Item Social Identification scale (SISI; Postmes, Haslam, & Jans, 2013) was used to measure recovery identity: "Right now, I identify with people who are in recovery", with responses from 1 (*fully disagree*) to 7 (*fully agree*). The SISI has shown strong convergent validity with the 14-item scale from which it was derived and has good test-retest reliability (Postmes et al., 2013; Reysen, Katzarska-miller, Nesbit, & Pierce, 2013).

2.3.3 Collective efficacy. Single item collective efficacy scales have been validated in various contexts (e.g., Boström et al., 2013; Lim & Eo, 2014), assessing individuals' perception of the group's capability as a whole. Following Bandura (2006), participants were asked "How confident are you that this group as a whole can achieve recovery?" on a ten-point scale, with three points containing verbal descriptions of 1 (*not confident)*, 5/6 (*somewhat confident)* and 10 (*very confident*). A higher score indicated greater perceived collective efficacy.

2.3.4 Psychological distress. The K10 (α=.91; Kessler et al., 2003) assessed psychological distress. The K10 comprises ten items examining the extent to which mental health symptoms (predominantly symptoms of anxiety and depression) have been present in the past four weeks, for example "About how often did you feel worthless?". Responses were recorded on a 5-point scale

from 1 (*none of the time*) to 5 (*all of the time*). Prior research has indicated a moderate correlation between the K10 and measures of mental health recovery (Andresen, Caputi, & Oades, 2010).

2.3.5 Recovery outcomes. The I.ROC (α=.87, Monger et al., 2013) was used to assess recovery. Developed and validated in line with the recovery model (Dickens et al., 2019; Monger et al., 2013), the I.ROC is based around four areas of wellbeing: *home* (e.g., having a safe and secure place to live), *opportunity* (e.g. to pursue meaningful education, work and/or leisure), *people* (e.g. social support) and *empowerment* (e.g. self-management). In total, the I.ROC contains 12 questions, such as "In the past 8 weeks, how often have you felt hopeful for the future?" Responses were scored on a 6-point scale of 1 (*never*) to 6 (*all the time)* and summed to create a composite score. The I.ROC was considered particularly appropriate for this sample, who had complex mental health issues and varying levels of literacy, due to its short length, simple language, and accompanying pictographs for each item.

2.3.6 Semi-structured qualitative interviews. Semi-structured interviews aimed to capture spontaneously generated comments relating to the overarching goals of the research. Following previous qualitative research on social identity in relation to recovery (Dingle et al., 2015b), the semi-structured interview questions intentionally avoided cues to the study variables of interest. This allowed participants to orient to issues most salient to them with regard to their experiences of the recovery-oriented service. Four open-ended questions were developed:

- What was your life like before you came into the (*service-name*) group program?
- Since completing (*group-name*) at (*service-name*), what has your life been like?
- What has been your overall experience of (*group-name*) at (*service-name*)?
- (*group-name)* brings together people who are working towards recovery. What was your experience of this – of working with other people towards recovery?

2.4 Data Analysis

The interview data were analysed by the second author following principles of thematic analysis (Braun and Clarke, 2006). Specifically, transcripts were read iteratively and coding was applied to data informed by two conceptual frameworks: the recovery model and the social identity approach. Codes were then grouped together into potential themes, which were subsequently discussed and revised in consultation with the authorship team.

3. Results

3.1 Sample characteristics

The sample ranged from 18 to 68 years (M=43.13; SD=13.38). Two-thirds (67%) were women and 85% were Caucasian. Most participants (93%) had a formal mental health diagnosis and 91% were receiving mental health support from other organisations or services (most commonly a psychiatrist and/or psychologist). Only 44% were in private housing, with the remainder in supported or community housing, a boarding house, or other short term or unstable housing.

Psychological distress was, on average, in the "very high" clinical range (Andrews & Slade, 2001). This is perhaps not surprising given the vulnerability of the present sample. Participants were asked for their mental health diagnoses (most had several comorbid conditions) and this information was cross-referenced with organisational records. Most commonly reported were mood disorders (64%), anxiety disorders (47%), psychotic disorders (39%), traumatic stress disorders (17%) and personality disorders (15%). Diagnoses were highly diverse in the sample, with small numbers of participants also reporting other conditions such as obsessive compulsive disorder or hoarding disorder.

3.2 Consumer perspectives on recovery groups

From the interviews, four main themes were developed through the thematic analytic process: (1) social isolation prior to engaging with the community mental health service; (2) recovery group participation enabling meaningful social connection; (3) the recovery group environment as

empowering; and (4) benefits of participating in a recovery group. Each theme is described, alongside excerpts using pseudonyms.

Theme 1: Prior social isolation. All participants described extreme and distressing social isolation prior to engaging with the service. In most cases, participants explicitly linked this isolation to their mental ill health, such as in Michael's case:

> *I would isolate myself from my friends quite frequently, maybe with fear…I think with the fear of showing some symptoms of my depression or I guess not being able to manage the welling up of either anger, sadness or anxiousness in that moment.* (Michael)

In the case of this participant, *showing* signs of mental ill health was of concern and led to him isolating himself. For some participants, isolation itself was a source of distress. One participant, for instance, described her life prior to attending the recovery groups as:

> *Scarily isolating. The isolation was scary in the sense that it was very anxiety-inducing and there were only a small number of people I felt close to. I probably rang them up far too often! Isolation was the worst. My world was unbelievably narrow.* (Katie)

Theme 2: The group environment enables meaningful social connection. Most interviewees described a strong sense of connection with the other recovery group members and a growing sense of trust and acceptance.

> *Another thing that really helps with these courses is just the social kind of aspect, if that's the right term…being around other people with the same sort of problems and situations…and getting some solace I think, knowing that you are not the only one. When people are telling their stories I think, well I could be telling this!* (Gary)

As Gary states, and in most participants' experiences, the shared understanding of mental ill health with other members of the group could lead to "solace". This was in contrast to their experiences of prior isolation. For Michael, being in a group with similar experience lessened his fear of rejection:

> *At first, it was a little bit daunting. I think that before the start of (group-name), it was very difficult to communicate my illness to other people, because I thought that they would reject me. But being in a group, all people who are recovering…I guess that sense of rejection was reduced because we are all working towards recovery and working to better ourselves and*

we understand that people fall down and need help and that help is good. (Michael)

These benefits stood in stark contrast to the social isolation described prior to joining the recovery group (Theme 1), with participants learning from and trusting the insights gained from other group members. For instance, Katie reflected on how such social support would help her in her times of need:

> *I like the way* (recovery group name) *made me reflect on what I'm like when the wheels start wobbling, what I'm like when the wheels are falling off and what to do if all the wheels fall off at once! I ended up giving cards with my doctor's number and my psychiatrist's number to all of my friends and trusted neighbours. I told them all that if you see the wheels start to wobble, ring up the GP or ring up the psychiatrist. To give people permission to do that – it makes them take things seriously.* (Katie)

There was also evidence of one 'deviant case' (Ross, 1963): a participant who did not develop a sense of belonging in the group. Judy stated that a lack of information about fellow group members was a barrier to connecting effectively with them:

> *I had no idea what other people's problems were…what brought them here. I wasn't sure what we had or didn't have in common. Were they hospitalized? No information was given.* (Judy)

Theme 3: The recovery group environment as empowering. Participants' accounts often linked the development of a recovery identity to the sense of purpose that they derived from engaging with the group. For example:

> *The thing that I am struggling with and will struggle with for quite a while, because I had such a good life before, is purpose. I don't feel like I have a purpose. But when I come to group, I feel I do have a purpose, because of the way I am able to disseminate information to the others.* (Kristin)

Kristin acknowledges that her distress will be an ongoing struggle. However, through "disseminat[ing] information to the others", she is able to feel purpose.

> *Seeing other people's artwork and hearing their stories…it's really inspiring. Sometimes with the art group, I noticed that people who were so unwell they could barely speak could do the most wonderful paintings.* (Katie)

Participants referenced ways in which the group made them feel more empowered or optimistic about their own recovery journey, often in relation to learnings that were applicable within their lives. The group environment could be experienced as empowering for a number of reasons. As Katie notes, the group provided a space that allowed members to share their strengths. Even members who "could barely speak" were still able to contribute and demonstrate their capacity. As well as empowering for these group members through sharing their artwork, Katie also noted it was "inspiring" for her to see.

> *You can learn off other people experiencing* (the) *same issues as you. Like, you might find something about yourself that they haven't tried and they might try it and say that's helpful. And vice versa, makes me learn from them.* (Harry)

> *Sometimes they* (other group members) *give you a leg up. Making it a shared experience makes a difference. I've made major changes in my life and that has a lot to do with the group that I am in.* (Kristin)

In explaining how they found the group empowering, participants often directly highlighted how the *personal* benefits they derived were attributable to the *group* environment. This is apparent here, for example, in Harry noting that he could "learn off other people" and in Kristen stating that the major changes in her life had "a lot to do with the group".

Theme 4: Personal benefits of participating in a recovery group. The perceived benefits of participating in the recovery group were diverse, ranging from improved wellbeing, new coping skills, or a different perspective on setbacks. For example:

> *My overall experience with (group-name) has been a journey of confidence building.* (Michael)

> *It's changed in the sense of how I view things. My life is still messy day to day but I seem to be doing a lot better at stepping back, viewing things and absorbing information. I've learned quite a few skills from the courses that have helped me to do that.* (Gary)

Judy – who did not feel a sense of connection to other group members – was also the only participant who reported limited personal benefits from the groups. This is consistent with our theoretical framework. Judy stated:

> *No noticeable change in my depression. I read a lot of mental health articles, so there were only a few things taught in the course that I didn't already know. It didn't help me get better. (Judy)*

However, she nevertheless went on to state that she found the inclusive and non-stigmatising approach to mental health care to be eye-opening:

> *...but I learned how the community is trying to deal with mental health…. In my country, suicide rates are very high and mental health treatments are only available if you're are extremely unwell. I feel guilty but privileged, fortunate to have access to a well-structured, well-managed free course.* (Judy)

3.3 The link between recovery identity and wellbeing

Confirming H1a, recovery identity was a significant negative predictor of psychological distress in a regression analysis, $F(1,66)=6.65$, $p=.012$, explaining 8% of the variance. Confirming H1b, recovery identity was also a significant positive predictor of recovery outcomes in a regression analysis, $F(1,66)=19.43$, $p<.001$, explaining 23% of the variance.

To evaluate H2, a repeated measures ANOVA was specified in which the dependent variable, wellbeing, had two indicators: recovery outcomes and psychological distress. Recovery identification was specified as a continuous predictor. The critical test of H2 was the interaction term between recovery identification and wellbeing, $F(1,66)=16.30$, $p<.001$. This indicated that the relationship between recovery identity and recovery outcomes was significantly *stronger* than the relationship between recovery identity and psychological distress. The two wellbeing indicators are plotted in Figure 1 at each level of recovery identification.

3.4 Collective efficacy as the mechanism through which recovery groups benefit participants

The role of collective efficacy (H3) was tested using a mediation model (10,000 bootstraps in Model 4 of PROCESS v3.3; Hayes, 2017). These models are summarised in Figure 2. In both models, recovery identification significantly predicted collective efficacy ($\beta=.30$, $p=.015$). Collective efficacy, in turn, predicted recovery outcomes ($\beta=.40$, $p<.001$) and psychological distress ($\beta=-.42$, $p<.001$). Both indirect effects were significant and of comparable size, such that collective efficacy

mediated the relationship between recovery identification and recovery outcomes (accounting for approximately 25% of the variance) and between recovery identification and psychological distress (accounting for approximately 43% of the variance). Once this indirect effect via collective efficacy was accounted for, the direct effect of recovery identification on recovery outcomes remained significant (β=.36, *p*=.001), but the direct effect of recovery identification on psychological distress was non-significant (β=-.17, *p*=.145). This provided support for H3.

Finally, as a sensitivity analysis, we assessed the plausibility of the reverse causal order of these variables by conducting mediation analyses swapping the independent and dependent variables. In both cases, the indirect effect was non-significant (β_{K10} = -.10; CI: -.24, .01; $\beta_{I.ROC}$ = .04; CI: -.10, .20). This provides no support for the alternative hypothesis that wellbeing affects recovery identity via collective efficacy.

4. Discussion

This study used both qualitative and quantitative methods to provide the first investigation of social identity processes in a recovery-oriented group program for people with chronic and severe mental illness. The qualitative data suggested that recovery-oriented groups had benefits for attendee wellbeing and were valued for their role in fostering meaningful social connection. In addition, consumers emphasised that they felt empowered by their group experience and "in it together" in a way that supported their capacity to meet their recovery goals. The recovery-oriented groups provided a kind of rallying point for effective and *collective* action to improve outcomes for themselves and one another.

The quantitative data provided further evidence for the importance of social identity processes in mental health recovery. Specifically, social identification as "in recovery" was associated with reduced psychological distress and, even more strongly, with recovery outcomes such as sense of purpose and daily functioning. Aligning with the interview data, mediation analyses provided evidence that these benefits of recovery identity were attributable to the way in which it

engendered collective efficacy for group members to accomplish their shared recovery goals. Together, these data indicate that the *group* processes in the recovery-oriented groups enabled *individual* benefits for participants.

4.1 Implications

The recovery model has become highly influential in the provision of modern mental health services, a fact which is perhaps better understood as part of social movement to protect the rights of people with mental ill-health, rather than a shift driven by the scientific evidence (Beckwith et al., 2016). Recovery principles such as person-centred care undoubtedly have moral value. However, this moral focus has meant there has been little empirical investigation of whether the recovery model effectively meets its goals. This investigation is needed to enable for continual improvement of recovery-oriented mental health services and the wellbeing of consumers.

Against this backdrop, the current study provides several new insights. First, it illustrates how the social identity approach provides a much-needed theoretical framework to explain and study the recovery model. This realisation has recently gained traction in the field of addiction (Frings & Albery, 2015), but is explored for the first time here in the context of mental health. Second, this study provides evidence consistent with the recovery model, such that participants who were more fully engaged in recovery-oriented groups (as indexed by their recovery identity) reported reduced psychological distress and better recovery outcomes.

Third, this study provides insights into which features of recovery-oriented practice might be particularly beneficial. Specifically, the *group-based* nature of the program was singled out by interviewees. All interviewees described distressing social isolation prior to joining the recovery group, and it is a salient aspect of their experience that the recovery group was key to breaking down that isolation. The development of a shared recovery identity is unique to this model of care, because traditional mental health services rarely enable empowerment through shared experiences. An implication of these findings, then, is that recovery-oriented care might emphasise activities that

facilitate the development of shared recovery identity. For practitioners, this suggests that facilitating a positive group environment can be key to effective intervention. Other recent research has provided insights into how this can be achieved (Cruwys et al., 2019; Steffens et al., 2019).

4.2 Strengths and Limitations

This project had a number of notable strengths, in particular its external validity ensured through community-based data collection with vulnerable service users. The diverse content of the different groups in this study increases our confidence that the findings are attributable to what each group had in common: its focus on recovery principles and developing a shared recovery identity. The data collection process was also consultative, and sought to represent the perspectives of healthcare consumers. Nevertheless, there are some significant limitations: like many community health studies with vulnerable groups, the data is cross-sectional and the sample is small, with data collection occurring at the commencement of the groups. Although this prevents us from inferring causality, we nevertheless observed large effect sizes. This accords with previous research on recovery identity in addiction (Dingle et al., 2015a), and speaks to the likely clinical importance of recovery identity and collective efficacy. Furthermore, prior research in general population samples has already provided evidence for the causal role of social identity in enabling collective efficacy, which in turn is protective for wellbeing (Muldoon et al., 2017; McNamara et al., 2013). This research is best viewed as a detailed "case study" of recovery oriented mental health support groups, with the hypotheses generated here requiring further validation in rigorous and well-powered study designs.

4.3 Conclusions

This study, informed by the social identity approach, used qualitative and quantitative methods to explore the factors associated with positive outcomes in a recovery-oriented mental health service. In concert, the findings indicate that *seeing oneself* as a person in recovery (i.e., developing a recovery identity) is a central part of the recovery process, associated with better

wellbeing both as conceptualised within the recovery model (e.g., a more meaningful and purposeful life) and as conceptualised by a traditional mental health framework (e.g., reduced symptoms of psychological distress). Recovery-oriented support groups achieved these powerful outcomes by facilitating collective efficacy in group members – a sense that, together, we can realise our shared goals and overcome shared challenges. People with chronic and severe mental health conditions often have limited opportunities to develop positive and destigmatised social identities supporting them in achieving their goals. Ultimately, this study illustrates the value of fostering this sense of empowerment, a principle at very heart of the recovery model.

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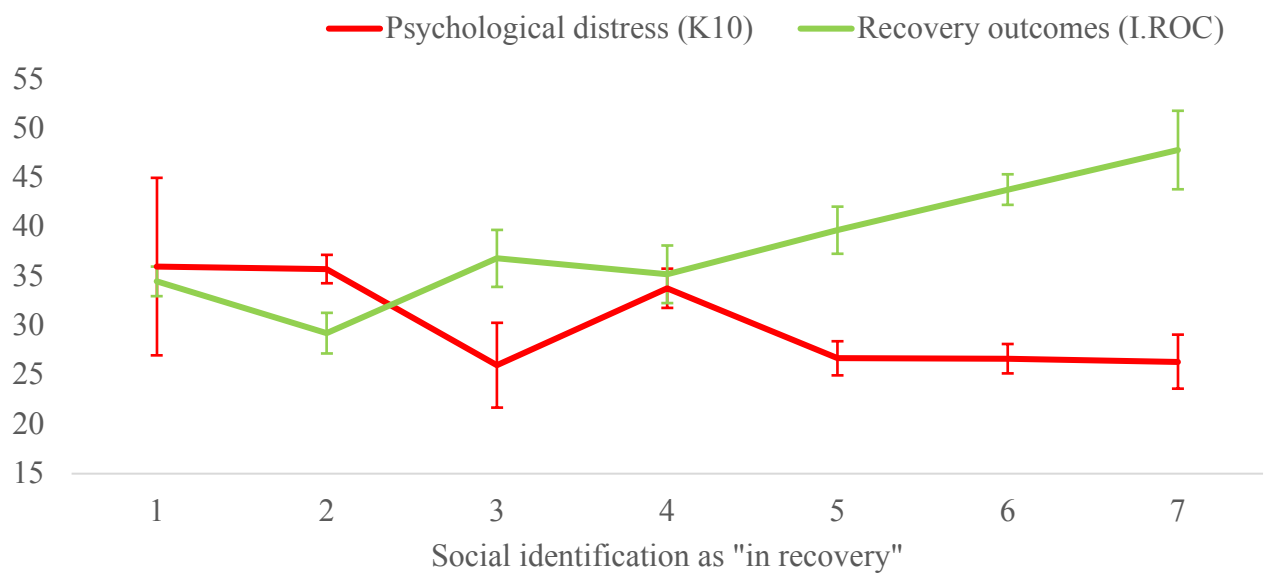
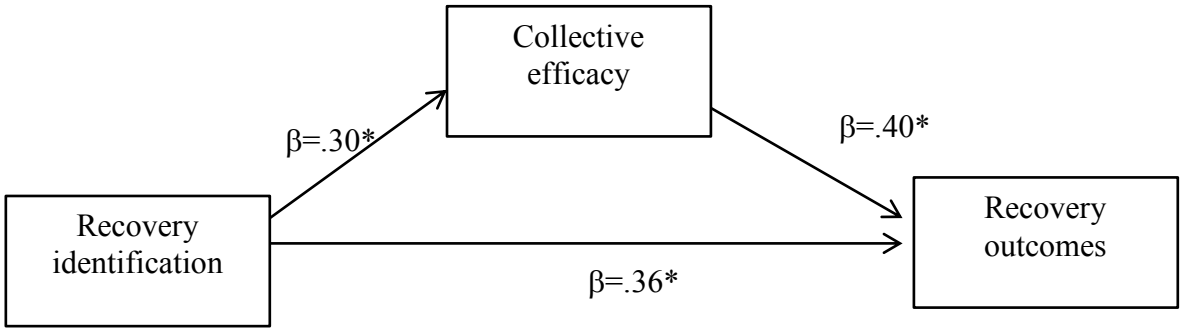
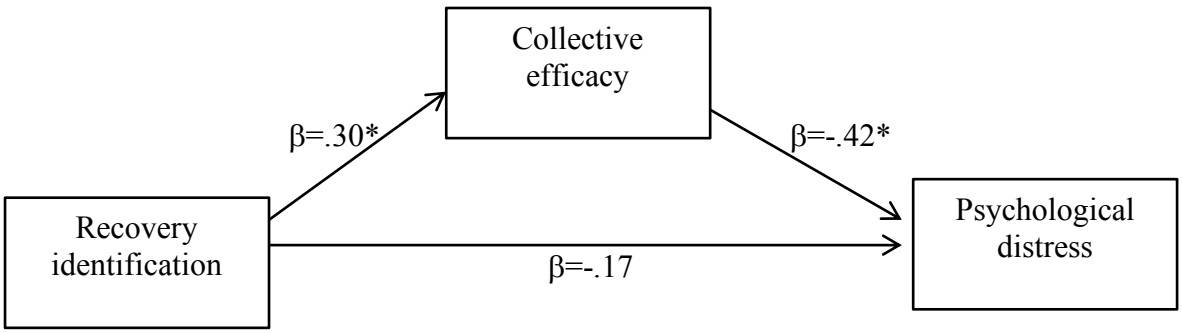


Figure 1. People with chronic mental health conditions had reduced psychological distress and better recovery outcomes the more they identified as “in recovery”. *Note.* Error bars represent standard errors.



Standardised Total effect: .48

Standardised Indirect effect: .12 (.03,.25).



Standardised Total effect: .30

Standardised Indirect effect: -.13, (-.25,-.02).

Figure 2. Collective efficacy mediates the link between recovery identity and wellbeing (recovery outcomes and psychological distress).

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