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A pilot study of the Moving On In My Recovery program for people in recovery from substance use

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ABSTRACT

Background: This study pilot tested Moving On In My Recovery (MOIMR), a 12-session, acceptance-based, cognitive-behavioral, manual-guided group program for individuals in recovery from substance use. MOIMR aims to bridge the gap between formal treatment and sustained recovery.

Method: Participants were 61 people in recovery from substance use and in the catchment area of the Betsi Cadwaladr Health Board, North Wales, United Kingdom. Using a variety of questionnaires, participants' psychological flexibility and wellbeing were assessed at baseline, post-treatment, and a three-month follow-up. Participants who dropped out were contacted at the follow-up and interviewed about their experience.

Results: The study successfully recruited participants from real-world treatment services. During the study, significant improvements were observed in participants' social functioning, experiential avoidance, recovery capital, low mood, and anxiety. The proportion of participants who achieved abstinence also improved. Qualitative feedback confirmed the benefits that participants derived from attending the MOIMR groups.

Conclusion: The program offered significant benefits for the participants despite many of them having apprehensions about undertaking a group-based approach. The gains established by quantitative analysis appeared to be supported by the qualitative findings. These findings suggest that a full randomized controlled trial of MOIMR would be feasible.

KEYWORDS

Alcohol; drugs; substance use; recovery; group intervention

Drug misuse is a global crisis. The United Nations Office on Drugs and Crime[1] estimated that in 2020 more than a quarter of a billion people used drugs—a 26% increase over the previous decade. Currently in the United Kingdom, substance misuse is a leading cause of avoidable mortality.[2]

Treatment services have had limited effectiveness in providing sustained recovery from substance misuse. In fact, relapse rates following treatment for alcohol or other substance misuse have run rampant,[3,4] for which there are many causes,[5] including maladaptive motivation.[6,7] It is evident, therefore, that recovery from an substance use disorders does not end when patients leave formal treatment. The recovery movement[8] recognizes the complexities of addiction, describing recovery as a process that takes years to complete. As a result, there is a new focus in both research and practice on the concept of recovery.[9,10]

The provision of peer recovery support, otherwise known as mutual aid, has been widely accepted as a cost-effective way of maintaining treatment gains.[11] Undoubtedly, the best known forms of mutual aid are Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), both of which embraces a 12-step intervention.[12] A Cochrane review[11] reported that manualized, 12-step interventions outperformed traditional CBT and other treatments in achieving

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abstinence. An alternative form of mutual aid is Self-Management and Recovery Training (SMART Recovery). SMART Recovery draws on evidence-based, psychological interventions, such as Motivational Interviewing and Cognitive Behavioral Therapy.[13]

Research on recovery groups for people with substance use is not new[14] but most of the research seems to focus on large, internationally available, mutual-aid groups [i.e., 12-step fellowships like AA[15]] or other well-established mutual-aid groups, such as SMART Recovery.[16] As Rettie et al. concluded, there is a growing number of small, localized recover-based groups that deserve formal investigation of their effectiveness.

Moving On In My Recovery (MOIMR) is a 12-session, manual-guided program[17] designed to provide people in recovery from substance use with the skills needed to support their recovery and to bridge the gap between formal treatment and sustained recovery. The program utilizes the principles of Acceptance and Commitment Therapy (ACT[18]) in combination with service users' lived experiences. It combines evidence-based strategies with co-production by treatment professionals and service users in recovery. This has been shown to be an effective component of psychological interventions for substance-use disorders.[19]

The MOIMR program was developed by asking people in recovery what helped them most early in their recovery (e.g., what topics were most important to consider and what strategies and techniques were most helpful to them). The program addresses many topics related to mental wellbeing and substance misuse (e.g., how to deal with loss, stigma, shame, anxiety, depression, and relapse). Each of the topics and strategies is based on psychological theory, and each is an evidence-based technique that has been shown to be effective in practice. A detailed description of the MOIMR program can be found on the program's website at: www.moving-on.uk

Consistent with other ACT-based therapies, the MOIMR program aims to enhance psychological flexibility, which is the individuals' capacity to maintain awareness and acceptance of their present state, without attempting to control or avoid unpleasant or aversive internal experiences.[18] When individuals are open to and accepting of distressing internal experiences, they are more likely to achieve a meaningful life that is consistent with their personal values.[20] By contrast, in experiential avoidance, individuals give up the pursuit of meaningful activities because of distressing internal experiences, and this ultimately leads to greater suffering.[18]

This study is the first to formally evaluate the efficacy of the MOIMR program. The primary aim of the present study was to pilot test the MOIMR program and to determine whether participants' psychological flexibility and wellbeing improved. We hypothesized that from baseline to the post-group assessment, there would be improvements in participants' psychological flexibility, wellbeing, and other areas of their functioning and that these gains would be maintained at the three-month follow-up. We also listened to participants' experiences of recovery, including those who were more likely to relapse during the study. To this end, we attempted to interview all participants irrespective of their recovery outcomes. The results of this study were expected to inform us about the viability of evaluating this program in a randomized controlled trial in the future.

Method

Participants

Participants [$N=61$ (64% males), mean age = 43 years] were recruited from six different MOIMR groups across the catchment area of the Betsi Cadwaladr Health Board, North Wales, United Kingdom. Alcohol was the primary substance of concern for 61% of the participants, heroin for 26%, cocaine for 8%, and other substances (e.g., amphetamine, ketamine) for 5%. At study entry, 54% of the sample had been abstinent from addictive substances for three months. Among the 29 participants who completed the MOIMR program, 48% completed the post-group assessment, and 41% also completed the three-month follow-up.

Design

A within-participants, repeated-measures design with three time points (baseline, post-group, three-month follow-up) was used. Qualitative

analysis included a focus group for each MOIMR group at the post-group assessment and another focus group at the three-month follow-up. In keeping with the design and delivery of MOIMR, we involved service users in conducting the study. For instance, we recruited a volunteer peer to help collect the data and to co-facilitate the semi-structured focus groups at the post-treatment and follow-up assessments; the interview protocol is included in the Supplemental Material.[1] We also aimed to minimize bias caused by participants' agreement to take part in this study. To that end, we paid all participants (whether they dropped out or continued attending the MOIMR groups) for their participation. The interview protocol for participants who did not complete the study is included in the Supplemental Material (see footnote 1). Statistical analysis was based on a series of repeated-measures ANOVAs with Bonferroni adjustments. Qualitative analysis employed a thematic analysis[21] methodology following the audio-recordings of the focus groups. The recordings were transcribed and analyzed following the six-phase approach of thematic analysis. The following steps were taken: (1) Members of the research group familiarized themselves with the data by reviewing the transcripts; (2) initial codes were generated from the data; (3) the transcripts were inspected for themes; (4) potential themes that best represented the data were selected; (5) the themes were defined and labeled; and finally (6) a report was written about the thematic analysis of the data.

Instruments

The following questionnaires were administered at each assessment point:

Recovery Strengths Questionnaire (RSQ[22]) is a 15-item self-report questionnaire that assesses five dimensions of recovery capital (social, physical, activity, personal, and attitudinal strengths). Respondents record their current satisfaction in each area on a 0-to-10 scale. The RSA is reliable (α = .93[22])

Patient Health Questionnaire (PHQ-9[23]) is a nine-item measure of low mood and depression. Respondents self-report the frequency of various clinically significant symptoms during the past two weeks on a four-point Likert scale. Internal reliability (α = .89) and test–retest reliability (α = .84[24]) are very good.

General Anxiety Disorder (GAD-7[25]) is a seven-item questionnaire that assesses anxiety. Respondents self-report the frequency of clinically significant symptoms during the past two weeks on a four-point Likert. The GAD-7 has very good internal (α = .92) and test–retest (α = .83) reliability.

General Health Questionnaire (GHQ-12[26]) is a 12-item questionnaire that assesses mental health and social functioning. Items are rated on a one-to-four scale. Reliability (α =. 93) is very good.[27]

Brief Experiential Avoidance Questionnaire (BEAQ[28]) is a 15-item questionnaire that assesses experiential avoidance. Items are rated on a one-to-six scale. Internal consistency (α =. 93) is very good.

Acceptance and Action Questionnaire–Substance Abuse (AAQ-SA[29]) is an 18-item scale with two subscales: Values Commitment and Defused Acceptance, which measure psychological flexibility vis-à-vis substance-related thoughts, feelings, and urges. The AAQ-SA is internally consistent (α = .85).

Procedure

Each participant met with a member of the research team prior to the first session of the MOIMR program to complete the *baseline* assessment. Following the last session of the program (i.e., Week 12), participants again completed the *post-treatment* questionnaires and a focus group about their experiences in the program. Participants who did not complete the program were contacted to arrange a time for them to complete the questionnaires and an individual interview. Participants were paid £5 ($6.29) for completing the baseline questionnaires and £10 ($12.59) for completing the post-group assessment.

Three months after the last MOIMR session, participants again completed the questionnaires (*three-month follow-up*) and a focus group. They were again paid £10 ($12.59) for their time. Participants were then thanked and debriefed.

Results

Of the 69 people who enrolled in the study, 61 participated. The retention rate at the post-group

assessment was 48%; of the 61 participants who began the program, 29 were retained in the study at the post-group assessment. The retention rate at the three-month follow-up was 41%; of the 61 original participants, 25 were retained at the three-month follow-up. The follow-up rate of participants who dropped out of the program was 22%. This rate was not unexpected considering the usual difficulty contacting people with substance use who have dropped out. There were no apparent differences between participants who completed the study and those who dropped out in terms of age, gender, primary substance of concern, three-month abstinence rate, or scores on any of the measures.

Quantitative outcomes

Means and standard deviations of outcome measures at baseline (pre-group), post-treatment (after the final Week 12 session) and at a three-month follow-up are displayed in Table 1. All of the measures showed a significant improvement from baseline to the three-month follow-up except for the *Acceptance* subscale of the AAQ-SA.[29] The Recovery Strengths Questionnaire,[22] a measure of recovery capital, the PHQ-9[23] a measure of low mood, and the GAD-7,[25] a measure of anxiety, all showed statistically significant improvement from baseline to post-treatment, and the improvements were maintained at the three-month follow-up. In contrast, the GHQ-12,[26] a measure of social functioning, the BEAQ,[28] a measure of experiential avoidance, and the AAQ-SA[29] *Values* subscale all significantly improved from baseline to the three-month follow-up but these outcomes were not significant at the post-treatment stage. Finally, abstinence rates (based on a criterion of continued abstinence for a minimum of the previous three months) improved from baseline (55%) to post-group (62%) and to the three-month follow-up (68%).

Table 1. Means and standard deviations of participants' questionnaire scores at baseline (Week 1), at post-treatment (Week 12), and at the three-month follow-up.

	Baseline		Post-treatment		Three-month follow-up	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
Recovery strengths (RSQ)	85.1	23.8	100.8***	22.8	104.3***	26.3
Low mood (PHQ-9)	15.6	7.4	11.3**	6.3	9.1***	7.9
Anxiety (GAD-7)	13.5	5.9	9.0**	5.7	7.9**	6.6
Social functioning (GHQ-12)	17.6	9.4	12.6	8.4	11.5*	7.8
Experiential avoidance (BEAQ)	59.9	14.7	56.8	15.6	53.6*	13.1
Acceptance (AAQ)	31.8	11.2	38.0	13.5	37.8	13.7
Values (AAQ)	43.8	6.0	47.6	9.5	48.4*	7.9

Note: *$p < .05$. **$p < .01$. ***$p < .001$.

Qualitative outcomes

The Thematic Analysis revealed four main themes as follows:

Theme 1: *Barriers and benefits of attending MOIMR*. Many participants described an initial reluctance to attend a group-based program followed by an increased level of importance for it. They had a tendency to downplay the anticipated effectiveness of the program or their own need to participate. This initial reluctance was, however, balanced against the participants' need to work on their recovery within the structure that MOIMR provided. In answer to the question, "Please can you tell me about your experience of being involved in Moving On In My Recovery," participants described:

> (Male Participant One) At first, because it was a sort of group thing, I was nervous but after I, after I attended a couple of sessions they made me feel quite at home…so it turned out to be something that I had to force myself to do to something that I wanted to do,

> Other participants described: (Patrick) I was the biggest sceptic.; (Lynne) I just didn't want to do it.; (Carl) I dreaded it.; (Marc) I was not keen on groups.

This attitude to participation was, however, outweighed by participants' need to work on their recovery within the structure provided by MOIMR that they had not found elsewhere:

> (Peter) The whole way it is structured and along with being able to discuss with people going through a situation the same as yourself is one of the things that helped me.

> (Ian) Each week there is a focus on a theme… other mutual aid groups don't do that…I found that with AA people just stood up and told a story and you couldn't interject whereas in this course there was an interaction between you and everyone else and you can talk about things.

(William) From being the biggest sceptic. I was totally shocked by the impact.

Theme 2: *Feeling connected*. A very prominent theme was the sense that prior to entering the program many people felt alone and isolated in their recovery from addiction. Other people in the group impacted on the participants, and there was a sense of a shared journey. The group deepened participants' ability for perspective-taking. Co-facilitation by people with lived experience was also highly valued. Participants reported:

(Dave) You realized that you are not alone. And (Ian), I just thought there was something wrong with me…; I have come to realize I can't help the way I feel and I should accept that it is okay to feel this…. No one judged me. In this group I was just accepted for me, who I was, so that I have a problem but that problem doesn't define me…. I've learned not to control my thoughts but to go with them…. It helped me to stop hating yourself as much for what you had done…. Moving On helped me see the bigger picture.

Other participants described: (Carl) No one judged me. I was accepted for who I was.; (Wendy) It was good to be involved with other people, you know, sharing, talking and hearing other people.; (Marc) To have people who have been there and done it made it relatable.; (Dave) I made real friendships.; (Ian) It was an opportunity to really discuss ideas and topics.

Theme 3: *The broader impact of MOIMR skills*. Many participants described how MOIMR had impacted them in unexpected ways. They learned specific skills to cope with cravings and urges, and the skills of being able to lean in to discomfort and to let go of painful thoughts and memories helped in other ways. The program also helped participants to learn about themselves. In response to the question, "What aspects of MOIMR have been important for you throughout your recovery," participants reported:

(Carl) I noticed lots of changes: it almost shocked me back to life… What I liked most was looking at your emotions and leaning in. I used to lean out and avoid things constantly but now I just lean in to everything and it's helped me loads.

(Marc) The change in me is quite amazing really. It gives you confidence to tackle problems head on.

Theme 4: *A recovery perspective*. A frequent observation from participants was that they did not want to see the course come to an end. Many participants described MOIMR as not being a course that could simply be done just one time. In fact, many participants suggested that it should be done more than once:

(Patricia) You need to do it more than once.; I've done the course three times and you learned more each time you do it.

(Carl) It's like the first time you're not ready and then the second or even third time it comes together, you know?

Realizing that they would not have the group to attend was difficult for participants.

(Peter) I think it important that when you're finished with this course that it has to lead on to something… I really looked forward to a Tuesday and for it not to be there was really difficult.

MOIMR non-completers

We were able to contact eight participants who dropped out of the study for the post-group follow-up assessment, but one participant could not be interviewed due to intoxication. Pairwise comparisons of these participants' baseline and follow-up scores showed marginal, non-significant improvements on the Recovery Strengths Questionnaire, the PHQ-9, the GAD-7, and the BEAQ. Nevertheless, the follow-up scores of the participants who dropped out were largely equivalent to the baseline scores of the entire sample. The quality of the qualitative interviews yielded unsuitable transcripts for analysis: the individual interviews were short (with an average duration of 8 minutes and 30 seconds). Of the participants interviewed, three dropped out after two or three sessions, and they all reported that they had dropped out because they were not actually in recovery when they started the program (e.g., they were still actively using and were withdrawing whilst attending the program). The remaining participants attended between six and eight sessions, and they dropped out for several different reasons. Two were due to relapse (and feeling too ashamed to re-attend); one was because of a

re-housing issue that impacted travel; and one was because of a required court attendance. The majority of the participants thought the program was useful for them, and all but one person stated that they wished to re-attend the program at a future date. The one participant who did not wish to complete the program indicated it was due to an unwillingness to attend groups in general.

Discussion

The outcome measures selected for the study reasonably captured the changes expected from this intervention. The recovery capital of participants and their low mood and level of anxiety all improved from baseline to the post-group assessment, and these improvements were maintained at the three-month follow-up. Social functioning, a connection to values (a subscale of the AAQ-SA), and experiential avoidance all showed significant improvements, but only at the three-month follow-up. This might be a consequence of a lack of sufficient power in the study to detect all improvements, but these aspects of improvement also require significant behavioral changes; therefore, they might take greater practice and more time to achieve. The intervention specifically targeted psychological flexibility. Although there were promising outcomes on some of these measures, significant changes were not detected on the acceptance scale of the AAQ-SA, even though the mean scores changed in the expected direction.

From the service users' perspective, it appears the intervention was received positively. All of the participants who were interviewed praised the program highly, and many of those who dropped out indicated that they intended to join a MOIMR group in the future. The participants particularly valued the co-facilitation of groups by people with lived experiences. Interestingly, many participants described their initial reluctance to attend a group-based intervention, but also how their reticence about attending groups lifted as they became more comfortable in the group. Participants described being on a shared journey with other group members, including the facilitators. It seems that the structure and framework of the group was something that had been missing from the lives of the people struggling with substance use. The group made profound impacts on the participants' lives, and many felt it should be more widely available and as a form of continuous support for people in recovery. In short, participants were transformed from being reticent about group treatment to being champions of it.

This study recruited participants from real-world treatment services. We recruited 85% of those service users who were participating in the MOIMR program. Attrition from the study was high at 52% and, of course, this is a limitation; however, a recent systematic review and meta-analysis of dropout rates in psychosocial interventions for substance use[30] found a mean drop-out rate of around 30%. Lappan et al. found, however, that drop-out rates were higher for people identified as being addicted to substances than those who were identified as not addicted to substances, higher in group programs than individual interventions, and higher in interventions that had more than seven sessions or lasted more than 90-min. All of these factors characterized the MOIMR intervention and the sample of participants we recruited. In the present study, drop-out rates were also higher in those locales where the groups had only recently been established. In those locations where the groups had been running longer, fewer people dropped out of the study.

This study also sought to establish whether it would be viable to conduct a randomized controlled trial (RCT) to evaluate the effectiveness of MOIMR. We conclude that a RCT would indeed by feasible, and we recommend that it be carried out. We reached this conclusion on the basis of (a) the ease with which the pilot study was executed, and (b) the promising results that it yielded for the participants who completed this study. We cannot be certain, of course, that the improvements in participants' lives demonstrated in this study can be attributed solely to the intervention or whether another intervention would bring equivalent or possibly better outcomes. A RCT would allow us to draw these additional conclusions.

The aim of the MOIMR program is to target participants who are relatively stable in their

recovery and those who have already achieved abstinence. The objective is to assist these participants in maintaining their abstinence and possibly exiting from treatment when doing so seems feasible. The actual three-month abstinence rate upon entering the study was somewhat lower than expected at 54% of the sample. This rate had improved at the post-group timepoint (to 62%) and had improved still further at the three-month follow-up (to 68%). Given the acceptance-based and behavioral features of the intervention, it is possible that some of the participants were not entirely suitable for the intervention.

There were no demographic or functioning differences between those participants who were retained in the study (i.e., the Completers) and those who dropped out (i.e., the Non-completers). This implies that the Completers were representative of the entire sample. Participants who were retained in the study engaged in the follow-up interviews and were fully compliant in completing the assessment measures. This was less easily achieved with the participants who dropped out of the MOIMR program but who were contacted at the follow-up. In the main, the participants who dropped out did so because they had relapsed (i.e., had resumed their substance use at a dependent level) or because they had continued to use substances at a dependent level.

There are a number of limitations and areas where this study failed to achieve its targets. First, there was a high attrition to follow-up, although we set out to explore the experiences of all of the participants. We were highly motivated to assess the views of those who dropped out of the program, the more resilient of whom appeared to disengage due to other opportunities such as employment and others, unfortunately, due to relapse. The depth and quality of the transcripts were insufficient to warrant a thematic analysis and when it was clear that a participant was intoxicated, the interview was not completed. Second, there are potentially many more interesting areas to evaluate in such a study (i.e., the mechanisms by which change occurred or the level of recovery outcomes related to the drug of choice of participants) that were beyond the scope of this pilot study. Finally, there is potential for unintended bias by the developer of the program who was the Principal Investigator of the study, although the diversity of the research team members did ensure a range of perspectives in the analysis and interpretation of the results.

Conclusions

The pilot study of the MOIMR program demonstrated that participants achieved a broad range of improvements across the duration of the intervention, and these were maintained or further improved up to three-months after the intervention had been completed. Interviews with participants revealed that although there were perceived barriers to a group intervention, there were many unexpected benefits. Aside from the wider impact that the program brought participants, there was a deeper connection to the other group participants in what became a "shared journey." Respondents cited the need for further mutual aid opportunities following the program. We feel that the MOIMR program is a viable intervention for a larger randomized controlled trial of its effectiveness.

Note

1. Supplemental material can be requested by writing to the first author at: Dr Lee Hogan, North Wales Clinical Psychology Programme, Brigantia Building, Penrallt Road, Bangor, Gwynedd LL57 2DG. Email: lee.hogan@bangor.ac.uk.

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Ethical approval

Ethical approval was obtained from Bangor University (Gwynedd, United Kingdom) School of Psychology Ethics Committee and the UK Integrated Research Application System (code 249737). The study was registered with Research & Development Department, Betsi Cadwaladr Health Board (North Wales, United Kingdom) and with the Health and Care Research Wales Portfolio (approval code 18/WA/0279).

Disclosure statement

No potential conflict of interest was reported by the author(s).

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