Recovery pathways and societal responses in Belgium, the UK and the Netherlands (REC-PATH)

September 2021

David Best[1], Wouter Vanderplasschen[2], Jessica De Maeyer[3], Dike Van de Mheen[4], Lore Bellaert[2], Gera Nagelhout[5], Tim Millar[6], Vicky Taxiarchi[6], Matthias Pearce[6], Thomas Martinelli[5], Lorna Brown[1], Tijs Van Steenberghe[3], Freya Vander Laenen[2], Charlotte Colman[2] & David Patton[1]

[1] University of Derby, UK

[2] Ghent University, Belgium

[3] University of Applied Sciences and Arts (HOGent), Ghent, Belgium

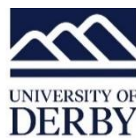
[4] Tilburg University, the Netherlands

[5] IVO Addiction Research Institute, the Netherlands

[6] University of Manchester, UK

This research was funded under the ERANID program (European Research Area Network on Illicit Drugs), with funds from the Belgian Science Policy Office (BELSPO, DR/M6/80), Research Foundation-Flanders (FWO, G0H5217N), the UK National Institute for Health Research (NIHR, PR-ST-0217-10001) and the Netherlands Organization for Health Research & Development (ZonMw).

The views expressed are those of the author(s) and not necessarily those of the funders.



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1. Short lay summary

It is now generally agreed that not only do most people eventually overcome substance use disorders, they do so through a gradual process of change that is referred to as a 'recovery journey'. The aim of this study was to assess what the key factors are that are associated with this process and whether they differ according to gender and according to the context in which the journey is undertaken.

The REC-PATH study was a collaboration between researchers in Belgium, the UK and the Netherlands who used multiple methods to address what support services and systems were commonly used in recovery and whether national policies were relevant in supporting and sustaining recovery change. Finally, we wanted to assess whether recovery pathways were different for men and women.

While the results of the outcome component of the research, where more than 300 participants completed in-depth surveys on three occasions, separated by more than one year, did not show gender differences, there were some extremely positive results:

- Relapse was unusual across the whole sample;
- Relapse was unusual, especially for those who started the study with more than five years already in recovery;
- Rates of meaningful activities and stable housing were high across the sample, while unmet needs were low particularly among those in stable recovery;
- Participants whose recovery journeys included a combination of mutual aid and treatment were associated with better outcomes than participants whose recovery journeys only included specialist addiction treatment, or only included mutual aid.

Qualitative interviews from the UK suggest that men's recovery journeys are more dependent on careers and group factors while women rely more on primary relationships (partners, parents, and children in particular). The Photovoice study revealed the methodological potential of photovoice as a research method for exploring interconnected recovery challenges among women, as well as the destructive impact of negative social norms on women's recovery experiences.

National policies appeared to have less impact on recovery experiences as, across all three countries, bold recovery models had been poorly operationalised and the delegation of policy implementation to a local level meant weak implementation and limited evaluation.

Keywords

Addiction, Recovery, Pathways, Gender, Mechanisms of Behaviour Change, Treatment, 12-step mutual aid, Natural recovery

2. Executive summary

2.1 Rationale and background

While the last 20 years has seen an explosion of research into certain key aspects of addiction recovery (such as prevalence and patterns, and the effectiveness of mutual aid groups), most of this research has been conducted in North America and there remain significant gaps in the literature. There is also a paucity of research about environmental and contextual effects on addiction recovery and the mechanisms that support and sustain recovery journeys. In 2017, building on a growing body of research, Kelly published a paper on the prevalence and pathways to addiction recovery that suggested differences in mechanisms of recovery action (for 12-step mutual aid groups) for men and women. The current study was an attempt to build on this emerging interest in mechanisms of action on the one hand, and an emerging literature on gender differences in recovery pathways and patterns on the other (Grella et al, 2008; Timko, Finney and Moos, 2005).

The second ambition was to assess context effects in recovery in more detail. While Sheedy and Whitter (2009) had described the essential elements of recovery-oriented systems of care, this was at a state or municipality level, and the field was lacking both research in non-Anglophone countries and comparative studies. The policy component of the research programme described below attempts to address this question. The programme of research was designed to assess what 'mechanisms of behaviour change for recovery' (MOBCR) are represented in recovery journeys across the participating sites (Belgium, UK, and the Netherlands) and whether these mechanisms differ both by the stage of recovery the individual has reached and as a function of their gender.

The study focused on the impact of engagement in four recovery interventions with a fifth mechanism of change involving 'natural recovery'. Natural recovery involves the transition to addiction recovery without support of either specialist treatment or help, or involvement in peer-based mutual aid groups. The four other interventions were:

1. 12-step mutual aid groups
2. Other peer-based recovery support services
3. Community based treatment (including substitute prescribing)
4. Residential treatment (including residence in a Therapeutic Community)

Specifically, there were nine research questions identified as outlined below:

RQ1: What are the characteristics of those in early, sustained, and stable recovery in England, Belgium, and the Netherlands and how do they vary by gender and by experiences of MOBCR at baseline? How has this changed by one-year follow-up?

RQ2: How often have participants experienced each of the MOBCR and at what stage of their addiction/recovery trajectory at baseline survey assessment? How has this changed by one-year follow-up?

RQ3: What are the typical combinations of MOBCR and to what extent do these vary by gender, country, and recovery stage at baseline? How has this changed by one-year follow-up?

RQ4: Are there significant baseline differences in the levels of housing stability, employment, family engagement and Quality of Life (QoL) as a function of: a) recovery stage, b) MOBCR and combination of these mechanisms, c) country, d) gender and e) age? How has this changed by one-year follow-up?

RQ5: For each staged group (early, sustained, and stable recovery), what is the evidence of positive recovery growth over time in the key outcome domains of recovery capital, social functioning, QoL, meaningful activities, and housing from baseline to one-year follow-up? Is there a relationship between follow-up outcomes and country, gender or MOBCR, and what appear to be the structural barriers and enablers for continuing recovery growth?

RQ6: What are the predictors of relapse (reinstatement of any form of illicit drug use) and loss of community reintegration, by gender, age, country, and recovery stage? If there is relapse what are the mechanisms used to reinstate recovery and how effective are they?

RQ7: How do drug users in various stages of recovery experience recovery and various sources of (social) recovery capital? In particular, what differential barriers/resources do men and women experience in their recovery process and how do women portray their recovery capital?

RQ8: What are the indicators of impact of national policies on recovery journeys and utilisation of different MOBCR? Are there particular policy applications that target women and is this manifest in either the qualitative or quantitative data?

RQ9: What recommendations for effective recovery policies can be formulated based on service users' and user organisations experiences?

2.2 Methods

Seven work packages were implemented that built on the skills profile of the research team, their existing knowledge and expertise and innovative methods and techniques that allowed for triangulation and the inclusion of the voices and experiences of our participant cohort. A brief description of each work package is provided below:

WP1: Literature and policy review: This is presented in an overview and logic paper (Best et al., 2018) and in a book chapter (Best et al., 2019) which address the conceptual foundations for the research programme.

WP2: Life in Recovery (LiR) survey: Based on original work from the US Faces and Voices of Recovery (Laudet, 2013), the LiR survey was adapted to be used as recruitment strategy and initial eligibility screening for participation in the quantitative outcome study. However, this was also designed to yield baseline data on a large sample of participants, not all of whom would be eligible for completion of the full assessment and follow-up. An agreed distribution method was developed for use in all three of the participating countries with the preferred method of completion being online, but hard copies were also made available. The survey was completed using a Qualtrics platform and disseminated through advertisement online and subsequent snowballing methods.

WP3: Quantitative study: (a) baseline collection; (b) follow-up at 12 months; (c) analysis. Those who successfully completed the Life in Recovery survey, met the eligibility criteria and were willing to sign an informed consent form were recruited into the main quantitative cohort study, agreeing to complete a structured instrument (consisting predominantly of standardised instruments of acceptable psychometric properties) on two separate occasions one year apart. The basic aim therefore was to assess changes in key recovery outcomes as a function of engagement with the five recovery mechanisms identified above. The only area that did not involve the use of standardised measures was around recovery mechanisms for which a dedicated scale was developed and piloted through the Public Patient Involvement group in Sheffield. The finalised instrument was back-translated into Dutch for use with both the Belgian and Dutch cohorts. Participants were offered the option of completing the instrument either online or, if they were uncomfortable with this option, by researcher-administered interviews.

WP4: Qualitative study: (a) in-depth + lifeline interview; (b) photovoice project with women in recovery; (c) content analysis of qualitative findings. In all three of the participating countries, a sub-sample of 30 individuals were invited to complete an in-depth qualitative interview with equal numbers of males and females participating. The interview was semi-structured and used a life-course narrative approach to assess mechanisms for recovery initiation and maintenance, and to examine the role of social groups and networks in recovery processes. Additionally, in Belgium, a Photovoice method was used with a sub-sample of female participants who were supported and trained in photography and who came together as a group to record key components of their recovery journeys.

WP5: Role of socio-environmental components in recovery pathways (policy analysis): One of the key conceptual frames for the study was around the role of context in shaping pathways to addiction recovery, with particular focus on recovery-oriented drug policies. As the UK (both Scotland and England) had established recovery policies (dating back to 2007 and 2010 respectively) whereas the advent of Dutch and Belgian recovery policies was much more recent, there was scope for a comparison of policies and their translation into practice. This involved a three-stage process in all four of the countries (because of its separate drug policies, Scotland was regarded as a separate country only for this component of the analysis). This involved:

1. Workshops with key policy makers
2. Documentary analysis of key policy documents and reports
3. In-depth interviews with key stakeholders

The aim was to assess the origins of recovery policy, the effectiveness of their implementation and the evidence generated in evaluating recovery policy.

WP6: Integration + scientific valorisation: The oversight of the project was undertaken in two ways – to ensure peer involvement through regular consultation with the Sheffield Public Patient Involvement panel, the Dutch client movement Het Zwarte Gat and through the support and advice of two international experts – Professor John Kelly from Harvard Medical School and William White of Chestnut Health Systems, both recognised as field leaders in the area of addiction recovery. Internally, the project team met on a regular basis and as data have been produced so the work has increasingly been subjected to external scrutiny through independent reviews of journal submissions.

WP7: Dissemination: community involvement + societal impact: The most immediate impact of the project was through the Belgian Photovoice work package, where there was a direct intervention and support for the participants in the form of new social networks and research support. There has been a dissemination plan that had a key component for actively engaging the participant group in the study with the findings. The major dissemination event was planned to be a conference (March 2020) which has been postponed twice as a result of the COVID-pandemic. There is a website that continues to be active to support dissemination activities. Further impact is discussed below.

2.3 Key findings

Although data from across the participating countries will be reported here for the quantitative data collection and analysis, the qualitative and policy components of the project will primarily focus on Belgium and the Netherlands.

Life in Recovery data

The Life in Recovery screening questionnaire was attempted by 364 individuals from the UK, 231 from the Netherlands and 181 from Belgium, of whom 54 did not complete all of the fields and were excluded, leaving a final sample of 722. This provided a total of 722 competed questionnaires from the first round of data collection and the same sample from whom the outcome study cohort were drawn. Across all domains there were significant improvements in functioning and wellbeing (health, finance, employment, social functioning, and crime) with longer periods in recovery associated with better functioning in each of these areas.

2.4 Implications and next steps

The implications of the study are that there has been consistency in recovery across the outcome component of the study, with some apparent benefits associated with recovery pathways that include peer-based mutual aid participation, and so active education and encouragement of engagement by professionals is a key implication. The qualitative data suggest gender differences in pathways with female pathways more strongly associated with dyadic relationships and so the emphasis should be more strongly on relationship support and family support for women in recovery. Our policy findings would suggest that much clearer definitions, operational planning and goal setting is essential if recovery policies are to be tested effectively. Finally, in terms of next steps, the project team have been supported through the UKRI COVID fund to test the impact of lockdown and subsequent easing of restrictions on recovery pathways and this funding will also support further dissemination and implementation of our findings.

2.5 Conclusions

From the quantitative analysis, clear differences appeared between countries participating in the study in their pathways to recovery, which are much clearer than the gender differences identified. It seemed that the UK sample indicates a much more prominent and visible access to peer recovery communities, although whether this is a result of more established recovery policies is harder to establish. This is something that the authors will continue to explore in the qualitative data and there is a comparative qualitative paper planned to be submitted for peer reviewed journals. This study has generated a unique and significant database involving innovative methods and multiple sites as well as cohort quantitative data, that have been supplemented with new data collection (and new dissemination techniques) through ESRC funding. However, this means that data analysis will be ongoing.

3 Description of the research

3.1 Brief background and rationale

There has been a growing body of research on the subject of addiction recovery[1] in the course of the last 20 years in both the US (e.g. White, 2009, 2012) and the UK (e.g. Best, 2019), based on agreement that there is a journey to recovery that typically takes around five years and is mediated by personal, social, and societal factors. There has also been increasing interest in 'what works' in recovery with Humphreys and Lembke (2013) identifying three core areas of evidenced support for recovery housing (particularly in the form of the Oxford House model), for peer-based delivery of interventions and for mutual aid groups, with much of the evidence for the latter coming from the 12-step approach.

The literature was also clear in showing that recovery is a staged journey (Betty Ford Institute Consensus Group, 2007; Dennis et al., 2014) that typically takes around five years characterised as a first year of 'early recovery', the period between one and five years as 'sustained recovery' and five years or more as 'stable recovery'. White (2012) has argued that this is not a linear journey and that it is a personally determined process, based on individual strengths and capabilities (Granfield & Cloud, 2001).

In 2007, Moos described four key psychological mechanisms that he considered to be at the heart of the recovery process. Two of these were social – social learning and social control – which referred to the importance of role modelling and the importance of group norms in shaping both addictive behaviours and the transition to recovery. These were accompanied by two cognitive components – coping skills and behavioural economics, with the latter referring to the perceived advantages and disadvantages of both continued use and of the transition to recovery.

This paper was one of the first to address mechanisms prior to Kelly's 2017 assessment of the effective component of 12-step mutual aid. While this paper indicated that 'spiritual transformation' was a relatively uncommon mechanism, the study showed the importance of group transitions, particularly for male problem drinkers. Not only was the paper a significant step forward in understanding mechanisms, but it also allowed for the possibility that these mechanisms might be specific to particular populations.

This has significant ramifications for the study of gender and recovery. Grella and colleagues (2008) have argued that the broad pathways of recovery journeys are similar for men and women, but there are important differences. Among 1202 people seeking addiction treatment in the US (60% women) who were followed up annually for six years post treatment initiation, women were less likely to have their recovery journeys interrupted by imprisonment, and, within each cycle of data collection, women were one third

[1] Most of the existing literature is based on studies of alcohol and opiate addiction, although there are some studies that focus on psychostimulants. For the current project, as specified by the funders, the inclusion criteria were that the sample should be people perceiving themselves to be in recovery from illicit drugs (and so not primary alcohol use).

less likely to relapse. Crucially, self-help participation was more strongly associated with recovery for women. This supports findings from an eight-year follow-up study conducted by Timko, Finney and Moos (2005) reporting that women were more likely than men to participate in self-help groups and that their participation led to greater reductions in alcohol use (Timko et al., 2005). Furthermore, women who use drugs experience less social support than their male counterparts (EMCDDA, 2006) and are more likely to have been exposed to parental substance use (Jones et al., 2007; Tuchman, 2010). Thus, there are grounds for assessing differential pathways to recovery by gender as a primary objective of the current study, as much of the early evidence on mutual aid groups were based on the experiences of white men and did not incorporate the experiences of women or of historically marginalised populations.

The second level of analysis that the current study will investigate is around the impact of context and culture on recovery processes and practices. While there is considerable literature on the impact of mutual aid group involvement on recovery (e.g., Kelly & Yetarian, 2008), there is much less on the support systems and conditions required to support recovery. In the mental health recovery field, Leamy and colleagues (2011) conducted a systematic review of positive factors contributing to recovery and summarised the findings in the acronym 'CHIME' (Connectedness, Hope, Identity, Meaning and Empowerment). Best (2019) went further in suggesting that the order of these factors is such that positive human connections generate the belief and hope that change is possible. This sense of hope motivates action in the form of meaningful activities that in turn creates a sense of self-empowerment and a positive personal and social identity.

In their review of the evidence for the Substance Abuse and Mental Health Services Administration, Sheedy and Whitter (2009) described the conditions required for a 'recovery-oriented system of care'. This model was critical as it created a framework for support systems and services that would support and build recovery resources and create the conditions for the flourishing of personal recovery. Sheedy and Whitter identified 17 elements that they identified as essential for a recovery-oriented care model:

1. Person-centred;
2. Inclusive of family and other ally involvement;
3. Individualized and comprehensive services across the lifespan;
4. Systems anchored in the community;
5. Continuity of care;
6. Partnership-consultant relationships;
7. Strength-based;
8. Culturally responsive;
9. Responsiveness to personal belief systems;
10. Commitment to peer recovery support services;
11. Integrated services;
12. System-wide education and training;
13. Inclusion of the voices and experiences of recovering individuals and their families;
14. Ongoing monitoring and evaluation
15. Evidence driven;
16. Research based;
17. Adequately and flexibly funded.

What is important about this work is the initiation of a scientific endeavour to characterise environmental conditions that can either support or block addiction recovery efforts made by an individual. Further evidence in this area is provided in the edited book on Addiction Recovery Management (Kelly and White, 2011), which includes a series of case studies of US cities and states who have made the transition to a recovery-oriented model and where evidence is provided on the effectiveness of this transition.

Thus, the current study has three main areas of study. First, assessing potential mechanisms of action in long-term recovery pathways. Second, examining how these mechanisms vary according to gender, and, thirdly, what is the impact of context (specifically the policy context) on recovery pathways and journeys.

3.2 Research questions

These three areas of investigation are examined through nine research questions that relate to the work packages outlined in the methods section below:

RQ1: What are the characteristics of those in early, sustained, and stable recovery in England, Belgium, and the Netherlands and how do they vary by gender and by experiences of MOBCR at baseline? How has this changed by one-year follow-up?

RQ2: How often have participants experienced each of the MOBCR and at what stage of their addiction/recovery trajectory at baseline survey assessment? How has this changed by one-year follow-up?

RQ3: What are the typical combinations of MOBCR and to what extent do these vary by gender, country, and recovery stage at baseline? How has this changed by one-year follow-up?

RQ4: Are there significant baseline differences in the levels of housing stability, employment, family engagement and QoL as a function of: a) recovery stage, b) MOBCR and combination of these mechanisms, c) country d) gender and e) baseline social identity and recovery capital? How has this changed by one-year follow-up?

RQ5: For each staged group (early, sustained, and stable recovery), what is the evidence of positive recovery growth in the key outcome domains of recovery capital, social identity, QoL, employment, housing, and family engagement from baseline to one-year follow-up? Do these vary by country, gender, or MOBCR, and what appear to be the structural barriers and enablers for continuing recovery growth?

RQ6: What are the predictors of relapse (reinstatement of any form of illicit drug use) and loss of community reintegration, by gender, country, and recovery stage? If there is relapse what are the mechanisms used to reinstate recovery and how effective are they?

RQ7: How do drug users in various stages of recovery experience recovery and various sources of (social) recovery capital? In particular, what differential barriers/resources do men and women experience in their recovery process and how do women portray their recovery capital?

RQ8: What are the indicators of impact of national policies on recovery journeys and utilisation of different MOBCR? Are there particular policy applications that target women and is this manifest in either the qualitative or quantitative data?

RQ9: What recommendations for effective recovery policies can be formulated based on service users' and user organisations experiences?

In order to answer the research questions, 7 work packages (including specific subtasks) are distinguished in the project as outlined and described in detail below:

WP1: Literature and policy review

This was presented in an overview and logic paper (Best et al., 2018) and in a book chapter (Best et al., 2019), which addressed the conceptual foundations for the research programme.

REC-PATH (recovery pathways): overview of a four-country study of pathways to recovery from problematic drug use

Although there has been a growth in recent years in recovery research, much of this has been from the United States, and there is very little comparative research in this area. This article describes the rationale, conceptual foundations and methods for a prospective, multi-country, cohort study aimed to map pathways to recovery from problematic illicit drug use, with a specific focus on gender differences in recovery pathways. This study combines qualitative and quantitative components and examines the impact of recovery policy on the accessibility and viability of recovery pathways in England, Scotland, Belgium, and The Netherlands. Additionally, the article describes five processes through which mechanisms for behavior change for recovery may be triggered. This study will provide opportunities for linking recovery outcome research with analyses of national recovery policies, while also addressing the gap in literature around female pathways to recovery.

Best, D., Vanderplasschen, W., Van de Mheen, D., De Maeyer, J., Colman, C., Vander Laenen, F., … Nagelhout, G. E. (2018). REC-PATH (recovery pathways): overview of a four-country study of pathways to recovery from problematic drug use. *Alcoholism Treatment Quarterly*, *36*(4), 517–529. https://doi.org/10.1080/07347324.2018.1488550

How do mechanisms for behaviour change in addiction recovery apply to desistance from offending? Learning lessons from the REC-PATH programme of work

Several studies have focused on the relationship between drug use and offending and the common overlap in populations involved in it (Bennett & Holloway, 2004). As a result, theories on recovery and desistance share common grounds: they are both dynamic, transformational processes and similar internal and external components seem to influence these processes of change, including peer and professional treatment interventions (Marsh, 2011; Best, Irving and Albertson, 2016). Starting from recovery, this chapter will discuss putative mechanisms of behaviour change that are primarily linked to peer and professional interventions to assess what lessons can be applied to persons involved in drug use and offending. The aim of the chapter is to examine how change may come about and what the options are for applying this process in the context of recovery and desistance. This chapter starts from a European research project in England, Scotland, the Netherlands and Belgium (REC-PATH), aiming to understand how recovery can come about and what the preferred change mechanisms, also called pathways, are for men and women at different stages of their recovery journey. This chapter focuses on five candidate–pathways: mutual aid groups, other forms of peer and community activities, therapeutic communities, community treatment interventions and one form of change in which no peer or professional intervention is delivered,

known as 'natural recovery' (Granfield and Cloud, 2001). The questions presented here are about what kinds of mechanisms of support and intervention may be effective, whether these should be community based or residential, and to what extent there is evidence supporting the delivery of these interventions by peers rather than professionals. A final question arises about the circumstances under which people can achieve and sustain their own recovery, without external support. In this paper, we explore each of the five mechanisms of change that are included in the REC-PATH study, with some discussion of the underlying philosophies and recovery models to inform a discussion of their implications that REC-PATH may have for offending and desistance (Van Roeyen et al, 2017). The conceptual frame for much of this discussion will be around the accrual of personal and social recovery capital and how that concept may most effectively be operationalised in the context of desistance.

Best, D., Colman, C., Vanderplasschen, W., Vander Laenen, F., Irving, J., Edwards, M., … Martinelli, T. (2019). How do mechanisms for behaviour change in addiction recovery apply to desistance from offending? Learning lessons from the REC-PATH programme of work. In D. Best & C. Colman (Eds.), *Strengths-based approaches to crime and substance use* (pp. 86–102). London: Routledge.

WP2: Life in Recovery (LiR) survey (online + hard copy): (a) recruitment; (b) eligibility screening

Recruitment and sample

The origins of this part of the programme, which constituted the foundations for the remaining direct recovery research in the programme are based on the US Life in Recovery survey (Laudet, 2013), undertaken for the US recovery advocacy organisation Faces and Voices of Recovery (FAVOR). The results of the online survey, completed by more than 3,000 people, showed consistent improvements from life in addiction to life in recovery across domains as diverse as social relationships, health, community involvement, employment, and involvement with the criminal justice system. Furthermore, greater improvements were typically associated with longer duration of recovery. The rationale for the survey is that it provides paired questions asking about life in active addiction and repeating the same questions for life in recovery and so allowing assessment of how things have improved or deteriorated in the intervening period.

David Best had already led Life in Recovery surveys in Australia (Best et al., 2014) and the United Kingdom (Best et al., 2015), using amended versions of the US scale, and it had been undertaken in Canada (McQuaid et al., 2017). For the REC-PATH study, the Life in Recovery instrument was supplemented with some additional measures:

- The survey asks about the five mechanisms of behaviour change for recovery,
- Ever and past 30-day drug use,
- Barriers and facilitators to recovery,
- Experiences during periods of problematic drug use, and,
- Experiences during recovery

Inclusion criteria were being a minimum age 18 years and being in recovery from problematic illicit drug use for at least 3 months. The concept of "recovery" was self-defined by respondents and could mean complete abstinence from illicit drugs, but could also mean that respondents are still using illicit drugs but no longer in a problematic way. Recovery from alcohol use was not examined in this study, though people may have comorbid problematic alcohol use. We attempted to recruit equal populations of people in early recovery (first year), sustained recovery (between one and five years in recovery) and stable recovery (more than 5 years).

The study also attempted to stratify so that there were equal numbers of men and women, as gendered pathways are a key focus of the study[2]. Recruitment was done through key recovery agencies and treatment services, through social media, and through word-of-mouth (we actively encouraged a

[2] Only one person out of 368 in the quantitative analysis described their gender as 'other' (i.e. not male or female). Therefore, this third gender category was not analysed in the study.

snowballing approach in each participating country). The study targeted a total of 250 respondents per country, providing us with an initial sweep of around 750 Life in Recovery (LiR) surveys. Respondents were able to fill in the survey online or on paper.

Initial recruitment took place between January and June 2018 using the brief LiR survey in Belgium (Flanders, n=181), the UK (n=311), and the Netherlands (n=230), and (Martinelli et al., 2020), resulting in a total sample of 722. The full recruitment process is described in Martinelli and colleagues (2020).

Results of the LiR screening analysis

Of the 722 participants, 63.3% were male, with a mean age of 41.2 years; 17.6% were in early recovery, 40.2% in sustained recovery and 42.2% in stable recovery, although the proportion of people in stable recovery was significantly higher in the UK (55.9%, compared to 34.1% in the Netherlands and 24.3% in Belgium), as was the mean age (45.5 years, compared to a mean of 40.1 years in the Netherlands and 35.5 years in Belgium).

Table 1 provides an overview of the use of different mechanisms of recovery support during their recovery journeys.

Table 1

Mechanisms reported by LiR participants ("Have you ever received help from?") (n=722)

	Total n=722	UK n=311	The Netherlands n=230	Belgium n=181	p-value Chi2
12-step fellowships (yes)	62.0	74.9	72.6	26.5	$p < 0.001$
Peer-based support services (yes)	38.1	52.4	29.6	24.3	$p < 0.001$
Residential treatment (yes)	68.7	57.9	77.8	75.7	$p < 0.001$
Outpatient treatment (yes)	70.4	68.2	73.0	70.7	$p = 0.467$
Other services (yes)	18.1	25.4	17.4	6.6	$p < 0.001$

Across the whole sample, there was widespread use of each of the mechanisms of recovery reported with more than 60% having access 12-step fellowships, residential treatment, and out-patient treatment with marked variations across the participating countries. Specialist treatment (both residential and out-patient) was more commonly used in Belgium and the Netherlands, with peer-based recovery support services and 12-step fellowship involvement more commonly used among participants from the UK.

Martinelli and colleagues (2020) replicated one of the main findings of the earlier recovery studies by reporting that there was a clear recovery stage effect in wellbeing – thus, while 11.0% of participants in early recovery reported acute housing problems in the previous thirty days, this diminished to 5.2% for people in sustained recovery and 2.0% for people in stable recovery. Similarly, involvement in crime in the

last 30 days was reported by 11.8% of people in early recovery, 5.9% of those in sustained recovery and 4.3% of those in stable recovery. Conversely, continuous full-time work in the last month was reported by 19.7% of those in early recovery, 32.8% of those in sustained recovery and 52.2% of those in stable recovery. Finally, illicit drug use in the last month was also linked to recovery duration and stage, with 16.5% of those in early recovery reporting use in the month prior to the LiR survey, compared to 7.9% of those in sustained recovery and 4.9% of those in stable recovery. As White (personal communication) has argued, this has "*profound implications on the need for sustained recovery check-ups and support even beyond the early years of recovery, e.g., integrating recovery check-ups into annual visits with primary care physicians or by treatment services or recovery community organizations*". This accumulation of findings provides extremely clear and strong evidence that recovery is a journey in which both risks reduce and the accrual of strengths and assets increase with time. In the conclusion to their paper, Martinelli and colleagues (2020) concluded that "*findings reveal that people with more time in recovery are less likely to have housing problems, be involved in crime or the criminal justice system or to use illicit drugs, while it is more likely that they have work or attend education compared to participants in earlier stages of recovery. These findings were consistent across the three countries, despite marked differences in the recruited recovery populations*" (2020, p. 11).

The work on the LiR database has continued with the development of a new scale and the extension of the LiR survey to a number of other agencies and countries recruited through the Recovered Users Network (RUN) in Bosnia and other Balkan countries. The paper "Measuring capital in active addiction and recovery: the development of the strengths and barriers recovery scale (SABRS)" provides more details on the SABRS scale development and early findings based on this extended sample (Best, Nisic & Vanderplasschen, 2020).

Measuring capital in active addiction and recovery : the development of the strengths and barriers recovery scale (SABRS)

Background: The international Life In Recovery (LiR) surveys have provided an important message to the public and policy makers about the reality of change from addiction to recovery, consistently demonstrating both that there are marked gains across a range of life domains and that the longer the person is in recovery the better their recovery strengths and achievements. However, to date, no attempt has been made to quantify the Life In Recovery scales and to assess what levels of change in removing barriers and building strengths is achieved at which point in the recovery journey. Methods: The current study undertakes a preliminary analysis of strengths and barriers from the Life in Recovery measure, using data from a European survey on drug users in recovery (n = 480), and suggests that the instrument can be edited into a Strengths And Barriers Recovery Scale (SABRS). The new scale provides a single score for both current recovery strengths and barriers to recovery. Results: The resulting data analysis shows that there are stepwise incremental changes in recovery strengths at different recovery stages, but these occur with only very limited reductions in barriers to recovery, with even those in stable recovery typically having at least

two barriers to their quality of life and wellbeing. Greater strengths in active addiction are associated with greater strengths and resources in recovery. Conclusion: As well as demonstrating population changes in each of the domains assessed, the current study has shown the potential of the Life In Recovery Scale as a measure of recovery capital that can be used to support recovery interventions and pathways.

Best, D., Vanderplasschen, W., & Nisic, M. (2020). Measuring capital in active addiction and recovery : the development of the strengths and barriers recovery scale (SABRS). *Substance Abuse Treatment Prevention and Policy*, *15*(1). https://doi.org/10.1186/s13011-020-00281-7

Overall, the Life in Recovery survey yielded a response of 722 completions (against a target of 750) and this provided the basis for recruitment to the outcome study that is reported below. However, it also acted as a third wave of data collection for the study and a stand-alone research base in its own right. The database drawn on for the above paper (Best et al., 2020) involved the inclusion of a further 480 active cases collected through the Recovered Users Network, generating an overall Life in Recovery database of just over 1,200 successful completions of the survey that will be a powerful additional resource.

To clarify, the Life in Recovery survey has served four primary purposes in the current research programme:

1. As a basis for recruitment for the outcome study reported in the next section;
2. As a quasi-baseline data set gathered on average around three months prior to the main questionnaire allowing three linked sets of data over a 15-month window for study participants;
3. As a stand-alone research resource for examining changes across countries in recovery barriers and strengths with a sample of 722 participants (second only to the original Faces and Voices survey);
4. As the basis for awareness raising and partnership that has, at the time of writing, generated a pan-European data collection partnership with RUN and the generation of a new recovery scale (SABRS) based on the data collected.

WP3: Quantitative study: (a) baseline collection; (b) follow-up at 12 months; (c) analysis

Outcome Study Baseline (OSB)

The aim of this model was to assess stability and transitions in recovery strengths and the ongoing use of recovery support mechanisms across the participating countries. The study was also the first study to specifically assess the impact of recovery stages (and recovery stage transitions) on wellbeing and a range of recovery outcomes. A brief rationale and method is provided below, prior to presenting an overview of the Mechanisms of Behaviour Change for Recovery (MOBCR) at baseline, followed by an outcome analysis of change and stability in recovery indicators.

Sample: In Belgium there were 181 participants eligible after LiR completion, with 113 completing the OSB. In the UK, a total of 313 people completed the LiR and met our inclusion criteria for the Outcome Study Baseline (OSB), who were invited to participate in the OSB. Of those 313 people, 118 individuals completed the OSB, leaving 195 who did not engage with the OSB stage of the study. The Netherlands had 231 participants eligible after LiR completion, with 137 participants completing the OSB. This resulted in a total sample for the OSB of 368 respondents, with the gender breakdown shown in Table 2 below:

Table 2

Gender Difference Between LiR Completers and LiR+OSB Completers

	UK		Belgium		The Netherlands	
	LiR Only Completed	LiR + OSB Completed	LiR Only Completed	LiR + OSB Completed	LiR Only Completed	LiR + OSB Completed
Male	*n* = 117 (61.9%)	*n* = 73 (38.1%)	*n*= 46 (34.6%)	*n*= 87 (65.4%)	*n* = 57 (42.2%)	*n* = 78 (57.8%)
Female	77 (63.1%)	45 (36.9%)	22 (45.8%)	26 (54.2%)	38 (40.0%)	57 (60.0%)
Other	1 (50%)	0	0	0	0	1 (50%)
Total	195	118	68	113	95	136

In the UK, there was a slightly lower rate of transition from the Life in Recovery screen to the baseline completion of the outcome study, but this was not the case in the Netherlands or Belgium. To provide an overview of the substance use histories of the outcome study sample, Table 3 compares problem histories across a range of substances by country of origin, based on the 313 individuals who completed the Outcome Study Baseline survey.

Table 3

Lifetime History of Problematic Substance Use by the three countries (n=368)

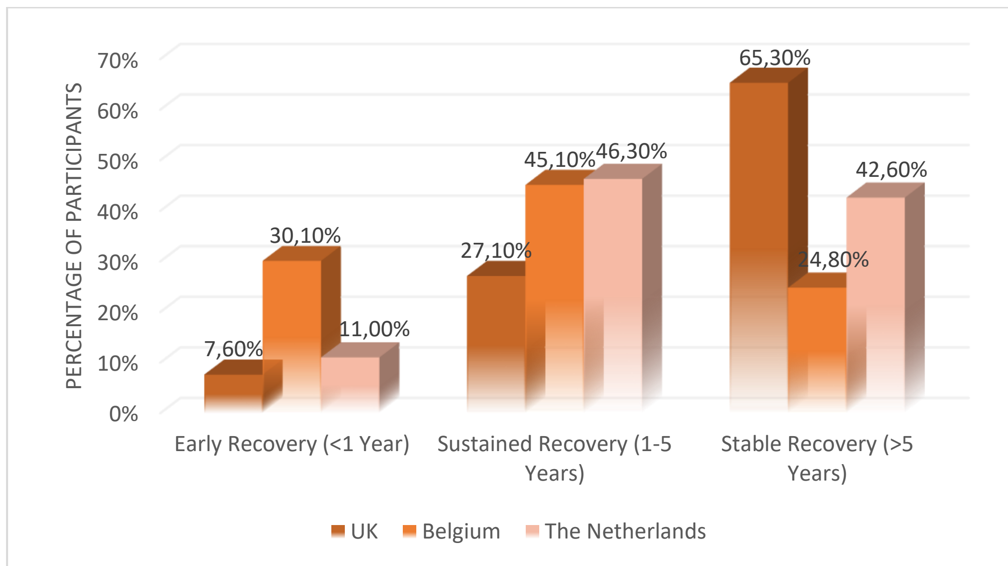
Ever Been a Problem…?				
	UK	**Belgium**	**The Netherlands**	Significance Test
Alcohol	*n* = 81 (68.6%)	*n* = 63 (55.8%)	*n* = 95 (69.9%)	χ^2 = 6.35, *p* = .042, Cramer's *V* = .132
Heroin	70 (59.3%)	29 (25.7%)	32 (23.5%)	χ^2 = 42.422, *p* = <.000, Cramer's *V* = .340
Cocaine (Powder)	70 (59.3%)	82 (72.6%)	81 (59.6%)	χ^2 = 5.81, *p* = .055, Cramer's *V* = .126
Cocaine (Crack)	51 (43.2%)	26 (23.0%)	42 (30.9%)	χ^2 = 10.99, *p* = .004, Cramer's *V* = .173
Amphetamines	68 (57.6%)	69 (61.1%)	63 (46.3%)	χ^2 = 6.09, *p* = .048, Cramer's *V* = .129
Ecstasy (MDMA)	51 (43.2%)	31 (27.4%)	60 (44.1%)	χ^2 = 8.75, *p* = .013, Cramer's *V* = .154
Cannabis	83 (70.3%)	61 (54.0%)	88 (64.7%)	χ^2 = 6.85, *p* = .033, Cramer's *V* = .137
Methadone (Prescribed)	46 (39.0%)	13 (11.5%)	19 (14.0%)	χ^2 = 33.12, *p* = <.000, Cramer's *V* = .300
Buprenorphine (Prescribed)	24 (20.3%)	6 (5.3%)	0	χ^2 = 36.61, *p* = <.000, Cramer's *V* = .316
Tobacco	98 (83.1%)	74 (65.5%)	98 (72.1%)	χ^2 = 9.41, *p* = .009, Cramer's *V* = .160
Prescription Drugs	61 (51.7%)	37 (32.7%)	29 (21.3%)	χ^2 = 26.00, *p* = <.000, Cramer's *V* = .26
Other Substance 1	7 (5.9%)	18 (15.9%)	18 (13.2%)	χ^2 = 2.58, *p* = .275, Cramer's *V* = .157
Other Substance 2	5 (4.2%)	10 (8.8%)	6 (4.4%)	χ^2 = .369, *p* = .831, Cramer's *V* = .078
Other Substance 3	0	2 (1.8%)	2 (1.5%)	χ^2 = 1.26, *p* = .533, Cramer's *V* = .167

There were significant differences between countries for seven substances. Heroin use is more common in the UK sample, and problematic use is evidenced by the much higher proportion of UK participants who reported use of prescribed methadone and prescribed buprenorphine (opioid substitute prescription drugs). Use of the stimulants cocaine powder and amphetamines are highest in the Belgian sample. There is also a higher rate of crack cocaine use in the UK sample. Three substances have a medium effect size (*V*= 0.3 = medium to 0.5 = large); heroin, methadone, and buprenorphine.

The differences by recovery stage across the OSB sample for each country are shown in Figure 1 below.

Figure 1

International Differences in Recovery Stages in the OSB (n=368)



The categories of recovery stage are significantly different across the three countries; $\chi^2 = 50.02$, $p = <.000$, Cramer's $V = .369$ (medium association), and are consistent with the pattern reported for the LiR data. Thus, the UK sample consisted of a markedly higher proportion of people in stable recovery and a lower proportion of people in earlier recovery, with the Belgian sample containing the largest group of participants in early recovery and the lowest in stable recovery.

The analysis reported in Table 4 (below) attempts to discern how useful participants found recovery-oriented groups/professional services. The table reflects "*yes*" responses to the first two columns only; attended and membership. The third column reports usefulness and was rated as follows; 0 = Not at all, 1 = Not useful, 2 = Somewhat not useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful. The usefulness column will have the mean and median scores reported. This section has missing data within many variables; however, the percentages still reflect the full sample. The table is divided into three sections – one for peer recovery support (divided into AA, NA, other 12-step, SMART Recovery and other), one for community treatment (divided into counselling[3], Medication Assisted Treatment (MAT), low threshold treatment and primary care) and residential treatment (divided into detoxification, rehabilitation, and Therapeutic Community).

[3] Including psychotherapy and psychology

Table 4

Lifetime use of Mechanisms of Behaviour Change as reported at the OSB (n=368)

	Have You Ever Attended…?	Have You Ever Considered Yourself a Member / Service User?	Usefulness Rating
Mutual Aid & Peer Support			
AA	*n* = 194 (52.9%)	*n* = 129 (66.5%)	*M* = 3.54, *Mdn* = 4.0
NA	204 (55.6%)	162 (79.4%)	*M* = 4.0, *Mdn* = 5.0
Other 12-Step Group	121 (33.0%)	88 (72.7%)	*M* = 3.97, *Mdn* = 5.0
Other Peer Recovery Group (Non-12-Step	131 (51.4%)	97 (74.0%)	*M* = 3.71, *Mdn* = 4.0
SMART	42 (11.4%)	23 (54.8%)	*M* = 3.55, *Mdn* = 4.0
Specialist Community (Out-patient) Treatment			
Counselling	*n* = 269 (73.3%)	*n* = 210 (78.1%)	*M* = 3.26, *Mdn* = 4.0
Medication Reduction Treatment	95 (25.9%)	80 (84.2%)	*M* = 3.25, *Mdn* = 3.0
Medication Maintenance Treatment	82 (22.3%)	67 (81.7%)	*M* = 2.60, *Mdn* = 2.0
Low Threshold Service	80 (21.8%)	64 (80.0%)	*M* = 3.59, *Mdn* = 4.0
Other (GP)	150 (40.9%)	111 (74.0%)	*M* = 2.97, *Mdn* = 3.0,
Residential Treatment			
Residential Detoxification	*n* = 204 (55.6%)	-	*M* = 3.64, *Mdn* = 4.0
Residential Rehabilitation	184 (50.1%)	-	*M* = 3.97, *Mdn* = 5.0
Therapeutic Community	112 (30.5%)	-	*M* = 3.85, *Mdn* = 5.0

Overall, there was widespread engagement with 12-step mutual aid groups with just over half of all participants having attended at least one AA meeting, NA meeting and/or one other form of peer-based recovery support group. However, active membership of peer-based recovery groups is around half that of lifetime attendance, with around one quarter of the sample reporting that they were members of peer support groups, although there was a substantially higher translation from lifetime attendance to perceived membership for AA and NA. All of the peer support groups were positively rated by participants.

For specialist out-patient treatment, the most commonly used service was counselling with around three-quarters of participants engaging in this service with positive ratings of usefulness. There were generally positive ratings of specialist treatment with the exception of GP services and medication assisted treatment, which were on average given the lowest usefulness ratings of any of the candidate mechanisms for change. In contrast, the most positive ratings were given to residential rehabilitation services and therapeutic communities, with all forms of residential treatment positively rated by participants. It is important to note that there are marked variations across the three countries in the levels of engagement with each mechanism as shown in Table 5 below.

Table 5

MOBCR Attendance by Country (n=368)

	Have You Ever Attended…?			
	UK	Belgium	The Netherlands	Significance Test
Mutual Aid & Peer Support				
AA	*n* = 87 (73.7%)	*n* = 31 (27.4%)	*n* = 76 (55.9%)	χ^2 = 51.01, *p* = <.000, *V* = .415
NA	83 (70.3%)	27 (23.9%)	94 (69.1%)	χ^2 = 64.61, *p* = <.000, *V* = .460
Other 12-Step Group	48 (40.7%)	7 (6.2%)	66 (48.5%)	χ^2 = 63.37, *p* = <.000, *V* = .489
Other Peer Recovery Group (Non-12-Step	53 (44.9%)	31 (27.4%)	47 (34.6%)	χ^2 = 12.21, *p* = .002, *V* = .219
SMART	42 (35.6%)	0	0	-
Specialist Community (Out-patient) Treatment				
Counselling	*n* = 80 (67.8%)	*n* = 89 (78.8%)	*n* = 100 (73.5%)	χ^2 = .778, *p* = .678, *V* = .050
Medication Reduction Treatment	54 (45.8%)	22 (19.5%)	19 (14.0%)	χ^2 = 25.63, *p* = <.000, *V* = .331
Medication Maintenance Treatment	46 (39.0%)	15 (13.3%)	21 (15.4%)	χ^2 = 26.01, *p* = <.000, *V* = .336
Low Threshold Service	44 (37.3%)	18 (15.9%)	18 (13.2%)	χ^2 = 20.49, *p* = <.000, *V* = .304
Other (GP)	53 (44.9%)	63 (55.8%)	34 (25.0%)	χ^2 = 6.19, *p* = .185, *V* = .117
Residential Treatment				
Residential Detoxification	*n* = 43 (36.4%)	*n* = 74 (65.5%)	*n* = 87 (64.0%)	χ^2 = 37.16, *p* = <.000, *V* = .247
Residential Rehabilitation	56 (47.5%)	57 (50.4%)	71 (52.2%)	χ^2 = 2.07, *p* = .356, *V* = .084
Therapeutic Community	22 (18.6%)	52 (46.0%)	38 (27.9%)	χ^2 = 15.70, *p* = <.000, *V* = .249

While there are relatively few differences in engagement in community treatment, there is a consistent pattern around peer-based activities, with the highest rates reported in the UK and the lowest in Belgium. In contrast, Belgian participants reported higher rates of engagement in all forms of residential treatment, with these consistently lower in the UK. The second core comparison for the study was around gender and Table 6 below presents gender differences in engagement and uptake with each mechanism of behaviour change.

Table 6

MOBCR Attendance by Gender (n=368)

	Have You Ever Attended...?			
	Male	Female	Other	Significance Test
Mutual Aid & Peer Support				
AA	*n* = 120 (50.4%)	*n* = 74 (57.8%)	-	χ^2 = .971, p = .324, V = .057
NA	129 (54.2%)	75 (58.6%)	-	χ^2 = .349, p = .555, V = .034
Other 12-Step Group	76 (31.9%)	45 (35.2%)	-	χ^2 = .004, p = .949, V = .004
Other Peer Recovery Group (Non-12-Step	89 (37.4%)	42 (32.8%)	-	χ^2 = 1.54, p = .214, V = .078
SMART	28 (11.8%)	14 (10.9%)	-	χ^2 = 1.61, p = .205, V = .136
Specialist Community (Out-patient) Treatment				
Counselling	*n* = 180 (75.6%)	*n* = 89 (69.5%)	-	χ^2 = .454, p = .500, V = .038
Medication Reduction Treatment	60 (25.2%)	34 (26.6%)	1 (100%)	χ^2 = .037, p = .847, V = .013
Medication Maintenance Treatment	44 (18.5%)	37 (28.9%)	1 (100%)	χ^2 = 2.91, p = .088, V = .113
Low Threshold Service	50 (21.0%)	30 (23.4%)	-	χ^2 = .055, p = .814, V = .016
Other (GP)	100 (42.0%)	50 (39.1%)	-	χ^2 = .484, p = .785, V = .046
Residential Treatment				
Residential Detoxification	*n* = 140 (58.8%)	*n* = 64 (50.0%)	-	χ^2 = 2.94, p = .230, V = .098
Residential Rehabilitation	129 (54.2%)	55 (43.0%)	-	χ^2 = 6.01, p = .014, V = .143
Therapeutic Community	79 33.2%)	33 (25.8%)	-	χ^2 = 2.04, p = .153, V = .090

There are far fewer differences by gender in uptake and utilisation of each MOBCR, with the only significant difference relating to residential rehabilitation and a general trend for male participants to be more likely to engage in residential treatment. To build on this analysis, Table 7 also reports on how useful each mechanism was perceived to be by gender.

Table 7

MOBCR Usefulness by Gender (n=368)

How Useful Was …?				
	Male	Female	Other	Significance Test
Mutual Aid & Peer Support				
AA	*M* = 3.38, *Mdn* = 4.0	*M* = 3.81, *Mdn* = 5.0	-	F (1, 191) = 3.17, *p* = .077
NA	*M* = 3.87, *Mdn* = 5.0	*M* = 4.31, *Mdn* = 5.0	-	F (1, 200) = 4.41, *p* = .037
Other 12-Step Group	*M* = 3.95, *Mdn* = 4.0	*M* = 4.02, *Mdn* = 5.0	-	F (1, 115) = .088, *p* = .767
Other Peer Recovery Group (Non-12-Step	*M* = 3.80, *Mdn* = 4.0	*M* = 3.54, *Mdn* = 4.0	-	F (1, 120) = .747, *p* = .389
SMART	*M* = 3.41, *Mdn* = 3.0	*M* = 3.91, *Mdn* = 4.0	-	F (1, 36) = .792, *p* = .379
Specialist Community (Out-patient) Treatment				
Counselling	*M* = 3.20, *Mdn* = 4.0	*M* = 3.40, *Mdn* = 4.0	-	F (1, 255) = .855, *p* = .356
Medication Reduction Treatment	*M* = 3.10, *Mdn* = 3.5	*M* = 3.50, *Mdn* = 4.0	*M* = 4.00	F (1, 86) = 1.03, *p* = .312
Medication Maintenance Treatment	*M* = 2.34, *Mdn* = 2.0	*M* = 2.91, *Mdn* = 3.0	*M* = 4.00	F (1, 74) = 2.29, *p* = .134
Low Threshold Service	*M* = 3.67, *Mdn* = 4.0	*M* = 3.46, *Mdn* = 3.5	-	F (1, 71) = .181, *p* = .672
Other (GP)	*M* = 2.82, *Mdn* = 3.0	*M* = 3.29, *Mdn* = 3.0	-	F (1, 118) = 2.14, *p* = .147
Residential Treatment				
Residential Detoxification	*M* = 3.58, *Mdn* = 4.0	*M* = 3.83, *Mdn* = 4.0	-	F (1, 199) = 1.04, *p* = .308
Residential Rehabilitation	*M* = 3.98, *Mdn* = 5.0	*M* = 4.30, *Mdn* = 5.0	-	F (1, 176) = 2.01, *p* = .158
Therapeutic Community	*M* = 3.97, *Mdn* = 4.0	*M* = 4.09, *Mdn* = 5.0	-	F (1, 108) = .158, *p* = .692

The only statistically significant difference here was that women were likely to give a higher rating to Narcotics Anonymous, but the scores were largely consistent apart from that. Data on the other core outcome indicators will be presented in the next section on change over time, based on the data from the one-year follow-up analysis.

From the baseline, the core conclusion is that our sample has extensive experience and engagement with multiple mechanisms to support behaviour change and that 'natural recovery' was rarely reported in the current sample. Most participants reported some form of peer-based recovery support, some level of community treatment and some residential treatment. There were, however, both national and gender-based differences in engagement with each of the mechanisms of behaviour change. For the international comparison, engagement in peer-based services is higher in the UK (with SMART Recovery only available in the UK) and residential treatment most common among the Belgian participants in the study.

The section on the Outcome Study Baseline is concluded with an overview of a paper that was published in the journal Drugs, Education, Prevention and Policy by Martinelli et al. (2021), as part of a special issue of the journal on mechanisms of behaviour change in recovery, edited by two of the principal investigators

for the REC-PATH study (David Best and Wouter Vanderplasschen). Based on the sample of 367 participants, the paper reports lifetime mutual aid involvement in 69% of all cases and reports that membership in mutual aid groups is strongly associated with more participation and (self-reported) changes in social networks, greater levels of recovery capital, and a stronger commitment to sobriety than among those whose recovery journeys do not involve mutual aid. The findings suggest that mutual aid groups provide a place where new social networks can be grown and through which commitment to sobriety remains at a higher level than for those not involved in mutual aid groups. Crucially, members of mutual aid groups also reported significantly higher levels of recovery capital – the resources required to sustain and build recovery over time (Granfield and Cloud, 2001; Best and Laudet, 2010; Vilsaint et al, 2017). This key theme around the added value of engaging in peer-based recovery support services will also arise in the next section which presents the main outcome study findings from the second administration of the full quantitative study.

Outcome Study Follow-Up (OSF)

Aims and method

The primary aim of this analysis was to assess the stability of recovery and to examine predictors of recovery outcomes in the study sample. All of those who had participated in the outcome study baseline (and a number of those who had agreed to complete the baseline but had failed to do so) were approached and asked to complete the online form. For those who preferred to complete the follow-up by telephone, this was arranged with a member of the research team. This also included a small number of participants who encountered technical difficulties in completing the form. Each candidate participant was approached on a total of three occasions if they did not reply (by email using their original contact details) and asked to participate.

Data were primarily gathered on Qualtrics directly either by participant completion or by a member of the project team. The completed database from all three countries was collated and cleaned by the team from the University of Manchester. The overall aim of the analysis was to assess change in key outcome indicators from baseline to follow-up and to assess whether changes were linked to the three primary grouping variables used in the study namely:

- Gender
- Country
- Recovery stage

A broad range of outcome indicators were used for this analysis, consistent with the definitions of recovery agreed in the consensus groups by the Betty Ford Institute and the UK Drug Policy Commission. Regression analysis were conducted separately for each of the following outcome indicators[4]:

1. Substance use
2. Health and wellbeing
3. Psychological health
4. Quality of life
5. Social support
6. Citizenship and participation
7. Housing
8. Involvement in the justice system
9. Unmet needs

One of the problems faced in undertaking the analysis was that there were uneven numbers of uptakes of each of the five mechanisms of behaviour change, with low levels of participants in the 'natural recovery' only category (see overall discussion for a review of this finding), and considerable overlap in the use of the other four mechanisms as reported in the section on the baseline results above. For this reason, it was necessary to collapse the five categories into three for the purpose of multi-variable analysis. In this revised version of the results, the recovery pathways were categorised as:

- "Peer-based recovery support or those reporting natural recovery" (in other words people who reported recovery but without professional treatment),
- "Treatment, but no peer-based recovery support",
- "All" (people who had engaged in both peer-based and professionally delivered treatment services)

This was in an effort to i) reduce standard errors driven by low numbers of the outcomes within the previously defined "Natural recovery or peer-based support" category, and ii) reduce the number of iterations that the model needs in order to converge. For each model, the p-values (where applicable) represent the 'overall' significance of the association of the covariate (e.g. country) with the outcome, while confidence intervals can be used as a guide as to whether the corresponding category statistically significantly differs from the baseline category (within covariate).

[4] Although the results reflect the current literature, the introduction of interactions of covariates at the multi-level mixed effects models structured to analyse the outcome domains 6-9 reduce the power of the corresponding analysis due to limited sample size.

Findings

A brief summary of the findings for each recovery outcome domain is reported here.

Outcome domain #1: Substance use: Overall, 10.4% reported problematic use of illicit or prescribed drugs at follow up. More male participants (14.4%) reported substance use at follow-up compared to females (8.2%), although this association was not statistically significant. There was clear evidence showing that substance use in the last year was strongly independently associated with recovery stage. While only 1.5% of people in stable recovery reported last year use (OR = 0.1, 95% CI 0, 0.4), this was the case for 17.6% of people in sustained recovery (OR = 0.6, 95% CI 0.2, 1.4) and 30% in early recovery (referent category).

Overall, problematic use of illicit drugs at follow-up was more prevalent for individuals in recovery for less than a year (29.3%) and those who followed treatment but no (Mutual Aid) MA (18.3%), and less prevalent for those who reported peer-based recovery support or natural recovery (6.6%). However, recovery pathway was not independently statistically significantly associated with this outcome.

Outcome domain #2: Physical health: Physical health was measured using the Maudsley Addiction Profile (MAP) health scale (Marsden et al, 1998), which provides a range of 0-40 with higher scores representing more adverse health symptoms. Although there was a higher mean score for female participants than for male participants (12.5 compared to 10.5), indicating worse health among females, this difference was only statistically significant at baseline. There was also very little change from baseline to follow-up: the average physical health score was similar at baseline (11.18, sd=0.4) and follow-up (11.22, sd=0.4). There were no independently statistically significant associations with the absolute change (follow up-baseline) of physical health, indicating the importance of ongoing physical health support through treatment and recovery services.

Outcome domain #3: Psychological health: Psychological health was measured using the Maudsley Addiction Profile (MAP) health scale (Marsden et al, 1998), which provides a range of 0-36[5] with higher scores representing more adverse health symptoms. There was little change in overall score from baseline to follow-up: the average mental health score slightly increased (i.e. deteriorated) from 11.15 (sd=0.4) at baseline to 11.21 (sd=0.4) at follow-up. There were no independently statistically significant associations with the absolute change of mental health (follow-up from baseline). On average, females were likely to have worse mental health scores than males (b=2.6, 95%CI [1.1, 4.2]), and there was also an association with recovery stage, where individuals in recovery for 1-5 years or more than 5 years were more likely to have better mental health scores at baseline than individuals in recovery for less than 1 year, with b=-2.7 (95% CI [-5.5, -0]) and b=-4.0 (95% CI [-7.0, -0.9]).

[5] Following pilot testing it was agreed that one item (thoughts of suicidal ideation) was not suitable and so this was dropped from the scale so the original 10-item scale was reduced to 9 with a revised scoring range of 0-36.

Outcome domain #4: Quality of life: This was measured on a scale scoring from 0-72 (based on 12 items taken from the WHO Brief Quality of Life measure (higher scores equate to better quality of life). As with the other wellbeing indicators, average QoL score was similar at baseline (49.8, sd=0.6) and at follow-up (49.6, sd=0.6), suggesting stability in wellbeing over time. However, there were three independent baseline effects:

- Country of origin was independently associated with QoL scores at baseline. On average, individuals in Belgium and Netherlands were likely to have worse QoL scores than individuals in the UK (b=-5.0, 95% CI [-8.3, -1.5] and b=-3.4, 95% CI [-5.9, -0.9], respectively).
- Recovery stage was independently associated with QoL at the baseline. On average, individuals in recovery for 1-5 years or more than 5 years were likely to have better QoL scores than individuals in recovery for less than 1 year, with b=4.7 (95% CI [1.1, 8.3]) and b=6.7 (95% CI [2.7, 10.7]).
- Lastly, recovery pathway was also independently associated with QoL at baseline. Individuals who received professional treatment but whose recovery journey did not include peer-based recovery support were likely to have worse QoL compared to individuals who have received both specialist treatment and peer-based recovery support (b=-3.6 (95% CI [-6.4, -0.8]).

This is a key finding in that the additive benefits of peer support alongside treatment are associated with longer and more stable recovery journeys.

Outcome domain #5: Social support: The social support scale consists of four items and is drawn from the work of Jetten, Haslam and Haslam (2012). The range of scores is 0-24 with higher scores indicating more positive social support. Although the average social support score deteriorated from 18 (sd=0.3) at baseline to 17 (sd=0.3) at follow-up, baseline scores were associated with recovery pathways. Individuals who had received specialist treatment but no peer-based recovery support services were likely to have worse social support at baseline compared to individuals who had received both specialist treatment and peer-based recovery support (b=-2.4 (95%CI [-3.9, -0.9]). There were no independently statistically significant associations with change in social support between baseline and follow-up.

Outcome domain #6: Citizenship and active participation: This is based on two items from the questionnaire that are combined to create a variable of meaningful activity that assesses if the person has been involved in either employment or training/education[6]. There were exceptionally high levels of engagement with meaningful activities: 85.3% were engaged in meaningful activities at baseline and 88.4% at follow up. There was a statistically significant association between recovery stage and engagement in meaningful activities ($\chi2(2) = 14.7$; $P = <0.001$). The contrast test suggests that participants in recovery for

[6] This is a multilevel mixed effects model including a new "time" variable to present baseline (Time=1) and follow up (Time=2), which allows for the outcome to be defined as meaningful activities overall (i.e. including both baseline and follow up). A random intercept is added to this model for each individual, this informs the model that the outcome includes multiple (2) values for each individual. The interaction component of recovery stage/pathway and time in this model are used to evaluate whether the change from baseline to follow up differed for people who were in different recovery stage/pathway at baseline.

1-5 years or for more than five years were significantly more likely to be involved in meaningful activities than participants in recovery for less than one year (OR=8.8, 95%CI [2.4, 32.6] and OR=20.9, 95%CI [4.2, 102.8])). In other words, one was more likely to be involved with meaningful activities if in recovery for more than a year, and this seems to be broadly 'equivalent' at baseline and follow-up. However, recovery pathway was not linked to engagement in meaningful activities, with high rates reported across all pathways.

Outcome domain #7: Housing: The majority of participants reported stable housing (in the previous month) at both time points: 5.2% of participants reported housing problems at baseline and 7.1% at follow up, indicating a small but not statistically significant increase. Housing problems were more prevalent among respondents in Belgium than in the UK and the Netherlands, both at baseline and at follow-up. Whilst the prevalence of housing problems slightly decreased in the UK over time (from 5.1% to 4.3%), they increased in the Netherlands (from 4.4% to 7.1%) and in Belgium (from 6.2% to 9.8%). Housing problems were more prevalent among males at follow-up than at baseline and were lower among females at any phase of the study. The prevalence of housing problems decreased over time for individuals in peer support or natural recovery only, whilst it increased for those who have engaged with both professional and peer recovery pathways, though this difference was not statistically significant. Age was the only co-variate independently statistically significantly associated with the outcome, as older participants were less likely to have housing problems (OR=0.9 per year, 95%CI [0.9, 1.0]).

Outcome Domain #8: Involvement in the criminal justice system: There were low rates of offending at both interviews with 6.8% of the participants reporting current involvement in offending or the justice system at baseline and 4.8% at follow-up (and some of these will be historical conditions or orders). There were few group differences, and no statistically significant changes over time but two differences were detected. A larger percentage of participants in recovery for less than one year (18.6%) were involved in offending or the justice system at baseline than those in recovery for more than 1 year (6.8% and 2.5% of those in recovery for 1-5 years and more than five years, respectively), whilst prevalence decreased over the follow-up period for all but those in recovery for more than 5 years (whose rates of offending were extremely low at each point). Second, a larger percentage of participants who had received specialist treatment but no peer-based recovery support were more likely to be involved in offending or the justice system compared to any other recovery pathway group (13.3% at baseline and 12.2% at follow-up), with consequent implications for the positive cost-effectiveness of recovery support services. Models for between group differences and change over time did not achieve convergence and the statistical significance of any difference/association could not be ascertained.

Outcome Domain #9: Unmet service needs: This was a composite scale taken from the REC-CAP instrument (Cano et al, 2017) that measured both whether individuals were engaged in particular kinds of

support (mental health, primary care, housing support, and so on) and also whether they had unmet support needs in each area. It is the total number of unmet needs that is reported in this section.

The largest proportion of individuals with unmet need was at baseline with a reduction reported at follow-up, and these were more prevalent in individuals from Belgium (59%) followed by the Netherlands (30.3%) and the UK (25.3%). This difference was much less apparent by follow-up, and may have reflected the higher rate of early recovery participants in Belgium. A slightly larger proportion of females (40.4%) than males (37.7%) had unmet needs at baseline. As would be anticipated, fewer individuals in stable recovery had unmet needs, both at baseline and at follow-up, and these were more common for individuals whose recovery journeys involved specialist treatment but no peer-based recovery support. However, neither recovery stage nor recovery pathway were independently statistically significantly associated with reductions in unmet needs. Age was independently associated with reductions in unmet needs, as older individuals were less likely to have housing problems (OR=1.0, 95%CI [0.9, 1.0]).

Follow-up analysis summary

There are several key findings from this analysis that are consistent with the literature, particularly the theme that those in longer-term recovery typically show better recovery indicators at both baseline and follow-up. There is also very clear evidence of high levels of active citizenship in stable recovery with high rates of meaningful activities, stable housing, and low rates of involvement in the justice system. The quantitative findings, however, do not support the hypothesis that recovery pathways are significantly different for men and women.

One key and important finding, supporting the earlier work of Fiorentine (1999) is that there is significantly better functioning for individuals whose recovery journey includes peer-based recovery support services, in that they reported higher baseline levels of quality of life and social functioning, much lower levels of involvement in the justice system (at both baseline and follow-up) and much lower baseline levels of unmet needs. This is a key finding in supporting an integrated approach to recovery support and the importance of integrating peer-based Lived Experience Recovery Organisations (LEROs) into recovery pathways, although the study design means that we cannot assume a causal influence of recovery group involvement on recovery outcomes.

WP4: Qualitative study: (a) in-depth lifeline interview; (b) Photovoice project with women in recovery; c) content analysis of qualitative data

In-depth interviews

In each of the three countries (Belgium, UK and the Netherlands), a total of 30 in-depth interviews were conducted, with equal numbers of male and female interviews undertaken in each location. The interview followed a life-course perspective, based on a common interview guide.

The aim of the qualitative interviews was to explore in greater depth the participants' journey to recovery and their experiences with different kinds of professional and peer support, and their understanding of the key components that supported their recovery or acted as a barrier to achieving their goals. The intention was to explore personal perceptions and experiences of each recovery mechanism and their beliefs about what worked at each stage of their recovery journey. One of the key research questions was to assess differences between male and female participants in their experiences of recovery and their use of each type of recovery mechanism.

Interviews with persons in recovery in Belgium

In Belgium, the qualitative interviews (n=30) focused on turning points towards recovery and contextual factors facilitating / hindering recovery.

Turning points towards addiction recovery: a contextualized understanding of its underlying dynamics

Background: A life course approach recognizes the role of turning points in adding twists and turns in individuals' addiction recovery processes. The notion of certain key moments that trigger turning point experiences offers a valuable theoretical construct for interpreting these dynamic change processes and their underlying contextual mechanisms. The current study aimed to identify turning points and assess how these generate long-term changes. Method: A qualitative research design was applied using a Lifeline Interview Method (LIM), allowing a retrospective lens to elicit recovery narratives. Purposive sampling was adopted to compose a heterogeneous sample of 30 persons in self-defined addiction recovery in Flanders (Belgium). An interpretative-phenomenological approach was adopted during a thematic analysis, grounding the research claims in respondents' lived experiences. Results: Key moments of change were brought forward by participants as positively turning around their addiction processes towards recovery: 1) anxiety about difficult drug-induced experiences; 2) being parents; 3) a sense of urgency through 'hitting rock bottom'; and 4) addiction treatment as part of a process of personal growth. Five additional experiences served as important layers surrounding and facilitating these turning points experiences. Conclusions: Our conceptual model counteracts the interpretation of single turning points causing abrupt changes in individuals' addiction trajectories and highlights the interconnectedness of multiple turning

point experiences and contextual factors. Treatment providers, researchers, and policymakers should take into account the relational and situational nature of recovery as a process of change.

Bellaert, L., Van Steenberghe, T., De Maeyer, J., Vander Laenen, F. & Vanderplasschen, W. (submitted). Turning points towards addiction recovery: a contextualized understanding of its underlying dynamics. *Addiction Research & Theory.*

Key emerging themes from the overall sample

Ultimately, recovery is concerned with flourishing and participation as an active and equal member of society. However, the recovery journeys of the qualitative sample did not progress in a linear direction with a constant accrual of recovery capital. Rather, it was clear that the journey was lengthy and complex, with respondents often experiencing many 'pains of recovery' and forms of negative recovery capital along the way. Similar to a game of snakes and ladders, respondents were making steps forward in a period of consistent or accelerated progress and accrual of recovery capital (as they encountered a 'ladder', such as discovering purpose, meaningful relationships or or dealing with past traumas) but as they travelled onwards, would encounter a 'snake' (such as a negative relationship, dire accommodation, navigating the world around them sober, sometimes for the first time as an adult or a down turn in their mental health) and consequently take a number of steps backwards:

> *"The next two to three years – we built the Service User Drug Reference Group and the weekend service – but it was great and for the first time I had a real sense of purpose and I had a great team of people volunteering for me and I had a real sense of ownership and pride to me – and to my self-esteem and it was the feeling that I can do something, I can achieve something. Round about 2009 I started to struggle with it a bit, it was getting really busy, the responsibility was huge and I went through a wobbly patch through my mental health not my recovery and it seems to be a pattern for me that every five years I go through a wobbly patch."* – Mark

For many people key recovery crises will happen after the end of treatment (as recovery is not a linear journey), emphasising the importance of continuity of care and access to recovery support services that should be community-based.

The journey was much more stable, with less dramatic leaps up a 'ladder' or down a 'snake' for those who were in stable recovery compared to those in early or sustained recovery stages, who are likely to need more intensive and assertive recovery support. Despite this dynamic and nuanced journey of progression and regression, gender appears to be a key factor that differentiates the nature of the recovery journey in a number of significant ways.

Perceptions of treatment

Past treatment experiences were almost universal amongst the whole sample. Often, respondents returned to different treatment modalities several times over the course of their recovery journey.

However, peer-based recovery groups were often tied to the founding of key and long-term friendships that aided them in their recovery journey. For some of the female respondents this also involved the commencement of romantic relationships with participants while they were in treatment, resulting in both negative and positive consequences. For some, treatment was synonymous with coercion either from the criminal justice system or family members to get them into treatment or they felt that the range of treatment options were so limited they did not feel they had much choice.

For those that later went on to work in the treatment system, they often expressed their views that the treatment system doesn't work due to a range of factors. Those that wanted to make changes to the system, often felt they needed to gain educational qualifications to be taken seriously and have a legitimate voice in this arena:

> *"Having worked in treatment for so long, I am tired of being patted on the head for being another ex-addict and that is why I am doing a PhD.*
>
> *"They are doing it wrong – and the driving force behind the PhD – putting people on methadone is just wrong – the problem with society today is that we are just isolated."* – Abbie

Perceptions of peer-based recovery support

Whilst the recovery journeys described in the interviews were personal and diverse, common themes emerged. For some, they felt that they are still in recovery and on some level will always be on that journey, learning about themselves, developing, and healing through understanding their triggers and areas of vulnerability. The discovery of purpose and their authentic self was a key milestone for many on their journey:

> *"Recovery means always progressing and moving forward. It's a journey. I'll never be recovered – it's a personal journey of self-discovery – that sounds like a cliché – but it's about self-development. The key thing is developing emotional intelligence – understanding yourself, where you're at and what you're doing."* – Harriet

For a minority, they considered themselves to have recovered and be 'post recovery', as was previously reported by White and Kurtz (2005) in their paper on the variety of recovery experiences. They had moved on from their addictions, triggers, and their former recovery community to embrace society, relationships and roles that are no longer connected to addiction or recovery. Recovery had given the respondents a sense of freedom from addiction and the addict lifestyle. They celebrated being clean and able to participate in the simple everydayness of life:

> *"Meaning in life: just day to day living – like I said at the beginning the life I have is so far removed from what I thought was possible."* - Yuri

A number of respondents discovered a sense of peace beyond the addict lifestyle.

Gender differences

Two dominant differences emerged in the sample between males and females. For the females there was a stronger focus on dyadic relationships with the onset of addiction often described as centring around various negative relationships including violent and abusive 'romantic' relationships with men, which often continued into their recovery journey:

> *"I then made the cardinal mistake – 13th step, I met a bloke and we left. We did a runner at 6 o'clock in the morning. We went to London where he lived, and we shacked up in a hotel for a few weeks and then moved into his flat and then started using again – it was a classic.*
>
> *"Drinking, using cocaine and some ecstasy – I kept well away from heroin and amphetamines – but what I didn't know at the time – I met this guy in treatment, but when he started using again, he became very violent. For about 3 and a half years, we lived in this fantasy world of drugs and alcohol and violence and police."* - Emily

In addition, becoming pregnant and a mum was a key driver for wanting to quit and provided the motivation to end an addictive lifestyle:

> *"When I did get pregnant that was the motivation for me to stop – after my daughter was born, I lost my house and moved out and it was to give her a better life. My daughter was nine months old – when I was pregnant, he was using more, and I left when she was nine months old."* - Holly

For others, restoring and repairing relationships with children and close family was key. Whilst in recovery, the women often spoke about the positive impact of forming key friendships from their recovery support groups. For the males in the sample discovery of purpose through an emerging career often in the drug recovery and treatment arena became a strong protective factor in their recovery journey:

> *"I got phased back in part-time then full-time and then promoted and this January I got promoted to under the director and I now deal with clinical staff and senior people and that has cemented my self-esteem – I have researched the subject and I take on a lot of research and trends and it has given me a real sense of purpose. And I am mindful on a daily basis that I am still an infantry soldier."* - Dan

Discussion and implications

A greater understanding of how gender differentially affects the recovery journey is vital. Moreover, gaining an understanding of the areas that facilitate accrual of recovery capital and conversely, those that impede recovery for males and females is imperative. Creating systems and pathways that utilise this knowledge has the potential to shorten the recovery journey and minimise the pains experienced along the way. The development, for example, of nuanced pathways based on gender for recovery support, that provide males with training and tools for work life balance and females with opportunities to engage in family reconciliation services and social community connectors.

Photovoice project with women in recovery in Belgium

The voices of women in recovery have long been absent in treatment studies and the addiction recovery debate. Available qualitative research primarily applies interview and focus group methods, but in this study we used an innovative photovoice method to uncover the personal recovery stories and pathways of women with a history of (illicit) substance use problems. The goal of this study was to engage with the lived experiences of women who use or have used drugs and to understand what supported them to initiate and maintain change. Eight women who initiated or ae maintaining recovery met monthly over a six-month period to select pictures and to share and find common themes, related to facilitators and barriers in their recovery process.

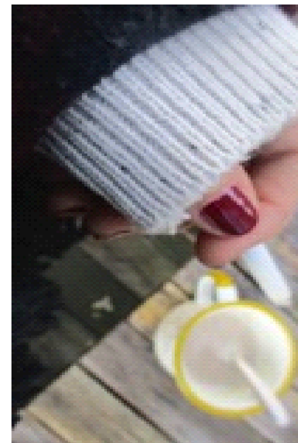
The photovoice project took place from 01/11/2019 to 30/06/2021. During that period following research activities took place: development of the photovoice methodology, recruitment, six group sessions, data-analysis, development of an academic article, development of a photo website, development of a photo book and preparation of a book presentation and/or photo exposition.

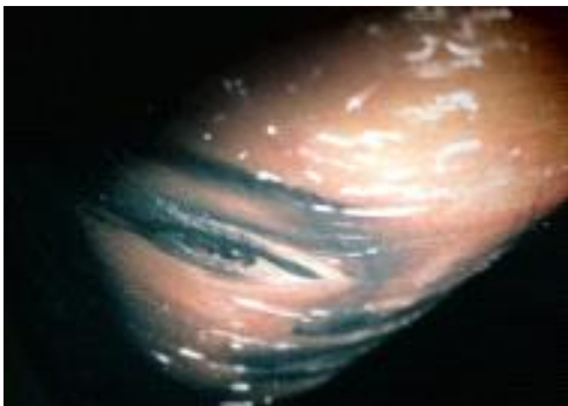
At the start of the project the research team developed a photovoice methodology which translated into a manual for the participants which contained information about the project, photography tips, some tricks and exercises and inspiring work from other photographers and photovoice projects in relation to addiction and recovery. Additionally, the team wrote a working paper on the conceptualization of recovery.

Women were recruited from the group who participated in the Life in Recovery survey in Belgium (Best et al., 2018). Only participants who met the baseline eligibility criteria (i.e. being at least three months in recovery, had a primary problem with illegal substances and being at least 18 years old), provided contact information and could be reached for the 12-month follow-up period were eligible for this sub-study. Based on these criteria, 27 women were eligible for the photovoice research. Eventually, ten women (between 25 and 54 years old) provided informed consent and started in the photovoice study. During the project, two participants dropped out due to specific challenges related to their recovery process. Two other participants could not engage in the group meetings. Therefore, we decided – by mutual agreement – to work with them individually. The remaining six women engaged in the group meetings throughout the duration of the photovoice process.

The project was built on six group sessions. Each participant received a ‘photovoice manual’ and a digital camera, which they could keep after the project. In general, the idea is that the participants make photos that are being discussed throughout the group sessions. The first group meeting had a strong focus on getting to know each other in order to create safety and explore the content of the project. During the first session, participants were asked what brings quality of life in their current daily lives. This served as a gateway to talk about which factors initiated change in their lives and what supported or hindered them in maintaining change. In the second group session, there was a focus on what supports the participants in

maintaining positive change in their lives. This entailed talking about persons, places and activities that were supportive for their recovery process. The following group session started with an introduction to the concept of recovery capital and how it can be connected to their day to day lives and environments. The group was invited to analyse the photos and interconnecting stories together with the researchers. As such, the focus of this session lied on understanding how personal, social and structural elements have an influence on recovery in day-to-day life. The fourth group session continued to build on the same focus. We also left space to talk about what factors hinder (maintaining) change. The fifth group session had to be cancelled. The final and sixth group session focused specifically on the topic of gender in relation to recovery.





Data-analysis was performed through inductive thematic analysis. The goal was to understand which dynamics constituted recovery processes in the lives of our participants. A first element of the thematic analysis was that participants were invited during the group sessions to analyse the data together with the researchers. This consisted of sharing the meaning of individual photos, how this relates to other photos or lived experiences and working towards a collective analysis of these photos and topics. A second step in the analysis was undertaken by the researchers. After verbatim transcription of the group discussions and individual interviews, two authors (TVS & JDM) familiarised themselves with the data and analysed the

data (group sessions, individual interviews, photos) independently. This resulted in a text document, including the analytic structure of relevant and recurring topics.

This research demonstrates the interactive and complex dynamics of recovery capital. The different photos and stories show how being in recovery is an intricate web of individual, social and societal (im-)material (in-)equalities. Even stronger, all these elements of recovery are fundamentally shaped by contemporary ideas and expectations about beauty, addiction, woman- and motherhood. Four themes were identified as building stones for initiating and maintaining recovery: (1) (Re-)building me; (2) Untangling what is life and what is addiction; (3) Becoming (re-)connected; and (4) (Enacting) perspectives on the future. The study revealed the methodological potential of the photovoice method for exploring interconnected recovery challenges among women, as well as the destructive impact of negative social norms on women's recovery experiences.

The photovoice project resulted in an academic article:

Van Steenberghe, T., Vanderplasschen, W., Bellaert L. & De Maeyer, J. (2021). Photovoicing interconnected sources of recovery capital of women with a drug use history, *Drugs: Education, Prevention and Policy*. https://doi.org/10.1080/09687637.2021.1931033

We also built a photo website (www.photovoicingrecoverypathways.com) and prepared a photography book (https://borgerhoff-lamberigts.be/boeken/recovery-pathways) that will come out in December 2021.

WP5: Role of socio-environmental components in recovery pathways (policy analysis)

The focus of this section is on the findings from the policy analysis and draws together themes from each country. We start with the findings from the policy analysis in Belgium and the Netherlands, and then look at the main findings from the UK policy analysis. A three-stage method was replicated in each of the four jurisdictions (Belgium, the Netherlands, England and Scotland) based on the following steps:

1. Undertake interviews and workshops with key policy champions and policy stakeholders from government departments;
2. Based partly on their recommendations, identify and analyse policy documents relating to recovery and to drug policy more generally;
3. Conduct key informant interviews with stakeholders identified by the civil servants and policy holders, and also based on 'snowball' connections.

Recovery policy analysis in Belgium and the Netherlands

Chasing a pot of gold : an analysis of emerging recovery-oriented addiction policies in Flanders (Belgium) and The Netherlands

Following the paradigm shift to recovery in the Anglophone world, recovery is also gaining momentum in drug policy and practice in Flanders (Belgium) and the Netherlands. Since the meaning of recovery is being debated internationally, broadening the assessment of how the recovery framework is applied in policy discourse and how it is implemented in various international contexts is imperative. This comparative policy analysis aims to assess similarities and differences in addiction recovery vision, implementation, and evaluation in Flanders and the Netherlands. The thematic analysis draws upon a triangulation of different data collection methods: a focus group (n=14) and interviews (n=21) with key figures in the addictions field, followed by analyses of relevant policy documents (n=9). Our findings show that a holistic vision of addiction recovery is endorsed in both countries. Although differences in policy development occurred (i.e. centrally driven in Flanders versus 'bottom-up' in the Netherlands), similar challenges emerged concerning recovery-oriented addiction policies. While policy makers in Flanders and the addiction sector in the Netherlands strongly proclaim recovery, structural implementation, dedicated funding, and systematic evaluation of recovery-oriented policies are lacking. This study suggests that systematic inclusion of experts by experience and aligning government and practice level funding and policies are crucial.

The study shows that the growing emphasis on recovery-oriented addiction policies is not restricted to the Anglophone world. Recovery, as an organizing concept, is also becoming the ultimate goal of treatment services and the guiding vision of addiction policies in Flanders (Belgium) and the Netherlands. Despite apparent between country differences in recovery-oriented policy development (i.e. centrally driven

versus 'bottom-up'), similar challenges emerged when implementing these policies. Clear implementation, in terms of content and financing, and evaluation of recovery-oriented addiction policies is, however, missing or just emerging, which is why these policy shifts to recovery could symbolize "chasing a pot of gold at the end of the rainbow". This might partly be due to a policy context that is based on decentralization and incremental change, in which a 'bottom-up' approach is used to spread new ideas and create a support base. We argue that if a central policy were to be put in place, it should impose minimal demands, through operationalization milestones and evaluation tools, while simultaneously ensuring sufficient room for innovation and a tailored approach.

Bellaert, L., Martinelli, T. F., Vanderplasschen, W., Best, D., van de Mheen, D., & Vander Laenen, F. (2021). Chasing a pot of gold: an analysis of emerging recovery-oriented addiction policies in Flanders (Belgium) and The Netherlands. *Drugs: Education, Prevention and Policy*, *28*(5), 399–410. https://doi.org/10.1080/09687637.2021.1915250

Recovery policy analysis in Scotland

The Road to Recovery (R2R, 2008) is seen, largely across political and professional disciplines, as an innovative and ground-breaking document and as signalling a fundamental change in direction. While there is generally a sense of disappointment about implementation (and in particular failures to evaluate), many of our expert interviewees would acknowledge that it has led to cultural change in some aspects of treatment delivery and has at least coincided with the growth of a visible recovery population in Scotland. It is perhaps surprising, given the criticisms of Road to Recovery around lack of specificity, adequate milestones, or clear targets, that precisely the same accusation could be levelled against Rights, Respect, Recovery (RRR), its replacement policy document (2018). At the time of writing, the Action Plan associated with RRR has almost no clear (enumerable or measurable) targets for recovery, and the whole concept of recovery has moved from the foreground of R2R to a supporting role in RRR.

The interpretation of policy and impact by our key stakeholders reflect the diversity of their backgrounds, with ongoing debate about how committed policy and policymakers are to key areas such as evaluation and research; to the active and meaningful inclusion of the voice of lived and living experience, and to actual change in the culture and process of delivering drug treatment. Tensions remain around the old dichotomies of recovery vs harm reduction and peer-led versus professionally led services.

Finally, it is important to recognise that Scotland faces unique challenges in social inequalities, significant pockets of poverty and deprivation and the ongoing challenges of excessive alcohol misuse and soaring rates of drug-related deaths. It would appear to have been the intractability of these factors, rather than a perceived failure of R2R, that has led to a new strategic approach, and the resulting spaghetti of structural

and organisational partnerships and expert groups, to yet further expansions in the professional architecture of attempting to address these issues.

Before going on to discuss the policy developments in England, it is clear that there are emerging themes from the work in Scotland, Belgium and the Netherlands:

1. Recovery policy has been linked to significant advances in engagement with communities and ‘experts by experience’;
2. The broad and aspirational goals of recovery approaches are generally met with enthusiasm across multiple stakeholder groups;
3. However, there is a problem with translation of these high-level aspirations to applied and practical models for implementation;
4. This then has a significant knock-on effect in struggling to articulate what needs to be evaluated and what the appropriate metrics for evaluation would be;
5. Finally, recovery policies do not exist in isolation and are shaped by broader health and mental health agendas and by wider political models and approaches.

Recovery policy in England

While the same model was applied in England as in the other countries, there were some practical obstacles. The REC-PATH policy analysis for England began in April 2018 with an initial call for the workshop with civil servants who were responsible respectively for research and analysis, and for recovery strategy. This proved to be a complex task for two reasons. First, English drug policy does not sit neatly within a single Government department, and so identifying key stakeholders was much more challenging than in Scotland. Secondly, many of the individuals contacted either did not reply or wish to be interviewed and therefore only one person (the justice lead) from Public Health England, a key partner in delivering drug and alcohol treatment (and related policy), was willing to participate. In addition, there was only one workshop with three individuals participating and the other two individuals were interviewed on a one-to-one basis. What was also highly evident from those who participated was that the areas they felt able to discuss or pass comment on were much more local and confined than their equivalents in Scotland.

The findings from this policy analysis show bold and ambitious policy goals, but poor articulation of how they should be implemented. This appears to have resulted in minimal impact or culture change. There is little clear evidence that the ambitions set out in policy documents are implementable, much less implemented or evaluated. There is, however, observable progress in the increasing role for co-production and active engagement with Lived Experience Recovery Organisations (LEROs) in policy development and implementation in England. The implications for recovery at a systems level are discussed.

A number of the interviewees expressed considerable hope that the Dame Carol Black Review (this is a phased review with two sections reporting in 2020) would re-invigorate drug policy in England and act as a catalyst for further investment in drug policy. However, one interviewee conceded that there is "*not one internal view within Government on this at this point – to a lesser extent this is also true in Scotland, but we have no uniform set of objectives, and there is an acceptance that the strategy has not gone hard or far enough*".

Another interviewee argued for a fundamental recognition of recovery communities and a separation of the funding and commissioning of recovery support services from acute treatment in their assertion that we "*need grants to local communities and we need some way to separate out grants for medical interventions from those for recovery communities. In cancer care they don't just delay death, but they try to save as many people as they can – [we] need to develop responsibility and a health care system that does this with substance related issues. Long-term, repairing someone's life and building connections, this is what the recovery community and those with lived experience would be best at. If you believe these two things are separate –[we] need structure for health care to work on the first part, but then need recovery community expertise to work on the second part".*

Overview of recovery policies in Scotland, England, the Netherlands and Belgium

There are a number of common themes that can be identified across the participating countries:

1. General positive responses to the transition to a recovery model for drug policy that is characterised by hope and ambition for people with addiction problems;
2. Challenges of definition and precision both in specifying what recovery policy means and how that should be translated into actions;
3. Lack of a clear implementation plan resulting in inadequate metrics to assess implementation and little consensus about evaluation process or method;
4. Almost a complete lack of comprehensive evaluation strategy and a fragmentation of evaluation process;
5. A transition to localism (not in Scotland) which makes both implementation and oversight at a central level extremely difficult to achieve;
6. Some elements of success – particularly around the growth of a visible recovery community, changes in attitudes and beliefs among some professional groups and a positive growth in the status and engagement of those with lived experience.

What is apparent from this analysis, and may yet be addressed through the Rights, Respect, Recovery model in Scotland, is the establishment of a model of mechanisms at a policy level. Our work on this will continue with a number of research outputs with three papers in early draft stage on:

- The role of recovery in drug policy in England
- Comparing the implementation of recovery models in Scotland and England
- What the ERANID study can tell us about comparative drug policy in four countries

The policy component was successfully completed in Belgium and the Netherland and this has led to journal submissions one of which has been accepted (Bellaert et al, 2021), while the other (Martinelli et al) is currently under review.

Implementing the policy research component in the UK was not possible in the same way as the workshops planned involved only small numbers of participants in both Scotland and England, and in England in particular there was a low level of engagement with the research team. A significant number of key policy stakeholders did not reply to a number of email requests for participation. Nonetheless, the remaining components of the analysis – expert interviews and documentary analysis have been completed and the intention is to submit at least two journal papers based on this work.

WP6: Integration and scientific valorisation

The design of the project team was engineered around adequate specialist skills and knowledge supplemented by external advisors who are world leaders in this area. For the quantitative analysis, the team from the University of Manchester have the expertise in database management in addiction research, under the leadership of Professor Tim Millar, a highly respected addiction academic. For the qualitative analysis, the innovative Photovoice method has been championed by dr. Jessica de Maeyer from the University of Applied Sciences and Arts in Ghent (HOGent) and has involved the use of a professional photographer with experience of Photovoice methods. Additionally, the qualitative research input has been led by the PhD students in Ghent and Rotterdam and the UK has had additional expert input from Dr David Patton from the University of Derby. For the policy analysis, the conceptual leads have been drug policy experts Freya Vander Laenen and Charlotte Colman from Ghent University, who have considerable expertise and knowledge in this area.

The overall project has been led by four academics with considerable international expertise in recovery research – Professor David Best in the UK, Professor Wouter Vanderplasschen in Belgium and Professors Dike Van de Mheen and Gera Nagelhout in the Netherlands. This team has been supported by expert advice and input from Professor John Kelly from Harvard Medical School and William White of Chestnut Health Systems, both global leaders in the field of addiction and recovery research. The other primary mechanisms of valorisation have been through expert review and the active involvement of the recovery community – as our peer champions. The full list of peer-reviewed papers completed and in preparation are listed at the end of this section.

Peer valorisation has occurred through both the Public Patient Involvement panel ShARPP in Sheffield that provided the initial feedback on the study and now through the College of Lived Experience Recovery Organisations.

WP7: Dissemination: community involvement and societal impact

This section will be divided into sections on community involvement and societal / policy impact.

Community involvement

In the UK, active dissemination of the findings to recovery groups and communities with presentations at Recovery Cymru's 10th anniversary and the Scottish Recovery Consortium's 10th anniversary events by David Best (December 2020). However, the most prominent form of dissemination and active recovery community engagement is through PI Best's role as a founding member of the College of Lived Experience Recovery Organisations (CoLERO). The aim of this group (founded in March 2020) is to increase the evidence base, support innovation and create a network of recovery community organisations to support recovery transitions. This group has now hosted two Recovery College events online and regularly contributes to community engagement through the live webinar series run by the recovery organisation The Well.

The Dutch speaking researchers Lore Bellaert and Thomas Martinelli regularly provided feedback to research participants using factsheets and recorded videos and blogs about core research findings. The UK researchers developed similar podcasts and a blog on the REC-PATH website. In the Netherlands, the client movement 'Het Zwarte Gat' was closely involved in setting up and disseminating the research findings. In Belgium, a national campaign on 'mental health' ('Te Gek') was devoted to addiction and recovery and built further on the REC-PATH project. Lore Bellaert was interviewed on the national radio and witnessed in a newspaper interview how addiction and recovery have affected her as a person, researcher and practitioner (autumn 2020). Finally, the photovoice project has resulted in a collection of beautiful pictures that will be/have been exposed in some characteristic public places (entrance hall of some large psychiatric hospitals) and that will be taken up in the permanent collection of the well-known museum of psychiatry in Ghent (Dr. Guislain). A website and book will support further dissemination of this innovative project to civil society and workers in alcohol and drug services. Obviously, the women participating in this Photovoice project have been empowered to make professional pictures, talk about recovery and connect with supportive peers.

Societal and policy impact

In the UK, there is currently a review of drug policy in the form of the Dame Carol Black review. PI Best has twice presented to the review group, once through the College of Lived Experience Recovery Organisations (CoLERO) as outlined above and also through the Recovery Group UK, a group primarily championing residential treatment services.

The work on dissemination is ongoing particularly with the forced cancellation of the final conference that was foreseen in Buxton (March 2020), where our aim was to actively engage a group of research participants in helping us disseminate our findings. This has been replaced by a successful online conference on March 25, 2021 (over 250 attendees), where we started to actively engage a group of 30 research participants from Belgium, the UK and the Netherlands to further enhance the dissemination process.

As we are completing the analysis of the quantitative and qualitative components (including the policy analysis), the aim is to focus on further dissemination and societal impact in the Autumn of 2021 and beyond that period. The COVID pandemic and related restrictions have clearly impacted on the REC-PATH valorisation activities. The researchers have not been able to talk about the research findings at international conferences, but plan to do so at the Lisbon Addictions conference in November 2022 and similar occasions. Several scientific papers have been produced by the research team, resulting in a dozen of journal articles in high impact journals as well as professional journals. The Photovoice project has resulted in a book publication by the famous Belgian arts publisher (Borgerhoff & Lamberigts), that will be published in December 2021.

As part of the dissemination process for the project, Wouter Vanderplasschen and David Best have become guest editors on a special issue of the journal Drugs: Education, Prevention and Policy, focusing on mechanisms and mediators of addiction recovery. This special issue was published in November 2021 and contains three papers from the current project, as well as a number of important international papers focusing on recovery pathways, gender and other recovery mediators.

The partnership that has grown between the international project partners is evidence of significant capacity building around recovery research with two PhDs in this area (one in Belgium and one in the Netherlands), approaching completion as a result of this project. The outputs from the project are ongoing and we would anticipate significant further contributions in the areas of innovative methods (such as Photovoice), contributions to addiction and recovery policy, understanding of pathways to recovery and a focus on gender-specific recovery effects.

Finally, the project partners has been successful in generating funding for a third wave of data collection (funded by the ESRC) and through this process we will be establishing continuity of data collection and research that also has a fundamental impact on service user involvement. We will partner with the research participants to disseminate our findings to recovery communities across the UK and beyond.

4. List of project outputs (published until November 2021)

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