

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

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## **ABSTRACT**

While there has been a growth in recent years in recovery research, much of this has been from the US and there is very little comparative research in this area. This paper 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. Our 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 paper describes five processes through which mechanisms for behaviour 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.

Key words: Recovery pathways; gender; policy; mechanisms of change; Life in Recovery

## INTRODUCTION

In a review of evidence for the Substance Abuse and Mental Health Services Administration (SAMHSA), Sheedy and Whitter (2009) estimate that, of all those who have a lifetime alcohol or drug dependence, 58% will achieve abstinence. White (2012) also estimates a recovery rate of approximately 50% based on an extensive review of literature. This represents a rather optimistic prognosis for what is often categorised as a chronic relapsing condition (O'Brien & McLellan, 1996; White, Boyle, & Loveland, 2003), and is consistent with a model of recovery based on hope and belief that change is possible.

Research assessments of who achieves this stable recovery status has generated a body of research into 'recovery capital', defined as the internal and external resources available to an individual to support their recovery endeavours (Granfield & Cloud, 2001). Subsequently, Cloud and Granfield (2008) extended this concept to 'negative recovery capital' to suggest that for certain populations, the likelihood of recovery is diminished, suggesting that this applies to older drug users, to female drug users, to users with a significant forensic history and to individuals with co-morbid mental health problems. However, models of recovery capital have had to be developed to incorporate community-related factors (Cano et al, 2017) and concerns remain that recovery capital may overstate the importance of personal factors at the expense of structural and community determinants of change.

This has also prompted research into the potential mechanisms that may support and sustain recovery endeavours. Moos (2008) cites four such mechanisms, two social and two personal mechanisms. He argues that recovery was more likely where there were opportunities for social learning and where networks provided social control in the form of norms and values that are supportive of recovery. Similarly, individuals were more likely to recover if their values changed so that the attractiveness of recovery exceeded the appeal of return to use, which he refers to as 'behavioural economics'. Finally, Moos suggests that the development of a range of coping skills

including resilience and self-esteem can help individuals manage high-risk situations. The social model is supported by a secondary analysis of Project MATCH data by Longabaugh et al. (2010) who found that transitioning from social groups supportive of drinking to social groups supportive of recovery was a major predictor of sustained recovery endeavours in problem drinkers.

This theme was further developed in a recent paper by John Kelly (2017) on mechanisms for behaviour change for recovery in Alcoholics Anonymous (AA). Kelly argues that social network change (along with cognitive transformations) was critical in male recovery but that increases in abstinence self-efficacy was the primary mechanism of behaviour change brought about by attendance at 12-step mutual aid groups. In challenging the importance of a 'spiritual awakening', Kelly also argued that the evidence would suggest a gender difference -the effective elements of 12-step related more strongly to social factors in men and to cognitive factors in women (particularly the growth of abstinence self-efficacy).

There is a gap in knowledge about how different approaches to supporting recovery from problematic drug use generate mechanisms of change towards stable recovery. Additionally, most recovery research has been performed in the US and Australia, but research in Europe, especially multi-country studies, are missing. Therefore, the current REC-PATH study examines with a prospective design how different approaches to supporting recovery, including 12-step mutual aid groups, generate such mechanisms for change in four European countries. Prior to outlining this model, the programmes of research that the REC-PATH study builds on will be described, namely the 'Life in Recovery' series of surveys and the 'Social Networks and Recovery' study.

### **Life in Recovery**

In 2012, the US recovery advocacy organisation 'Faces and Voices of Recovery' published the first national survey in the US on recovery journeys: the Life in Recovery survey. The results of the online survey showed consistent improvements of people 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. Across a diverse range of recovery types (eg 'in recovery', medication-assisted recovery), participants reported consistent improvements across diverse areas of wellbeing. Using adaptations of the same approach, the survey has since been repeated in Australia (Best et al., 2014), the UK (Best et al., 2015) and Canada (McQuaid et al., 2017). The results have been remarkably consistent with strong gains in each of the domains assessed, and have been used to inform policy and practice debates in each of these countries about the benefits associated with sustained and stable recovery.

### **Social Networks and Recovery (SONAR)**

Monash University, Deakin University, and the University of Queensland in Australia carried out a longitudinal study, funded by the Australian Research Council (ARC) that assessed the impact of changes in social networks and social identity on a cohort of over 300 drug and alcohol users recruited as they entered treatment at one of five Therapeutic Communities on the east coast of Australia (Best et al., 2016). The project involved interviewer-administered research assessments conducted around the time of treatment admission, and two follow-ups, the first follow-up around six months after baseline, approximately the time those who had completed the programme would be due to leave, and the second follow-up twelve months after baseline when they would all have returned to the community. The project was essentially an attempt to test the Social Identity Model of Recovery (SIMOR; Best et al., 2016), a conceptual approach to recovery that emphasises the importance of social network change in initiating and sustaining recovery. However, the model asserts that simply moving between social groups is not sufficient, as it is the identity that is linked to old and new groups that is crucial in transitioning values and beliefs to ones that could support and sustain recovery.

The project was also used to further enhance a research and therapeutic visualisation technique called Social Identity Mapping (SIM; Best et al., 2015). This technique was developed to allow rapid assessment of both the size and composition of the social network and the extent to which it was protective against substance use, using a method that actively involved and engaged the research participant. Recovery is sustained by moving away from groups whose norms are centred around substance use; moving away from such groups to those whose norms do not support heavy substance use requires a change in social network composition. The SIM method is highly engaging for clients, allowing a hitherto hidden visualization and understanding of the negative impact that engagement with groups supporting substance use norms are having on recovery efforts. It is a strong therapeutic tool that also yields both quantitative and qualitative research data.

The project allowed the development of a set of measures that assess pathways to recovery primarily from a social perspective, and the extension of the design of SONAR for the REC-PATH study allowed application beyond the Therapeutic Community setting to a more diverse range of recovery models and pathways.

### **Aim of the REC-PATH study**

The aim of our current project, called Recovery Pathways (REC-PATH), is to map pathways to recovery from problematic illicit drug use in populations engaging with five different mechanisms of behaviour change for recovery:

- 1) 12-step mutual aid support,
- 2) peer-based recovery support,
- 3) residential and community treatment,
- 4) specialist outpatient treatment (maintenance and abstinence oriented), or
- 5) through their own 'natural recovery' endeavours

With the exception of natural recovery which assumed no sustained engagement with either peer support or professional treatment, the assumption was that many of the participants may have attempted multiple methods, and our aim was to assess sequencing, impact and effectiveness of each pathway and combination.

Following the categorisation specified by the Betty Ford Institute Consensus Panel (2007), we will recruit populations in early (<1 year), sustained (1-5 years) and stable recovery (>5 years) in four countries (England, Scotland, Belgium and the Netherlands) using Life in Recovery as the screening tool, and then track these individuals over the course of one year, with baseline and one-year follow-up in-depth interviews. The objective is to examine how the mechanisms for behaviour change that are identified in the previous work of Moos (2008) and Kelly (2017) apply at different stages of recovery journeys. Eventually, this can provide indications for how treatment, interventions, and quality of life of people in recovery can be enhanced, and recovery can be sustained. These support delivering mechanisms are explained in more detail in Table 1 and in the text below:

1. 12-step mutual aid: this is globally the most widespread form of self-help (Humphreys et al., 2004; Kelly, 2017) and is based on the 12 Steps of Alcoholics Anonymous, that have been adapted for a number of other 12-step Fellowships including Narcotics Anonymous, Cocaine Anonymous and Gamblers Anonymous. The assumption underpinning this recovery model is that addiction is a lifelong, chronic affliction that can be effectively managed by working the 12 Step programme.

2. Other peer-based support groups: there are an eclectic range of other peer-based organisations from the highly structured and programmatic such as SMART Recovery (Horvath, 2000; Horvath & Yeterian, 2012) to small groups of like-minded people who come together to support each other's recovery. These are collectively referred to as Peer-Based Recovery Support Services (PBRSS) by White (2009).

3. Professional community treatment: this is a diverse group of professional treatment that will include counselling and other outpatient therapeutic interventions as well as pharmacotherapies such as opioid substitution (maintenance) therapies that have been the subject of considerable interest regarding the idea of 'medication-assisted recovery' (e.g. White & Torres, 2010).

4. Residential treatment: this will include Therapeutic Communities (TC), that is of particular interest to the study, because of its unique philosophy and approach based on the idea of the community, and the process of living in a TC, as the method of achieving recovery (De Leon, 2000; Vanderplasschen et al., 2013). However, this category will also include a more varied array of residential rehabilitative facilities, including those that are staffed exclusively by paid professionals.

5. To supplement these four forms of active intervention that we will examine, we will also consider a fifth pathway to recovery change, which has been termed 'natural recovery'. Natural recovery (e.g. Klingemann & Sobell, 2001; Sobell, Ellingstad, & Sobell, 2000); refers to those individuals who achieve and sustain recovery with no significant input from formal assistance or treatment for substance use problems, nor from support offered by mutual aid groups.

The aim of the study is to assess the utilisation and uptake of each of these support delivering mechanisms and their perceived effectiveness and impact among people in recovery at different stages of their recovery journey: 'early recovery' (within the first year), 'sustained recovery' (between one and five years into the recovery journey) and 'stable recovery' (more than five years into the recovery journey). Also, encouraged by the gender breakdown of the previous Life in Recovery surveys, we are aiming to recruit equal numbers of male and female participants from each of the stages of recovery in order to examine gender differences in uptake, utilisation and satisfaction with each of these projects.

The following research questions are answered in the REC-PATH study:



1. What are the characteristics of those in early, sustained and stable recovery in England, Scotland, Belgium and the Netherlands and how do they vary by gender and by experiences of the five mechanisms of behaviour change for recovery (MOBCR) at baseline? How have characteristics of those in different recovery stages changed by one-year follow-up?
2. 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, and what impact have those changes had on their wellbeing?
3. 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?
4. 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?
5. 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?
6. How do drug users in various stages of recovery experience recovery and access 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 process?
7. What are the predictors of relapse (reinstatement of any form of problematic 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?

8. 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? What are the differences between countries?
9. What recommendations for adequate recovery policies can be formulated based on service users' and user organisations' experiences?

## **METHODS**

### **Quantitative surveys**

The quantitative part of the REC-PATH study starts with a structured and standardised survey about lifetime recovery experiences, called Life in Recovery (LiR; updated from the original LiR, see above), that will be used as a screening mechanism to recruit a drug recovery sample in four countries: Scotland, England, Belgium and the Netherlands. There have only been minor amendments from the surveys reported in Australia (Best, 2015) and England (Best et al, 2015).

Inclusion criteria are being a minimum age of 18 years of age and being in recovery from problematic illicit drug use for at least three months. The concept of 'recovery' is 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 is not examined in this study, although people may have comorbid problematic alcohol use, which is assessed in the survey. We will attempt to recruit equal populations of people in early recovery (<1 year), sustained recovery (1-5 years), and stable recovery (>5 years), stratified so that there are equal numbers of men and women, as gendered pathways are a key focus of the study. We will recruit through the key recovery agencies and treatment services, through social media, and through word of mouth snowballing in each participating country.

We are aiming for a total of 250 respondents to the LiR survey which is our inclusion screen, per country, providing us with an initial sweep of around 1,000 Life In Recovery surveys. No incentives are given for participation in the LiR survey. Respondents can fill in the survey online or on paper. 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.

For those who complete the LiR survey meeting the inclusion survey and expressing willingness to participate, there is a more extensive survey which will be carried out among 150 respondents per country, providing baseline quantitative data on 600 participants in total. This Outcome Study at Baseline (OSB) survey comprises of standardised measures that will adequately address the research questions. Measures in the OSB include: Commitment to Sobriety (Kelly & Greene, 2014), Recovery Group Participation Scale (Groshkova, Best, & White, 2011), Maudsley Addiction Profile (Marsden, Gossop, Stewart, Best, Farrell, & Strang, 1998), MANSA (Björkman & Svensson, 2005) and Perceived Stigma (Link, Struening, Phelan, & Nuttbrock, 1997). The OSB survey will be carried out within one to three months after participation in the LiR survey. An incentive of €10/£10 is given for participation in this survey. Respondents can fill in the survey online, on paper, by telephone, or face-to-face, whichever they prefer. The questionnaire contains questions about e.g. quality of life, key life events, physical and psychological health, barriers and facilitators to recovery, past 30 day drug use, perceived stigmatization, social networks, and social identity.

Finally, we aim to reassess the cohort one year after the baseline survey, using a repeated measures approach; a direct replication of the OSB items. The follow-up survey, Outcome Study Follow-up (OSF), will be conducted among the respondents who participated in the OSB. Attrition will be mitigated by continual engagement with this cohort via social media, a dedicated closed group on Facebook, and email. OSF participants are incentivised further by the offer of €15/£15 given for

completing the OSF part of the study. In addition to repeating the measures from OSB, OSF will include questions exploring a range of behaviours and changes during the past 12 months.

### **Qualitative studies**

Sub-samples of 30 respondents per country will be interviewed between the first (OSB) and second follow-up survey (OSF), using in-depth qualitative interviewing techniques. The aim of these interviews is to understand the subjective experience of attempting to access various sources of recovery capital (Vilsaint, Kelly, Bergman, Groshkova, Best & White, 2017) and change mechanisms, including experiences with specialist treatment services (Kelly, 2017), and the nature and success of self-change attempts (natural recovery). Additionally, the in-depth qualitative interview will consist of individual, retrospective narratives to reflect the complexity of the recovery concept and the recovery journey. To facilitate this, the interview will be based on the Lifeline Interview Method (LIM) (Berends, 2011). LIM is a cross-sectional method, allowing a retrospective lens to elicit autobiographical, longitudinal data covering personal recovery trajectories. The results from the quantitative cohort study will inform the qualitative interview schedule.

The innovative Photovoice methodology (Vervliet et al., 2017) will be used among 15 women in recovery in Belgium to further explore and document their recovery pathways. These women are provided with cameras and are asked to photograph key recovery moments and experiences, thus gaining insight in structural barriers and facilitators of recovery. Photographs are discussed and analysed during group meetings and potential additional individual interviews. This study will address the gap in literature around female pathways to recovery in one of our participating sites.

### **Policy analysis**

A policy analysis is being conducted across the four participating countries. As the four countries differ in the way and extent to which recovery is translated into the national addiction policy, comparisons between these countries can be particularly informative. The aim of this analysis is to

explore how policy makers understand the process of addiction recovery and how that can be realised through various policy and practice activities. In each country, a focus group with key policy stakeholders in the addiction field, such as (top level) civil servants, is performed to start off the policy analyses. This is followed by documentary analyses of policy and related documents (eg official statistics) and face to face interviews with civil servants as well as politicians, experts by experience, academics and practitioners. The aim of this policy analysis is to identify how policy makers define recovery, what strategies and structures are implemented to achieve the identified recovery models and objectives and whether the objectives are implemented as intended as well as achieved as intended. The results from the quantitative and qualitative components of our study will be interpreted in light of the results from the policy analyses. We will look to undertake structured analysis of both the documents and the interview transcripts.

## **DISCUSSION**

The aim of the REC-PATCH study is to map pathways to recovery in populations engaging with different mechanisms of behaviour change for recovery - mutual aid, peer-based support, residential and community treatment, specialist treatment: maintenance and abstinence oriented) or through their own 'natural recovery' endeavours, at different stages of their addiction careers. The study is the first major comparative study of addiction recovery undertaken in Europe and will allow us to look at what mechanisms help to initiate and support recovery and how this differs by gender.

Examining how different forms of support and intervention generate mechanisms for sustainable behaviour change in recovery will shed further light on how treatment pathways and policy preferences influence the accessibility and viability of these pathways. While the study builds on previous work on Life in Recovery and the SONAR study conducted in Australia; REC-PATH will use a number of the same instruments to test the same underlying Social Identity Model of recovery, extending the design to move from one particular intervention modality (Therapeutic Communities) to five (four types of intervention and natural recovery). As the study also uses a prospective cohort

design, we will be able to examine active engagement with any of these change triggers as predictors of growth of recovery resources and recovery capital.

Furthermore, we will have two further components to the study to supplement the predominantly quantitative and structured approach of the outcome component of the study. The first is the use of qualitative techniques - including innovative methods such as Photovoice - to supplement the quantitative measures and this will include timeline follow-back methods to examine changes and pathways of recovery across the life course. The second critical additional component of the research programme is the opportunity to conduct a policy analysis across the four participating countries. Broadly speaking these can be characterised as having established recovery policies in Scotland (Scottish Government, 2008) and England (HM Government, 2010) and relatively new recovery policies in the Netherlands (GGZ Nederland, 2013) and Belgium (Ministerie van Welzijn, Volksgezondheid en Gezin, 2015). We will review the policy frameworks for recovery and then examine the impact of the policy and practice frameworks on the recovery pathways reported in the client-driven components of the study.

Finally, the overall programme of research will have an approach and a procedure that are consistent with the recovery paradigm of inclusivity and transparency. To this end, we will have a website and social media accounts and we will recruit both through the key recovery agencies and services and directly in each participating country. Our aim is to ensure that the voices of those in recovery are heard and that their stories are given the opportunity to be aired.

Table 1: Mechanisms of behaviour change for recovery.

	<b>1. 12-step mutual aid</b>	<b>2. Other peer-based support groups</b>	<b>3. Professional community treatment</b>	<b>4. Residential treatment</b>	<b>5. Natural recovery</b>
<b>Variants within the model</b>	AA, NA, CA	Structured / organisational (e.g. SMART or local)	Abstinence-oriented (detox, reduction) or maintenance	'Pure' or 'modified'	None
<b>Group-based</b>	Yes	Yes	Not necessarily	Yes	No
<b>Recovered or in recovery (self-defined)</b>	In recovery	Recovered	Recovered	Recovered	Not known
<b>Reliance on peer influence</b>	Yes	Yes	Not necessarily	Yes	No
<b>Reliance on professional input</b>	No	Possible	Yes	Possible	No
<b>Cost</b>	None	Low or none	Medium to high	High	None
<b>Promoting abstinence</b>	Yes	Generally, but not exclusively	In some but not all services	Yes	Not necessarily
<b>Promoting employment</b>	Through networks and social learning	Through networks and social learning	Case management model	Generally a requirement of graduation and moving on from TC	Employment unlikely to have been lost
<b>Promoting housing</b>	Through networks and social learning	Through networks and social learning	Case management model	Treatment and aftercare pathways	Housing may not have been lost as part of the retention of recovery capital
<b>Challenging stigma and exclusion</b>	Anonymity	Peer support	Various but including community linkage models	Through right living and possibly through links to recovery housing	Stigma may not be experienced

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