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Community recovery as a public health intervention: The contagion of hope

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## Abstract

There is a growing evidence base for recovery as a journey that involves reduced relapse risk, improved citizenship and better global health and wellbeing. While this is the case, there is a risk of omitting one of the prime benefits of a diverse range of recovery activities - the impact on families and the wider community. What the current paper does is to summarise evidence around the 'social contagion' of recovery through communities and its potential role in transmitting hope and the belief that recovery is possible even to those who are not yet ready to commit to abstinence. And further, that in doing so, visible recovery increases community cohesion and challenges stigmatisation and exclusion of recovery populations. The implications for public health from an emerging visible and high-profile social identity of recovery is discussed.

Key words: Recovery: hope; prevention; social contagion; public health

"All authors approve the manuscript and this submission The authors report no conflicts of interest"

#### Introduction

In 2007, Dennis and colleagues estimated that the average addiction career lasts for around 27 years - from initiation of psychoactive substance use to stable recovery. Such a finding, combined with the recognition that recovery journeys are typically of around five years from recovery initiation to stable recovery (measured in terms of reductions in the relapse risk rate; Betty Ford Consensus Institute, 2007) strongly supports an academic framework based on a developmental or life course perspective (Hser et al, 2007). In more recent work, Dennis et al (2015) concluded that most addicts will have significantly improved their chances of recovery after one year of continuous sobriety, and that after five years of continuous sobriety, most will be able to sustain their own recovery journey without any external support or assistance. Nonetheless (and dependent on the severity of their substance dependence) most addicts will cycle through at least episodes of problem use, treatment, incarceration and sobriety.

In spite of this incredibly long time-course, we know that the studies that have estimated the likelihood of recovery being sustained are significantly more optimistic. In their review for the Substance Abuse and Mental Health Services Administration, Sheedy and Whitter (2009) estimated that 58% of those who have a lifetime substance dependence will eventually achieve stable recovery. Although White's estimate (2013) was slightly more pessimistic at closer to 50%, the more recent studies reviewed indicated a recovery rate in the mid-50s, suggesting that people are more likely to recover than not.

We now have an emerging science that allows us to predict and measure effective recovery interventions and pathways to long-term recovery. From an individual perspective, Dennis et al (2015) have argued that early interventions are essential, while Dennis, Scott and Laudet (2014) have argued that among the 'external' inputs that can make a significant difference are ongoing monitoring and early re-intervention in the event of a lapse, including a key role for peer workers in the community, continuing care and participation in mutual aid groups, recovery management

check-ups (generally a telephone based system for providing ongoing monitoring and support) and a range of technology-driven interventions including apps and online support groups. This is consistent with the summary of evidence-based recovery interventions identified by Humphreys and Lembke who demonstrated the strong evidence base in favour of recovery housing, mutual aid group involvement and peer-delivered interventions.

It is also important to recognise, as argued by White and Cloud (2008), that the pathway to stable recovery is better predicted on the growth of strengths than on the elimination of pathologies and deficits. The development of recovery as a strengths based model is characterised by the concept of recovery capital (Granfield and Cloud, 2001) as the sum of resources available to individuals to support their recovery pathway. However, it is important to note that this idea emerges from the concept of social capital - including the notion that wellbeing is not just a question of access to resources but about a set of shared commitments and values (Putnam, 2000). In their subsequent iteration of recovery capital, Best and Laudet (2010) argued that there are three elements to recovery capital:

- personal recovery capital

- social recovery capital

community recovery capital

This model emphasises the complex dynamic pattern of factors that are essential to support and sustain recovery growth over the course of the first five years of abstinence - the growth of personal resources and strengths (such as resilience and coping skills, self-esteem and self-efficacy), social skills and particularly the transition from networks supportive of using to networks supportive of recovery (Longabaugh et al, 2010), and the responses of the community to creating opportunities for effective reintegration such as equitable access to houses, jobs and college courses. This tri-partite model has been mirrored in the desistance from crime literature by McNeill and colleagues (2014)

who have argued that there are three phases to sustainable desistance. These involve an initial cessation of the behaviour, a secondary phase that involves the generation of a new identity as a non-offender that is accepted by the person's social network and support system and a tertiary stage where society supports and affirms reintegration through access to community resources.

The current paper uses two case study examples to address two primary hypotheses and one key inference -

1) that social support is the essential building block for the generation of personal recovery capital and that recovery transmits through communities of recovery

2) that there is a residual benefit to this process in creating community gains that create a'therapeutic landscape of recovery'

3) that this has a community wide effect of generating hope and belief that change is possible and so prevents the exclusion of substance using populations

#### Method

The paper will use two innovative recovery projects as case studies - Jobs, Friends and Houses in Blackpool and Phoenix Futures recovery housing in the Wirral, both in the north-west of England. As Humphreys and Lembke (2013) have suggested, recovery housing is one of the key evidence based components of recovery pathways and an ideal location for assessing the growth and impact of recovery capital. Both services and settings will be outlined briefly before an overview of the study design and impact is provided.

Jobs, Friends and Houses: Is a social enterprise established by Lancashire Constabulary to provide pathways to housing and employment for vulnerable populations in Blackpool, a former holiday resort and coastal town on the north-west coast of England. The primary client group are problem substance users released from prison and the method of the data collection and evaluation of the

project has been described previously in Best (2015). The aim of the overall project was to assess the value for money of providing recovery pathways to meaningful activities and safe housing to this group - in the first year 45 people were taken on as apprentices in building professions and were working on the renovation and building of recovery properties in the city, some for sale to keep the business afloat and others to be rented out as part of a growing visible recovery population.

Phoenix Futures: In a model that is unusual in the UK, Phoenix Futures, who are one of the Therapeutic Community providers (with six residential treatment settings across the UK) have developed a staged pathway to housing support for residents graduating from the TC (supplemented by a small number of clients from other referral sources). The project described here was a pilot initiative in one of those sites (the Wirral, in the north-west of England) and is based on collecting recovery capital assessments from clients using an innovative method called the REC-CAP (Best et al, in press). What this part of the paper examines is the growth of community capital that is evidenced in client stories and collective impact of their engagement in local community activities inside and outside of the recovery community.

Method: In both cases, the data are based on structured research interviews with programme participants supplemented by observations undertaken by the authors and in-depth interviews with staff working in both of the programmes. The structured interviews differed in that the Jobs, Friends and Houses approach used a much less structured interview based more on subjective experience of change and the Phoenix interviews based on a very structured assessment of recovery capital and stage of growth and change in personal, social and community recovery capital. In each case, the authors were allowed extensive access to staff, clients and across the physical sites and were actively encouraged to engage openly with staff and clients in the programme.

#### Results

Jobs, Friends and Houses: In the quantitative summary of the key findings, Best et al (submitted) have reported on the significant reductions in recorded offenses and the savings to the public purse from participation in the programme. This is reflected in clear improvements in individual wellbeing and functioning from baseline to follow-up among the clients in the programme - firstly, longer retained in the programme and more days worked was associated with better recovery capital, but recovery capital at the follow-up point was also associated with better physical wellbeing (r = 0.49, p < 0.01), psychological wellbeing (r = 0.52, p < 0.01), overall quality of life (r = 0.55, p < 0.01) and greater involvement in recovery groups (r = 0.39, p < 0.05).

There was also a positive impact on social engagement among the JFH participants who actively engaged with the project - as Table 1 showed there was a huge increase in the level and diversity of social engagement among those actively involved in JFH:

#### **INSERT TABLE 1 ABOUT HERE**

Participants reported not only marked increases in their recovery networks but actually increased the number of users in the network as well as the number of non-users such that the total network size increased from a mean of 32.0 at the start of the programme to 98.2 at the 6-month follow-up. This has massive implications for the wellbeing of the participants. While there may be a concern in the increase in engagement with other substance users in terms of the negative connotations of social identification with high risk groups (Jetten et al, 2015; Best et al, 2016), the overall tripling of the social network will be associated with greater access not only to practical supports and resources but also to community awareness and information about resources in the community (Putnam, 2000).

This is reflected in the qualitative feedback received in the individual interviews. One participant said that "Before prison everyone was using except my family" while another said it was "100 per cent different. Everyone was using. I don't socialise with them any more". One person went as far as to say that "I didn't used to mix with people who didn't have a drug or alcohol problem", while another said "I didn't used to socialise - I just used to isolate", emphasising the impact of JFH participation on community engagement by programme participants.

However, the key theme of this paper is about the impact of that greater and more diverse access to individuals and groups on the community. Thus, one participant reported that "*It's a new way of life. Totally enjoying recovery. Adapting. In the past I found it hard to incorporate recovery with society. With JFH they are doing a good job, not just recovery it's the way things are done in society*". The clue is provided in the next excerpt from an in-depth interview where one participant reported that his intention was to *"Keep a close knit group of friends who are all in recovery. Keep in contact with sponsor. Volunteer and work within the sector."* This is the three components of recovery capital as specified by Best and Laudet (2010) - develop personal strengths and resources through strong recovery social networks leading to community engagement and contribution. What this translates to is a collective series of community connections that at the start of the programme was characterised in the following domains (see Figure 1):

#### **INSERT FIGURE 1 ABOUT HERE**

What this represents is the range of domains that JFH staff were or aspired to get involved in to provide effective community linkage for the clients on the programme to ensure that there were adequate meaningful diversionary activities that included but were not restricted to recoveryspecific activities. Thus, this included engagement in sport and recreational activities, employment, training and education (ETE in Figure 1) and links to the business community. However, the secondary purpose, as outlined in Best et al's (2015) paper on community engagement with the Salvation Army in Australia, is about Reciprocal Community Development, meaning what is the recovery community contributing to the life of the broader community. As is shown in Figure 2 below, by the one-year follow-up point the growth in engagement in sports and recreation activity had been significant:

The key issue is that this activity was reciprocal - not only were JFH clients active participants in a range of community activities, they were also creators and co-producers of a number of the community activities, generating opportunities for engagement not only for people in recovery but also for the wider community. Thus, in the language of recovery capital (Best and Laudet, 2010), this was not only tapping into community recovery capital, a range of staff and clients from JFH were involved in building community capital for other people in recovery and for the wider community. JFH participants have become not only core members of the recovery community but also core members of a more diverse range of communities in the local area.

Phoenix: While there is a strong evidence base around recovery housing (eg Jason et al, 2006), there is less clear evidence around the notion of pathways through recovery housing and housing as a form of continuity of staged care following specialist treatment. According to the Phoenix House (2015) there is a five stage model to housing provision within the Phoenix approach:

" momentum in the recovery process by setting clearly defined goals for each model of provision.

- Residential Rehabilitation Gives people the tools to achieve abstinence
- Bridge Housing Prepares people to exit formal treatment
- Supported Housing Provides a safe environment to develop life skills
- Recovery Houses Self-managed housing for those sustaining their own recovery
- Independent Living Safe secure abstinence independent living" (Phoenix Futures, 2015)

The aim of the model is to ensure that individuals have clear pathways from specialist alcohol and drug treatment to a phased form of housing provision. This has significant implications for providing a meaningful pathway to continuing care and avoiding some of the complexities of the transition to community re-engagement (McKay, 2016). The idea that this is phased to enable increased autonomy linked to personalised peer and professional support is consistent with the idea of the recovery journey as a pathway associated with building personal, social and community capital (Best

and Laudet, 2010: Best and Savic, 2015). Thus, the initial stage is around housing with high intensity staff support to provide both a peer environment and a range of therapeutic supports to enable the growth of personal recovery capital, embedded within a broader engagement with recovery and wider community groups and activities (Best et al, in press).

The research model here was around mapping recovery capital at each of the three phased recovery housing services in the application of the Phoenix model in the Wirral and linking this to observations of the houses and interviews with the staff about the progress and wellbeing of the residents and their links to the community. The final point is the key assessment as it attempts to show how continuity of care can lead to a transition from drawing on resources in communities to making an active contribution to the community.

In the Wirral, the residential rehabilitation service has a total of 35 beds with an additional resource of ten beds referred to as Housing Plus. There are then 22 supported accommodation housing places and five places within a recovery house, with the primary aim that residents from the residential treatment unit progress through these levels of housing provision as they progress in their postacute recovery journey. All of the residents living in the accommodation units who were on site on the days of the research visits agreed to participate in the research project.

Thus, there are two key questions in relation to recovery growth in this population:

- first, is there evidence of greater recovery strengths and wellbeing in those at later stages of the recovery housing model?

- second, is there any evidence that there is greater community involvement and greater active participation in community activities in the later stages of the housing model, consistent with the emerging idea of community recovery capital as a reciprocal process of active engagement in community activities.

Phoenix findings: The sample consisted of 23 individuals, four from the recovery house (3<sup>rd</sup> stage), eight from the middle stage and ten from the first stage of recovery housing. The group consisted of 19 males and four females; with a mean age of 39.7 years (and a range of 22 to 53 years); all reported their ethnicity as white British. Only four individuals reported any form of substance use in the last month all reporting drinking alcohol with one of these additionally reporting having used cannabis. Four individuals reported ongoing involvement with the criminal justice system although nobody reported ongoing crime.

Although there were no significant differences in wellbeing between the second and third stage recovery housing, there was a clear indication that those in the earliest stage had lower scores in personal and social recovery capital as would be predicted and that those beyond the first phase of housing also had markedly higher scores on wellbeing - physical and psychological health and quality of life. It was only the small group in the recovery housing who reported their personal and social recovery capital at a mean level of over 20 out of 25 (20.5 for personal capital and 21.3 for social recovery capital; compared to means of 14.8 and 17.1 respectively for the other groups in the study).

There were not however, clear differences in the presence of barriers to recovery or in unmet needs, which were low across all groups (measured in terms of dissatisfaction with existing support and levels of unmet needs).

Although the results are cross-sectional, this provides an endorsement of the basic premise that engagement in recovery housing in Phoenix accommodation in the Wirral is associated with the emergence of higher personal and social recovery capital and greater perceptions of wellbeing. This then provides the basis for assessing whether this is also associated with higher levels of active community engagement in the later stages of the recovery housing approach.

Around half of the group were involved in some form of ongoing activity with one person working full-time, 3 more involved in casual work, 4 attending college or university and eight involved in

volunteering. This was disproportionately at the later stages with all of the employment and college attendance and virtually all of the volunteering (6 out of 8) occurring at this stage. This partly fulfils the second research question suggesting that community involvement is a phased process.

In terms of what this actually involved, there were a diverse range of activities that residents were actively engaged in. While the residents in the later stage recovery house (stage three) were more likely to be involved in employment, those in both the recovery house and the second stage of housing were also engaged in a wide range of community activities including:

- two were volunteering as peer mentors, one with Phoenix and with another drug and alcohol services

- one was working with a community recovery service on a voluntary basis

- one was involved in dog-walking for a stray dogs home

- two had been involved in painting and decorating the local youth centre

- several had been involved in a project to turn waste land into local community gardens

- one was volunteering as a driver for Age Concern

Collectively there were initiatives that the residents were involved in working with the local school, and separately in doing voluntary work in a local country park. However, on most occasions it was individual residents in the recovery houses who were actively involved in community activities. This is consistent with the findings of the UK Life In Recovery Survey (Best et al, 2015) of high rates of volunteering in this population with higher rates as individuals progress in their recovery journeys.

#### Discussion

In 2015, Best and colleagues outlined the idea for Reciprocal Community Development based on the activities of the Salvation Army staff and residents at a Therapeutic Community on the central coast

of New South Wales in Australia, indicating the importance that recovery communities not only tap into community recovery resources but that they also contribute to those resources. In this paper, we have outlined activities from two UK projects - Jobs, Friends and Houses in Blackpool and Phoenix Futures housing model in the Wirral to demonstrate that the services and the residents who live in those houses can and do make an active contribution to the wellbeing of the local community.

There has been an emerging literature about people in recovery being better than well (Valentine, 2011; Hibbert and Best, 2011) based on the idea that people later in recovery reported higher mean quality of life scores - particularly around involvement in the local community and social life satisfaction - than the general public who had not previously had an addiction problem. This finding was borne out in the UK Life in Recovery survey where, in a sample of 802 people describing their own recovery journeys, 79% of those in stable recovery reported volunteering in their local communities, a rate just over twice as high as that reported in the general UK population. This is central to the current hypothesis which tests the concept of community recovery capital (Best and Laudet, 2010) and the idea of not only involvement in the local community but actively giving back to it.

The current paper draws on data from two applied recovery studies both linked to two key components of recovery philosophy - the importance of continuity of care (McKay, 2016) and the central role that recovery housing plays in recovery pathways (Humphreys and Lembke, 2013). In both studies there is emerging evidence that clear pathways to recovery involving safe places to live that are linked to the stage of the recovery journey provides a sense of direction but also confers a wider benefit on the lived community. In Blackpool, JFH has established a significant network of community engagements across multiple domains that are inherently reciprocal - they create community capital for the clients who participate, they add to the community resources in the town and they create bridges and pathways for new clients wanting to access similar types of social and community resources. This is akin to what WIlton and DeVerteuil (2006) referred to as 'therapeutic

landscapes of recovery' - a visible path to community resources that facilitates the recovery journey of people new to it while simultaneously engaging the community in activities that challenge stigma and exclusion. In Blackpool, this takes the form of creating multiple pathways to community groups including volunteering, leisure and arts projects and family activities, but primarily focused around the regeneration of housing stock and the transformation of a group of former addicts and offenders into individuals who make a positive contribution to their lived communities.

In the Wirral, the pathway to recovery and community engagement has been more focused around a housing pathway that allows residents to build personal and social capital in a supported environment before actively participating in community activities. The data presented not only shows evidence of this growth in wellbeing but also shows increased participation in the local community - not only as participants in community activities but also as contributors to the wellbeing and fabric of that community. The residents in the later stages of the Phoenix recovery housing model are active contributors to the local community through work around the environment, supporting schools, the elderly and a range of local community recovery projects. The point about this is generating a 'therapeutic landscape' by creating bridging social capital (Putnam, 2000) to new groups, by challenging stigmatising and discriminatory attitudes and by improving the quality of community life for all residents by enriching community connections and the levels of volunteering and community wellbeing.

There are some major limitations to the hypothesis advanced in this paper - both of the projects described were not established for research purposes and the data collected were part of a wider evaluation process. Thus, the data collected were opportunistic and are largely descriptive with almost no overlap in the data collected around the two projects. The analysis are largely qualitative and are reliant on a combination of evaluation questionnaires, in-depth qualitative interviews with clients and staff and from observations - in other words, none was specifically designed to test the questions raised in this paper. Future research in this area from our research group will make a

much more explicit attempt to assess not only the residents' and staff perceptions of community engagement but also the impact on the wider community.

However, there is emerging evidence from this paper of a public health impact in terms of community development and capacity building in communities. In the mental health field, Leamy and colleagues (2011) have argued that all successful recovery projects fulfil the acronym CHIME - they create Connectedness, Hope, a positive sense of Identity, Meaning and Empowerment. The argument from this paper is that this is a social contagion that creates pathways for others, and disseminates this hope to a wider community group with potential public health benefits. While only preliminary work, what this paper suggests is a hypothesis that coherent pathways to long-term recovery generate opportunities for community participation that enriches those communities, through improved networking and engagement leading to improvements in satisfaction, wellbeing and quality of life for all community members.

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#### References

Best, D., Beckwith, M., Haslam, C., Haslam, S. A., Jetten, J., Mawson, E., & Lubman, D. I. (2015). Overcoming alcohol and other drug addiction as a process of social identity transition: The Social Identity Model of Recovery (SIMOR), *Addiction Research & Theory*, 1-13. doi:

10.3109/16066359.2015.1075980

Best, D. & Laudet, A. (2010) The potential of recovery capital. RSA Projects. Royal Society for the Arts.

Best, D., Beswick, T., Hodgkins, S. & Idle, M. (2016) Recovery, ambitions and aspirations: An exploratory project to build a recovery community by generating a skilled recovery workforce, *Alcoholism Treatment Quarterly*, 34 (1), 3-14.

Best, D. & Savic, M. (2015) Substance Abuse and offending: Pathways to recovery. In Sheehan, R. & Ogloff, J. (eds) Working within the forensic paradigm: Cross-discipline approaches for policy and practice. Routledge: Abingdon, Oxon.

Best, D., McKitterick, T., Beswick, T. & Savic, M. (2015) Recovery capital and social networks among people in treatment and among those in recovery in York, England, *Alcoholism Treatment Quarterly*, 33 (3), 270-282.

Betty Ford Institute Consensus Group (2007) What is recovery? A working definition from the Betty Ford Institute. *Journal of Substance Abuse Treatment*, 33, 221–228.

Dennis, M. & Scott, C. (2007) Managing addiction as a chronic condition, *Addiction Science and Clinical Practice*, 4, 44-55.

Dennis, M., Scott, C., Funk, R. & Nicholson, L. (2015) A pilot study to examine the feasibility and potential effectiveness of using smartphones to provide recovery support for adolescents, *Substance Abuse*, 36 (4), 486-492.

Dennis, M., Scott, C., & Laudet, A. (2014) Beyond bricks and mortars: recent research on substance abuse disorder recovery management, Current Psychiatry Report, 1-7.

Granfield, R. and Cloud, W. (2001) Social Context and "Natural Recovery": The Role of Social Capital in the Resolution of Drug-Associated Problems, *Substance Use and Misuse*, 36, 1543-1570.

Hibbert, L. & Best, D. (2011) Assessing recovery and functioning in former problem drinkers at different stages of their recovery journey. *Drug and Alcohol Review*, 30, 12-20.

Humphreys, K. and Lembke, A. (2013) Recovery-Oriented Policy and Care Systems in the United Kingdom and United States, *Drug and Alcohol Review*, 33(1), 13-18.

Jason, L., Olson, B., Ferrari, J. and Lo Sasso, A. (2006) Communal housing settings enhance substance abuse recovery, *American Journal of Public Health*, 91, 1727 - 1729.

Jetten, J., Branscombe, N. R., Haslam, S. A., Haslam, C., Cruwys, T., Jones, J. M., . . . Zhang, A. (2015). Having a Lot of a Good Thing: Multiple Important Group Memberships as a Source of Self-Esteem, *PLoS ONE*, 10(5), e0124609. doi:10.1371/journal.pone.0124609

Leamy, M., Bird, V., Boutillier, C. Williams, J., & Slade, M. (2011) Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis, *The British Journal of Psychiatry*, 199 (6), 445-452.

Longabaugh, R., Wirtz, P. W., Zywiak, W. H., & O'Malley, S. S. (2010). Network support as a prognostic indicator of drinking outcomes: The COMBINE study. *Journal of Studies on Alcohol and Drugs*, 71(6), 837.

McKay, J. (2016) Making the hard work of recovery more attractive for those with substance use disorders, *Addiction*, early online.

McNeill, F. (2014) Discovering desistance: Three aspects of desistance? http://blogs.irss.org.uk/discoveringdesistance/2014/05/23/three-aspects-of-desistance/. Accessed 17.12.15.

Putnam R. (2000) *Bowling alone: The collapse and revival of American community*. Simon and Schuster: New York.

Sheedy, C. K., & Whitter M. (2009). *Guiding Principles and Elements of Recovery-Oriented Systems of Care: What Do We Know From the Research? HHS Publication No. (SMA) 09-4439.* Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.

White, W and Cloud, W (2008) 'Recovery Capital: A Primer for Addiction Professionals', *Counselor*, 9 (5), 22-27.

Wilton, R., & DeVerteuil, G. (2006). Spaces of sobriety/sites of power: examining social model

alcohol recovery programs as therapeutic landscapes. Social Science and Medicine, 63(3),649-661.

# Table 1: Changes in social network size and type

	Social network at	Social network at	T, significance
	baseline	follow-up	
Number of users	1.3	15.7	t = 1.89, ns
Number of people in	18.6	51.3	t = 3.63, p<0.01
recovery			
Number of non-users	12.1	31.2	t = 2.14, p<0.05
Total network size	32.0	98.2	

## Figure 1: Baseline set of networks





