HRB DRUG AND ALCOHOL EVIDENCE REVIEW

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The RTK Ltd (http://therighttoknow.co.uk) is a network of senior associates, based in London, delivering research, analysis and consultancy on social policy in the private and public sectors.

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HRB drug and alcohol evidence review

This series is part of a process of knowledge transfer and exchange between the HRB and those engaged in developing and implementing responses to problem drug and alcohol use in Ireland. The reviews support drug and alcohol taskforces, service providers and policy makers in using research-based knowledge in their decision making, particularly in regard to their assigned actions in the National Drugs Strategy (NDS). Topics for review are selected following consultation with stakeholders to identify particular information gaps and to establish how the review will contribute to evidence-based selection and implementation of effective responses. Each issue in this review series will examine a topic relevant to the work of responding to the situation in Ireland and will be used as a resource document by service providers, policy makers, practitioners, researchers and others working in this area.

National Documentation Centre on Drug Use

The National Documentation Centre on Drug Use (NDC) commissions the reviews in this series. The NDC website and online repository (www.drugsandalcohol.ie) and our library information services provide access to Irish and international research literature in the area of drug and alcohol use and misuse, policy, treatment, prevention, rehabilitation, crime and other drug and alcohol-related topics. It is a significant information resource for researchers, policy makers and people working in the areas of drug or alcohol use and addiction. The National Drugs Strategy assigns the HRB the task of promoting and enabling research-informed policy and practice for stakeholders through the dissemination of evidence. This review series is part of the NDC's work in this area.

Health Research Board

The Health Research Board (HRB) is the lead agency in Ireland supporting and funding health research. We provide funding, maintain health information systems and conduct research linked to national health priorities. Our aim is to improve people's health, build health research capacity and make a significant contribution to Ireland's knowledge economy. The HRB is Ireland's National Focal Point to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The focal point monitors, reports on and disseminates information on the drugs situation in Ireland and responses to it and promotes best practice and an evidence-based approach to work in this area.

Acknowledgements

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HRB drug and alcohol evidence reviews to date

Munton AG, Wedlock E and Gomersall A (2014) The role of social and human capital in recovery from drug and alcohol addiction. HRB Drug and Alcohol Evidence Review 1. Dublin: Health Research Board

Munton AG, Wedlock E and Gomersall A (2014) The efficacy and effectiveness of drug and alcohol abuse prevention programmes delivered outside of school settings. HRB Drug and Alcohol Evidence Review 2. Dublin: Health Research Board

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THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

KEY MESSAGES

KEY MESSAGES

This paper reports the results of an evidence review on the role of social and human capital in recovery from drug and alcohol addiction. It has been written for a practitioner audience – to provide stakeholders with key messages from recent research that can be used to inform the decisions they need to make. The messages appear below.

We limited our searches to papers published from 2008 onwards. From the 1,597 papers and articles identified using our search terms, we selected a total of 91 papers as relevant on the basis of having read the abstracts only. We were able to retrieve full copies of 70 of those papers. When we read the full texts, we excluded another 44 papers, leaving us with a total of 26 for our evidence review. Of those 26, 21 described primary research studies, and 5 were reviews of research.

KEY MESSAGES FOR PRACTITIONER GROUPS

Community-based organisations

- There is a reasonably consistent body of good quality research evidence to support the view that social and human capital (also sometimes characterised as recovery capital) play a key role in recovery from addiction.
- Where recovering addicts maintain strong social networks that include people who continue to use, the impact can be negative.
- Families are a significant source of social and recovery capital.
- Families can benefit from help in providing supportive relationships, reducing levels of conflict and reducing the emotional strain on recovering addicts caused by perceptions that their families are worried.
- Peer-supported community programmes focused on improving self-determination can have a significant positive impact on recovery from addiction.
- Social networks can be both negative and positive influences on recovery, depending on the type and source.

Executives, senior managers, commissioners and budget holders

- Community-based health promotion networks can increase success rates of established interventions such as Alcoholics Anonymous (AA).
- The provision of stable accommodation is a key element in recovery capital.
- The provision of vocational activity, including training and employment, is significantly associated with greater probability of sustained recovery.
- The development of peer networks immersed in communities can increase levels of engagement in meaningful activities and improve the chances of sustained recovery.
- Established programmes as provided by AA and Narcotics Anonymous (NA) report significantly better recovery rates when supported by community-based efforts to enhance the social capital of recovering addicts.

Service providers

- Including families in therapeutic and other recovery processes can help them support addicts effectively.
- Recovering addicts are more likely to come from families who have difficulties in understanding their experiences and so can find it more difficult to create a supportive social environment.
- Recovering addicts can benefit from support with other aspects of their lives that enable them to improve self-determination, such as financial management skills and adopting healthy lifestyles.
- People given more general support tend to improve their levels of self-determination and enhance their prospects for sustained recovery.
- Rebuilding a social support network, including friends and family and having secure accommodation, is a significant element in recovery capital.

Academics, planners and evaluators of drug/ alcohol prevention projects

- Different aspects or elements of social capital promote positive outcomes at successive stages of the recovery process, suggesting that recovery-orientated research should adopt long-term evaluation procedures.
- Measures such as the Perceived Sense of Community Scale (PSCS) can be very useful in assessing the extent to which community-based provision is effective in providing social capital for recovering addicts.
- Evaluation of addiction interventions could usefully include assessment of recovery capital as a means to allow for more informed addiction treatment and level of care decisions.
- While improving recovery rates can lead to substantial cost savings for health, criminal justice and social services, very little work on cost-benefit analysis has been done to date. Evaluation of programmes would benefit from including economic assessment.

02

THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

INTRODUCTION

INTRODUCTION

This rapid evidence assessment (REA) summarises evidence on the role of social and human capital in recovery from drug and alcohol addiction. It synthesises evidence from a range of literature, including reviews which seek to identify the role that social relationships play in the process of recovery, and primary research studies which examine the impact of social support on treatment completion and success in achieving and maintaining abstinence.

WHY FOCUS ON RECOVERY FROM DRUG AND ALCOHOL ADDICTION?

Addiction recovery has become an increasingly important concept in the design and implementation of substance use treatment and rehabilitation services in a number of countries. Recovery now has a prominent role in drug policies in the United States, England, Wales and Scotland.[1] The current EU Action Plan on Drugs (2013-2016) calls on member states to implement recovery and social re-integration services as part of a wider demand reduction pillar. In 2014 the Commission on Narcotic Drugs, the UN's drug policy-making body, passed a resolution on 'supporting recovery from substance use disorders' (E/CN.7/2014/L.9/Rev.1). A review of addiction services in North Dublin[2] recommends that addiction services should be delivered around clinical care pathways for drugs and alcohol, with a focus on recovery defined as 'an individual, person-centred journey, enabling people to gain a sense of control over their own problems, the services they receive, and their lives and providing opportunities to participate in wider society' (p.6). This is the policy background to our selection of this topic for review.

The HRB is helping to build evidence to support stakeholders in implementing certain actions of the National Drugs Strategy 2009–16 (NDS) and to encourage the use of research in decisions around the selection, implementation and evaluation of interventions. The idea of examining the concept of social capital and its contribution to addiction recovery emerged through discussions with stakeholders who have responsibility for implementing related actions in the strategy. The stakeholders were also interested in examining how their work contributes to building social capital.

As both social and human capital are relatively recent concepts in the addiction recovery literature, it was decided to commission a review of the literature to explore some of the properties of these concepts and to determine what evidence was available to demonstrate their contribution to recovery.

We think it will be useful to explain the association between social and human capital and addiction recovery, as this was the conceptual framework that influenced this review.

Granfield and Cloud (1999) are credited with introducing to the literature the construct of recovery capital, which they developed to explain how people overcame dependence on various substances, including alcohol, cocaine powder, crack cocaine, methamphetamines and heroin, without the aid of formal treatment or recourse to self-help groups. Most of those in Granfield and Cloud's study were in regular employment before, during and after their addiction experiences, some in professional occupations and others as self-employed business people. None of the sample of 46 people in this study displayed major mental health problems and, according to the authors, none were embedded in the 'street' subculture that surrounds substance use.

1 Laudet AB and Humphreys K (2013) Promoting recovery in an evolving policy context: what do we know and what do we need to know about recovery support services? *Journal of Substance Abuse Treatment* (45)1): 126–133

2 Pilling S and Hardy R (2013) *Review of the Dublin North City and County addiction service*. Dublin: Psychological Interventions Research Centre and University College London

In addition, many feared their substance use would be revealed to their work colleagues, thus jeopardising their job, career and the status and respect bestowed by colleagues. They also reported membership of professional societies. According to the authors, these personal and social assets enabled them to initiate and sustain attempts to overcome substance dependence without recourse to formal treatment or mutual-aid support. In effect, these assets represented a form of recovery capital. The authors developed the construct further in a later paper which described recovery capital as the sum of resources necessary to initiate and sustain recovery from substance misuse.[3] Cloud and Granfield delineate four dimensions to recovery capital: social, physical, human and cultural.

DIMENSION OF CAPITAL	Attributes and assets of capital
SOCIAL CAPITAL	The sum of resources that each person has as a result of their relationships, support from and obligations to groups to which they belong
PHYSICAL CAPITAL	Tangible assets such as property and money that may increase recovery options
HUMAN CAPITAL	Personal skills and education, positive health, aspirations and hopes
CULTURAL CAPITAL	Values, beliefs and attitudes that link the individual to social attachment and the ability to fit into mainstream social behaviour

Source: Cloud and Granfield 2008

Figure 1: A model of recovery capital

While recognising that the dimensions of recovery capital are not discrete groupings of assets and attributes, this review focuses only on the role of social and human capital. We think that this is a useful approach considering the role of taskforces in the personal and social development of people in recovery. This review examines how this work is conceptualised in the literature, and how aspects of recovery can be measured.

3 Cloud W and Granfield R (2009) Conceptualizing recovery capital: expansion of a theoretical construct. *Substance Use and Misuse*, 43: 1971–1986

03

THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

THE REVIEW METHOD

THE REVIEW METHOD

We used an approach known as a rapid evidence assessment (REA). The strength of the method lies in following a clear set of procedures and recording precisely what was done at each stage to enable the process to be replicated if necessary. We have followed guidelines developed and written by the UK's Government Social Research (GSR) and the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), part of the Social Science Research Unit at the Institute of Education, University of London.[4] The approach is similar to that used in a full systematic review but, because it employs single rather than multiple coders, it can be delivered within a comparably shorter timeframe for less resource commitments. Figure 1 summarises the stages of the REA process.

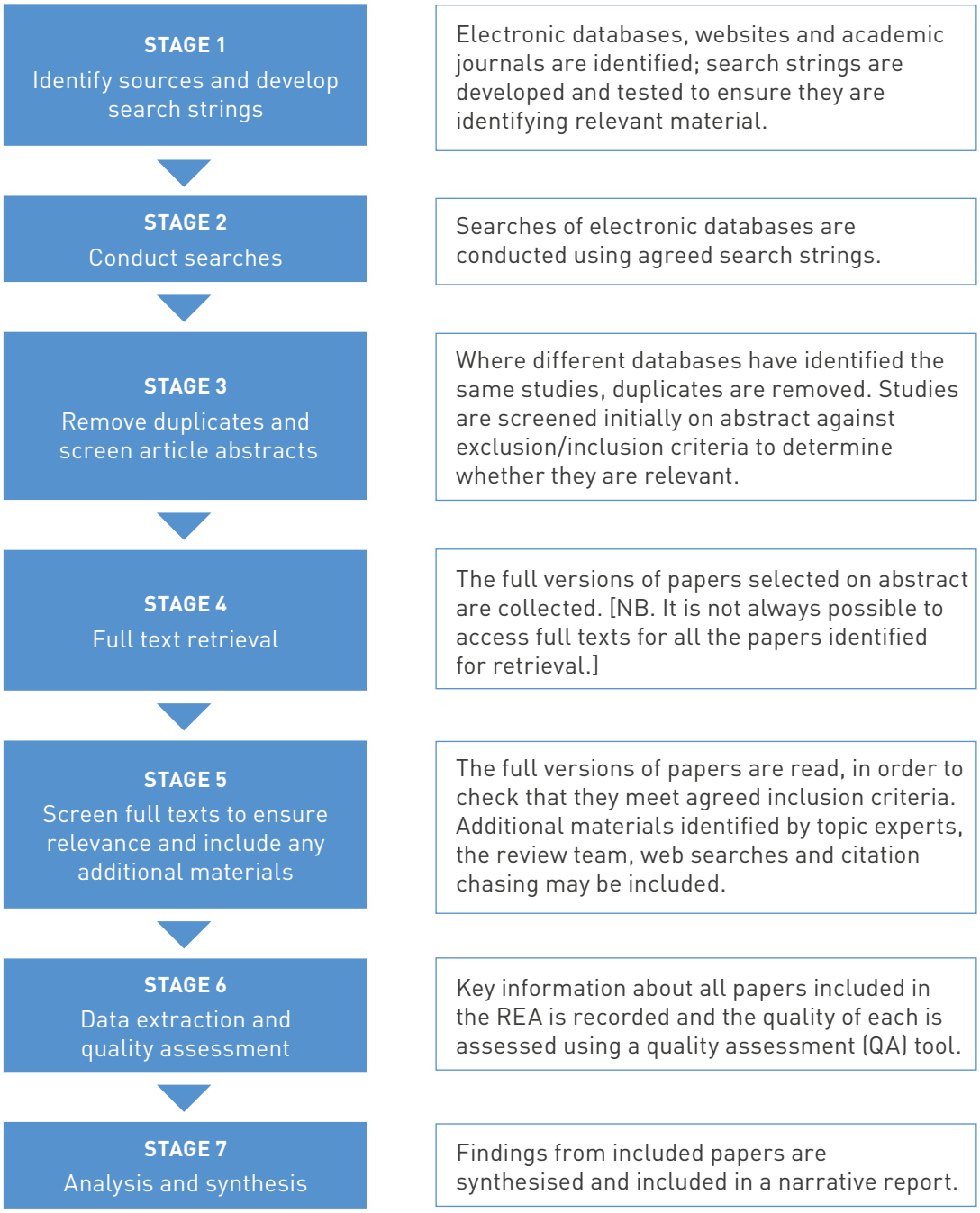

Figure 1: Summary of REA methodology.

ASSESSING THE STRENGTH OF A BODY OF EVIDENCE

Led by the medical profession, the last 20 years has seen a real growth in what has become known as Evidence-based Practice (EBP). Dr David Sackett, widely recognised as one of the founders of EBP, defined it as 'the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient'.[4] More recently, politicians, practitioners and other stakeholders have recognised the benefits of developing EBP in areas including public health and social policy.

Evidence reviews are a critical element in developing EBP; they are used to summarise the main characteristics of a body of evidence in relation to a specific issue. Guidance on how to assess the strength of a body of evidence typically highlights four important characteristics:[5],[6]

- The **quality** of individual articles or papers that make up the body of evidence
- The **quantity** (number) of papers that make up the body of evidence
- The **consistency** of the findings produced by the studies making up the body of evidence

  and
- The **context** in which the available evidence has been collected.

The US Agency for Healthcare Research and Quality (AHRQ) commissioned a review that evaluated 121 different grading systems for assessing the quality of individual studies.[7] Based on their findings, we used two different quality assessment systems, one for primary research studies, and a second for evidence reviews. As noted above, the review is to provides a guide to the credibility of each included study.

One of the key strengths of the scientific approach to collecting evidence is the capacity to replicate or repeat investigations to see if the same results are found. That is why it is so important that research papers provide enough detail on how an investigation was conducted to enable someone else to repeat what was done. The more times a finding has been replicated, the more confident we can be that the effect is a real one rather than a product of the way a study was designed and implemented; the more studies done to test a particular theory or intervention, the stronger the body of evidence. However, there is no rule of thumb for how many studies are needed to constitute an adequate body of evidence. That often depends on the research question being investigated; the more complex the question, then the more studies that are needed in order to be confident that the evidence is strong. Certainly, where only one or two studies have been done, even if they are well designed, it is reasonable to conclude that the body of evidence is small or weak. Based on recommendations, we take a case-by-case approach.[8]

4 Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB and Richardson WS (1996) Evidence based medicine: what it is and what it isn't. *British Medical Journal*, 1996 January 13; 312(7023): 71–72

5 Lohr KN (2004) Rating the strength of scientific evidence: relevance for quality improvement programs. *International Journal for Quality in Health Care*, 16(1): 9–18

6 Department for International Development (2013) Assessing the strength of evidence: DfID practice paper. www.gov.uk/government/publications/how-to-note-assessing-the-strength-of-evidence Retrieved 10 March 2014

7 Lohr KN (2004) Rating the strength of scientific evidence: relevance for quality improvement programs. *International Journal for Quality in Health Care*, 16(1): 9–18

8 Department for International Development (2013) Assessing the strength of evidence: DfID practice paper www.gov.uk/government/publications/how-to-note-assessing-the-strength-of-evidence. Retrieved 10 March 2014

QUALITY ASSESSMENTS OF STUDIES FOR THIS REVIEW

In assessing the quality of primary research, we rated studies on seven criteria: rationale for overall research strategy; study design; sampling strategy; data collection procedures; data analysis; interpretation and reporting of results; and the credibility of the conclusions. In addition, where primary studies tested the impact of specific interventions, we rated the design of the intervention study using the Maryland Scientific Methods Scale (SMS).[9] Not all primary studies test interventions, (e.g., some may report survey findings), and therefore not all primary studies were rated on the Maryland Scale. Details of the quality assessment system for primary studies and quality scores for papers assessed can be found in Appendix B.

For reviews, we used eight criteria: review method; search strategy; data collection (sift); quality appraisal; data analysis (quantitative); qualitative synthesis; interpretation and reporting of results and credibility of conclusions. Details of the quality assessment system we used for reviews can be found in Appendix C of this report, along with quality scores for all the reviews included.

QUANTITY OF RESEARCH AVAILABLE

For each review that we undertake we categorise the size of the evidence as small, medium or large, and specify the number of studies associated with each category. Typically, we might assess the size of the evidence as 'small' where the review has identified five or fewer studies; 'medium' where we have found between six and ten studies, and 'large' if 11 or more studies were found.

The flow diagram in Figure2 provides details of the numbers of studies identified at each stage of the REA process.

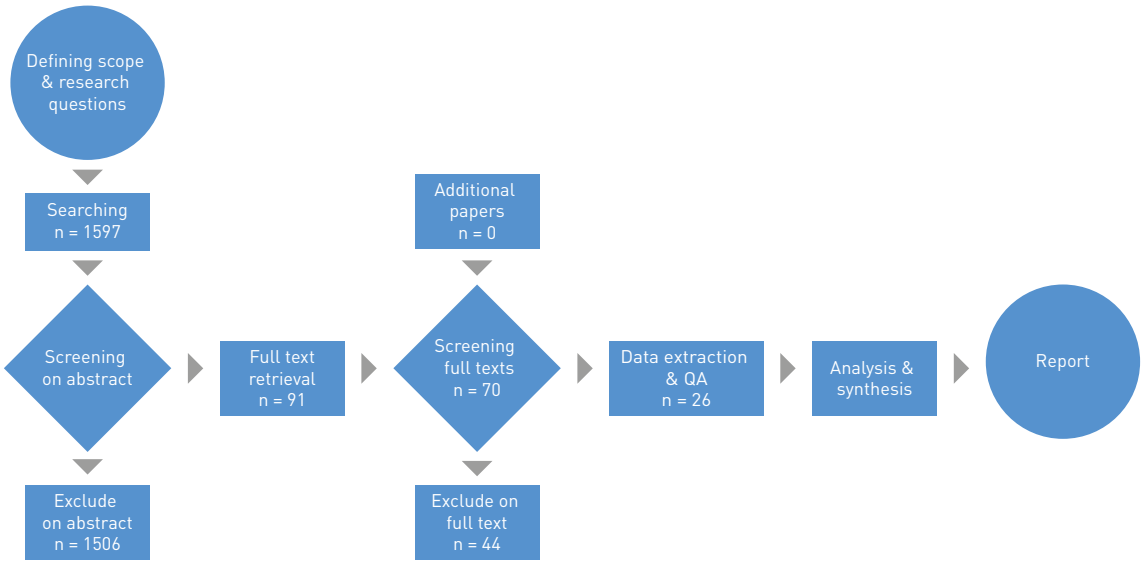

Figure 2: REA workflow: review of evidence concerning the role of social and human capital in recovery from drug and alcohol addiction.

9 Sherman L, Gottfredson D, MacKenzie D, Eck J, Reuter P, Bushway S (1997) P*reventing Crime: What Works, What Doesn't, What's Promising*. Washington: US Department of Justice

Of the 91 references we selected for full text retrieval, we were able to gain access to 70. The texts we were unable to get copies of were for the most part books that the British Library did not hold copies of. When we read the full texts, we excluded another 44 papers, leaving us with a total of 26 for our evidence review. Of those 26, 21 described primary research studies, and 5 were reviews of research.

THE CONSISTENCY OF THE FINDINGS PRODUCED BY THE STUDIES MAKING UP THE BODY OF EVIDENCE

A strong body of evidence is usually defined as one where a large number of studies all report the same or similar findings when a specific intervention is delivered to a particular group of end users. Examples from medical research might include the use of aspirin to prevent heart attacks in high-risk patients[10] or the health benefits of giving up smoking.[11] However, social interventions, like drug prevention, are typically more complex. As a result, it is possible to have a large number of studies that, because they have tested slightly different interventions in different social contexts, do not provide entirely consistent findings. Using a review to synthesise or pull together the findings from multiple studies helps to establish the degree of consistency in a body of evidence by exploring the impact of these similarities and differences.

THE CONTEXT IN WHICH THE AVAILABLE EVIDENCE HAS BEEN COLLECTED

A review needs to acknowledge the context in which the evidence cited has been produced. It is important to have a good understanding of how well evidence collected in one particular context can be generalised to another. In social policy research, country of origin is often, although by no means always, relevant. Similarly, elements of social context such as a patient group or the way in which an intervention was delivered, need to be acknowledged. To summarise, assessing the overall strength of a body of evidence is best done by considering the quality, size, consistency and context of the papers and articles uncovered by a search of appropriate sources.

INTERNATIONAL COMPARISONS

Evidence reviews invariably have to address the issue of international comparisons – just how relevant is research conducted in one country to policy and practice in another? Twenty of the 26 papers included in the review came from the US, five from the UK and one from Italy. A key feature of research in this area has been the attempt to understand the theoretical behavioural principles that might explain the consistent observation that social capital in general, and self-help groups in particular, seem to have a positive impact on the process of recovering from addiction.[12], [13], [14] The literature has identified four related theories that identify common social processes. Social control theory specifies processes such as bonding, goal

10 Hayden M, Pignone M, Philips C and Mulrow C (2002) Aspirin for the primary prevention of cardiovascular events: a summary of the evidence for the US Preventive Services Task Force. *Annals of Internal Medicine*, 136: 161-172

11 Surgeon General (1989) *Reducing the health consequences of smoking – 25 years of progress*. Available at: http://profiles.nlm.nih.gov/NN/B/B/X/S/. Retrieved 10 March 2014

12 Moos RH (2008) Active ingredients of substance use-focused self-help groups. *Addiction*, 103(3): 387–396

13 Kelly JF, Magill M and Stout RL (2009) How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous. *Addiction Research and Theory*, 17(3): 236–259

14 Tracy EM, Kim H, Brown S, Min MO and Jun MK (2012) Substance abuse treatment stage and personal social networks of women in substance abuse treatment. *Journal of the Society for Social Work and Research*, 3(2): 65–79

direction and structure; social learning theory specifies the importance of norms and role models; behavioural economics and behavioural choice theory emphasise involvement in rewarding activities other than substance use; and, stress and coping theory highlights building self-efficacy and effective coping skills. While work is still to be done to improve understanding of mechanisms that underlie the impact of social capital and self-help, the fact is that they seem to be consistent with psychological and social theories. While local delivery will inevitably be influenced by social, economic and political context, the common theoretical principles identified by research make much of the work around the positive impact of social and human capital generalisable across international borders.

REA LIMITATIONS

The time and resources available to deliver the REA inevitably create limitations in relation to the methods used.

- Limits on the time and resources available for REAs means that (a) they may miss some literature not catalogued on the key electronic databases, and (b) the majority of quality ratings are conducted by one assessor, with a second assessor only rating a small sub-sample.
- Some of the primary studies included were of limited methodological quality. As a consequence, results should be generalised with caution.
- Time did not allow for this REA to involve 'pearl growing' i.e. going through the reference lists of selected articles looking for other potentially important sources that our searches of electronic databases may have missed.
- All review methods, including REAs, risk generating inconclusive findings that provide a weak answer to the original question. For example, there may not be studies of sufficient methodological quality to address the question. The tight timescales in an REA mean that if findings are inconclusive, there is less time than in a systematic review to go back and reformulate the question or inclusion criteria.

04

THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

THE WEB OF DETERMINANTS

THE WEB OF DETERMINANTS

Epidemiological evidence suggests that substance abuse, and recovery from substance abuse, can be influenced by biological, social, environmental, psychological and genetic factors that include gender, race and ethnicity, age, income level, educational attainment and sexual orientation.[15]

The available research evidence clearly supports the view that recovery is strongly influenced by social relationships, whether they are with people in recovery, families and friends, or other members of local communities. The positive influence of social or human capital may differ across individuals, and may change as people move through different stages in the recovery process. The challenge in maximising the positive influence of human capital will be to develop our understanding of these individual differences and changing needs.

THE SOCIAL AND PSYCHOLOGICAL CONTEXT OF RECOVERY FROM DRUGS AND ALCOHOL ABUSE

Other reviews have identified associations between certain personality characteristics, including attention deficit disorders and impulsiveness, and the increased likelihood of problem substance abuse.[16] The literature on recovery has highlighted how important social context can be; this includes the availability of peer groups that support abstinence, economic self-determination, family support, stable accommodation and activities to provide alternatives to substance abuse. Groups over-represented in substance abusing cohorts include homeless young people, young people who have been excluded from school and children of sex workers.[17]

The evidence on effective recovery interventions reflects the fact that substance abuse happens in a complex social and psychological context. That complexity clearly needs to be mirrored in the way in which recovery programmes assess the need for and the provision of social capital.

15 Centers for Disease Control and Prevention. CDC health disparities and inequalities report: United States, 2011. MMWR. 2011;60 (suppl). Available from http://www.cdc.gov/mmwr/pdf/other/su6001.pdf [PDF - 3MB]

16 Sanju G and Hamdy M (2005) Gateway hypothesis – a preliminary evaluation of variables predicting non-conformity. *Addictive Disorders & their Treatment*, 4: 39–40

17 Canning U, Millward L, Raj T and Warm D (2004) *Drug use prevention amongst young people: a review of reviews*. London: Health Development Agency

05

THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

KEY STAKEHOLDERS AND THE ROLE OF PROFESSIONALS

KEY STAKEHOLDERS AND THE ROLE OF PROFESSIONALS

The evidence on what influences recovery from substance abuse consistently highlights a potentially complex mix of social, personal and genetic factors. In terms of the delivery of public services, responsibility for addressing the often complex needs of young people at risk traditionally spans different administrative functions. Services delivered under the banners of health, education, criminal justice, housing, employment and children's services can all influence substance abuse outcomes. As a result, the successful delivery of initiatives designed to address substance abuse often depends on the extent to which professionals in those administrative functions have the capacity to coordinate their efforts effectively and are incentivised to do so.

The importance of coordinating different services to provide effective delivery of a comprehensive or holistic service for young people at risk means that messages from research evidence are relevant to all key stakeholders. That said, research in this field tends to focus on four broad areas in which substance abuse professionals work.

Community-based organisations – Typically, local service providers and/or recruiters of young people and community organisations are often best placed to assess how interventions need to be delivered in order to meet local needs most effectively.

Executives, senior managers, commissioners and budget holders – Working in both national and local public bodies and senior decision-makers, can have a substantive influence on services by ensuring that resources are allocated on the basis of local need and evidence of effectiveness.

Service providers – These people work in a range of administrative areas, including public health, education and specialist drug services, in both treatment and prevention.

Academics, planners and evaluators – These groups need to work collaboratively with service providers, helping them to evaluate the impact of services through the use of appropriate research methods and practicable measures of outcomes.

06

THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

THE EVIDENCE FOR THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

THE EVIDENCE FOR THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

This section of the review sets out details of the evidence under six main headings:

- elements of recovery capital in the literature
- evidence for the role of social and human capital in recovery
- family relationships as recovery capital
- social support as a negative influence
- a note on quality of life measures
- gaps in the evidence

ELEMENTS OF RECOVERY CAPITAL IN THE LITERATURE

A research study conducted in the North of England aimed to identify the elements of recovery capital that play a role post treatment.[18] Researchers interviewed 45 recovering addicts in treatment, asking them to identify how elements of recovery capital helped them sustain their recovery post treatment. People identified access to supported housing as critical, raising specific concerns about their ability to afford to live independently with financial stability. Being able to access welfare entitlement was also a key concern. Recovering addicts generally expressed a desire to find employment, often in the substance use treatment field. However, for many it was a long-term goal, with substantial risks associated with pursuing this too early. The positive social support that people were able to access was derived almost exclusively from within the recovery community, although the rebuilding of relationships with family (children in particular) was a key motivator post treatment. The authors concluded that effective programme delivery should address human capital issues as a source of confidence for continued recovery. Other external factors such as family and maintaining aspects of a normal life also provided people with the motivation to stay substance free.

A national survey conducted in Italy looked at the social capital aspects of self-help groups operating in the field of alcohol abuse.[19] It compared people just beginning the group therapy process and those with long-term participation in self-help groups. The results showed significant differences in many aspects of social capital: participation in the local community; proactivity in the social context; family, friends and neighbourhood connections; tolerance of diversity; value placed on life; and work connections. People with long-term experience of self-help groups achieved better scores in social capital than younger participants, and compared with a significant sample of the Italian (general) population as well. The authors concluded that active engagement in their recovery by people experiencing alcohol-related social exclusion may produce impressive improvements not only in their individual quality of life (better health, more trust, enhanced self-esteem) but also in their community inclusion and civic commitment.

Research that has looked specifically at recovery from substance abuse has highlighted the key role played by supportive peer groups, the need to move away from substance-abusing friends and the critical role in having access to stable accommodation.[20] Groups of substance abusers not able to access these important elements of social or human capital are likely to need specific support from treatment

18 Duffy P and Baldwin H (2013) Recovery post treatment: plans, barriers and motivators. *Substance Abuse Treatment, Prevention, and Policy*. 8:6

19 Folgheraiter F and Pasini A (2009) Self-help groups and social capital: new directions in welfare policies? *Social Work Education*, 28(3): 253–267

20 Best D, Gow J, Knox T, Groshkova T and White W (2012) Mapping the recovery stories of drinkers and drug users in Glasgow: quality of life and its associations with measures of recovery capital. *Drug and Alcohol Review*, 31(3): 334–341

programmes. That may in some cases indicate the need for substance abusers to be able to access residential treatment. Analysis of data from the English National Treatment Outcome Research Study (NTORS) showed that recovery rates among residential in-patients tended to be higher, at around 50%, when compared with the overall figure of about one-third of those across all treatments achieving abstinence.[21]

A Scottish study looked at four different types of recovery capital to examine which might be the best predictor of recovery from alcohol abuse.[22] Results showed that of the four (social capital, physical capital, human capital and community capital),[23] it was physical capital that was the best predictor of recovery. Physical capital includes physical health, sleep hygiene, cessation of drug hunger, housing, finances, access to transport and physical appearance. The authors concluded that attending to physical and immediate needs is of primary importance when supporting recovering addicts.

Another attempt to operationalise and measure peer support used questionnaire data from 509 adolescents recently discharged from primary substance abuse treatment.[24] The resulting scale has three peer-focused factors: positive versus negative social behaviour, drug use and post-treatment peer association. The authors concluded that the measure provides a means to develop a more thorough understanding of the way adolescents give and receive social support, and the role such support plays in recovery from treatment. Research into effective treatment of adolescents for substance abuse disorders needs to develop a better understanding of the role of social capital in the process. The ability to operationalise and measure peer support with measures such as this may help treatment providers design and enhance more effective programming options.

Identifying particular clients or groups of clients who may need to be supported should at least in part be driven by assessment of social capital resources. Measures such as the Perceived Sense of Community Scale (PSCS) are likely to be useful in helping with that process of identification. The PSCS was developed as an approach towards understanding 'sense of community' (SOC) not bounded by specific place. It measures the psychological state of SOC across a broad definition of community (a group acting on some shared interest e.g., a self-help group). The PSCS was tested by a US research team in a study of over 800 residents of residential homes designed to provide mutual support to individuals recovering from substance abuse and dependence.[25] The results showed that the PSCS can be used to assess the psychological sense of community (SOC) among members of group settings without regard to place or community. Other

21 Gossop M, Marsden J, Stewart D and Treacy S (2002) Change and stability of change after treatment of drug misuse 2-year outcomes from the National Treatment Outcome Research Study (UK). *Addictive Behaviors*, 27(2):155–166

22 Burns J and Marks D (2013) Can recovery capital predict addiction problem severity? *Alcoholism Treatment Quarterly*, 31(3): 303–320

23 This study's definition of perceived community capital (CC) is unique in that it considers the cultural capital explored by Cloud and Granfield (2009) while considering and merging the notion of community capital proposed by White and Cloud (2008)

24 Yao P, Ciesla JR, Mazurek KD and Spear SF (2012) Peer relations scale for adolescents treated for substance use disorder: a factor analytic presentation. *Substance Abuse Treatment, Prevention, and Policy*, 7: 1–6

25 Stevens EB, Jason LA, Ferrari JR, Olson B and Legler R (2012) Sense of community among individuals in substance abuse recovery. *Journal of Groups in Addiction & Recovery*, 7(1):15–28

measures that could be useful to monitor recovery capital include the Recovery Capital Scale,[26] and the Assessment of Recovery Capital (ARC) scale.[27]

EVIDENCE FOR THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY

The review has found a reasonably consistent body of good quality research evidence to support the view that social and human capital (also sometimes characterised as recovery capital in the literature) plays an important role in recovery from addiction.

One of the best known and most successful 12-step programmes to tackle substance abuse is the one used by Alcoholics Anonymous (AA). In an effort to understand more about what makes participation in the AA fellowship effective, a review undertaken in the United States examined 24 studies containing data regarding the relationship between social support networks and AA recovery.[28] The authors conclude that the current body of literature clearly demonstrates that being involved in AA can contribute to more positive friendships and AA can produce larger social networks containing others in recovery who provide support for abstinence. Individuals involved with other social networks that were supportive of drinking actually benefited the most from AA involvement. Based on the findings from the 24 studies included in this review, the authors 'strongly recommended that individuals dealing with alcohol and drug abuse problems seek out recovery options that involve social support, especially for people whose existing social networks fail to promote their abstinence'. (p18)

Further work to promote the role of social support in helping people recover from substance misuse was provided by a review of the literature on College Campus Recovery Communities in the United States. It concluded that the solution to dealing with increasing rates of alcoholism in US universities may be to establish supportive sober communities to foster recovery efforts and address the needs of students suffering the effects of alcohol abuse.[29]

Another review looked at the literature to determine how exactly does AA help its participants?[30] The results suggested that AA helps recovery through enhancing self-efficacy, coping skills, and motivation, and by facilitating adaptive social network changes. These outcomes are primarily related to the idea of building human capital; enabling the individual to become more competent in their ability to handle problems related to their addiction. Interestingly, the review also reported that the evidence regarding the importance of social support and social network changes in recovery through AA is more compelling than that on the role of spirituality. This is indeed an important insight, as traditionally a lot of negative publicity surrounded AA and other 12-step

26 White W (2001) The Recovery Capital Scale. http://www.williamwhitepapers.com/recovery_toolkit/. Retrieved 18 March 2104

27 Groshkova T, Best D and White W (2013). The Assessment of Recovery Capital: properties and psychometrics of a measure of addiction recovery strengths. *Drug and Alcohol Review*, 32(2): 187–194

28 Groh DR, Jason LA and Keys CB (2008) Social network variables in alcoholics anonymous: a literature review. *Clinical Psychology Review*, 28(3): 430–450

29 Smock SA, Baker AK, Harris KS and D'Sauza C (2011) The role of social support in collegiate recovery communities: a review of the literature. *Alcoholism Treatment Quarterly*, 29(1): 35–44

30 Kelly JF, Magill M and Stout RL (2009) How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous. *Addiction Research and Theory*, 17(3): 236–259

programmes, due to what was seen as their emphasis on religion and spirituality, which by some were viewed as the key drivers of change.

When data collected on a cohort of people in treatment for alcohol abuse were analysed, the results showed that greater AA attendance facilitated substantial decreases in pro-drinking social ties and significant, but less substantial increases in pro-abstinence ties.[31] Also, AA attendance reduced engagement in drinking-related activities and increased engagement in abstinent activities. These data were collected from a sample of 1,726 persons who were receiving out-patient treatment and aftercare for alcohol abuse. The authors concluded that 'one of the potential "downstream" mechanisms by which such changes may decrease relapse risk is by reducing or eradicating exposure to alcohol-related cues, thereby reducing craving, while simultaneously allowing or encouraging individuals to experience new social connections that are potentially rewarding and help reinforce recovery.' (p9).

Another review provided an overview of some of the probable active ingredients of self-help groups in light of various theories of social functioning. The authors of this review conclude that there is reasonable evidence to indicate that, via self-help groups, interpersonal relationships can provide group cohesion and support; the group encourages personal growth through taking responsibility for self-discovery and the group also embodies clear expectations for individual behaviour. Self-help groups also promote abstinence as a group norm and the visibility of positive role models; involvement in alternative rewarding activities and a focus on self-efficacy and coping skills are some of the active ingredients responsible for the positive influence of self-help groups. These active ingredients appear to also enhance the development of personal and social resources that protect individuals against the re-emergence of substance use and promote the recovery process.[32]

Research into Narcotics Anonymous (NA) has produced similar findings to those reported above for AA. For example, a US study using a sample of active drug users, assessed the associations between frequency of attending a 12-step programme, perceived social norms, and social network structure.[33] Results showed that individuals who perceived that their drug partners went to NA were over ten times more likely to be frequent attenders. The authors suggested that individuals may be persuaded to participate in the 12-step programmes by believing that similar people (their drug partners) attend these programmes. Individuals who are trying to control their drug use should be encouraged to associate with others in recovery or with people attending a 12-step programme.

The role of recovery capital in successful outcomes was examined in a study conducted in the UK with adults recruited from drug treatment services.[34] This research aimed to identify elements of social capital that played a role in recovery post treatment. Findings confirmed that key factors influencing continued abstinence post treatment included good social support, secure accommodation, additional support around mental health, improving physical health and good financial

31 Kelly JF, Stout RL, Magill M and Tonigan JS (2011) The role of Alcoholics Anonymous in mobilizing adaptive social network changes: a prospective lagged mediational analysis. *Drug and Alcohol Dependence*, 114(2-3): 119–126

32 Moos RH (2008) Active ingredients of substance use-focused self-help groups. *Addiction*, 103(3): 387–396

33 Davey-Rothwell MA, Kuramoto SJ and Latkin CA (2008) Social networks, norms, and 12-step group participation. *American Journal of Drug and Alcohol Abuse*, 34(2): 185–193

34 Duffy P and Baldwin H (2013) Recovery post treatment: plans, barriers and motivators. *Substance Abuse Treatment, Prevention, and Policy*. 8:6

management. The strongest indications were for the importance of rebuilding a social support network (family and friends) and having secure accommodation. Providing access to stable accommodation was found to be an important part of sustaining abstinence in a study based on a survey of 269 former heroin and alcohol addicts.[35] In sustaining abstinence, alcohol users were more likely to report support from their partner, whereas former heroin users were more likely to receive support from their peers. Users of both alcohol and heroin emphasised the need to create distance between themselves and former friends who were still using alcohol and drugs, and both cited stable accommodation as crucial in sustaining abstinence.

The same authors[36] looked at the processes of addiction recovery, pathways to sustained recovery and factors associated with higher quality of life in a group of recovering alcohol and heroin users. The study aimed to assess what recovery factors and aspects of current living and functioning were most strongly associated with higher life quality. The results again supported the role of social capital in the form of engagement with peers in recovery and in the engagement in meaningful activities, suggesting a strong dynamic in the relationship between personal capital (in the form of traits like self-esteem and skills that can be deployed in meaningful activities), and the growth of social skills and supports that constitute the central components of recovery capital. The authors suggested that effective programmes monitor individual needs for social capital and provide the kind of support most appropriate to those individual needs.

In a third study, the same research team looked in more detail at the role of recovery capital in the resolution of substance use disorders.[37] They examined 176 former illicit drug users and drinkers, looking at relationships between recovery capital and vocational activity (training or employment), physical health, psychological health, and overall quality of life. The study found that people with larger social networks were associated with enhanced personal and social recovery capital. The study demonstrated high levels of personal and social wellbeing – manifesting in engagement in community activities and strong social networks – among persons engaged in recovery support activities that were not linked to time in recovery. The authors concluded that the study suggests that social learning of recovery is central to the process of enabling the growth of recovery capital.

An Italian study into sources of social capital found self-help groups to be particularly useful to recovering addicts.[38] They have what the authors described as an 'extraordinary capacity' to develop quasi-professional helping skills, as well as a strong reflexive capacity in certain group members (natural helpers). Their evidence suggests that programmes could usefully employ former users who have been helped to acquire empowerment by the professional systems. Peer-to-peer support of this kind can be very effective in breaking the cycle of dependency and passivity.

35 Best D, Groshkova T and Loaring J (2010) Comparing the addiction careers of heroin and alcohol users and their self-reported reasons for achieving abstinence. *Journal of Groups in Addiction & Recovery*, 5(3-4): 289–305

36 Best D, Gow J, Knox T, Groshkova T and White W (2012) Mapping the recovery stories of drinkers and drug users in Glasgow: quality of life and its associations with measures of recovery capital. D*rug and Alcohol Review*, 31(3): 334–341

37 Best D, Honor S and Karpusheff J (2012) Well-being and recovery functioning among substance users engaged in post treatment recovery support groups. *Alcoholism Treatment Quarterly*, 30(4): 397–406

38 Folgheraiter F and Pasini A (2009) Self-help groups and social capital: new directions in welfare policies? *Social Work Education*, 28(3): 253-267

A US study looked at the extent to which recovery capital (defined as social supports, spirituality, religiousness, life meaning, and 12-step affiliation) predicted better outcomes for people recovering from cocaine and heroin addiction.[39] The study recruited 312 individuals whose primary substance use was crack cocaine or heroin. The sample was interviewed at baseline and one year later. The sample was divided at baseline into under 6 months in recovery (28%), 6–18 months in recovery (26%), 18–36 months in recovery (20%), and over 3 years in recovery (26%). 'In recovery' was defined as length of time from the last time that any illicit drug was used. The study tested the hypothesis: 'Do higher levels of recovery capital prospectively predict sustained recovery, higher quality of life and lower stress one year later?' The domains under study, the components of recovery capital hypothesised as predicting subsequent outcomes were, social supports, spirituality, meaning of life and religiousness and 12-step affiliation. Laudet and White[39] concluded that 'the main hypothesis that greater levels of baseline recovery capital prospectively predict better outcomes was generally supported for the full sample. Recovery capital added a significant percentage of explained variance in all three outcome domains after controlling for baseline level of the domains under study, and the full model reached statistical significance for each of the outcomes.'

Another US study found that while having a sponsor at 3 months predicted the number of days' abstinence from alcohol in months 7–9, having a sponsor at 6 months into the recovery process did not mediate the same association.[40] A third study looked at the relationship between 4 treatment stages (engagement, persuasion, active treatment, relapse prevention) and the composition, social support, and structural characteristics of personal networks.[41] Again, the results showed that effective elements of support differed across different stages of the recovery process. On the basis of their own and other work,[42,43] the authors concluded that while social networks have been shown to have a role in recovery, little is known about specific social network interventions and their effects i.e. whether network interventions should target network size, composition, support availability, or connections.

A US study followed 117 women entering a residential substance abuse treatment programme.[44] Most of the women (75%) had at least one previous drug treatment episode, and 44% had two or more previous treatment episodes. A total of 42% reported being multiple drug users when they first entered treatment, with marijuana, crack/cocaine, and methamphetamine the drugs women most often reported using prior to treatment. The research looked at social support in terms of two components: emotional support

39 Laudet AB and White WL (2008) Recovery capital as prospective predictor of sustained recovery, life satisfaction, and stress among former poly-substance users. *Substance Use and Misuse*, 43 (1): 27–54

40 Rynes KN and Tonigan, JS (2012) Do social networks explain 12-step sponsorship effects? A prospective lagged mediation analysis. *Psychology of Addictive Behaviors* 26(3): 432-439

41 Tracy EM, Kim H, Brown S, Min MO and Jun MK (2012) Substance abuse treatment stage and personal social networks of women in substance abuse treatment. *Journal of the Society for Social Work and Research*, 3(2): 65-79

42 Copello A, Orford J, Hodgson R and Tober G (2009) *Social behaviour and network therapy for alcohol problems*. New York, NY: Routledge

43 Valente TW, Gallaher P and Mouttapa M (2004) Using social networks to understand and prevent substance use: a transdisciplinary perspective. *Substance Use & Misuse*, 39: 1685-1712

44 Lewandowski CA and Hill C (2009) The impact of emotional and material social support on women's drug treatment completion. *Health and Social Work*. 34(3): 213-221

and material support. The primary data collection instruments were a life history calendar developed for the study and the Scale of Perceived Social Support (SPSS).[45] Emotional support was defined as women's perceptions of whether they felt supported in their drug recovery process by family, friends, and partners and by drug treatment, child welfare and welfare agencies. Material support was defined as women reporting that they received financial support or a residence, or that their children were being cared for in foster care. Results showed that having adequate social supports can reduce overall stress, thus decreasing the likelihood of a relapse. The authors concluded that treatment agencies should explore ways to maintain or encourage such support, as the women in their study who reported lower emotional social support, in general, were less likely to complete treatment.

Adolescent use of drugs or alcohol was the focus of a US study that looked at perceptions of neighbourhood disorganisation and social capital to assess the extent to which they were associated with alcohol or drug (AOD) use, AOD dependence, and access to AOD treatment.[46] The authors used Putnam's definition of social capital as civic participation, which frequently occurs through involvement in community organisations or voluntary associations.[47] It was measured using a ten-item questionnaire that asked if people had participated in a range of community activities such as team sports, community work or social clubs over the previous 12-month period. The study was based on the secondary analysis of data from two waves of the National Survey on Drug Use and Health (NSDUH). Data were collected from 38,115 young people aged between 12 and 17 years. The results showed just over half of the sample (54.2%) reported never using alcohol or drugs, 41.1% reported lifetime AOD use and 4.6% were AOD dependent. Two per cent reported receiving AOD treatment. Medium and high levels of social capital were negatively associated with AOD use and dependence. Social capital was unrelated to access to AOD treatment. Neighbourhood disorganisation was positively associated with AOD use, dependence, and access to treatment. The authors concluded that neighbourhood disorganisation and social capital were associated with AOD use and dependence, and that subjective measures of social context may be an important key to understanding the mechanics of adolescent AOD addiction and treatment utilisation.

A UK study followed a sample of 269 former alcohol and heroin addicts, looking at reasons for achieving and maintaining desistance. Alcohol and heroin users differed in their self-reported reasons for stopping use. Drinkers were more likely to report work and social reasons, while drug users were more likely to report criminal justice factors. In sustaining abstinence, alcohol users were slightly more likely to report partner support, while drug users were more likely to report peer support and were also more likely to emphasise the need to move away from substance-using friends than was the case for former alcohol users. Users of both alcohol and heroin were least likely to cite partner factors in sustaining recovery, but were more likely to need to move away from using friends and to cite stable accommodation as crucial in sustaining abstinence.

45 MacDonald G (1998) Development of a social support scale: an evaluation of psychometric properties. *Research on Social Work Practice*, 8: 564–576

46 Winstanley EL, Steinwachs DM, Ensminger ME, Latkin CA, Stitzer ML and Olsen Y (2008) The association of self-reported neighborhood disorganization and social capital with adolescent alcohol and drug use, dependence, and access to treatment. *Drug and Alcohol Dependence*, 92: 173-182

47 Putnam RD (1995) Bowling alone. America's declining social capital. *Journal of Democracy* 6: 65–78

A US study found significant reductions in the risk of relapse in a small sample of clients who participated in a Peer Support Community (PSC) Programme.[48] The PSC aims to help people continue abstinence from AOD and remain in housing, thereby transitioning out of homelessness. It offers services to help people in the transition. The study was designed to examine the effectiveness of a PSC model inclusive of occupational therapy services implemented to address the need for sustained recovery within a Permanent Supportive Housing (PSH) facility. Despite limitations associated with the size of the sample, the authors concluded that the study supported the use of participation in a PSC as a promising strategy for sustaining recovery of at-risk clients.

A US study followed 469 adult residents of a communal living setting over a period of eight months.[49] Most had been drug or alcohol-free for around two years. The authors were looking specifically at the extent to which the relationship between social support and recovery was mediated by a person's self-regulation functioning. They hypothesised that changes in self-regulation would be significantly related to social support among residents of recovery homes. Social support information was collected by administering the Important People Inventory.[50] The inventory contains contact and behaviour information on up to 12 people in the participant's social network (e.g., spouse, parent, sibling, friend). Positive social support is defined as support for abstinence. Findings indicated a positive association between social support and changes in scores on measures of self-regulation.

Another US study looked at how women, predominantly African-American, in substance abuse treatment described their social network's supportive and unsupportive behaviours and attitudes related to recovery.[51] The women described supportive actions in terms of emotional, informational, and tangible support. They described the negative elements of their social networks in terms of difficulties created by conflict relationships that created emotional strain, such as excessive worry, and informational support in the form of criticism. The authors again reinforced the value of including consideration of social networks in treatment programmes. Support for recovering addicts may be particularly important when problematic relationships involve close family such as partners or children.

FAMILY RELATIONSHIPS AS RECOVERY CAPITAL

A large interview study conducted in New Mexico found family relationships to be very important.[52] The actions and communications of family members often supported the recovery process. However, where family members found it difficult to understand and empathise with the experiences of recovering addicts, those same relationships could

48 Boisvert RA, Martin LM et al. (2008) Effectiveness of a peer-support community in addiction recovery: participation as intervention. *Occupational Therapy International*. 15(4): 205-220

49 Ferrari JR, Stevens EB and Jason LA (2010) An exploratory analysis of changes in self-regulation and social support among men and women in recovery. *Journal of Groups in Addiction & Recovery*. 5(2): 145-154

50 Clifford PR and Longabaugh R (1991) *Manual for the administration of the Important People and Activities Instrument*. Adapted for use by Project MATCH for NIAAA 5R01AA06698-05 Environmental Treatment of Alcohol Abusers, Richard Longabaugh, Principal Investigator

51 Tracy EM, Munson MR, Peterson LT and Floersch JE (2010) Social support: a mixed blessing for women in substance abuse treatment. *Journal of Social Work Practice in the Addictions*, 10(3): 257–282

52 England Kennedy ES and Horton S (2011) "Everything that I thought they would be, they weren't:" family systems as support and impediment to recovery. *Social Science & Medicine*, 73(8): 1222–9

be more problematic. For that reason, the authors suggested service delivery could usefully include families in therapeutic interventions, psycho-education, social support groups and other recovery services. Interviews which the research team conducted with family members suggested that most would be very willing to be involved in that way.

Social support from family members in particular was investigated by a US study involving cocaine abusers.[53] The aim of the study was to identify factors predicting sustained cocaine abstinence and transitions from cocaine use to abstinence over a two-year period. It used data from three studies of continuing care for patients in intensive out-patient programmes (IOPs). Cocaine abstinence and successfully moving from use to abstinence were predicted by several factors, including higher self-efficacy and better social support. Commitment to abstinence, self-help behaviours and beliefs, and self-efficacy, contributed independently to the prediction of cocaine use transitions. The authors concluded that the research had several implications for the provision of extended continuing care or other forms of outcomes monitoring, recovery support, or disease management. All cocaine-dependent individuals seemed to be vulnerable to relapse when they experienced a decline in self-efficacy. For people who have either continued to use or have relapsed into use, a focus on self-efficacy and self-belief may contribute to reduction in cocaine use. As a consequence, programmes designed to help individuals into recovery might usefully monitor self-efficacy and depression in cocaine-dependent people, and administer treatment when self-efficacy seems to drop, or depression scores increase. The telephone-based interventions and cognitive behaviour therapy monitored in this study both seemed to be effective in this regard.

SOCIAL SUPPORT AS A NEGATIVE INFLUENCE

The part that social capital plays in recovery is not always positive. For example, a US study cited evidence to show that while people being treated for substance abuse can be positively influenced by abstinence-supporting social influences, they can be negatively influenced by maintaining relationships with substance-using individuals.[54] The study identified three independent types of social support in 122 men and women entering treatment for substance abuse disorders: frequent positive support, limited positive support, and negative support. People with access to frequent positive support, defined as people with a high likelihood of support for abstinence and frequent contact with network members, showed greatest improvements in substance abuse by the end of the study period. The authors concluded that their results offered further evidence for the important role played by informal social networks in treatment outcomes.

A US review included papers that investigated treatment programmes for people with diagnosed substance use and/or mental disorders, and reported empirical data on social networks and/or social support.[55] The review found that social networks can inhibit as well as promote recovery. In particular, it is not uncommon for those in recovery to include those who continue to substance abuse in their networks. The authors concluded that because of the social nature of substance use, programme design should

53 McKay JR, Van Horn D, Rennert L, Drapkin M, Ivey M and Koppenhaver J (2013) Factors in sustained recovery from cocaine dependence. *Journal of Substance Abuse Treatment* 45(2): 163–172

54 Buckman J, Bates ME and Morgenstern J (2008) Social support and cognitive impairment in clients receiving treatment for alcohol- and drug-use disorders: a replication study. *Journal of Studies on Alcohol and Drugs* 69(5): 738–746

55 Biegel D and Tracey EM (2006) Personal social networks and disorders: a literature review and implications for practice and future research. *Journal of Dual Diagnosis*, 2(2): 59–88

take into account an understanding and assessment of social networks. Assessing social networks in terms of structural, interactional and functional features can help both the practitioner and the client identify sources of support as well as sources of stress, peer pressure, and non-support that might impact substance abuse treatment and recovery. Effective programmes for adults with dual disorders should include social support interventions to modify and strengthen the immediate social environment through social network and/or family interventions. This can include social skills training in developing supportive networks. Such skills as initiating contacts and conversations, asking for help, resisting peer pressure, managing conflict and balancing reciprocity and appropriate boundaries may all be important to building and mobilising support.

A NOTE ON QUALITY OF LIFE MEASURES

Research into recovery from addiction has highlighted the role of social or recovery capital. This relatively recent focus on social as well as the more traditional symptom assessments in monitoring and evaluating recovery from addiction has highlighted the case for considering quality of life (QoL) as an outcome measure.[56] QoL measures assess an individual's satisfaction with life in general rather than just their disease-related limitations in functioning. As such, they can provide a useful means of assessing the extent to which recovery capital provides substance abusers with resources that can make a positive difference to treatment adherence and abstinence. A study of methadone treatment for opiate-dependent individuals in The Netherlands found that QoL measures provided a useful means of monitoring the kind of personalised support that helped them realise treatment goals.[57]

GAPS IN THE EVIDENCE

Evidence for the impact of social or human capital on recovery from drug and/or alcohol addiction is reasonably consistent across the reviews and studies the REA has identified. However, in terms of evidence gaps, four areas for research have been identified as priorities.

Self-help groups provide a valuable source of social capital for recovering substance abusers. Research suggests that the success of programmes such as AA is largely due to the way in which they support recovering addicts by creating a network of social relationships between people who have successfully abstained over long periods.[58]

However, while the value of self-help groups is widely recognised, the mechanisms by which they support abstinence are not well understood. If research can shed more light on how self-help groups work to provide positive social support, it may well be that those lessons can be applied to other important social milieu, such as the family and social networks.[59]

56 Laudet AB (2011) The case for considering quality of life in addiction research and clinical practice. A*ddiction Science & Clinical Practice*, 6: 44–55

57 De Maeyer J, van Nieuwenhuizen C, Bongers IL, Broekaert E and Vanderplasschen W (2012) Profiles of life in opiate-dependent individuals after starting methadone treatment: a latent class analysis. *International Journal of Drug Policy*, http://dx.doi.org/10.1016/j.drugpo.2012.09.005

58 Kelly JF, Stout RL, Magill M and Tonigan JS (2011) The role of Alcoholics Anonymous in mobilizing adaptive social network changes: a prospective lagged mediational analysis. *Drug and Alcohol Dependence*, 114(2-3): 119–126

59 Moos RH (2008) Active ingredients of substance use-focused self-help groups. *Addiction*, 103(3): 387–396

Secondly, more work needs to be done on how the provision of positive social capital may differ over the course of the recovery process. The evidence available suggests that depending on where substance abusers are in the process of moving towards sustained abstinence, the nature of what might constitute effective support is likely to change.[60]

Thirdly, some of the evidence reviewed suggests there may be important individual differences in the way in which recovering substance abusers may need to access different types of social or human capital.[61] As a consequence, it is important to improve understanding of how to assess individual differences in both the need for, and availability of, social capital as part of the recovery process.

Finally, we know that there are considerable health costs, welfare costs, and costs to the criminal justice system associated with substance abuse. It is also true that providing the kind of long-term support that evidence suggests is needed to maintain abstinence for many recovering addicts is expensive. To inform people who make decisions about where to best spend scarce resources requires evidence, not just of efficacy, but also of benefits. As with many other areas of social policy, the required cost-benefit analyses have yet to be conducted in the area of substance abuse prevention and treatment.[62]

60 Rynes KN and Tonigan JS (2012) Do social networks explain 12-step sponsorship effects? A prospective lagged mediation analysis. *Psychology of Addictive Behaviors*, 26(3): 432–439

61 Best D, Gow J, Knox T, Groshkova T and White W (2012) Mapping the recovery stories of drinkers and drug users in Glasgow: quality of life and its associations with measures of recovery capital. *Drug and Alcohol Review*, 31(3): 334–341

62 Gates S (2006) *Interventions for prevention of drug use by young people delivered in non-school settings (Review)* The Cochrane Collaboration

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THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

CONCLUSIONS

CONCLUSIONS

The research literature on substance abuse treatment has consistently reported evidence to support the view that the relationships people maintain with their families, friends and other social contacts are critical to understanding why people start to abuse drink and drugs, why they persist to the point of addiction, and how they respond to treatment designed to move them to abstinence.

The most successful treatment programmes are those that recognise the role of social capital and develop interventions that provide support via self-help groups, peer support, and families. Effective recovery programmes need to address other elements of substance abusers' social environments, including the need for stable accommodation, the capacity to manage financial affairs, and constructive activities that provide a positive alternative to relapse. While good cost-benefit analyses have yet to be done, the available evidence suggests that recovery programmes are likely to be cost-effective. Savings can be made by reducing demand for health care, enabling people to make a positive contribution to their communities.[63]

This evidence review has presented a range of key messages for different stakeholders. It has provided support for programmes that address issues of social and human capital as part of the recovery process, and has suggested that community-based efforts to enhance the social capital of recovering addicts can have a significant impact on the success rates of established programmes such as those provided by AA and NA.

63 Godfrey C, Eaton G, McDougall C and Culyer A (2002) *The economic and social costs of Class A drug use in England and Wales, 2000*. London. Home Office

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THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

REFERENCES

REFERENCES

Best D, Gow J, Knox T, Groshkova T and White W (2012) Mapping the recovery stories of drinkers and drug users in Glasgow: quality of life and its associations with measures of recovery capital. *Drug and Alcohol Review*, 31(3): 334–341

Best D, Groshkova T and Loaring J (2010) Comparing the addiction careers of heroin and alcohol users and their self-reported reasons for achieving abstinence. *Journal of Groups in Addiction & Recovery*, 5(3-4): 289–305

Best D, Honor S and Karpusheff, J (2012) Well-being and recovery functioning among substance users engaged in post treatment recovery support groups. *Alcoholism Treatment Quarterly*, 30(4): 397–406

Biegel D and Tracey EM (2006) Personal social networks and disorders: a literature review and implications for practice and future research. *Journal of Dual Diagnosis*, 2(2): 59–88

Boisvert RA, Martin LM et al. (2008) Effectiveness of a peer-support community in addiction recovery: participation as intervention. *Occupational Therapy International*, 15(4): 205–220

Brody G (2012) The Adults in the Making program: long-term protective stabilizing effects on alcohol use and substance use problems for rural African American emerging adults. *Journal of Consulting and Clinical Psychology*, 80(1): 17–28

Brown BL (2012) A three-wave longitudinal examination of perceived organizational support, affective professional commitment, personal recovery status and turnover intentions among substance abuse professionals, *Journal of Substance Abuse Treatment* (43)3 (October 2012): e2-e3

Buckman J, Bates Marsha E (2008) Social support and cognitive impairment in clients receiving treatment for alcohol- and drug-use disorders: a replication study. *Journal of Studies on Alcohol and Drugs*, 69(5): 738–746

Burns J and Marks D (2013) Can recovery capital predict addiction problem severity? *Alcoholism Treatment Quarterly*, 31(3): 303–320

Canning U, Millward L, Raj T and Warm D (2004) Drug use prevention amongst young people: a review of reviews. London: Health Development Agency

Centers for Disease Control and Prevention. CDC health disparities and inequalities report: United States, 2011. MMWR. 2011;60(suppl). Available from http://www.cdc.gov/mmwr/pdf/other/su6001.pdf [PDF – 3MB]

Clifford PR and Longabaugh R (1991) *Manual for the administration of the Important People and Activities Instrument*. Adapted for use by Project MATCH for NIAAA 5R01AA06698-05 Environmental Treatment of Alcohol Abusers, Richard Longabaugh, Principal Investigator

Cloud W and Granfield R (2009) Conceptualizing recovery capital: expansion of a theoretical construct. *Substance Use and Misuse*, 43: 1971–1986

Copello A, Orford J, Hodgson R and Tober G (2009) *Social behavior and network therapy for alcohol problems*. New York, NY: Routledge

Davey-Rothwell MA, Kuramoto SJ and Latkin CA (2008) Social networks, norms, and 12-step group participation. *American Journal of Drug and Alcohol Abuse*, 4(2): 185–193

Department for International Development (2013) Assessing the strength of evidence: DfID practice paper. www.gov.uk/government/publications/how-to-note-assessing-the-strength-of-evidence. Retrieved 10 March 2014

De Maeyer J, van Nieuwenhuizen C, Bongers IL, Broekaert E and Vanderplasschen W (2012) Profiles of life in opiate-dependent individuals after starting methadone treatment: a latent class analysis. *International Journal of Drug Policy*, http://dx.doi.org/10.1016/j.drugpo.2012.09.005

Department of Health (2012) Steering Group Report on a National Substance Misuse Strategy. Available at: http://healthupdate.gov.ie/wp-content/uploads/2012/02/Steering-Group-Report-on-a-National-Substance-Misuse-Strategy-7-Feb-11.pdf

Duffy P and Baldwin H (2013) Recovery post treatment: plans, barriers and motivators. *Substance Abuse Treatment, Prevention, and Policy*. 8:6

England Kennedy ES and Horton S. (2011) "Everything that I thought they would be, they weren't:" Family systems as support and impediment to recovery. *Social Science & Medicine*, 73(8): 1222–9

Ferrari JR, Stevens EB and Jason LA (2010) An exploratory analysis of changes in self-regulation and social support among men and women in recovery. *Journal of Groups in Addiction & Recovery*, 5(2): 145–154

Folgheraiter F and Pasini A (2009) Self-help groups and social capital: new directions in welfare policies? *Social Work Education*, 28(3): 253–267

Gates S (2006) *Interventions for prevention of drug use by young people delivered in non-school settings (Review)* The Cochrane Collaboration

Godfrey C, Eaton G, McDougall C and Culyer A (2002) *The economic and social costs of Class A drug use in England and Wales, 2000*. London: Home Office

Gossop M, Marsden J, Stewart D and Treacy S (2002) Change and stability of change after treatment of drug misuse 2-year outcomes from the National Treatment Outcome Research Study (UK) *Addictive Behaviors*, 27(2): 155–166

Granfield R and Cloud W (1999) *Coming clean: overcoming addiction without treatment*. New York: New York University Press

Groh DR, Jason LA, Keys CB (2008) Social network variables in alcoholics anonymous: a literature review. *Clinical Psychology Review*, 28(3): 430–450

Groshkova T, Best D and White W (2013) The assessment of recovery capital: properties and psychometrics of a measure of addiction recovery strengths. *Drug and Alcohol Review*, 32(2): 187–194

Hill T and Lewandowski C (2009) The impact of emotional and material social support on women's drug treatment completion. *Health and Social Work*, 34(3): 213–221

Kelly JF, Magill M and Stout RL (2009) How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous. *Addiction Research and Theory*, 17(3): 236–259

Kelly JF, Stout RL, Magill, M and Tonigan JS (2011) The role of Alcoholics Anonymous in mobilizing adaptive social network changes: a prospective lagged mediational analysis. *Drug and Alcohol Dependence*, 114(2-3): 119–126

Laudet AB (2011) The case for considering quality of life in addiction research and Clinical Practice. *Addiction Science & Clinical Practice*, 6: 44–55

Laudet AB and Humphreys K (2013) Promoting recovery in an evolving policy context: What do we know and what do we need to know about recovery support services? *Journal of Substance Abuse Treatment* 45.1 (July 2013): 126–133

Laudet AB and White WL (2008) Recovery capital as prospective predictor of sustained recovery, life satisfaction, and stress among former poly-substance users. *Substance Use and Misuse*, 43 (1): 27–54

Lewandowski CA and Hill C (2009) The impact of emotional and material social support on women's drug treatment completion. *Health and Social Work*. 34(3): 213-221

Lohr KN (2004) Rating the strength of scientific evidence: relevance for quality improvement programs. *International Journal for Quality in Health Care*, 16(1): 9–18

Marsch L (2012) Leveraging technology to enhance addiction treatment and recovery, *Journal of Addictive Diseases* 31.3 (July 2012): 313–318

MacDonald G (1998) Development of a social support scale: an evaluation of psychometric properties. *Research on Social Work Practice*, 8: 564–576

McKay JR, Van Horn D, Rennert L, Drapkin M, Ivey M and Koppenhaver J (2013) Factors in sustained recovery from cocaine dependence. *Journal of Substance Abuse Treatment*, 45(2): 163–172

Miller WR and Carroll K (2006) *Rethinking substance abuse: what the science shows and what we should do about it*. New York, NY: Guilford Press

Moos RH (2008) Active ingredients of substance use-focused self-help groups. *Addiction*, 103(3): 387–396

Pilling S and Hardy R (2013) *Review of the Dublin North City and County addiction service*. Dublin: Psychological Interventions Research Centre and University College London

Putnam RD (1995) Bowling alone. America's declining social capital. *Journal of Democracy* 6: 65–78

Rynes KN and Tonigan JS (2012) Do social networks explain 12-step sponsorship effects? A prospective lagged mediation analysis. *Psychology of Addictive Behaviors*, 26(3): 432–439

Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB and Richardson WS (1996) Evidence based medicine: what it is and what it isn't. *British Medical Journal*, 1996 January 13; 312(7023): 71–72

Sanju G and Hamdy M (2005) Gateway hypothesis – a preliminary evaluation of variables predicting non-conformity. *Addictive Disorders & their Treatment*, 4: 39–40

Sherman L, Gottfredson D, MacKenzie D, Eck J, Reuter P and Bushway S (1997) Preventing Crime*: What Works, What Doesn't, What's Promising*. Washington: US Department of Justice

Smock SA, Baker AK, Harris KS and D'Sauza C (2011) The role of social support in collegiate recovery communities: A review of the literature. *Alcoholism Treatment Quarterly*, 29(1): 35–44

Stevens EB, Jason LA, Ferrari JR, Olson B and Legler R (2012) Sense of community among Individuals in Substance Abuse Recovery. *Journal of Groups in Addiction & Recovery*, 7(1): 15–28

Surgeon General (1989) *Reducing the health consequences of smoking – 25 years of progress*. Available at: http://profiles.nlm.nih.gov/NN/B/B/X/S/. Retrieved 10 March 2014

Tracy EM, Kim H, Brown S, Min MO and Jun MK (2012) Substance abuse treatment stage and personal social networks of women in substance abuse treatment. *Journal of the Society for Social Work and Research*, 3(2): 65–79

Tracy EM, Munson MR, Peterson LT and Floersch JE (2010) Social support: a mixed blessing for women in substance abuse treatment. *Journal of Social Work Practice in the Addictions*, 10(3): 257–282

Valente TW, Gallaher P and Mouttapa M (2004) Using social networks to understand and prevent substance use: a transdisciplinary perspective. *Substance Use & Misuse*, 39: 1685–1712

White, W. (2001) The Recovery Capital Scale. http://www.williamwhitepapers.com/recovery_toolkit/. Retrieved 18 March 2104

White W and Cloud W (2008) Recovery capital: a primer for addiction professionals. *Counsellor*, 9: 22–27

Winstanley EL, Steinwachs DM, Ensminger ME, Latkin CA, Stitzer ML and Olsen Y (2008) The association of self-reported neighborhood disorganization and social capital with adolescent alcohol and drug use, dependence, and access to treatment. *Drug and Alcohol Dependence*, 92: 173–182

Yao P, Ciesla JR, Mazurek KD, Spear SF (2012) Peer relations scale for adolescents treated for substance use disorder: a factor analytic presentation. *Substance Abuse Treatment, Prevention, and Policy*. 7: 1–6

09

THE ROLE OF SOCIAL AND HUMAN CAPITAL IN RECOVERY FROM DRUG AND ALCOHOL ADDICTION

APPENDICES

APPENDIX A: RAPID EVIDENCE ASSESSMENT METHODOLOGY

Databases searched

PSYCINFO

PsycINFO, formerly Psychological Abstracts, is an abstracting and indexing database run by the American Psychological Association (APA). It contains more than 3 million records devoted to research literature in the behavioural sciences and mental health, including peer-reviewed journals, books, and dissertations. The database contains more than 57 million cited references, including almost 3 million from the period 1920 to 1999.

SOCIAL POLICY & PRACTICE

The Social Policy & Practice database covers all aspects public and social policy, public health, social care, community development, mental and community health, homelessness, housing, crime, equalities, children and families and older people. It comprises over 320,000 bibliographic records, with a significant number citing important 'grey literature' sources such as semi-published reports, surveys and statistics.

EMBASE

Embase is the most comprehensive international biomedical database for biomedical researchers. Embase indexes articles published in over 90 countries and 40 languages, with the database growing at a rate of over 1 million records a year.

APPLIED SOCIAL SCIENCES INDEX AND ABSTRACTS

Applied Social Sciences Index and Abstracts (ASSIA) is an indexing and abstracting tool covering health, social services, psychology, sociology, economics, politics, race relations and education. It provides a comprehensive source of social science and health information that is updated monthly. ASSIA currently contains over 375,000 records from over 500 journals published in 16 different countries, including the UK and the US.

SOCIOLOGICAL ABSTRACTS

Sociological Abstracts provides abstracts from the international literature in sociology and related disciplines in the social and behavioural sciences. It covers journal articles and citations to book reviews drawn from over 1,800 journals, as well as providing abstracts of books, book chapters, dissertations, and conference papers.

SOCIAL SERVICES ABSTRACTS

Social Services Abstracts provides bibliographic coverage of current research focused on social work, human services and related areas, including social welfare, social policy, and community development. The database abstracts and indexes over 1,300 serial publications. It currently contains over 155,505 records, adding new citations at the rate of 5,500 a year.

WEB OF KNOWLEDGE

Web of Knowledge is an academic citation indexing and search service, which is combined with web linking. It covers the sciences, social sciences, arts and humanities. The database includes 23,000 academic and scientific journals, 110,000 conference proceedings and 9,000 websites.

We conducted searches to include any publications produced in English. We limited the years of publication to 2008 onwards. We searched for papers across the full range of the Centre for Reviews and Dissemination (CRD) hierarchy of evidence[64] – from well-designed RCTs to opinions of respected authorities, descriptive studies and reports of expert committees.

We searched the databases in the following order, refining the search terms as we proceeded and also the periods searched.

DATABASE	SEARCH TERMS	NO. OF HITS
ASSIA 2006-2013	No limit on age groups, and no NOT set (Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)	198
PsycINFO 2006-2013	No limit on age groups, and no NOT set 1. ((Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests and measures] (439) 2. limit 1 to yr="2006 -Current" (308)	308
Embase	No limit on age groups, and no NOT set 1. ((Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (441) 2. limit 1 to yr="2006 -Current" (250)	250
Social Policy & Practice 2006-2013	No limit on age groups, and no NOT set 1. (Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)).mp. [mp=abstract, title, publication type, heading word, accession number] (42) 2. limit 1 to yr="2006 -Current" (30)	30

64 Centre for Reviews and Dissemination (2008). *Systematic Reviews: CRD's guidance for undertaking reviews in health care*. York: University of York

DATABASE	SEARCH TERMS	NO. OF HITS
Social Policy & Practice 2008-2013	Full strategy with NOT set 1. ((Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)).mp. [mp=abstract, title, publication type, heading word, accession number] (42) 2. limit 1 to yr="2008 -Current" (24) 3. (schools or colleges or methadone or needle* or Opiate Substitution or OST or buprenorphine or detox* or residential treatment or older people or gambl* or betting or game*).mp. [mp=abstract, title, publication type, heading word, accession number] (108701) 4. limit 3 to yr="2008 -Current" (21051) 5. 2 not 4 (22)	22
PsycINFO 2008-2013	Full strategy with NOT set 1. ((Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures] (442) 2. limit 1 to yr="2008 -Current" (235) 3. (schools or colleges or methadone or needle* or Opiate Substitution or OST or buprenorphine or detox* or residential treatment or older people or gambl* or betting or game*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests and measures] (106779) 4. limit 3 to yr="2008 -Current" (68638) 5. 2 not 4 (207) 6. (schools or colleges or methadone or needle* or Opiate Substitution or OST or buprenorphine or detox* or residential treatment or old or gambl* or betting or game*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests and measures] (163062) 7. limit 6 to yr="2008 -Current" (100991) 8. 2 not 7 (204)	200

DATABASE	SEARCH TERMS	NO. OF HITS
Embase 2008-2013	1. ((Social support or social capital or social network* or bridging or bonding) and ((drug or alcohol or substance) and (abuse or misuse or addict*)) and (recovery or rehab* or reintegrate*)).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (441) 2. limit 1 to yr="2008 -Current" (189) 3. (schools or colleges or methadone or needle* or Opiate Substitution or OST or buprenorphine or detox* or residential treatment or older people or gambl* or betting or game*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (337544) 4. limit 3 to yr="2008 -Current" (129056) 5. 2 not 4 (156) 6. (schools or colleges or methadone or needle* or Opiate Substitution or OST or buprenorphine or detox* or residential treatment or old or gambl* or betting or game*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (1201072) 7. limit 6 to yr="2008 -Current" (456324) 8. 2 not 7 (154)	154
ASSIA 2008-2013	Full strategy with NOT set ((“Social support” OR “social capital” OR “social network*” OR bridging OR bonding) AND ((drug OR alcohol OR substance) AND (abuse OR misuse OR addict*)) AND (recovery OR rehab* OR reintegrate*) AND pd(20080101-20131231)) NOT ((schools OR colleges OR methadone OR needle* OR Opiate Substitution OR OST OR buprenorphine OR detox* OR residential treatment OR older people OR gambl* OR betting OR game*) AND pd(20080101-20131231))	27

DATABASE	SEARCH TERMS	NO. OF HITS
Sociological Abstracts 2008-2013	Full strategy with NOT set ((Social support OR social capital OR social network* OR bridging OR bonding) AND ((drug OR alcohol OR substance) AND (abuse OR misuse OR addict*)) AND (recovery OR rehab* OR reintegrate*) AND pd(20080101-20131231)) NOT ((schools OR colleges OR methadone OR needle* OR Opiate Substitution OR OST OR buprenorphine OR detox* OR residential treatment OR older people OR gambl* OR betting OR game*) AND pd(20080101-20131231))	115
Social Services Abstracts	Full strategy with NOT set (((Social support OR social capital OR social network* OR bridging OR bonding) AND ((drug OR alcohol OR substance) AND (abuse OR misuse OR addict*)) AND (recovery OR rehab* OR reintegrate*)) NOT (schools OR colleges OR methadone OR needle* OR Opiate Substitution OR OST OR buprenorphine OR detox* OR residential treatment OR older people OR gambl* OR betting OR game*)) AND pd(20080101-20131231)	100
Web of Knowledge	Full strategy with NOT set (((Social support OR social capital OR social network* OR bridging OR bonding) AND ((drug OR alcohol OR substance) AND (abuse OR misuse OR addict*)) AND (recovery OR rehab* OR reintegrate*)) NOT (schools OR colleges OR methadone OR needle* OR Opiate Substitution OR OST OR buprenorphine OR detox* OR residential treatment OR older people OR gambl* OR betting OR game*)) AND pd(20080101-20131231)	193
	TOTAL	**1,597**

INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria

CRITERIA	DESCRIPTION	EXAMPLE
The role of social support in recovery	Studies and reviews that investigate the role of social networks/social capital/social support in drug and alcohol addiction recovery.	Day E, Copello A and Seddon JL (2013) Pilot study of a social network intervention for heroin users in opiate substitution treatment: Study protocol for a randomized controlled trial. Trials. 14 (1): 2013. Article Number: 264
Social capital as a contributing factor to recovery	Studies and reviews that identify social networks/social capital/social support as a contributing factor to recovery along with other factors.	McKay JR, Van Horn D and Rennert L (2013) Factors in sustained recovery from cocaine dependence. *Journal of Substance Abuse Treatment*, 45.2 (August 2013): 163–172
Recovery champions	Studies and reviews that investigate the role of recovery champions in aiding recovery through peer support.	Best D, Loudon L and Powell D Identifying and Recruiting Recovery Champions: Exploratory Action Research in Barnsley, South Yorkshire. *Journal of Groups in Addiction & Recovery*, 8.3 (July 2013): 169–184
Recovery capital	Studies and reviews that evaluate the effects of recovery capital.	Groshkova T, Best D and White W (2013) The Assessment of Recovery Capital: Properties and psychometrics of a measure of addiction recovery strengths. *Drug and Alcohol Review*, 32.2 (March 2013): 187–194
Social support and recovery in communal living recovery programmes	Studies and reviews that relate to the role of social support in communal living recovery programmes.	Ortiz E, Alvarez J and Jason LA (2009) Abstinence social support: The impact of children in Oxford House. *Journal of Groups in Addiction & Recovery*, Vol. 4(1-2), March 2009: 71–81
How the literature measures recovery	Studies and reviews that identify measures of recovery from drug and alcohol addiction.	Groshkova T, Best D and White W (2013) The Assessment of Recovery Capital: Properties and psychometrics of a measure of addiction recovery strengths. Drug and Alcohol Review 32.2 (Mar 2013): 187–194

Exclusion criteria

CRITERIA	DESCRIPTION	EXAMPLE
Policy reviews	Reviews of policy on recovery support provision.	Laudet AB and Humphreys K (2013) Promoting recovery in an evolving policy context: what do we know and what do we need to know about recovery support services? *Journal of Substance Abuse Treatment*, 45.1 (July 2013): 126–133
Online networks and use of technology in support in recovery	Studies and reviews that investigate the role of social support on line and through text messaging in aiding recovery.	Marsch L (2012) Leveraging technology to enhance addiction treatment and recovery, *Journal of Addictive Diseases* 31.3 (July 2012): 313–318
Social support in in-patient recovery	Studies and reviews that investigate the role of social support in recovery within the setting of in-patient rehabilitation programmes.	
Organisational support in recovery/inter-organisational networks in recovery	Studies and reviews that relate to inter-organisational networks rather than inter-personal networks.	Brown BL (2012) A three-wave longitudinal examination of perceived organizational support, affective professional commitment, personal recovery status and turnover intentions among substance abuse professionals, *Journal of Substance Abuse Treatment* 43.3 (October 2012): e2-e3
Recovery support services	Studies and reviews that relate to support services rather than social capital and social support.	Laudet A (2012) Longitudinal perspectives on physical and mental health comorbidities among women in recovery: Implications for recovery support services and integrated care. *Journal of Substance Abuse Treatment* 43.3 (October 2012): e7

APPENDIX B: QUALITY SCORES FOR PRIMARY RESEARCH STUDIES

Quality appraisal criteria for primary research studies.

	QUALITY APPRAISAL CRITERIA
Research rationale	*Convincing rationale for overall research strategy and how it was designed to meet study aims/research questions, including comprehensive review of previous research and justification for collecting new primary data.
Research design	*Good discussion of main features of research design and strengths and weaknesses of data sources. *Research design shows robustness (reliable and replicable) and validity. *Implications of limitations taken into consideration in the analysis and findings. *ETHICS – confidentiality, anonymity, data protection, instructions to participants etc., impartiality.
Sampling	*Does the study describe locations and population(s) of interest and how and why chosen (e.g., typical or extreme case or diverse constituencies etc.) to allow comparisons be made? *Was the sampling strategy appropriate to research question, e.g., purposive vs random; is large enough for generalisability if required? *Is the achieved sample representative of the population of interest? Is there information about the response rate?
Data collection	*Detailed description of data and collection methods used, explaining any limitations and methods to maximise inclusion/limit bias. *Reliability – was there pilot testing of tools/methods; did more than one person collect data?
Data analysis	*Explicit and appropriate analytic procedure for processing raw data into results/themes that could be repeated with a similar methodology. *Reliability – was there triangulation of data analysis (e.g., multiple scorers or coders)?
Interpretation and reporting of results	*Study reports findings on all variables or concepts investigated and includes discussion/mention of any negative cases and outliers and confounding/ moderating variables. *Discussion of mechanisms through which effects happen, with examples from the data. *Limitations – discusses importance of study's context and biases/flaws in design.
Credibility of conclusions	*Conclusions presented are supported by study findings and previous research and theory (where appropriate). *Evidence of openness to new/alternative ways of viewing subject/theories/ assumptions. *An attempt is made to quantify/explain the strength or value of the findings, if appropriate.

CRITERIA FOR EACH LEVEL OF THE MARYLAND SCIENTIFIC METHODS SCALE (SMS)

1. Correlation between a prevention programme and a measure of crime at one point in time (e.g., areas with CCTV have lower crime rates than areas without CCTV)
2. Measures of crime before and after the programme, with no comparable control conditions (e.g., crime decreased after CCTV was installed)
3. Measures of crime before and after the programme in experimental and control conditions (e.g., crime decreased after CCTV was installed in an experimental area, but there was no decrease in crime in a comparable area)
4. Measures of crime before and after in multiple experimental and control units, controlling for the variables that influence crime (e.g., victimisation of premises under CCTV surveillance decreased compared to victimisation of control premises, after controlling for features of premises that influenced their victimisation)
5. Random assignment of programme and control conditions to units (e.g., victimisation of premises randomly assigned to have CCTV surveillance decreased compared to victimisation of control premises).

The authors of the SMS suggest that confidence in intervention results is highest at level 5 and level 3 and should be the minimum level required to achieve reasonably accurate results.

Quality appraisal scores for primary research studies included in the REA. Each study is rated 0-2 for each quality appraisal criterion.

	REFERENCE	RESEARCH RATIONALE	RESEARCH DESIGN	SAMPLING	DATA COLLECTION
1.	Best D, Gow J and Knox T *et al*. (2012)	2	2	1	2
2.	Best D, Groshkova T and Loaring J (2010)	2	2	1	1
3.	Best D, Honor S and Karpusheff J (2012)	2	2	1	2
4.	Boisvert RA, Martin LM *et al*. (2008)	2	1	0	1
5.	Buckman J and Bates ME (2008)	2	1	2	2
6.	Burns J and Marks D (2013)	2	2	2	2
7.	Davey-Rothwell MA, Kuramoto SJ and Latkin CA (2008)	1	1	2	1
8.	Duffy P and Baldwin H (2013)	2	2	1	2
9.	England Kennedy ES and Horton S (2011)	2	1	1	2
10	Ferrari JR, Stevens EB and Jason LA (2010)	2	2	1	2

DATA ANALYSIS	INTERPRETATION AND REPORTING OF RESULTS	CREDIBILITY OF CONCLUSIONS	OVERALL SCORE	COUNTRY OF STUDY	STUDY METHODS	MARYLAND SCORE* IF APPROPRIATE
2	2	2	13	UK	Mixed methods: semi- structured interviewing, group participation and assessment of social networks	N/A: no intervention
2	2	2	12	UK	Quantitative: survey	N/A: no intervention
1	2	2	12	UK	Mixed methods: survey and interviews	N/A: no intervention
2	2	1	9	US	Mixed methods: semi structured interviews and participant observation	1
2	2	2	13	US	Quantitative: quasi-experimental, single group pre- and post-design with longitudinal follow-up	1
2	2	2	14	UK	Quantitative: survey and factor analysis	N/A: no intervention
2	2	2	11	US	Quantitative: survey and social network data	1
2	2	2	13	UK	Qualitative research based on grounded theory methodology	1
2	2	2	12	US	Qualitative: structured and semi-structured interviews	1
2	2	2	13	US	Quantitative: survey and psychometric measures	1

	REFERENCE	RESEARCH RATIONALE	RESEARCH DESIGN	SAMPLING	DATA COLLECTION
11.	Folgheraiter F and Pasini A (2009)	2	2	2	2
12.	Hill T and Lewandowski C (2009)	2	2	1	2
13.	Kelly JF, Stout RL *et al.* (2011)	2	2	2	2
14.	Laudet AB and White WL (2008)	2	2	1	2
15.	McKay JR, Van Horn D, Rennert L *et al.* (2013)	2	2	2	2
16.	Rynes KN and Tonigan JS (2012)	2	1	1	1
17.	Stevens EB, Jason LA, Ferrari JR, Olson B and Legler R (2012)	2	1	1	1
18.	Tracy EM, Munson MR, Peterson LT and Floersch JE (2010)	1	1	1	1
19.	Tracy EM, Kim H, Brown S, Min MO and Jun MK (2012)	1	1	1	1
20.	Winstanley EL, Steinwachs DM Ensminger, ME, Latkin CA, Stitzer ML and Olsen Y (2008)	2	1	2	2
21.	Yao P, Ciesla JR, Mazurek KD and Spear SF (2012)	1	1	1	1

DATA ANALYSIS	INTERPRETATION AND REPORTING OF RESULTS	CREDIBILITY OF CONCLUSIONS	OVERALL SCORE	COUNTRY OF STUDY	STUDY METHODS	MARYLAND SCORE* IF APPROPRIATE
2	2	2	14	Italy	Quantitative: survey	4
2	2	2	13	US	Mixed methods: semi-structured interviews, life history calendars and social network data	1
2	2	2	14	US	Quantitative: randomised control trial	5
2	2	2	13	US	Quantitative: quasi-experimental: non-equivalent comparison group design	N/A not measuring against an intervention
2	2	2	14	US	Quantitative: pre- and post-test design	2
2	2	2	11	US	Quantitative: prospective lagged mediation analysis	n/a
2	2	2	11	US	Quantitative: factor analysis of questionnaire data	n/a
2	2	2	10	US	Qualitative: cross-sectional interview study	n/a
2	2	2	10	US	Qualitative: cross-sectional interview study	n/a
2	2	2	13	US	Quantitative; secondary analysis of national survey data	n/a
2	1	2	9	US	Quantitative; factor analysis of questionnaire data	n/a

APPENDIX C : QUALITY SCORES FOR REVIEWS

Quality appraisal criteria for reviews included in the REA.

GENERIC QUESTIONS	QUALITY APPRAISAL
Review method	Comprehensive review of previous research and justification for reviewing multiple sources of data rather than conducting new primary research (including reference to other reviews/metas).
	Clear identification of the research question and study aims, its context and objectives.
	Was the review systematic? i.e. was there a clear process that is supported by other evidence?
	Were appraisal tools methods piloted, including search?
	Reliability – triangulation of search, coding and analysis/appraisal – were multiple researchers used and agreement rates provided? How were differences in coding/ scores resolved?
	SUBSCORE:
Search strategy	Detailed explanation of search strategy and boundaries, including explanation of why key terms and synonyms were used (i.e. could the search be easily replicated to find similar results/update?)
	Sources – were a wide range of databases and websites searched covering multiple sources of data?
	If subsequent searches were performed on references within the initial search or contact with experts, are there details of the process and criteria used to propose inclusion?
	External validity (robustness of search) – are the databases used likely to ensure a comprehensive search with maximised inclusion and limited bias? If there are few negative findings (for effect studies), have unpublished articles been sourced?
	Non-English-language studies – if not included is there a detailed explanation (e.g., phenomenon specific to UK or cross-cultural studies would confound results)?
	Accounts for or acknowledges publishing bias towards significant results.
	Was the search timeline explicitly stated and appropriate to the scope of the research question, considering the number of relevant studies published?

GENERIC QUESTIONS	QUALITY APPRAISAL
	SUBSCORE:
Data collection (SIFT)	Description of studies and how and why chosen – details of pre-determined sift criteria that could be replicated.
	Description of population(s) of interest and how sample selection (s) relates to it and allows comparisons to be made.
	If there are too many studies to reasonably include in a review or meta, was a random sample chosen through an explicit system?
	Description of methods to maximise inclusion/secure representative coverage and limit potential for sample bias.
	Did the search criteria give sufficient attention to ethical issues – to the extent that it limits potential for bias and the possibility of skewing the type of studies included?
	SUBSCORE:
Quality appraisal	Validity of results – are opposing viewpoints included and discussed; are conclusions plausibly based on the data and not researcher's pre-conceptions (e.g., has the researcher critically reflected on own biases and influence and research skills?)
	Explicit analytic procedure for processing raw data into results/themes that could be repeated with a similar methodology. Were the methods employed (e.g., statistical tests/models for quantitative research) appropriate?
	Reliability – was there triangulation of data analysis (e.g., multiple scorers or coders)?
	Quality appraisal tool – robust with detailed explanation (or copy as appendix)?
	Marking criteria included considerations of ethics, researcher bias, comparability of any control groups, context and reliability of data collection (included representativeness of sample), quality of analyses, validity of results, and credibility of conclusions.
	Open explanation of rules/tool for classification of variables (e.g., different types of treatments/interventions)
	Have the authors identified all important confounding factors and adequately taken them into account in the analysis (e.g., for quantitative research: restriction in design and techniques)?

GENERIC QUESTIONS	QUALITY APPRAISAL
	SUBSCORE:
Data analysis/ synthesis – quantitative	Explicit analytic procedure for processing raw data into results/themes that could be repeated with a similar methodology.
	Have the authors identified all important confounding factors and adequately taken them into account in the analysis (e.g., for quantitative research: restriction in design and techniques, modelling, stratified, regression, or sensitivity analysis to:
	Coding of variables – openly explains procedure and specifies categories and units for scales.
	Codes quality of studies (and research designs).
	Has multiple regression analysis been performed on independent/moderator variables to separate out effects (when many variables)?
	Were the methods employed (e.g., statistical tests/models) appropriate? For example, using 'd' for effect sizes of categorical variables and 'r' for continuous variables.
	Has sample size been taken into account, either by weighting studies based on sample size or giving equal sizes to all studies?
	Were details given of calculation of effect sizes (e.g., from means and standard deviations presented in the studies)?
	Describes procedure for examining the distribution of effect sizes and analysing the impact of moderating variables, including details of statistical tests.
	SUBSCORE:
Qualitative synthesis	Meta-ethnography – detailed description of qualitative analyses.
	Discussion of how error or bias may have arisen in design/data collection/analysis and how addressed, if at all.
	Have the authors identified all important confounding factors and adequately taken them into account in the analysis?
	Search was exhaustive and analysis reached 'data saturation' (i.e. looking at new studies will not add to the knowledge base).
	Common themes are grouped together but individual nuances are preserved.

GENERIC QUESTIONS	QUALITY APPRAISAL
	SUBSCORE:
Interpretation and reporting of results	Are the main results presented clearly and with reference to confidence intervals etc. if appropriate?
	Findings/conclusions 'make sense' (have a coherent logic) and clear discussion of how they were derived and evidence to support them.
	Discussion of the mechanism through which a causal relationship might occur.
	Identification of patterns of association/linkages, with descriptions of divergent positions/multiple perspectives and any anomalous/negative cases.
	Discussion of how error or bias may have arisen in design/data collection/analysis and how addressed, if at all – limitations that may affect generalisability.
	Were effect sizes presented clearly as histograms, forest plots etc., if appropriate?
	Discussion of implications of findings for policy or practice; identification of new avenues of research (e.g., potential new moderators).
	Discussion of how context may shape an intervention's effects (e.g., does it work on some groups and not on others; are significant effects found?).
	SUBSCORE:
Credibility of conclusions	Discussion/evidence of the main assumptions/hypotheses/theoretical ideas on which the research was based and how these affected the form, coverage or output of the research.
	Conclusions presented are supported by study findings and previous research and theory (where appropriate).
	Evidence of openness to new/alternative ways of viewing subject/theories/ assumptions.
	SUBSCORE:

Quality appraisal scores for reviews included in the REA. Each study is rated 0-2 for each quality appraisal criterion.

	REFERENCE	REVIEW METHOD	SEARCH STRATEGY	DATA COLLECTION	QUALITY APPRAISAL
1.	Biegel D and Tracey EM (2006)	1	1	1	1
2.	Groh DR, Jason LA and Keys CB (2008)	1	1	1	2
3.	Kelly JF, Magill M and Stout RL (2009)	1	1	1	1
4.	Moos R (2008)	1	0	0	0
5.	Smock SA, Baker AK, Harris KS and D'Sauza C (2011)	1	1	1	0

DATA ANALYSIS	QUALITATIVE SYNTHESIS	INTERPRETATION AND REPORTING OF RESULTS	CREDIBILITY OF CONCLUSIONS	OVERALL SCORE	COUNTRY OF ORIGIN	REVIEW METHOD
1	1	2	2	10	US	Literature review
0	1	2	2	10	US	Literature review
0	1	1	2	8	US	Systematic review
0	0	1	2	4	US	Literature review
0	1	2	2	8	US	REA

NOTES

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