

Manuscript version: Author's Accepted Manuscript

The version presented in WRAP is the author's accepted manuscript and may differ from the published version or Version of Record.

Persistent WRAP URL:

<http://wrap.warwick.ac.uk/102593>

How to cite:

Please refer to published version for the most recent bibliographic citation information. If a published version is known of, the repository item page linked to above, will contain details on accessing it.

Copyright and reuse:

The Warwick Research Archive Portal (WRAP) makes this work by researchers of the University of Warwick available open access under the following conditions.

Copyright © and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable the material made available in WRAP has been checked for eligibility before being made available.

Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Publisher's statement:

Please refer to the repository item page, publisher's statement section, for further information.

For more information, please contact the WRAP Team at: wrap@warwick.ac.uk.

What influences social outcomes among offenders with personality disorder:
A systematic review

Author(s)

1. Catriona Connell (corresponding author)

Affiliations

- 1) University of Warwick, UK;
- 2) Birmingham and Solihull Mental Health NHS Foundation Trust, UK

Address:

Division of Mental Health and Wellbeing
Warwick Medical School
University of Warwick
Coventry, CV4 7AL
Email address: c.connell.1@warwick.ac.uk
Telephone: 024 765 74530
ORCID: orcid.org/0000-0002-4016-5120

2. Dr V. Furtado

Affiliations

- 1) University of Warwick, UK;
- 2) Birmingham and Solihull Mental Health NHS Foundation Trust, UK

3. Dr E.A. McKay

Affiliations

- 1) Brunel University London, UK

4. Prof. S.P. Singh

Affiliations

- 1) University of Warwick;
- 2) Coventry and Warwickshire Partnership NHS Trust

Funding statement

This report is independent research supported by Health Education England and the National Institute for Health Research (HEE/ NIHR ICA Programme Clinical Doctoral Research Fellowship, Miss Catriona Connell, ICA-CDRF- 2015-01-060). The views expressed in this publication are those of the author(s) and not necessarily those of the NHS, the National Institute for Health Research or the Department of Health.

What influences social outcomes among offenders with personality disorder: A systematic review

Abstract

Background:

Personality disorder is highly prevalent in offender populations and is associated with poor health, criminal justice and social outcomes. Research has been conducted into factors that influence offending and health, but, in order to improve (re)habilitation, service providers must also be able to identify the variables associated with social outcomes and the mechanisms by which they operate.

Aim: To establish what is known about what influences social outcomes among offenders with personality disorder.

Method: A systematic review was completed using Cochrane methods, expanded to include non-randomised trials. Anticipated high heterogeneity informed a narrative synthesis.

Results: Three studies met inclusion criteria. Two were qualitative studies including only 13 cases between them. All studies were low quality.

Conclusions: There is insufficient evidence to determine what influences good social outcomes among offenders with personality disorder. Research is required to identify associated variables, to inform the development of effective interventions.

Background

Social outcomes vary, but typically reflect participation in socially valued activities, for example; employment, family roles and independent living. In line with a previous review on the effectiveness of interventions in improving social outcomes among people with personality disorder and an offending history (Connell et al., 2017), we conceptualised social outcomes in terms of *participation*, or 'involvement in a life situation' as defined by the World Health Organization (2002). In these terms, participation is integral to functioning and health (World Health Organization, 2002), mental health and wellbeing (Government Office for Science, 2008) and mental health recovery (Hendryx et al., 2009, Stickley and Wright, 2011). Among offender populations, when activities are personally meaningful *and* socially valued (prosocial), participation is associated with desistance from crime and reduced risk of reoffending (de Vries Robbé et al., 2011, Maruna, 2001, Ministry of Justice, 2013). Offenders who do not participate in prosocial activities (e.g. remain unemployed or lack prosocial relationships) or who participate in antisocial activities (e.g. gang affiliation, substance use) are at higher risk of reoffending (Andrews and Bonta, 2010).

Offenders with personality disorder tend to experience worse mental health, physical health and lower quality of life than other offenders (Black et al., 2010). Of particular concern to forensic practitioners, is that this group tend to have higher rates of reoffending, notably serious violent offending (Yu et al., 2012, West, 2013, Walter et al., 2011). These poor outcomes suggest that offenders with personality disorder may experience specific difficulties with participation in socially valued activities in the community. If participation could be improved, this could, in turn, improve health and protect against reoffending.

Interventions reporting an effect on social outcomes for offenders with personality disorder are limited and varied. Many do not specify the variables targeted or the mechanisms by which the intervention brings about change in participation (Connell et al., 2017). Better knowledge about relevant variables and mechanisms of change could help service providers to develop interventions that improve complex social outcomes for this group.

We aimed to identify what influences social outcomes among offenders with personality disorder by answering the question: For adult offenders with personality disorder, what influences complex social outcomes (including participation in employment, prosocial leisure and independent living) in the wider (non-institutional) community?

Method

We used the Cochrane Collaboration stages for systematic reviews (Higgins and Green, 2011). We adapted the search strategy from PICO for the purpose of the review question, by omitting intervention to allow a more exploratory approach to identifying variables and influencers. Methods and inclusion criteria were pre-specified in a protocol and registered on PROSPERO. ID=CRD42016042303 (Connell et al., 2016).

Inclusion criteria

Types of studies

Reports of empirical research using any study design, with no limitations on date or quality, in English. Opinion pieces, commentaries or service descriptions, editorials and publications addressing laws, policies and/or media reports were excluded.

Population

People with a diagnosis of personality disorder or psychopathy who have committed a criminal offence and who live in the community (i.e. non-institutional) setting. Offender status was defined as having a conviction of at least one criminal offence (determined from official source or self-report). Personality disorder was considered present where participants had been diagnosed according to a specified method, and psychopathy where individuals had scored above an accepted threshold on a recognised psychopathy scale. In a clarification to the published protocol (Connell et al., 2016), studies reporting a mixed sample (e.g. including offenders with other diagnoses or none) were included where at least 60% of the sample had a personality disorder/psychopathy *and* 60% had an offending history.

Phenomena of interest

Variables or other influencers of social outcomes are described, measured or inferred. Variables/influencers that moderate or mediate the relationship between identified variables/influencers and social outcomes (participation).

Outcome

Participation in personally meaningful and socially valued activities in a community (non-institutional) setting, as described in the WHO International Classification of Functioning chapters on activity and participation (World Health Organization, 2001).

Search strategy

We applied the search strategy, tailored to individual database requirements, to eleven multidisciplinary research databases (see protocol) and grey literature. Searches were completed in July 2016 and updated until September 2017. We reviewed reference lists of included studies and key papers. An example of the search strategy applied to PsycINFO is shown in the online supplementary table.

Study selection

CC removed duplicates and screened all titles and abstracts against inclusion criteria. A second reviewer (VF) screened 430 randomly selected citations (23%). Reviewers reached 97% agreement with divergence resolved by the third reviewer (EAM).

Quality appraisal

All studies were low quality, based on appraisal using an appropriate tool for study type (Downs and Black, 1998, CASP UK, 2013).

Data extraction

After piloting we applied a structured tool to extract data relevant to the review.

Data synthesis

The Cochrane Collaboration four-step method of narrative synthesis (Ryan, 2013) was adapted to meet review aims. Steps involved: 1) Identifying variables/influencers of participation and theorising mechanisms of action, 2) Preliminary synthesis of findings, 3) Exploring relationships in the data within and between studies, and 4) Assessing the robustness of the synthesis.

Results

Included studies

Figure 1 summarises the study selection. The three included studies involved 67 male participants.

[Insert Figure 1]

Defining social outcomes

In a records based study, Reiss et al. (1996) report community outcomes for 54 men treated in a UK high security hospital, 60-61% of the original sample (not all were discharged to the community) had personality disorder according to DSM-III-R (American Psychiatric Association, 1987). Good social outcome required a 'good' score in each of four categories: social interaction, employment, accommodation and (absence of) substance misuse. Scoring was on a purpose-designed tool, involving rating against pre-specified but arbitrary criteria set by the authors. Participation includes social activities, employment and independent living skills and thus the 'good social outcome' construct was considered relevant.

Jacobs et al. (2010) conducted a qualitative exploration of the experiences of offenders with personality disorder accessing a community forensic psychology service. Social outcomes were identified in a theme about 'return to work and independence'. This theme included references to employment, education and 'full independence'.

In a single case study to evaluate the applicability of the *Good Lives Model* to treatment of high-risk offenders with high psychopathy checklist scores, Whitehead et al. (2007) described attending college and learning to drive, developing prosocial relationships with peers and forming an intimate relationship. Success was reported in achievement or not of these outcomes.

Variables tested for their potential effect on social outcomes

Reiss et al. (1996) tested 'all recorded background and treatment factors', although limited information is given about what was tested and the scoring procedure. They report

significant results from their univariate analysis. Variables indicative of a future good social outcome were higher IQ (good outcome mean=107.6 poor outcome mean=98.5, mean difference 9.0, $t=2.3$, $p<0.03$) and adequate or better assertiveness in the first 18 months of admission, as rated by staff (OR 6.0, 95% CI = 1.3-28.2). Though reporting the rate of good outcomes on the separate components for a subsample of younger men ($n=28$), mean age 19.2 years at admission, the variables were not tested for their influence on these separately.

The case study and qualitative study were exploratory (Jacobs et al., 2010, Whitehead et al., 2007). Potential influencers from the perspective of participants and study authors were extracted from the supporting material.

Return to work and independence was a theme identified by Jacobs et al. (2010), who attribute success in this area to authors 'increased social confidence', mediated by supported participation in vocational activity. In quotations supporting this assertion, a participant describes 'growing and maturing', and having 'more hope' since being in the service.

The single case study by Whitehead et al. (2007) identified 'sustaining motivation', 'developing and validating a prosocial identity', 'social and practical skill development', 'avoiding previous problematic activities and routines', and 'practical assistance and information given by staff' as influencing participation.

Synthesis

Influencing variables

Cross-study synthesis was restricted by the low number and quality of studies. Reiss et al. (1996) identified assertiveness at admission and IQ to be indicative of future good social outcomes. As historical factors, these may be considered potential moderators between institutional treatment and good social outcome. Neither assertiveness nor IQ featured in the qualitative study or case study.

There were commonalities between the qualitative study and case study in reporting prosocial identity and self-efficacy as facilitative of participation, achieved by supported participation in different activities and social roles. Supported participation may mediate the relationship between self-efficacy and/or identity, and participation. Whitehead et al. (2007) also allude to habitually undertaking destructive patterns of activity as a potential mediator of the relationship.

Theory and mechanisms of how variables influence participation

Whitehead et al. (2007) offered a theoretical basis to describe the mechanisms by which influencers may impact upon participation. They applied the Good Lives Model, which posits that being unable to achieve normal human 'goods' in prosocial ways results in increased risk of offending. These 'goods' can be explicitly or implicitly linked to successful participation, for example 'excellence in work'. How the person achieved participation was identified from the supporting case material. This included: enhanced motivation for participation in prosocial activity through setting goals and evoking cognitive dissonance with current

activities; identity transformation through envisaging and enacting a prosocial role; and personalised practical support from staff to facilitate this, including providing knowledge and opportunities, culturally relevant mentoring, and practical assistance.

Discussion

Systematic literature review to identify what influences participation and social outcomes among offenders with personality disorder revealed few studies, all of low quality. Narrative synthesis was consequently limited. Studies only included men and thus caution is advised in considering the relevance of review findings to women.

The studies reported a complex composite construct that included multiple activities in interaction with other people. This is consistent with the multifaceted nature of participation as described by the World Health Organization (World Health Organization, 2002). It was only clearly defined for measurement purposes and tested statistically in Reiss et al. (1996). Although IQ and past assertiveness are unmodifiable, service providers may consider whether specific support is required for those low in assertiveness or with lower IQ.

Jacobs et al. (2010) and Whitehead et al. (2007), inferred from their data that participation was supported by prosocial identity and self-efficacy, mediated by supported participation in prosocial activities and roles. Participation, particularly where it involves social contribution, is integral to identity transition in desistance and recovery processes (Maruna, 2001, Leamy et al., 2011, Blank et al., 2014). However, as participation appears as both a

potential mediator and outcome, it is unclear whether participation precedes identity change or vice versa. More research is required to disentangle this relationship.

Transforming participation is not straight-forward, as habitual patterns of antisocial activity may be difficult to change (Whitehead et al., 2007). This finding is consistent with evidence that despite structured support to increase participation in the form of employment among ex-offenders, only 16% sustain this at six months (Department for Work and Pensions, 2016). Where support is given to increase participation, attention must be paid to ensuring the individual has the skills and motivation to continue independently. Research is required to identify what variables contribute, and how, to sustained independent participation among offenders with personality disorder.

Limitations

Including studies where at least 60% of the sample had a personality disorder *and* 60% had an offending history permitted the inclusion of Reiss et al. (1996). It was not clear what proportion of the subgroup discharged to the community would be an offender with personality disorder and thus findings from this study may be influenced by the inclusion of participants without a personality disorder.

Conclusion

Three studies reported influencers of social outcomes among offenders with personality disorder. All were low quality. One applied a theory to explain the relevance of particular influencers, and one statistically tested relationships between social outcome and historical variables. Narrative synthesis was therefore limited.

Variables associated with participation and the mechanisms by which they operate cannot be determined from the current evidence. Research is required to inform service users, providers, professionals and policy makers attempting to improve participation and social outcomes among offenders with personality disorder.

Funding statement

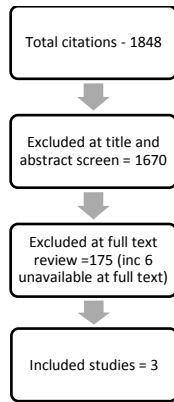
This is independent research supported by the National Institute for Health Research and Health Education (NIHR/HEE ICA Programme Clinical Doctoral Research Fellowship, Ms Catriona Connell, ICA-CDRF-2015-01-060). The views expressed are those of the author(s) and not necessarily those of the NHS, the National Institute for Health Research or the Department of Health. The funding organisation had no role in design of the study or collection, analysis, and interpretation of data or in writing the manuscript.

References

- AMERICAN PSYCHIATRIC ASSOCIATION 1987. *Diagnostic and Statistical Manual of Mental Disorders. 3rd Edition. Revised.*, Arlington, VA, American Psychiatric Association.
- ANDREWS, D.A. & BONTA, J. 2010. *The psychology of criminal conduct.*, New Providence, NJ, LexisNexis Group.
- BLACK, D. W., GUNTER, T., LOVELESS, P., ALLEN, J. & SIELENI, B. 2010. Antisocial personality disorder in incarcerated offenders: Psychiatric comorbidity and quality of life. *Ann Clin Psychiatry*, 22, 113-20.
- BLANK, A. A., HARRIES, P. & REYNOLDS, F. 2014. 'Without occupation you don't exist': Occupational engagement and mental illness. *Journal of Occupational Science*, 1-13.
- CASP UK. 2013. *CASP checklists* [Online]. Oxford Better Value Healthcare Ltd. Available: <http://www.casp-uk.net/casp-tools-checklists> [Accessed 8 March 2015].
- CONNELL, C., FURTADO, V., MCKAY, E. A. & SINGH, S. P. 2016. *What is known about the factors influencing participation in prosocial occupation among personality disordered offenders released to/on license in the community?* [Online]. York: Centre for Reviews Dissemination Available: http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016042303 [Accessed].
- CONNELL, C., FURTADO, V., MCKAY, E. A. & SINGH, S. P. 2017. How effective are interventions to improve social outcomes among offenders with personality disorder: A systematic review *BMC Psychiatry*, [in press].
- DE LAS HERAS DE PABLO, C. 2017. Chapter 8: Dimensions of doing. In: TAYLOR, R. R. (ed.) *Kielhofner's Model of Human Occupation: Theory and application* 5ed. Philadelphia: Wolters Kluwer.
- DE VRIES ROBBÉ, M., DE VOGEL, V. & DE SPA, E. 2011. Protective factors for violence risk in forensic psychiatric patients: A retrospective validation study of the SAPROF. *International Journal of Forensic Mental Health*, 10, 178-186.
- DEPARTMENT FOR WORK AND PENSIONS 2016. *Work Programme Official Statistics to December 2015*, London, Department of Work and Pensions.
- DOWNS, S. H. & BLACK, N. 1998. The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology and Community Health*, 52, 377-384.
- GOVERNMENT OFFICE FOR SCIENCE 2008. *Foresight Mental Capital and Wellbeing Project. Final Project report.*, London, Government Office for Science.
- HENDRYX, M., GREEN, C. A. & PERRIN, N. A. 2009. Social support, activities, and recovery from serious mental illness: STARS study findings. *The Journal of Behavioral Health Services & Research*, 36, 320-329.
- HIGGINS, J. P. T. & GREEN, S. (eds.) 2011. *Cochrane handbook for systematic reviews of interventions*, London: Cochrane Collaboration
- JACOBS, B., BRUCE, M., SONIGRA, K. & BLAKESLEY, J. 2010. Service user experiences of a community forensic personality disorder service: A qualitative survey. *The British Journal of Forensic Practice*, 12, 47-56.

- LEAMY, M., BIRD, V., LE BOUTILLIER, C., WILLIAMS, J. & SLADE, M. 2011. Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis. *The British Journal of Psychiatry*, 199, 445-452.
- MARUNA, S. 2001. *Making good: how ex-convicts reform and rebuild their lives*, Washington, DC, American Psychological Association.
- MINISTRY OF JUSTICE 2013. *Analysis of the impact of employment on re-offending following release from custody, using Propensity Score Matching Ministry of Justice ad hoc Statistical Release, March 2013a*, London, Ministry of Justice.
- REISS, D., GRUBIN, D. & MEUX, C. 1996. Young 'psychopaths' in special hospital: Treatment and outcome. *The British Journal of Psychiatry*, 168, 99-104.
- RYAN, R. 2013. Cochrane Consumers and Communication Review Group: data synthesis and analysis. Cochrane Consumers and Communication Review Group.
- STICKLEY, T. & WRIGHT, N. 2011. The British research evidence for recovery, papers published between 2006 and 2009 (inclusive). Part One: a review of the peer-reviewed literature using a systematic approach. *J Psychiatr Ment Health Nurs*, 18, 247-56.
- WALTER, M., WIESBECK, G. A., DITTMANN, V. & GRAF, M. 2011. Criminal recidivism in offenders with personality disorders and substance use disorders over 8 years of time at risk. *Psychiatry Research*, 186, 443-445.
- WEST, L. 2013. *Personality disorder and serious further offending* Doctor of Forensic Psychology, University of Nottingham
- WHITEHEAD, P. R., WARD, T. & COLLIE, R. M. 2007. Time for a change: Applying the good lives model of rehabilitation to a high-risk violent offender. *International Journal of Offender Therapy and Comparative Criminology*, 51, 578-598.
- WORLD HEALTH ORGANIZATION 2001. *International Classification of Functioning, Disability and Health (ICF)*, Geneva, World Health Organization.
- WORLD HEALTH ORGANIZATION 2002. *Towards a common language for functioning, disability and health: ICF The International Classification of Functioning, Disability and Health*, Geneva, World Health Organization.
- YU, R., GEDDES, J. R. & FAZEL, S. 2012. Personality disorders, violence, and antisocial behavior: a systematic review and meta-regression analysis. *Journal of Personality Disorders* 26, 775-92.

Figure 1 - PRISMA Flow diagram



Online supplementary table

Table 1: Search strategy for PsycINFO

Database	Search strategy
PsycINFO	<p>(SU.EXACT("Mentally Ill Offenders") OR (SU.EXACT("Male Criminals") OR SU.EXACT("Perpetrators") OR SU.EXACT("Female Criminals") OR SU.EXACT("Criminals"))) OR (ti(offen* OR crim* OR delinq* OR felon* OR gang* OR perpetrat* OR justice*) OR ab(offen* OR crim* OR delinq* OR felon* OR gang* OR perpetrat* OR justice*)))</p> <p>AND</p> <p>(SU.EXACT.EXPLODE("Personality Disorders") OR (ti(personality disorder* OR psychopath*) OR ab(personality disorder* OR psychopath*)))</p> <p>AND</p> <p>((SU.EXACT("Supported Employment") OR SU.EXACT("Employment Status")) OR SU.EXACT("Leisure Time") OR (SU.EXACT("Hobbies") OR SU.EXACT("Recreation") OR SU.EXACT("Active Living") OR SU.EXACT("Self-Care Skills") OR SU.EXACT("Activities of Daily Living") OR SU.EXACT("Lifestyle") OR SU.EXACT("Interests") OR SU.EXACT("Activity Level"))) OR (ti(("social participation" OR "activity participation" OR "time use" OR activit* OR occupation* OR self-care OR function* OR work* OR employ* OR volunteer* OR vocation* OR education* OR role OR leisure OR recreat* OR sport* OR hobb* OR faith OR religio* OR spiritual* OR participat*))) OR (ab(("social participation" OR "activity participation" OR "time use" OR activit* OR occupation* OR self-care OR function* OR work* OR employ* OR volunteer* OR role OR education* OR leisure OR recreat* OR sport* OR hobb* OR faith OR religio* OR spiritual* OR participat*))))</p> <p>AND</p> <p>(SU.EXACT("Reintegration") OR SU.EXACT("Protective Factors") OR (ti(probation OR release* OR discharge* OR integrati* OR reintegrat* OR rehabilitat* OR desist* OR reent* OR re-ent* OR re-settl* OR resettle* OR protective OR positive) OR ab(probation OR release* OR discharge* OR integrati* OR reintegrat* rehabilitat* OR desist* OR reent* OR re-ent* OR re-settl* OR resettle* OR protective OR positive)))</p>