



SWEDISH AGENCY FOR HEALTH
TECHNOLOGY ASSESSMENT AND
ASSESSMENT OF SOCIAL SERVICES

Appendix 3

Psychological and
psychosocial interventions
in forensic psychiatric care

Appendix 3 Excluded studies

Table 1 Studies with high risk of bias

Author Year Reference Country Study design	Participants N (% Female) Age M (SD) Dropout rate?	Intervention group n duration	Control group n	Measures of outcomes
Clarke et al 2010 [1] UK Non-randomised	N=35, (0% female) Age: 37.4 years (10.1) Dropout rate: n=3	n=18 Reasoning and Rehabilitation programme (R&R) 36 sessions à 2 hours Duration: no information	n=17 TAU	Interviews by documented instruments
Cullen et al 2012 [2] UK RCT	N=84 (0% female) Age: 35.4 years (11.4) Dropout rate: n=21	n= 44 Reasoning and Rehabilitation programme (R&R) 36 sessions Duration: 5 days (workshop)	n=40 TAU	Behaviour assessments based on journals
Hakvoort et al 2015 [3] Netherlands RCT	N=15 (0% female) Age: 35.6 (8.9) Dropout rate: n=11	n=10 Music therapy program (new) 20 sessions Duration: 6 months	n=5 TAU	Musical observation assessments rated by the principle researcher
Jotangia et al 2015 [4] UK Non- randomised	N=38 (100% female) Age: I: 38.94 (9.36) C: 37.90 (9.23) Dropout rate: n=11	n=18 Reasoning and Rehabilitation Mental Health Program (R&R2MHP) 12 sessions Duration: no information	n=20 TAU	Interviews by documented instruments
Tyler et al 2017 [5] UK Non-randomised	N=135 (24% female) Age: 36.56 (10.74) Dropout rate: 23	n=63 Specialist fire setting treatment programme (the FIP-MO) Weekly 2-hour group sessions Duration: 28 weeks	n=72 TAU	Self-reported by documented instruments
Tomlinson et al 2017 [6] Canada RCT	N=13 (% female -no information) Age: 42.73 (12.12) Dropout rate: 2	n=7 Dialectical behaviour therapy DBT Weekly 1.5 hours sessions Duration: 6 months	n=7 TAU	Interviews by documented instruments
Walker, [7] 2013 UK RCT	N=81 (0% female) Age: 36.8 (8.91) Dropout rate: incomplete information	n=46 psycho-education programme 2 one-hour sessions/week Duration: 11 weeks	n=35 TAU	Interviews by documented instruments + one recently developed
Walker et el 2012 [8] UK Non-randomised	N=48 (0% female) Age: 36.8 (8.91) Dropout rate: incomplete information	n=28 psycho-education programme 2 one-hour sessions/week Duration: 18 months	n=20 TAU	Interviews by documented instruments + one recently developed
Williams et al 2014 [9] UK Non-randomised	N=44 (0% female) Age: I: M=38 (Range 23–62) C: M=38 (Range 27–56) Dropout rate: n=1	n=27 cognitive-behavioural therapy (CBT) for schizophrenia 1.5 hours/week Duration: 9 months	n=17 TAU	Behaviour assessments & interviews by documented instruments

References

1. Clarke AY, Cullen AE, Walwyn R, Fahy T. A quasi-experimental pilot study of the reasoning and rehabilitation programme with mentally disordered offenders. *Journal of Forensic Psychiatry & Psychology* 2010;21:490-500.
2. Cullen AE, Clarke AY, Kuipers E, Hodgins S, Dean K, Fahy T. A multisite randomized trial of a cognitive skills program for male mentally disordered offenders: violence and antisocial behavior outcomes. *Journal Of Consulting And Clinical Psychology* 2012;80:1114-20.
3. Hakvoort L, Bogaerts S, Thaut MH, Spreen M. Influence of Music Therapy on Coping Skills and Anger Management in Forensic Psychiatric Patients: An Exploratory Study. *International Journal Of Offender Therapy And Comparative Criminology* 2015;59:810-36.
4. Jotangia A, Rees-Jones A, Gudjonsson GH, Young S. A multi-site controlled trial of the R&R2MHP cognitive skills program for mentally disordered female offenders. *International Journal Of Offender Therapy And Comparative Criminology* 2015;59:539-59.
5. Tyler N, Gannon TA, Lockerbie L, Ó Ciardha C. An evaluation of a specialist firesetting treatment programme for male and female mentally disordered offenders (the fip-mo). *Clinical Psychology & Psychotherapy* 2017.
6. Tomlinson MF, Hoaken PNS. The potential for a skills-based dialectical behavior therapy program to reduce aggression, anger, and hostility in a Canadian forensic psychiatric sample: A pilot study. *The International Journal of Forensic Mental Health* 2017;16:215-26.
7. Walker H, Tulloch L, Ramm M, Drysdale E, Steel A, Martin C, et al. A randomised controlled trial to explore insight into psychosis; Effects of a psycho-education programme on insight in a forensic population. *Journal of Forensic Psychiatry & Psychology* 2013;24:756-71.
8. Walker H, Connaughton J, Wilson I, Martin CR. Improving outcomes for psychoses through the use of psycho-education; preliminary findings. *Journal Of Psychiatric And Mental Health Nursing* 2012;19:881-90.
9. Williams E, Ferrito M, Tapp J. Cognitive-behavioural therapy for schizophrenia in a forensic mental health setting. *Journal of Forensic Practice* 2014;16:68-77.

Table 2 Studies excluded according to PICO.

Study	Exclusion criteria
Ahmed, 2015 Ahmed, A. O., Hunter, K. M., Goodrum, N. M., Batten, N.-J., Birgenheir, D., Hardison, E., Buckley, P. F. (2015). A randomized study of cognitive remediation for forensic and mental health patients with schizophrenia. <i>Journal Of Psychiatric Research</i> , 68, 8-18. doi:10.1016/j.jpsychires.2015.05.013	Population, psychiatric disorder but no serious mental disorder
Beach, C., Dykema, L.-R., Appelbaum, P. S., Deng, L., Leckman-Westin, E., Manuel, J. I., Finnerty, M. T. (2013). Forensic and nonforensic clients in assertive community treatment: a longitudinal study. <i>Psychiatric Services (Washington, D.C.)</i> , 64(5), 437-444. doi:10.1176/appi.ps.201200170	Study design, no control
Bernstein, D. P., Nijman, H. L. I., Karos, K., Keulen-de Vos, M., de Vogel, V., & Lucker, T. P. (2012). Schema therapy for forensic patients with personality disorders: Design and preliminary findings of a multicenter randomized clinical trial in the Netherlands. <i>The International Journal of Forensic Mental Health</i> , 11(4), 312-324. doi:10.1080/14999013.2012.746757	Preliminary study
Bond, G. R., Kim, S. J., Becker, D. R., Swanson, S. J., Drake, R. E., Krzos, I. M., Frounfelker, R. L. (2015). A Controlled Trial of Supported Employment for People With Severe Mental Illness and Justice Involvement. <i>Psychiatric Services (Washington, D.C.)</i> , 66(10), 1027-1034. doi:10.1176/appi.ps.201400510	Population, outpatients, non-forensic care

Bouman, Y. H. A., Van Nieuwenhuizen, C., Schene, A. H., & De Ruiter, C. (2008). Quality of life of male outpatients with personality disorders or psychotic disorders: a comparison. <i>Criminal Behaviour & Mental Health, 18</i> (5), 279-291. doi:10.1002/cbm.703	Study design, no control
Capone, G., Schroder, T., Clarke, S., & Braham, L. (2016). Outcomes of therapeutic community treatment for personality disorder. <i>Therapeutic Communities, 37</i> (2), 84-100. doi:10.1108/TC-12-2015-0025	No relevant studies
Clayton, A., O'Connell, M. J., Bellamy, C., Benedict, P., & Rowe, M. (2013). The Citizenship Project part II: impact of a citizenship intervention on clinical and community outcomes for persons with mental illness and criminal justice involvement. <i>American Journal Of Community Psychology, 51</i> (1-2), 114-122. doi:10.1007/s10464-012-9549-z	Population, outpatients, non-forensic care
Coid, J. W., Hickey, N., & Yang, M. (2007). Comparison of outcomes following after-care from forensic and general adult psychiatric services. <i>The British Journal of Psychiatry, 190</i> , 509-514. doi:10.1192/bjp.bp.106.023044	Study design, no control
Fitzgerald, M. (2011). An evaluation of the impact of a social inclusion programme on occupational functioning for forensic service users. <i>The British Journal of Occupational Therapy, 74</i> (10), 465-472. doi:10.4276/030802211X13182481841903	Population, a minority was forensic
Ford, J. D., Steinberg, K. L., Hawke, J., Levine, J., & Zhang, W. (2012). Randomized trial comparison of emotion regulation and relational psychotherapies for PTSD with girls involved in delinquency. <i>Journal Of Clinical Child And Adolescent Psychology: The Official Journal For The Society Of Clinical Child And Adolescent Psychology, American Psychological Association, Division 53, 41</i> (1), 27-37. doi:10.1080/15374416.2012.632343	Population, majority too young and no Severe Mental Disorder
Haddock, G., Barrowclough, C., Shaw, J. J., Dunn, G., Novaco, R. W., & Tarrrier, N. (2009). Cognitive-behavioural therapy v. social activity therapy for people with psychosis and a history of violence: randomised controlled trial. <i>The British Journal Of Psychiatry: The Journal Of Mental Science, 194</i> (2), 152-157. doi:10.1192/bjp.bp.107.039859	Population, non-forensic
Hatton, 2016 Hatton, V., & Akerman, G. (2016). Working with suicide risk in offenders: a review of training at HMP Grendon. <i>Journal of Criminal Psychology, 6</i> (4), 214-220.	Study design, no control
Hitch, 2016 Hitch, D., Hii, Q. K., & Davey, I. (2016). Occupational therapy in forensic psychiatry: Recent developments in our understandings (2007–2013). <i>British Journal of Occupational Therapy, 79</i> (4), 197-205. doi:10.1177/0308022615591018	Study design, no control
Hodgins, S., Tengström, A., Eriksson, A., Österman, R., Kronstrand, R., Eaves, D., Vartiainen, H. (2007). A Multisite Study of Community Treatment Programs for Mentally Ill Offenders with Major Mental Disorders: Design, Measures, and the Forensic Sample. <i>Criminal Justice and Behavior, 34</i> (2), 211-228. doi:10.1177/0093854806291248	Study design, missing outcome
Jeon, G.-s., Gang, M., & Oh, K. (2017). The effectiveness of the Nanta-program on psychiatric symptoms, interpersonal relationships, and quality of life in forensic inpatients with schizophrenia. <i>Archives Of Psychiatric Nursing, 31</i> (1), 93-98. doi:10.1016/j.apnu.2016.09.005	Study design, non-equivalent control group
Jacob, G. A., & Arntz, A. (2013). Schema Therapy for Personality Disorders-A Review. <i>International Journal of Cognitive Therapy, 6</i> (2), 171-185.	Population, outpatients, personality disorder, non-forensic
Kriegel, L. S., Henwood, B. F., & Gilmer, T. P. (2016). Implementation and Outcomes of Forensic Housing First Programs. <i>Community Mental Health Journal, 52</i> (1), 46-55. doi:http://dx.doi.org/10.1007/s10597-015-9946-5	Outcome and Study design, no control
MacInnes, D., Kinane, C., Beer, D., Parrott, J., Craig, T., Eldridge, S., Priebe, S. (2013). Study to assess the effect of a structured communication approach on quality of life in secure mental health settings (Comquol): study protocol for a pilot cluster randomized trial. <i>Trials, 14</i> , 257-257. doi:10.1186/1745-6215-14-257	study protocol
MacInnes, D., Kinane, C., Parrott, J., Mansfield, J., Craig, T., Eldridge, S., Priebe, S. (2016). A pilot cluster randomised trial to assess the effect of a structured communication approach	No outcome

on quality of life in secure mental health settings: The Comquol Study. <i>BMC Psychiatry</i> , 16(1), 335-335.	
McCarthy, L., & Duggan, C. (2010). Engagement in a medium secure personality disorder service: A comparative study of psychological functioning and offending outcomes. <i>Criminal Behaviour and Mental Health</i> , 20(2), 112-128. doi:10.1002/cbm.758	Study design, no control
Novaco, R. W., & Taylor, J. L. (2015). Reduction of assaultive behavior following anger treatment of forensic hospital patients with intellectual disabilities. <i>Behaviour Research And Therapy</i> , 65, 52-59. doi:10.1016/j.brat.2014.12.001	Study design, no control
Nurenberg, J. R., Schleifer, S. J., Shaffer, T. M., Yellin, M., Desai, P. J., Amin, R., Montalvo, C. (2015). Animal-assisted therapy with chronic psychiatric inpatients: equine-assisted psychotherapy and aggressive behavior. <i>Psychiatric Services (Washington, D.C.)</i> , 66(1), 80-86. doi:10.1176/appi.ps.201300524	Population, schizophrenia or schizoaffective, non-forensic
O'Reilly, K., Donohoe, G., O'Sullivan, D., Coyle, C., Mullaney, R., O'Connell, P., Kennedy, H. G. (2016). Study protocol: a randomised controlled trial of cognitive remediation for a national cohort of forensic mental health patients with schizophrenia or schizoaffective disorder. <i>BMC Psychiatry</i> , 16, 5-5. doi:10.1186/s12888-016-0707-y	study protocol
Oxnam, P., & Gardner, E. (2011). Stepping Stones - a group therapy programme for the treatment of emotion regulation difficulties in offenders with an intellectual disability. <i>Journal of Learning Disabilities and Offending Behaviour</i> , 2(4), 146-151. doi:http://dx.doi.org/10.1108/20420921111207828	Study design, no control
Putkonen, A., Kuivalainen, S., Louheranta, O., Repo-Tiihonen, E., Ryyänänen, O.-P., Kautiainen, H., & Tiihonen, J. (2013). Cluster-randomized controlled trial of reducing seclusion and restraint in secured care of men with schizophrenia. <i>Psychiatric Services (Washington, D.C.)</i> , 64(9), 850-855. doi:10.1176/appi.ps.201200393	Population, mainly non-forensic
Qiu, H.-Z., Ye, Z.-J., Liang, M.-Z., Huang, Y.-Q., Liu, W., & Lu, Z.-D. (2017). Effect of an art brut therapy program called go beyond the schizophrenia (GBTS) on prison inmates with schizophrenia in mainland China-A randomized, longitudinal, and controlled trial. <i>Clinical Psychology & Psychotherapy</i> . doi:10.1002/cpp.2069	Population, prisoners
Randall, J. R., Chateau, D., Smith, M., Taylor, C., Bolton, J., Katz, L., Brownell, M. (2016). An early intervention for psychosis and its effect on criminal accusations and suicidal behaviour using a matched-cohort design. <i>Schizophrenia Research</i> , 176(2-3), 307-311. doi:10.1016/j.schres.2016.05.021	Population, non-forensic first-time psychosis
Rose, J. L., Dodd, L., & Rose, N. (2008). Individual cognitive behavioral intervention for anger. <i>Journal of Mental Health Research in Intellectual Disabilities</i> , 1(2), 97-108. doi:10.1080/19315860801988368	Population, outpatients visiting intellectual disability service,
Rowe, M., Bellamy, C., Baranoski, M., Wieland, M., O'Connell, M. J., Benedict, P., Sells, D. (2007). A peer-support, group intervention to reduce substance use and criminality among persons with severe mental illness. <i>Psychiatric Services (Washington, D.C.)</i> , 58(7), 955-961.	Population, outpatients mental illness and druguse
Sharma, R., Reddon, J. R., Hoglin, B., & Woodman, M.-A. (2008). Assessment of the long-term benefits of life skills programming on psychosocial adjustment. <i>Journal of Offender Rehabilitation</i> , 47(1-2), 121-137. doi:10.1080/10509670801940987	Intervention, effect of time since treatment
Shaw, J., Conover, S., Herman, D., Jarrett, M., Leese, M., McCrone, P., Stevenson, C. (2017). Critical time Intervention for Severely mentally ill Prisoners (CriSP): a randomised controlled trial. doi:10.3310/hsdr05080	Population, prisoners
van den Broek, E., Keulen-de Vos, M., & Bernstein, D. P. (2011). Arts therapies and schema focused therapy: A pilot study. <i>The Arts in Psychotherapy</i> , 38(5), 325-332. doi:10.1016/j.aip.2011.09.005	Population, no Severe Mental Disorder

Wenzlow, A. T., Ireys, H. T., Mann, B., Irvin, C., & Teich, J. L. (2011). Effects of a discharge planning program on Medicaid coverage of state prisoners with serious mental illness. <i>Psychiatric Services, 62</i> (1), 73-78. doi:10.1176/appi.ps.62.1.73	Outcome, Administrative data
Young, S., Hopkin, G., Perkins, D., Farr, C., Doidge, A., & Gudjonsson, G. (2013). A controlled trial of a cognitive skills program for personality-disordered offenders. <i>Journal Of Attention Disorders, 17</i> (7), 598-607. doi:10.1177/1087054711430333	Population, no Severe Mental Disorder
Zwets, A. J., Hornsveld, R. H. J., Muris, P., Kanters, T., Langstraat, E., & van Marle, H. J. C. (2016). Psychomotor therapy as an additive intervention for violent forensic psychiatric inpatients: A pilot study. <i>The International Journal of Forensic Mental Health, 15</i> (3), 222-234. doi:10.1080/14999013.2016.1152613	Population, no Severe Mental Disorder

Table 3: Studies with qualitative method, excluded according to design, population or outcome.

Study	Exclusion criteria
Alexiou, E., Degl'Innocenti, A., Kullgren, A., & Wijk, H. (2016). The impact of facility relocation on patients' perceptions of ward atmosphere and quality of received forensic psychiatric care (Vol. 42, s. 1-7): <i>Journal of Forensic and Legal Medicine</i> .	Method: Questionnaires
Brunt, D. (2008). The ward atmosphere of single-sex wards in a maximum-security forensic psychiatric hospital in Sweden (Vol. 29:3, s. 221-241): <i>Issues in Mental Health Nursing</i> .	Method: Questionnaires
Brunt, D., & Rask, M. (2005). Patient and staff perceptions of the ward atmosphere in a Swedish maximum-security forensic psychiatric hospital (Vol. 16:2, s. 263-276): <i>Journal of Forensic Psychiatry & Psychology Taylor & Francis Group</i> .	Method: Questionnaires
Brunt, D., & Rask, M. (2007). Ward Atmosphere – the Scarlet Pimpernel of psychiatric settings? (Vol. 28:6, s. 639-656): <i>Issues in Mental Health Nursing Ebsco</i> .	Method: Questionnaires
Holmberg, G., & Kristiansson, M. (2006). Contacts with public services, with special reference to mental health care, preceding a serious crime: a retrospective study of 268 subjects of forensic psychiatric investigations (Vol. 29:4, s. 281-288): <i>International journal of law and psychiatry</i> .	Population/research question (the six-month period preceding the crime).
Hörberg, U., Sjögren, R., & Dahlberg, K. (2012). To be strategically struggling against resignation : The lived experience of being cared for in forensic psychiatric care (Vol. 33:11, s. 743-751): <i>Issues in Mental Health Nursing</i> .	Different analysis on earlier study
Kjellin, L., Andersson, K., Bartholdson, E., Candefjord, I. L., Holmstrøm, H., Jacobsson, L., Östman, M. (2004). [Coercion in psychiatric care - patients' and relatives' experiences from four Swedish psychiatric services Coercion in psychiatric care - patients' and relatives' experiences from four Swedish psychiatric services]. <i>Nordic Journal of Psychiatry, 58</i> (2), 153-159.	Subject, regional differences
Lundqvist, L.-O., & Schröder, A. (2015). Patient and staff views of quality in forensic psychiatric inpatient care. In (Vol. 11:1, s. 51-58): <i>Journal of Forensic Nursing Lippincott Williams & Wilkins</i> .	Method: Questionnaires
Rask, M., & Brunt, D. (2006). Verbal and social interactions in Swedish forensic psychiatric nursing care as perceived by the patients and nurses (Vol. 15:2, s. 100-10): <i>Int J Ment Health Nurs</i> .	Method: Questionnaires

Olsson, H. (2013). <i>Att minska risken för våld och att främja återhämtning i den rättspsykiatriska vården [Elektronisk resurs] : Patienters och personalens erfarenheter av vägen mot återhämtning</i> . Sundsvall: Avd. för omvårdnad, Mittuniversitetet.	Duplicate: Thesis, studies published elsewhere
Olsson, H., & Schön, U.-K. (2016). Reducing violence in forensic care : how does it resemble the domains of a recovery-oriented care? In (Vol. 25:6, s. 506-511): <i>Journal of Mental Health</i> .	Population: care workers
Schröder, A., Ågrim, J., & Lundqvist, L.-O. (2013). The Quality in Psychiatric Care-Forensic In-Patient Instrument: Psychometric properties and patient views of the quality of forensic psychiatric services in Sweden. In (Vol. 9:4, s. 225-234): <i>Journal of Forensic Nursing Philadelphia, USA : Lippincott Williams & Wilkins</i> .	Method: Questionnaires
Strand, S., Olsson, H., & Kristiansen, L. (2009). <i>To decrease the risk for violence for patients sentenced to forensic psychiatric care- personnel and patient's views</i> .	Publication: Abstract on conference papers
Åling, M., Kasel, D., & Peternelj-Taylor, C. (2016). What is your story? The experiences of patients and nurses in secure forensic environments. In (Vol. s. 35): <i>Abstracts : Narrative Nursing: Nordic Conference Of Mental Health Nursing: 14-16 September 2016 Börshuset – Malmö Malmö : Psykiatriska riksföreningen för sjuksköterskor</i> .	Publication: Abstract on conference papers

Table 4: Health economic studies, excluded according to PICO.

Study	Exclusion criteria
Amos A. Assessing the cost of early intervention in psychosis: A systematic review. <i>Australian & New Zealand Journal of Psychiatry</i> . 2012;46(8):719-34.	Population
Benton C, Roy A. The first three years of a community forensic service for people with a learning disability. <i>The British Journal of Forensic Practice</i> . 2008;10(2):4-12.	Population
Fontanarosa J, Uhl S, Oyesanmi O, Schoelles K. Interventions for adult offenders with serious mental illness (Provisional abstract). <i>Database of Abstracts of Reviews of Effects</i> . 2013(2):i.	Study design
Hodgins S, Tengström A, Eriksson A, Österman R, Kronstrand R, Eaves D, et al. A Multisite Study of Community Treatment Programs for Mentally Ill Offenders with Major Mental Disorders: Design, Measures, and the Forensic Sample. <i>Criminal Justice and Behavior</i> . 2007;34(2):211-28.	Study design
Khalifa N, Talbot E, Schneider J, Walker DM, Bates P, Bird Y, et al. Individual placement and support (IPS) for patients with offending histories: the IPSOH feasibility cluster randomised trial protocol. <i>BMJ Open</i> . 2016;6(7):e012710-e.	Protocol
Kisely SR, Campbell LA, Preston NJ. Compulsory community and involuntary outpatient treatment for people with severe mental disorders. <i>The Cochrane Database Of Systematic Reviews</i> . 2011(2):CD004408.	Population
MacInnes D, Kinane C, Parrott J, Mansfield J, Craig T, Eldridge S, et al. A pilot cluster randomised trial to assess the effect of a structured communication approach on quality of life in secure mental health settings: The Comquol Study. <i>BMC Psychiatry</i> . 2016;16.	Study design

McCollister KE, French MT, Fang H. The cost of crime to society: New crime-specific estimates for policy and program evaluation. <i>Drug and Alcohol Dependence</i> . 2010;108(1):98-109.	Population
Novaco RW, Taylor JL. Reduction of assaultive behavior following anger treatment of forensic hospital patients with intellectual disabilities. <i>Behaviour Research and Therapy</i> . 2015;65:52-9.	Study design
Rosen A, Mueser KT, Teesson M. Assertive community treatment -- issues from scientific and clinical literature with implications for practice. <i>Journal of Rehabilitation Research & Development</i> . 2007;44(6):813-25..	Study design
Ross J, Quayle E, Newman E, Tansey L. The impact of psychological therapies on violent behaviour in clinical and forensic settings: a systematic review (Provisional abstract). <i>Aggression and Violent Behavior</i> . 2013;18(6):761-73.	Study design