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| **Table 1: Randomized controlled trials on computer-assisted cognitive remediation for unemployed outpatients between 2005 and 2016** | | | | | | | | | | |
| **Study and location** | **Diagnosis** | **Intervention** | **Cog Remed Type** | **control** | **vocational outcomes** | **res** | **N** | **Unemployment condition** | **Follow up (month)** | **Duration of computer-based cognitive exercises (**Approximately) |
| McGurk et al. (2005) United States | SMI | CT + SE | TSW using  CogPack | SE | Type of each job, hours  worked, wages earned, and job tenure | Significant: The CT + SE group held significantly more jobs,  worked more hours, and earned more wages than the SE only group. | 44 | Not currently competitively employed, desire for competitive Work. | 12 | 24h /12 weeks |
| Vauth et al. (2005) Germany | Schizophrenia  *Inpatients during the vocational rehabilitation*  *and outpatients during the follow-up period* | CT + SE  or  SE + Training of self-management skills for negative symptoms. | CAST  + coping cards  + errorless learning | SE (graduated job placement in different training sites for up to 15 hours per week) | Rate of successful job placement (part- and full-time employment  more than 3 months vs. no useful work) | Significant: CT + SE was 2.3 times as effective in successful job placement as SE only at the 12-month follow-up interval. | 138 | Unemployed  (52.9% of the patients had had no meaningful work in  the preceding year). | 12 | 24h/8 weeks (twice weekly for 90 minutes) |
| McGurk et al. (2007) United States | SMI | CT + SE | Cogpack | SE  programs | Total number of jobs; Total number of weeks; Total number of hours; Total wages. | Significant: More patients worked in the CT +SE than the SE  And CT +SE held more jobs, worked more weeks and more hours, and earned more wages than in the SE alone. | 44 | Current unemployed, desire for employment, enrolment in supported employment, history of at least one unsatisfactory job ending. | 24 - 36 | 24h/12weeks |
| Bell et al. (2008)  United States | schizophrenia  and schizoaffective patients | CT + SE (vocational rehabilitation) | NET, using CogRehab, (Bracy, 1995) modified + Sci-Learn (Scientific Learning,  2003). | SE (vocational rehabilitation) | Cumulative employment rates; Work hours; Total hours worked (transitional or competitive work). | Significant: CR + SE patients  - worked more hours,  - reached higher cumulative rate of competitive employment,  - maintained significantly higher  rates of employment. | 72 | Participants were classified as work experienced if they had ever held a continuous full time job for at least  one year. | 12 (after active intervention for 12 months) | up to 10 h per week / 28 weeks (average = 113.75 h (sd SD=94.0)) |
| McGurk et al. (2009)  United States | SMI | CT + SE (vocational rehabilitation : Internships and supported  employment) | Cogpack + weekly group (cognition and job + problem solving about job ) | vocational rehabilitation (internships and supported  employment) | Job type; competitive/ noncompetitive;  worked hours; wages earned. | Significant: CR+SE worked more hours and earned more wages  for all types of work compared with SE alone | 24 | Unemployed, interest in obtaining work, history of unsatisfactory job ending. | 24 | 24 h  (45-60 min,  usually completing 2 sessions per week) /16 weeks |
| Sato et al. (2014)  First study in Japan | Schizophrenia or Schizoaffective disorder | CT + SE (IPS + traditional supported employment) | TSW using  CogPack (japanese version) | SE (IPS + traditional supported employment) | Competitive employment rate; total days employed; total earnings; use of internship programs; vocational Rehab Program. | No Significant (except More internship progr for person with disability in SE group) | 94 | Have any competitive work experience and have intention to find employment at the time of entry. | 16 | 24h/12 weeks training exercises + 12h verbal exercises (transfer); weekly group discussions |
| Bell et al. (2014) United States | Schizophrenia or Schizoaffective disorder | CT + SE (IPS + work support group) | 1/ CogRehab + Sci-Learn  2/ PositScience’s Brainfitness and Insight + training tasks | SE (IPS + work support group) | Competitive (cumulative) employment rate; Work hours (Total hours worked over the two-year follow-up period). | Significant only in lower-functioning (compared with higher) in the SE+CR. | 175 | Unemployed. | 24 | up to 10 h per week/12 months |
| Au et al. (2015)  First study in China | Schizophrenia or Schizoaffective disorder | CT + ISE (IPS + WSST) | Strong Arm System and Captain's Log | ISE (IPS + WSST group) + recreational activities | Competitive (cumulative) employment rate; job tenure; salary; No. of job termination. | No Significant | 90 | Unemployed, and had competitive employment as their current vocational goal. | 11 | max 72h/12 weeks (6h per week) |
| Tsang et al. (2016)  China | Schizophrenia or Schizoaffective disorder | CT + ISE (IPS + WSST) | Strong Arm System and Captain's Log | ISE + recreational activities | Cumulative employment rate; longest duration of a job held. | No Significant | 90 | Have employment history (about 96%). | 15 | max 72h/12 weeks (6h per week) |
| McGurk et al. (2015) United States | SMI (SCZ and Schizoaff = 46%) | CT + SE (Enhanced Vocational Rehabilitation) | TSW  CogPack | SE (Enhanced Vocational Rehabilitation) | Number of jobs; weeks worked; wages earned; hours worked; weeks to first job. | Significant consistently: better competitive employment outcomes (jobs obtained, weeks worked, and wages earned) in CT + SE than in the SE group. | 107 | Enrolled in a vocational rehabilitation program but has no work for the past 3 months. | 24 | 12-24h/12weeks |
| McGurk et al. (2016) United States | SMI | CT + SE (Enhanced Vocational Rehabilitation) | TSW  CogPack | SE (Enhanced Vocational Rehabilitation) | Number of jobs; weeks worked; wages earned; hours worked; weeks to first job. | CT + SE patients significantly more likely to engage in work related activities than those in E-VR; No Significant on competitive work or paid employment outcomes. | 54 | Enrolled in a vocational rehabilitation program but has no work for the past 3 months. | 36 | 12-24h/12weeks |

SMI: Severe Mental Illness as determined by the State of New York Office of Mental Health ; CT: Cognitive training or cognitive rehabilitation ; SE: Supported employment / vocational rehabilitation; TSW: Thinking Skills for Work program; CAST (Vauth et al. 2000): Computer-assisted cognitive strategy training ; IPS: Individual Placement and Support ; ISE: Integrated Supported Employment; WSST: work-related social skills training; NET : Neurocognitive enhancement therapy; Cogpack: version 6.0, Marker Software, Ladenburg, Germany