

self-confidence and participation in community-based activities.

The results show that New York State's OMH CR2PR implementation was a feasible CR program for this specialized population in a large public mental health system. This was indicated by the moderately high rate of utilization (72%) and low dropout rate for clients with serious mental illness (17%). Clients were also extremely satisfied about the impact on cognition and on daily functioning. Clinicians noted more engagement in the clinic and/or community.

CR programs in large systems of care require an investment in training clinicians to address cognitive health, both so the clinical teams know who to refer and there are clinical staff to run the groups and do brief cognitive assessments to guide the CR treatment planning. Program evaluation data are an important way to ascertain the value of such an investment. The New York State OMH CR2PR program evaluation data indicates that CR used in real-world clinical outpatient settings is responsive to clients' perceived cognitive and recovery needs.

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Empowering People With Mental Illness in Workplace Settings

TO THE EDITOR: Mental illness stigma can impede the professional lives of people with mental illness by complicating their work routines, which can contribute to termination and difficulty with reemployment. Therefore, addressing stigmatizing attitudes from employers and colleagues is important to improve employment as well as workplace participation of people with mental illness (1). However, in addition to this kind of public stigma, self-stigma among employees with mental illness can introduce additional distress, which can contribute to both presenteeism and absenteeism in the workplace (2). These problems can in turn lead to financial difficulties, diminished well-being, and

increased psychological distress among employees with mental illness (3), as well as to economic loss for employers.

Self-stigma is a process in which individuals with mental illness are aware of stereotypes, agree with them, apply them to themselves, and consequently may lose self-esteem and experience hopelessness, social withdrawal, and demoralization. Self-stigma is often accompanied by the anticipation of future discrimination, which leads to the avoidance of potentially threatening situations, including work. To avoid stigma, secrecy is common, which not only has negative psychosocial consequences (such as social isolation, feelings of shame, and anxiety) but also eliminates the possibility of obtaining reasonable accommodations. The common approach of targeting public stigma in order to improve workplace participation of employees with mental disorders is appropriate but may be insufficient. Interventions addressing self-stigma among employees with mental disorders are also needed.

Although effective interventions to reduce self-stigma have been developed (4), they have never been evaluated in workplace settings, and their impact on employee well-being and workplace participation remains unclear. Implementation at workplaces demands the consideration of setting-specific factors, including the risk of involuntary disclosure due to participation and potentially limited support by employers. To reduce the risk of involuntary disclosure, approaches that allow anonymity, such as webinars or individual coaching, might be superior to face-to-face group formats. However, given that existing programs to reduce self-stigma are generally based on peer support, adaptations need to be made with caution so as not to exclude the factor responsible for reductions in self-stigma. Employer support might be increased if benefits are clearly communicated and the intervention is cost-effective. One example of a short and potentially cost-effective intervention is “Honest, Open, Proud” (HOP), a peer-led group program supporting people with mental illness in their decision regarding whether to disclose their mental illness. HOP reduces stigma stress and may increase quality of life (5). To serve as a workplace self-stigma intervention, HOP was recently adapted as a self-administered guide for mental health professionals with current or past experiences of mental illness, and it is complemented by an anonymous Web-based peer support forum (for more information: <https://www.ucl.ac.uk/pals/hop-mhp-project-0>). Similar approaches may ensure confidentiality while including aspects of peer support.

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Mirror Neurons and the Clubhouse Model

TO THE EDITOR: The clubhouse model is a community psychosocial rehabilitation program that facilitates mental health recovery of people with severe mental illness. The model features the “work-ordered day,” whereby people with severe mental illness become clubhouse members and engage in meaningful work (such as producing newsletters and making meals) alongside the staff to manage the clubhouse. Some of the purported benefits of clubhouse participation include lower rates of rehospitalization, enhanced self-reported recovery and perceived quality of life, better employment outcomes, and improvements in general physical and mental health. Researchers are still striving to explain precisely why clubhouses are successful, and to this end, recent scientific advancements in neuroscience may offer a framework for understanding how modeling behaviors may support mental health recovery.

Mirror neurons were first discovered in the 1990s when scientists studied the brains of macaque monkeys and found that some neurons in premotor cortex responded not only when executing a specific action but also when observing other monkeys perform the same action. The human mirror neuron system similarly activates when attempting to understand the actions and intentions of others, which underlies mechanisms of observational learning. By observing the behaviors of others, people can imagine the outcome before attempting the behavior. In some situations, people may experience self-agency simply through observation.

Research has shown that people with schizophrenia exhibit mirror neuron dysfunction (1). However, mirror neuron deficits appear to be less severe for patients taking medication (2) or nonexistent during the residual illness phase (3), suggesting that

mirror neuron functioning can be restored for people with severe mental illness.

Mirror neurons have been used to guide motor and sensory rehabilitation and poststroke rehabilitation, but research has yet to explore whether mirror neurons can inform mental health recovery. However, some exploratory studies link mirror neurons to intention, social communication, and empathy (4). Moreover, according to the associative learning perspective, the mirror neuron activity is a product, as well as a process, of social interaction (5). The question remains: Do mirror neurons underlie the social learning and modeling that occur in clubhouses?

Research of this question is still lacking; however, results from our qualitative study at a clubhouse showed that the work-ordered day creates spaces and occasions where modeling and mirroring can take place. Clubhouses arrange for activities to occur out in the open, and so members are constantly observing tasks being performed by other members and staff. When ready, members can attempt these tasks on their own. In our study, several members expressed perceived agency simply by observing others. When people with mental illnesses live in isolation, they have limited opportunities to observe what is possible. The clubhouse is intentionally designed to multiply those opportunities and broaden one's horizons. Future studies should explore longitudinally how mirror neurons may underlie not only clubhouses, but psychosocial rehabilitation in general, to reveal the mechanisms of interaction-based psychiatric interventions.

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