Using the Occupational Therapy Practice Guidelines for Adults with Serious Mental Illness

Catana Brown PhD, OTR/L, FAOTA
Associate Professor
Midwestern University
College of Health Sciences
Glendale, AZ

Catana Brown, PhD, OTR/L, FAOTA

Catana Brown authored the Occupational Therapy Practice Guidelines for Adults With Serious Mental Illness, working with Deborah Lieberman, the series editor, and Marian Arbesman, the issue editor. She has worked with adults with serious mental illness for her entire occupational therapy career of more than 30 years.

Catana's research and clinical interests have focused on the development of assessments and interventions to support successful and satisfying community living for people in recovery. These include the Test of Grocery Shopping Skills, The Adolescent Adult Sensory Profile, and a manualized weight loss program called Nutrition and Exercise for Weight Loss and Recovery (NEW-R).

Learning Objectives

After completing this course, the learner will:
1. Define serious mental illness and discuss the impact of serious mental illness on occupational performance.
2. Describe recovery oriented practices.
3. Recognize the importance of evidence when making practice decisions.
4. Identify evidence based interventions to enhance occupational performance of people with serious mental illness.
Module 1
Overview of Serious Mental Illness and Recovery

Statistics on Adults with Serious Mental Illness

- 26% of American adults have a mental illness.
- 6% of American adults have a serious mental illness. (NI MH, 2010)
- Leading cause of disability is serious mental illness.

Defining Serious Mental Illness

1. Specific psychiatric diagnosis:
   - Schizophrenia
   - Bipolar disorder
   - Major depression (DSM-5)
2. Significant functional impairment:
   - Less than 60 GAF score (SAMHSA, 2002)
DSM-5 Criteria for Schizophrenia

At least two of the following symptoms for at least 1 month:

- **Positive Symptoms:**
  - Delusions
  - Hallucinations
  - Disorganized speech
  - Disorganized or catatonic behavior

- **Negative Symptoms:**
  - Flat affect
  - Social withdrawal
  - Difficulty initiating behavior
  - Anhedonia (APA, 2013)

Common Cognitive Impairments in Schizophrenia

- Difficulties with executive functions:
  - Problem-solving
  - Reasoning
  - Decision-making

- Working memory impairments.

- Slower processing speed.

Common Sensory Processing Impairments in Schizophrenia

1. Tend to miss and avoid sensory stimuli.
2. May not see or hear things that others notice.
3. May have difficulty screening sensory stimuli.
4. Often overwhelmed by certain sounds, sights, smells, or touch.
5. May lose the opportunity to process necessary information.
Heterogeneity of Schizophrenia

- No two individuals with schizophrenia are the same:
  - Some individuals may experience positive symptoms.
  - Others may experience negative symptoms.
  - Some may experience significant executive dysfunction.
  - Others may have few issues with cognitive or sensory processing.

- Must appreciate the individual and identify areas of need.

Relationship of Symptoms & Impairments to Occupational Performance

A particular impairment or symptom does not translate to difficulties in occupational performance.

Knowledge Check

Susan works in a busy and noisy office. She has a diagnosis of schizophrenia. She was recently given a new and complicated assignment, but has yet to start. Her boss didn’t spend much time giving her instructions. Although there may be several reasons why Susan has not started, what is the most likely explanation based on the existing research? Click Submit to check your answer.

A. Auditory hallucinations are interfering with Susan’s ability to initiate her work.
B. Susan always finds it challenging to initiate a new task in a busy and noisy environment.
C. The complex assignment and hurried instructions are making it difficult for Susan to understand how to do the work.

Submit
DSM-5 Criteria for Bipolar Disorder

At least one manic episode characterized by elevated, expansive, or irritable mood lasting at least 1 week and three or more of the following:

- Inflated self-esteem or grandiosity.
- Decreased need for sleep.
- Pressured speech.
- Flight of ideas/racing thoughts.
- Distractibility.
- Increase in goal-directed activity.
- Excessive involvement in pleasurable activities that have a high potential for painful consequences. (APA, 2013)

Relationship of Bipolar Disorder and Occupational Performance

- Association between creativity and mania. (Jamison, 1993)
- Sometimes high levels of productivity.
- Can be debilitating with a negative impact on one’s life.
- Disrupts daily routines, interfering with work and social relationships.

DSM-5 Criteria for Major Depressive Disorder

At least one major depressive episode characterized by depressed mood or loss of interest or pleasure and at least 4 of the following symptoms:

- Weight loss or weight gain.
- Insomnia or hypersomnia.
- Psychomotor agitation or retardation.
- Fatigue.
- Feelings or worthlessness.
- Difficulty concentrating.
- Suicidal ideations. (APA, 2013)
Depression and Occupational Performance

Factors associated with greater occupational dysfunction:

- Multiple episodes.
- Lack of treatment. (Pratt & Brody, 2008)

Nature of occupational performance problems in depression:

- Impairments in self-efficacy.
- Impairments in volition. (Dunlop et al. 2005; Furukawa et al. 2010)

Knowledge Check

There is a great deal of similarity in symptomatology and impairment among individuals with serious mental illness. Click Submit to check your answer.

A. True
B. False

Submit

A Change in Paradigms: Medical Model to Recovery Model

Recovery Model emphasizes the following principles:

- Hope
- Choice
- Empowerment
- Full participation

President’s New Freedom Commission stated:

“…after a year of study, and after reviewing research and testimony, the Commission finds that recovery from mental illness is now a real possibility. The promise of the New Freedom Initiative—a life in the community for everyone—can be realized” (p.1).

Click here to access the report summary.
The Recovery Movement

Pat Deegan is a leader in the recovery movement. She is an advocate and innovator, developing technology and contributing significantly to the adoption of recovery-oriented practices.

Click here to view Showing Up for Recovery by Pat Deegan.

You can access more of her work at www.pat-deegan.com.

Fundamental Components of Recovery

<table>
<thead>
<tr>
<th>Ten Fundamental Components of Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-direction</td>
</tr>
<tr>
<td>2. Individual and person-centered</td>
</tr>
<tr>
<td>3. Empowerment</td>
</tr>
<tr>
<td>4. Holistic</td>
</tr>
<tr>
<td>5. Non-linear</td>
</tr>
<tr>
<td>6. Strengths-based</td>
</tr>
<tr>
<td>7. Peer support</td>
</tr>
<tr>
<td>8. Respect</td>
</tr>
<tr>
<td>9. Responsibility</td>
</tr>
<tr>
<td>10. Hope</td>
</tr>
</tbody>
</table>

Knowledge Check

Explain how you would you alter these common practices to respect a recovery oriented perspective? Click Submit to check your answer.

Practice 1: The building has separate lunch rooms and bathroom for staff and clients.
Practice 2: Topics related to spirituality are avoided in treatment.
Practice 3: All services are provided by licensed professionals.
Practice 4: The board for the mental health center consists primarily of professionals, family members, and community leaders.

Learner's response:  
Submit
Occupational Therapy and Recovery

Ways that occupational therapy is consistent with recovery:
- Supporting individuals in their goal to live life to the fullest.
- Developing a sense of meaning and purpose.
- Providing services that contribute to successful community living.
- Promoting choice through client-centered practices.
- Believing in the potential of humans to realize a more positive future.

Challenges for occupational therapists:
- Abdicating control of the decision-making process.
- Allowing individuals to make mistakes in life.

Learn about recovery:
- The National Empowerment Center
- Mental Health Recovery Website
- Mental Health and Recovery: What Helps and What Hinders

Module 2
The Practice Guidelines & Occupational Therapy in Community Mental Health

Two Focused Questions
1. What occupational therapy interventions are effective for improving and maintaining participation in paid and unpaid employment and education for adults with serious mental illness? (Arbesman & Logsdon, 2011)
2. What is the evidence for the effectiveness of interventions within occupational therapy's scope of practice designed to create, establish, modify and maintain performance; prevent disability; and promote health, wellness and hope in the context of a recovery model in the areas of community integration and normative life roles for adults with serious mental illness? (Cohen, D'Ambro, Jeffie & Arbesman, 2011)
Levels of Evidence

- Level I—Systematic literature reviews, meta-analyses, and randomized controlled trials
- Level II—Two-group nonrandomized studies
- Level III—One-group nonrandomized studies
- Level IV—Descriptive studies with analysis of outcomes
- Level V—Case reports and expert opinion

(review criteria)

Inclusion Criteria:
- Level I, II, and III
- Participants were individuals with serious mental illness.
- Used interventions within the scope of occupational therapy practice.

Exclusion Criteria:
- If published before 1990.
- Used only qualitative methods.
- Not peer reviewed.

Knowledge Check

Match the correct level of evidence on the right to each study description on the left. Click Submit to check your answers.

a. Level I
b. Level II
c. Level III
d. Level IV
e. Level V

Study 1 - A case study examining outcomes of an individual with serious mental illness participating in a work program.
Study 2 - A systematic review of the efficacy of supported employment for people with serious mental illness.
Study 3 - A randomized controlled trial comparing supported employment and transitional employment programs.
Study 4 - A study that uses a pre-test and post-test to evaluate the outcomes of individuals participating in a work program within the VA system.
Occupational Therapy & Community Mental Health Practice

- Practice guidelines and research questions are most relevant for community-based practice.
- Occupational therapists address participation in the areas of occupation:
  - Work
  - School
  - Community living

Settings for Community-Based Practice

- Clubhouses
- Community-Based Case Management
- Homeless Settings
- Community Support Programs
- Consumer Operated Services

Occupational Therapy Process

1. Referral
2. Evaluation
   - Occupational profile
   - Person-Environment-Occupation evaluation
3. Intervention
   - Plan
   - Implement
   - Review and reevaluate
4. Targeting Outcomes
   - Discharge Plan

See Appendix E, p. 101: Selected CPT™ Codes for Occupational Therapy Evaluations and Interventions.
Occupational Profile

Analyzing Occupational Performance

1. Administer assessment to identify factors that influence occupational performance.
2. Interpret the assessment data.
3. Develop a hypothesis that identifies factors that support or hinder occupational performance.
4. In collaboration with the client, develop goals.
5. Identify interventions based on best practice, evidence, and client preference.
6. Document the evaluation process and communicate results to team members.

Knowledge Check

After completing the Occupational Performance History Interview II with Mark, the occupational therapist finds that Mark is concerned about managing his finances. Mark has a diagnosis of schizophrenia. He has recently moved into his own apartment and has a limited social security income. The occupational therapist decides to administer additional assessments to determine what aspects of money management are challenging for Mark, and what cognitive skills support or hinder occupational performance in this area. Review Table 1 on page 12 in the practice guidelines. Identify potential assessments that would be relevant for Mark in Areas of Occupation (Occupations) and Performance Skills. Click Submit to check your answer.

Learner response:
Documenting and Communicating Evaluation Results

Documentation and communication of the evaluation includes:

- Discussion with the client.
- Written report.
- Oral presentation in team meetings.

Intervention Approaches

1. Restore/Remediate:
   • Skill development or restoration.
2. Modify/Compensate/Adapt:
   • Make changes to environment or task.
3. Maintain:
   • Preserve occupational performance.
4. Prevent:
   • Reduce likelihood that a performance problem occurs.
5. Create/Promote:
   • Enrich performance.

Knowledge Check

Match the correct intervention approach on the right to each intervention on the left. Click Submit to check your answers.

1. Simplify recipes so that an individual can prepare items she likes.
   a. Restore/remediate
2. Complete crisis intervention plan so that individual's desires are addressed if involuntary hospitalization becomes necessary.
   b. Modify/adapt
3. Find an affordable fitness center so individual can continue exercising once a group at the mental health center has ended.
   c. Maintain
4. Identify yoga classes to help with symptom management.
   d. Prevent
5. Locate a grocery store with fresh produce.
   e. Create/promote
Module 3
Evidence-Based Interventions

Work & People with Serious Mental Illness

- Number of individuals with serious mental illness that are working is low:
  - 22-40% (Cook, 2006)
  - 17.2% (Salkever et al. 2008)
  - 17.9% (Cate Study, Resnick et al. 2008)

- Make up 33% of SSI beneficiaries and 28% of SSDI beneficiaries (Cook, 2006).

- Underemployment is also an issue:
  - Most (70%) of those with college degrees earned less than $10/hour. (Cook, 2002)
  - Average pay is $7.05/hour. (Salkever et al. 2008)
  - Approximately 38% of those with mental disabilities that are working earn near minimum wage. (National Health Interview Survey: Disability Supplement, Kaye, 2002)

Benefits of Work:
Central to Identity Formation

- Provides Meaningful Activity
- Promotes Recovery
- Increases Social Relationships
- Enhances Self-Efficacy
Barriers to Employment

- Low educational attainment.
- Lowered productivity.
- Discrimination.
- Poverty.
- Disincentives.
- Shortage of vocational rehabilitation.

Supported Employment

Individual Placement and Support (IPS) Model includes:

- Rapid job search.
- Placement in competitive employment.
- Supports and training on site.
- Coordination of employment and mental health services.
- Counseling on social security benefits.
- Support for as long as necessary.

EBP Supported Employment Tool-Kit: http://store.samhsa.gov/product/Supported-Employment-Evidence-Based-Practices-EBP-KIT/SMA08-4365

Evidence for Supported Employment

- Supported employment is superior to other interventions for following work outcomes:
  - Obtain competitive employment.
  - Hours worked.
  - Job tenure.
  - Earnings.
- Best outcomes when there is high fidelity to the Individual Placement and Support Model.
- Large numbers remain unemployed.

Refer to pages 21-24 in the practice guidelines to learn more about the evidence for supported employment.
Role of Occupational Therapy in Supported Employment

- Matching individuals' interests and skills with job opportunities.
- Making recommendations related to reasonable accommodations.
- Making recommendations related to job training.
- Implementing programs that augment supported employment.

See the case description of Jose on page 33 in the practice guidelines to learn more about occupational therapy interventions for supported employment.

Knowledge Check

Jim graduated from high school and has two semesters of college credits. He is concerned that his diagnosis of bipolar disorder and limited work history with no employment for the last 7 years will make it hard to find a job. He enjoys animals and would like to pursue some sort of work that would involve animals. Which of the following interventions would be most consistent with supported employment? Select all that apply. Click Submit to check your answer.

A. Placing Jim in a sheltered workshop to develop basic work skills before moving to competitive employment.
B. Job search that quickly focuses on placing Jim in a job that is consistent with his skills and interest in animals.
C. Providing Jim with prevocational counseling focused on developing a resume and working on interview skills and social skills for work.
D. Providing Jim with counseling related to his social security disability benefits so that he can make informed decisions about his work situation.
E. On-the-job, but time-limited, support from a vocational counselor so that Jim does not become too dependent on outside services.

Submit
**Educational Background of People with Serious Mental Illness**

Based on supported employment principles:
- Choice of educational experience and setting.
- Supports provided in the natural environment (in the educational setting).

Goals of supported education:
- Attaining a college degree.
- Completing a general equivalency diploma (GED).
- Obtaining a technical training certificate.
- Taking adult education courses at a community college.

[Click here](#) for resources on supported education.

---

**Goals of Supported Education**

Based on supported employment principles:
- Choice of educational experience and setting.
- Supports provided in the natural environment (in the educational setting).

Goals of supported education:
- Attaining a college degree.
- Completing a general equivalency diploma (GED).
- Obtaining a technical training certificate.
- Taking adult education courses at a community college.

[Click here](#) for resources on supported education.

---

**Interventions within Supported Education**

**Performance skills**
- Basic educational knowledge (e.g., computer skills, math, public speaking).
- Stress management.
- Time management.

**Environmental supports**
- Accessing campus resources.
- Reasonable accommodations.
- Peer support.
Knowledge Check
In supported education, students with serious mental illness are identified by the college's student services and provided with the necessary reasonable accommodations. Click Submit to check your answer.

True
False

Submit

Models within Supported Education
Onsite Model:
➢ Tutoring
➢ Classroom accommodations
➢ Campus support groups
➢ Counseling

Self-Contained Classroom Model:
➢ Computer training
➢ Study skills
➢ Math
➢ Campus resources

Services provided:
➢ Individualized basis
➢ In a group

Evidence for Supported Education
Fewer studies have examined supported education.
Two Level I and two Level III studies report promising results.
Individuals in supported education have better educational outcomes.
Attendance and participation are associated with better outcomes.
Role for Occupational Therapy in Supported Education

Performance skills:
- Group or individual
- Module-based format

Environmental supports:
- Reasonable accommodations
- Accessing resources

Refer to the case description of Cara on page 32 of the practice guidelines to learn more about occupational therapy interventions for supported education.

The Bridge Program was developed by occupational therapists, Sharon Gutman and Victoria Schmidt.

Knowledge Check

Julie is enrolled in a college course for the first time. The cognitive impairments associated with her schizophrenia make it difficult for Julie to listen to the lectures and take notes at the same time. She is easily distracted and worries that other students are looking at her and talking behind her back. Which of the following practices would be consistent with supported education. Select all that apply. Click Submit to check your answer.

A. Suggest that Julie drop this course so that she doesn't receive a bad grade on her transcript, increase her medications, and then return to the class when her symptoms are more stable.
B. Provide Julie with a note-taker (which could be a current student taking notes in the class), so that Julie can concentrate on the lecture and then look at the notes on her own later on.
C. Suggest that Julie attend an on campus support group with other students with psychiatric disabilities.
D. Ask the professor to reduce the number of assignments that Julie must complete to successfully pass the course.

Submit

Community Living and Serious Mental Illness

Reasons for targeting community living:
- Living independently but desire a better quality of life.
- Living on own for first time after moving away from home, etc.
- Moving out of homelessness and need supports for independent living.
Components of Skills Training

1. Identify target behaviors.
2. Break down target behaviors into component parts.
3. Teach skills through demonstration, didactic instruction, and practice.
4. Assign homework to practice skills.
5. Provide regular feedback and reinforcement. (Bellack, 2004)

Click here to learn more about the UCLA Social and Independent Living Skills Modules.
Knowledge Check

Skills training is best provided in the controlled environment of the clinic so that participants are not overwhelmed with the complexity of the real world. Click Submit to check your answer.

True
False

Submit

Evidence for Community Living Skills Training

- Results of 5 systematic reviews:
  - Two found positive outcomes. (Corrigan, 1991; Dik and Bond, 1996)
  - Three found skills training was not more effective than other interventions. (Pilling et al., 2002; Robertson et al., 1998; Tungpukom & Nicol, 2008)

- Numerous Level I studies find individuals with serious mental illness can learn and retain new skills.

- Schizophrenia Patient Outcomes Research Team (PORT) recommended skills training as an evidence-based practice. (Dixon et al., 2010)

  "Substantial evidence indicates that people with schizophrenia can learn a variety of interpersonal and everyday living skills when provided with structured behavioral training that is focused on clearly defined activities, situations, and problems." (p.51)

- Click here to learn more about the Schizophrenia PORT recommendations.

Additional Findings Related to Skills Training

- The longer the duration of the training the better the results. (Dik & Bond, 1996)

- Targeted skills are not generalized to larger role functioning. (Dik & Bond, 1996)

- Generalizability can be enhanced with supports and reinforcement of skill use in natural environments. (Seyn et al., 2002)

- Effect of skills training on symptoms is unclear - some studies find improvements. (Seyn et al., 2002)

- Other studies do not find an improvement in the reduction of symptoms. (Patterson, 2006)
Role for Occupational Therapy in Skills Training

Occupational therapists can:
- Implement existing skill training programs.
- Develop or enhance skill training programs.
  (Hedrich et al. 2006; Brown et al. 2002)

Refer to the case description of Mai on page 34 of the practice guidelines to learn more about occupational therapy interventions for community living.

Knowledge Check

Simple instrumental activities are best taught over several sessions, to ensure integration of learning through repeated practice. Click Submit to check your answer.

True
False

Submit

Health & Wellness and Serious Mental Illness

Very serious health issues for individuals with serious mental illness, include:
- Metabolic syndrome (diabetes) rates 4 x the national average. (Saari et al. 2005)
- Life expectancy reduced 25 years. (Cotten & Manderbach, 2000)
- Most common cause of death is cardiovascular disease.

Click here to learn about the SAMHSA 10 by 10 Campaign.
Barriers that interfere with wellness for people with serious mental illness:

- Live below poverty line.
- Lack access to quality healthcare.
- Experience medication side effects.
- Present lifestyle concerns, including:
  - High smoking rates.
  - Inadequate nutrition.
  - Lack of physical activity.
  - Sleep problems.

Knowledge Check

In general, people with serious mental illness have more physical health and wellness concerns than individuals in the general population. Click Submit to check your answer.

True
False
Interventions to Promote Health & Wellness

Types of interventions:
- Development of many initiatives and programs.
- Target specific areas of health and wellness.
- Focus on general health and wellness.

Weight Loss

Factors associated with effective weight loss programs:
- Lasts at least 3 months.
- Addresses nutrition and physical activity.
- Includes education and activity-based approaches.

Click here to access the full SAMHSA report.
Nutrition and Exercise for Weight Loss and Recovery (NEW-R) is available for free download.

Exercise to Improve Mood

Four studies examined the efficacy of exercise for improving mood with the following findings:

1. Increase in activity and exercise associated with a decrease in anxiety and depression. (Dunn, Trivedi & O’Neal, 2001)
2. Higher dose of exercise was more effective than a low dose in decreasing depression. (Dunn et al., 2005)
3. Aerobic exercise decreased depression in adults with serious mental illness. (Hutchinson, Skirner & Cross, 1999)
4. An outdoor adventure program decreased depression and anxiety in adults with serious mental illness. (Kelley, Coursey & Selby, 1997)
Action over Inertia Intervention

Action over Inertia:
- Developed by occupational therapists.
- Improves occupational balance and increases occupational engagement.
- Administered individually over 12 weeks, using a workbook.
- Participants spent more time in meaningful activity a day.

(Edgelew & Krupa, 2011)

Purchase the workbook through the Canadian Association of Occupational Therapy.

Interpersonal and Social Rhythm Therapy (IPSRT)

IPSRT features:
- Based on evidence that exacerbations of manic episodes in bipolar disorder are associated with disruptions in routines. (Maloff-Schwartz et al. 1998)
- Works to establish and maintain basic social rhythms (e.g., getting out of bed, eating meals, first contact with others, etc.).
- Participants in IPSRT had a longer remission time than individuals in a control condition. (Frank et al. 2005)

Wellness Recovery Action Planning (WRAP)

WRAP is a self-management program for serious mental illness:
- Create daily maintenance plan.
- Identify triggers and early warning signs.
- Recognize when things are getting worse.
- Establish a crisis plan. (Copeland, 1997)

Evidence indicates:
- Increase sense of hope.
- Decrease in symptoms.
- More prepared to manage problems. (Palmer et al. 2011; Copeland et al. 2011)
Role for Occupational Therapy in Wellness

- Training in physical and mental health with holistic focus.
- Developing and implementing wellness programs.
- Adapting existing wellness programs.
- Making modifications as necessary:
  - Address cognitive impairments in materials.
  - Recognize limited resources.
  - Recognize unique concerns.
  - Address medication requirements.
  - Create strategies to ensure maintenance.

Refer to the case description of Gerald on page 36 of the practice guidelines to learn more about occupational therapy interventions for health and wellness.

Knowledge Check

Lisa has frequent bouts of depression. When depressed she finds it difficult to get out of bed, sometimes misses work, and avoids contact with others. Which of the following wellness strategies has research to support its efficacy? Select all that apply. Click Submit to check your answer.

A. Regular aerobic exercise.
B. Engagement in positive and meaningful activity.
C. Sensory integration.
D. Daily dose of St. John’s Wort.

Submit

Cognition and Serious Mental Illness

Common cognitive impairments:
- Slowed processing speed.
- Reduced selective attention.
- Diminished working memory.
- Impaired higher order executive functions. (Green, 2006)

Differences in cognitive impairments across diagnoses:
- Schizophrenia and bipolar disorder - more enduring.
- Depression - tends to improve with remission of symptoms. (Guevher, Johnson & Benedict, 2006)
Impact of Cognitive Impairments on Occupational Performance

- Cognitive impairments are more detrimental than positive and negative symptoms with regards to occupational performance. (Green, 2006)
- Impact of cognition impairments on occupational performance:
  - Interferes with skill acquisition necessary to carry out occupations.
  - Leads to an avoidant coping style regarding the environment and others.
  - Prevents development of a strong sense of self. (Lysaker & Buck, 2007)

Intervention: Cognitive Remediation

Cognitive remediation involves:
1. Targeting improvement of basic cognitive skills.
2. Improving cognition to facilitate acquisition of occupational performance skills.
3. Using graded computer and paper and pencil activities on area of impairment.

Evidence for Cognitive Remediation

1. Some systematic reviews found no benefits. (Pilling et al. 2002; McGrath & Hayes, 2010)

2. A meta-analysis found medium effect sizes for improvement in cognition and psychosocial functioning. (McGurk et al. 2007)

3. Randomized controlled trials found:
   - Improvements in cognitive skills.
   - Less evidence for generalization to occupational performance. (Kupper et al. 2007; Wykes et al. 2009; Kurtz et al. 2003; Liebenow et al. 2008)

4. Combining cognitive remediation with skills training may lead to better generalization. (Roder et al. 2002; Bland et al. 2006)
Knowledge Check

Cognitive remediation most likely results in what positive outcome? Click Submit to check your answer.

A. Enhanced occupational performance.
B. Reduction of symptoms.
C. Improved attention and memory skills.
D. Improved social skills.

Submit

Intervention: Cognitive Adaptation Training (CAT)

➢ Adapt the environment to compensate for cognitive impairments
➢ Assess to identify if issues related to apathy (initiating activity), disinhibition (attention), or both.
➢ Put strategies in place to cue, sequence behaviors, or eliminate distractors. (Velligan et al. 2000; 2006)

Evidence for Cognitive Adaptation Training (CAT)

Two randomized controlled trials found CAT superior to control groups in areas of:

➢ Symptoms
➢ Adaptive functioning
➢ Relapse rates
➢ Use of available supports (Velligan et al. 2000; 2006)
Intervention - Errorless Learning

Errorless learning includes:
- Teaching new content or skills that compensate for cognitive impairments, especially memory impairments.
- Preventing participant from making mistakes during the learning process.
- Interfering with the encoding of incorrect information.
- Learning information like names and skills like ADLs and work tasks.

Evidence for Errorless Learning

- First study:
  - Investigate the efficacy of word learning in individuals with schizophrenia with and without memory impairments.
  - Errorless learning was effective for both groups but memory impaired received more benefit. (O-Carrol et al. 1999)
- Second study:
  - Errorless learning resulted in better outcomes than conventional instruction for job tasks.
  - Individuals with memory impairments benefitted most. (Kern et al. 2002)

Role of Occupational Therapy in Cognitive Interventions

Occupational therapists can:
- Promote generalization of cognitive remediation through real world activities.
- Adapt environments to reduce cognitive demands.
- Utilize errorless learning principles when teaching new information or skills.

Refer to the case description of Stanley on page 35 of the practice guidelines to learn more about occupational therapy interventions for cognitive impairments.
Knowledge Check

Match the correct cognitive intervention on the right to the occupational therapy strategy on the left. Click Submit to check your answers.

1. Using repetition and mastery to teach someone how to send a text message.
2. Working on decision-making skills while choosing products from a grocery store shelf.
3. Creating a simplified recipe for a favorite meal.

a. Cognitive remediation
b. Cognitive adaptation training
c. Errorless learning

Submit

Implications for Occupational Therapy Research and Education

- Develop manualized interventions or fidelity measures.
- Augment practice guidelines with new evidence.
- OT must play major role in evidence for mental health practice.
- Conduct research that compares interventions.
- Include evidence-based practices in OT education.

The Evidence-Based Practitioner

Using the practice guidelines and other resources will:
- Increase your confidence in clinical decision making.
- Provide better options when collaborating with clients.
- Enhance your communication with other team members.

Congratulations on completing Using the Occupational Therapy Practice Guidelines for Adults with Serious Mental Illness!

To continue, complete the course summary and click EXAM on the left side of the screen.