OT Cognitive Adaptation: An Intervention in Time Management for Persons With Co-Occurring Conditions

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Summary

Providing practical skills for everyday living can have far-reaching effects on clients’ lives.

The prevalence of individuals with co-occurring mental disorders and substance abuse disorders is remarkably high. In 2002, 17.5 million adults age 18 and older (8%) were estimated to have serious mental illness. Of these, 4 million (23%) were also dependent on or abused alcohol or an illicit drug.

These individuals with co-occurring mental disorders and substance abuse disorders often exhibit cognitive impairments that have a negative impact on their ability to function in many areas of daily activity, including organizational skills and time management. Yet despite the high rate of co-occurring conditions, few interventions exist that address the cognitive needs of this population.

For individuals with co-occurring mental disorders and substance abuse disorders, interventions that focus on cognitive adaptation strategies may help to create more satisfying life patterns. The Occupational Therapy Practice Framework: Domain and Process (Framework) states, "Engagement in occupation to support participation in context is the focus and targeted end objective of occupational therapy intervention." Performance patterns, as defined in the Framework, refer to habits, routines, and roles that are adopted by an individual as he or she carries out occupational or daily life activities. Time management and organization are useful habits that support performance in daily life and contribute to life satisfaction.

Background

The "Occupational Therapy—Let's Get Organized" life skills group was designed by the first author to educate residents of the Starhill facility of Palladia, a residential therapeutic drug facility located in Bronx, New York, on the ramifications of time management, through a variety of organizational and trial-and-error learning strategies. In 2000, United Way of New York City—Target Needs Funding sponsored the group with the goal of establishing a Lifeline/Life Support Program. The Lifeline Support Program provided staff with additional training and support to identify, assess, and treat clients in the Starhill facility who have impaired abilities to function well in the community due to cognitive limitations and a lack of experience in life skills.

Potential participants in the Lifeline Support program were individuals with co-occurring conditions who had difficulty managing their daily routines. They would miss welfare appointments, medical appointments, court appearances, school attendance, and work assignments. When they lived in the larger community, their time management difficulties led to loss of services, worsening medical and psychiatric conditions, being remanded by judges, and loss of employment. When they lived in the therapeutic community, time management difficulties led to loss of privileges, negative progress reports to their referral source, suspension from school, remands to jail, and worsening medical and psychiatric conditions.

One manifestation of poor time management skills was that the residents commonly missed appointments at the center's in-house medical department. All program participants are given initial medical exams, but because many have neglected their health, this exam requires follow-up appointments. Residents often put the follow-up appointment card in their pocket and misplaced it, or they took it to their room and stored it in a drawer. Occasionally, they would put the appointment date on a calendar, but they would forget to routinely check the calendar.

Sometimes residents had competing obligations and could not prioritize which activity they should attend to and which they should postpone. Others were able to follow the structure of the facility but could not organize a schedule for themselves after they started to transition from the facility to school or a vocational program.
We used three screening tools to identify potentially eligible participants: the Substance Use Disorders Treatment for People with Physical and Cognitive Disabilities Treatment Improvement Protocol (TIP)\(^6\); the Kohlman Evaluation of Living Skills (KELS)\(^7\); and the Allen Cognitive Level Screening (ACLS-2000).\(^8,9\)

The first screening tool, the TIP, identifies general health, psychosocial concerns, and learning styles, as well as problems and symptoms related to anxiety and depression. The KELS helps to determine the client's procedural knowledge of routine activities and what assistance may be required to perform daily tasks in areas such as safety, transportation, telephone use, money management, and work and leisure interests. The ACLS-2000 is commonly used by occupational therapists to provide a quick estimate of an individual's capacity to learn and perform both routine and novel tasks, and how to structure and grade activities. We used these assessments to provide baseline knowledge and to help structure and grade treatment activities appropriate to the individuals' needs.

Participants were selected if they were in Allen's Cognitive Model Level 5, which is defined as being capable of new learning, although there may be difficulty planning ahead or anticipating consequences of actions.\(^10,11\) Allen's prescription for groups at Cognitive Level 5 includes providing multiple means of sensory stimuli and engagement to tap the learner's attention (e.g., a wall clock, calendars, file folders, a bulletin board containing newspaper and magazine articles on popular topics); appropriate challenges to increase motivation; and an accepting, interpersonal environment.

Based on the evaluation data, the Lifeline Support program evolved into The "Occupational Therapy—Let's Get Organized" life skills group. The group was designed as a 10-week module consisting of two 1-hour sessions per week to provide consistency and repetition to facilitate integrating and generalizing new learning, and to establish proper habit formation. There were approximately 10 participants per session, with a total of five 10-week sessions over 2 years. Approximately 100 potential participants were evaluated for inclusion in the program.

**Group Session Stages**

Each group session used the following six-stage format.

**Stage 1: Sign In**

At the first stage of each session, clients used the attendance sheet to enter the date and time of their arrival, then answered the question "how are you feeling now?" Each client was also given an Emotion Identification\(^12\) worksheet with approximately 100 faces of various emotions. At the beginning of each session clients would review the Emotion Identification sheet and write down how they were feeling. Learning is best done in a neutral environment or an environment that creates curiosity; if a client is in a negative emotional state it is harder to learn. Stage 1 gave the clients an outlet for reflection and transition from the emotions of the day to the task at hand.

Each client was given a personalized file folder to be kept in the room for their attendance sheet, emotion sheet, and work sheets. After the first session they would retrieve it from the file box when they arrived.

**Stage 2: Appointment Books**

For the second stage, we distributed appointment books. At each subsequent session participants reviewed their appointment books and entered new information, proudly sharing various ways of personalizing the books (e.g., using color coding, family photographs, sticky notes, alligator clips, etc.). Positive habit-building experiences were discussed.

Although new learning usually generated positive emotions, participants were sometimes resistant to the process. In new learning there can be confusion, admission of error, uncertainty, or insecurity. Accepting clients' concerns and fears in a neutral manner, and providing a supportive environment, helped facilitate greater communication. By not confronting a client's present habits and routines directly, resistance was defused and openness to new information emerged. Client statements like, "I don't need to use an appointment book, I just remember," "I have a calendar in my room and I use it," and "I keep my appointment cards in my wallet, but even then I can miss an appointment because I forget to look at them," became opportunities to look at the concept of trial-and-error learning, which compares and contrasts ways of performing. What could be a block to learning was turned around and used as a positive quality.

**Stage 3: Activity**

The third stage focused on time management and organization, with participants using work sheets taken predominately from Precin's Living Skills Recovery Workbook\(^13\) to reinforce the activities. The work sheet topics included the following:
• How do I learn?
• How to make time work for me
• Prioritizing time to make it work for me
• Making the most of my time and energy
• Revising my schedule: Estimating
• and anticipating time use
• Time for fun: Weekend planning
• Midterm review
• What I have to do versus what I like to do
• Rewarding myself

The activities included the following:

• Organization and time management tools (watches, clocks, sticky notes, file folders, lists, drawers, calculators)
• Planning, organizing, and budgeting for a meal
• Techniques for shopping for a meal

We modified the work sheets to conform to Allen's Cognitive Level 5 by extending the length of sessions and using colored pencils and highlighters to increase visual cues for scanning and attention to reduce distraction. We enlarged or edited graphs on the work sheets to decrease the amount of written information, and we used completed work sheets as visual samples to assist participants in planning and problem solving during task activities. At Level 5 all sensory cuing, including visual, can be used to gain the client's attention, and these materials created the novelty and exploratory qualities needed to engage the clients actively in the process.

Stage 4: Discussion

The fourth stage was a discussion of the completed work sheet or activity. Each work sheet required thought, reactions, and possible changes that one could make to become more organized or manage one's time more efficiently. We reassured participants that using trial and error to correct mistakes was an acceptable and valuable learning tool. For some tasks, clients were asked to rate themselves before and after completion to examine their sense of self-competency and to help them set more realistic expectations of the time and effort required. The group norm "mistakes are okay" promoted respect for each other's efforts, lowered performance anxiety, and facilitated a willingness to try new behaviors.

Clients were encouraged to notice their own and others' learning styles. A list of learning strategies was posted on the "Let's Get Organized" bulletin board and in the participants' personal files. When a new learning style captured a client's attention, he or she was encouraged to practice it and describe its effectiveness to the group. One of the favorite learning styles was "cheating," which was looking at what someone else was doing before starting a work sheet or activity. Many group members identified cheating as a negative trait; for them, being encouraged to "cheat" provided a supportive, novel, and playful atmosphere for learning. Clients were allowed to redo their work sheets until they were satisfied with results. If, for example, they liked their work sheets to be neat and erasure free, they did them over if they made a mistake. When they redid them they usually added more detail because they had learned additional information.

To make the activities meaningful we tied them to clients' daily lives. For example, in one session they looked at their personal energy levels and circadian rhythms, and compared these to the activity energy levels needed for various activities they performed during the day (e.g., they could have low energy for watching TV or looking at a magazine, but needed high energy for taking a test or going on a job interview). They discussed how the intersection of energy level and activity demands either helped them complete a task more easily or required them to make more effort. They then tried to arrange their schedules to more closely match their energy levels and circadian rhythms with various activity requirements. As a result, some began studying during a time of day when their energy was high. For those who could not change their activity times to match energy levels, it was helpful to understand why certain tasks required more energy than they expected.

Stage 5: Homework

For homework, members used their appointment books daily, and this new habit was reinforced in the residential community at large. For example, the counselors began asking participants to add information to their appointment books during their individual sessions. Other homework was stimulated by the work sheets or activities.

Stage 6: Closing
The sixth and final stage involved cleaning up materials and returning work sheets to the files. A motivator for completing these tasks was the anticipation of being informed of the next group topic. The group ended with the Serenity Prayer.

**Results**

The participants made a list of things they needed to do for the day and week, and used the list to accomplish their tasks. The list could be attached to their appointment books by using sticky notes or binder clips for easy access and revision or replacement. They felt both more productive and more in control of managing their days by checking off their accomplishments, which helped build positive habits to be used in many aspects of their daily lives, such as homemaking, working, or managing and maintaining their health (e.g., complying with medications, keeping medical and psychiatric appointments—both of which improved).

Punctuality among the participants improved over time. All clients initially requested that they be reminded of each group and sent for at the group time. One by one they stated that they no longer needed to be reminded and were able to show up on time by using the techniques taught in the groups. All of the participants kept their appointment books beyond the 10-week session. Participants commented that they realized how many appointments they had missed before they started using their appointment book regularly. No one lost, sold, or gave away his or her appointment book.

Of the 35 participants, 16 completed pre- and posttest nonstandardized outcome measures, at the beginning of the first group session and at the end of the final session. The remaining 19 participants were discharged, graduated, or sent for training or schooling before completion of the group.

We used two assessments to measure outcomes. The Time Management Knowledge Scale (TMKS) from the *Living Skills Recovery Workbook* consists of six open-ended questions and is designed to assess time management skills. A Time Management Behavior Scale (TMBS) was designed for use with this therapeutic group by the lead author and researcher Anne Riley, PhD, of the Bloomberg School of Public Health at Johns Hopkins University in Baltimore.

The TMBS consists of four questions, each with a 5-point Likert scale. Paired sample t-tests comparing pre- and posttest scores for the TMKS and TMBS indicated improved knowledge in time management skills. Participants had a statistically significant improvement in scores on the TMKS after participating in the group intervention. These results support the efficacy of group intervention for improving knowledge related to time management. We did not see a statistically significant improvement in the TMBS, which may be due to Type II errors (small sample size) and the limited number of items on the scale.

**Conclusion**

During the period in which the "Occupational Therapy—Let's Get Organized" life skills group was taking place, all clients who entered Starhill were enrolled in a 4-week calendar workshop. The workshop was helpful both as an engagement activity and as a skill-building course. Clients would immediately practice using an appointment book to organize daily schedules and increase individual responsibility and accountability; prioritize; explore the concepts of personal energy levels and cycles; and identify leisure options for sobriety. The calendar workshop provided an opportunity for clients to experience a sense of achievement, which in turn contributed to a higher sense of efficacy and self-esteem. It also meant that all the residents of the facility began to carry and use appointment books, keeping track of appointments, classes, assignments, and other important information that they had previously ignored, forgotten, or missed.

As a result, functioning improved in the resident-run aspects of the facility, which was structured so that clients managed some aspects of each of their units. Those in the Let's Get Organized group began reporting that they had used a new skill learned in the group, such as list making, to keep track of their work. They also began checking to see if they could work a particular shift by looking in their appointment books rather than just saying "yes" without checking.

The occupational therapy intervention described provided this population with practical skills needed in everyday living and directed the focus of recovery on creating stable routines, keeping track of time and appointments, becoming organized, and following through with responsibilities.

**References**


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_Stacey-Anne Meade and Lori Hadar_ completed this research as part of the Master's Project Sequence and were awarded the SUNY Downstate Medical Center Occupational Therapy Program Research Award for 2006.

**Reference Information:**


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