5

Treatment Groups for Functional Skills

with Jennifer Joy Hunsaker, Patricia Briody, and Erika E. Ehlert

Amalgamation of eclectic treatment modalities enhances the neurorehabilitation and recovery for survivors of acquired brain injuries (ABIs) during the post-acute phase of recovery. Incorporating group therapies and activities that emphasize functional competence effectively prepares them for society or the "real world," specifically in the home, community, work, and school environments (Ben-Yishay & Diller, 2011; Klonoff, 2010; Malley, Bateman, & Gracey, 2009). They lend themselves nicely to experiential learning to heighten (Ben-Yishay & Diller, 2011; Klonoff, 2010; Malley et al., 2009):

- Awareness
- Self-understanding
- Emotional control and adjustment
- Peer exchanges
- Practical stepwise goal setting
- Establishment of subroutines that enable mastery
- Generalization of clinic-originated compensations

The atmosphere should breed social connections, collaboration, and sharing that is enjoyable, comfortable, and normalizing (Ben-Yishay & Diller, 2011; Klonoff, 2010; Malley et al., 2009). Functional groups have extra appeal to patients who otherwise may not see the practicalities of clinic-based interventions. This chapter describes an array of group physical therapies (aquatic therapy and adaptive balance and yoga groups), speech therapy groups (event planning, newsletter group, and a vocational group), and occupational therapy groups (a cooking group and community outings group).

Assessing and Treating Functional Skills at the CTN

General Overview and Goals

Functional group therapies at CTN have expanded over the years, as therapists, patients, families, and third parties came to recognize the importance of transitioning more "artificial" clinic-based interventions into ecologically valid pursuits in the home and community. Currently, the CTN offers 22 different groups across all programs, most of which are practical (see Chapter 1, Figure 1.2). Given the concrete relevance of these groups to patients' aims, they voice considerable appreciation and meaning from such endeavors. These groups are also perfect for increasing survivors' (and their support networks') awareness, acceptance, and realism as all parties can see for themselves how patients' day-to-day needs and aspirations are truly affected. This accelerates trust and buy-in toward the clinicians' know-how for neurorehabilitation and compensation training.

Structure and Process

Functional abilities are addressed throughout holistic milieu neurorehabilitation and is done judiciously. The interdisciplinary team generates ideas about what groups to enroll a survivor in during team meetings using the intake evaluation findings and ongoing clinical needs as the impetus. These are included in the plan of care. Insight and physical, cognitive, language, and emotional capabilities to actively engage are important precursors. Patients and caregivers have say-so into what groups are joined, as this boosts motivation. At times, insurance limitations influence what groups they can attend; there is also a reasonable self-pay rate that participants (and their families) can access to enrich their options. Ancillary community resources are also offered.

Protocol

Increasing functionality is accomplished through interventions in the clinic in combination with community-based applications. The physically based groups described in this chapter are innovative adjuncts to our motor group, which improves cardiovascular endurance using indoor exercise equipment (e.g., treadmill, elliptical, stationary cycle, and stepper) while engaging in cognitive games. Domain-specific groups allow inventive and targeted skill building while still addressing the overarching goals of metacognition, social interactions, and confidence in diverse contexts.

Aquatic Therapy in Post-Acute Neurorehabilitation

Aquatic therapy provides somatosensory inputs and enhances cortical processing of sensory and motor information (see Zhang et al., 2016, for a review). The physical characteristics of water, including its natural buoyancy, hydrostatic pressure, thermodynamics, hydrodynamic forces, and viscosity, lends itself nicely to aquatic exercise (also known as hydrokinesitherapy or hydrotherapy) after stroke as it allows easier body support than on land (Wang

et al., 2018; Zhang et al., 2016). Meta-analyses and quasi-experimental studies for stroke and other neurological entities demonstrate a reduction in muscle spasms and contractures and improvements in neuromuscular function like gait speed and independence, postural and dynamic balance, spasticity, knee extensor and ankle plantarflexion muscle strength, as well as contraction of the knee extension in paretic lower limbs (Marinho-Buzelli, Bonnyman, & Verrier, 2015; Noh, Lim, Shin, & Paik, 2008; Xie et al., 2019; see Zhang et al., 2016, for a review). Also, aquatic therapy can reduce tension, depression, anger, and confusion (see Wheeler, Acord-Vira, Arbesman, & Lieberman, 2017, for a review).

Aquatic Therapy Group at the CTN

General Overview and Goals

The aquatic therapy group provides a valuable supplemental physical therapy modality to address swimming capabilities incorporating water safety education and various strokes. The CTN has access to a hospital pool; other post-acute neurorehabilitation settings may need to find a community pool venue. The group improves:

- Range of motion and flexibility
- Balance and coordination
- Muscle strength and endurance
- Tone
- Speed of movement and aerobic capacity
- Weight bearing and ambulation

Complementary objectives are to lessen stress and promote relaxation, foster group relations, and explore swimming as a possible recreational pastime. Suitable patients have some level of hemiparesis as a result of their ABI and benefit from being able to weight bear and ambulate due to the buoyancy of the water.

Structure and Process

The aquatic therapy group is scheduled once per week for 60 minutes. Useful equipment includes masks, kick boards, and other flotation devices. Two sessions are devoted to those with pool access who solely require a Home Exercise Program (HEP) formulated from Physiotec, a computer-based resource (*http://physiotec.ca/us/en/patient-engagement*), or MedBridge (*www.medbridge.com*). For more extensive interventions, up to 8 weeks is recommended. Most often, a physical and occupational therapist treat two to three survivors and switch halfway to target different muscle groups in the extremities. From a safety standpoint, we recommend having two clinicians present and an accessible waterproof phone.

Protocol

Caregiver instruction is a crucial part of aquatic therapy group, as many homes and/or recreation centers have pools. First is a review of pool safety and any other pertinent preparation,

TABLE 5.1. Sample Aquatic Therapy Group Exercises

Stretches

- Standing gastroc
- Standing soleus
- Seated hamstring
- Seated shoulder horizontal adduction
- Seated shoulder flexion

Strengthening

Exercise	*What it targets*
• Standing hip flexion • Standing hip extension • Standing hip abduction • Standing hip adduction	• Weight bearing • Hip strength • Balance
• Standing shoulder flexion • Standing shoulder extension • Standing shoulder horizontal abduction • Standing shoulder horizontal adduction	• Shoulder strength • Range of motion (ROM)

Cardiovascular

Exercise	*What it targets*
• Marching • Hopping	• Endurance • Balance
• Walking in a circle and then walking in the opposite direction for increased resistance	• Endurance • Ambulation
• Flutter kick • Frog kick	• Coordination • Lower extremity ROM
• Combine upper and lower extremities for freestyle stroke • Combine upper and lower extremities for crawl stroke	• Coordination • Multitasking • Strengthening

followed by 10 minutes of warm-up exercises; 20 minutes of upper extremity workout; 20 minutes of lower extremity training incorporating ambulation; followed by 10 minutes of cool-down. If fitting, the patient engages in cardiovascular endeavors. Heart rate and blood pressure are taken poolside. Table 5.1 contains a sample of aquatic therapy group exercises. Participants are discharged from the group when they have achieved their individual goals, as measured by increased mobility and/or ambulation distances on land.

Adaptive Tai Chi in Post-Acute Neurorehabilitation

Tai chi ch'üan, an ancient martial art that originated in China, incorporates internal energy and soft, slow, and gentle movements, in conjunction with cognitive techniques (Gemmel & Leathem, 2006; Shapira, Chelouche, Yanai, Kaner, & Szold, 2001). Added plusses are balance, coordination, muscle tone control, and muscular strength, thus reducing abnormal hypertonicity and improving muscle weakness (Shapira et al., 2001). *Tai chi ch'üan* also reduces falls by promoting kinesthetic sense, balance, and coordination (Shapira et al., 2001). These elements, as well as its positive effect on mood (less tense, afraid, confused, angry, and sad; and more energetic and happier), self-esteem, and a reduction in stress,

augment functional capacities after traumatic brain injury (TBI) (Blake & Batson, 2009; Gemmel & Leathem, 2006; Shapira et al., 2001).

Therapeutic Balance Group at the CTN

General Overview and Goals

The therapeutic balance group incorporates modified, basic tai chi movement patterns for small groups with varying physical limitations. Typical brain injury etiologies are TBI and cerebrovascular accidents (CVAs) when survivors weight bear with or without assistance. Movements incorporate the right and left sides of the body and tackle strength and sensory deficits in a calming therapeutic atmosphere. Goals are to improve:

- Weight shifting
- Weight bearing on the affected side
- Single-leg stance
- Balance and coordination
- Flexibility
- Posture
- Body awareness and relaxation
- Direction following and multitasking

Structure and Process

The therapeutic balance group meets weekly for 45 minutes and is led by a physical therapist(s) and other disciplines, such as occupational therapists. Patients may receive one-on-one assistance if their physical difficulties warrant this; otherwise, generally, each clinician monitors two to three participants with a comfortable group size of six to eight. Participants generally attend therapeutic balance group for up to 12 weeks.

Protocol

The group format is initial posture techniques, stretching, and then modified tai chi movement patterns. Survivors learn to control movements of their body's center of gravity. The slow, continuous, even rhythm of the movement facilitates sensory and motor integration and awareness of their external environment. The emphasis on maintaining a vertical posture enhances postural alignment and orientation. There is continuous weight shifting from one leg to the other, which enables balance control, motor coordination, and lower extremity strength. Large dynamic flowing and circular movements of the extremities promote joint range of motion and flexibility. The modified tai chi movement patterns incorporate purposeful activities such as reaching forward. Patients' balance is further challenged by performing all movements on an uneven surface (a 2-inch mat), incorporating hand and ankle weights.

Patients are discharged when they can execute all movement patterns to the best of their abilities, ideally incorporating single leg stance. Table 5.2 contains a sample of therapeutic

TABLE 5.2. Sample Therapeutic Balance Group Movements

Name of movement pattern	Description of movement
Tai chi Step-Out/Holding the Ball	• Facing forward, the patient steps out to the right, knees flexed. • Shoulder flexion to 90 degrees. • Arms are in position as if holding a large ball.
Tai chi Circling the Ball	• Patient turns 45 degrees to the right. • Circles a ball with his/her arms in unison.
Tai chi Lunge	• Facing forward, the patient shifts his/her weight onto the left leg. • The left arm reaches out to the side and the right arm is down at his/her side. • Turn 90 degrees to the right with the right arm reaching out in front and the left arm down.
These first three movement patterns are then completed on the left.	
Tai chi Sweep	• Right arm shoulder flexion until 180 degrees. • The left leg kicks forward and circles backward. • The left leg is placed on the ground. • Alternate the sequence.
Tai chi Crane Takes Flight	• Facing forward, the patient steps out to the right; the left foot is placed forward or off the ground, maintaining a single leg stance. • Bilateral arms come out to the side to 90 degrees. • Alternate the sequence.
Tai chi Stable and Open	• Facing forward, the patient steps to the right. • Turn his/her body to the left, pivoting with the left foot forward and arms held above his/her head. • Alternate the sequence.

balance group movements. Informative references with photos and other resources, including music suggestions, are provided in Yu and Hallisy (2015) and Yu and Johnson (1999).

Adaptive Yoga in Post-Acute Neurorehabilitation

Yoga is an ancient practice, with roots in the Hindu religion; it describes the union between the mind and body encompassing postures, breathing exercises, and meditation (Meyer et al., 2012). It has been used to treat neurological disorders related to its aerobic, breathing, and meditative components (Meyer et al., 2012). There are multiple styles, and it is considered safe and well tolerated with few side effects when modified and done correctly (Meyer et al., 2012).

Randomized controlled trials of yoga have shown promise in the treatment of neurological disorders, like epilepsy and TBI, with better respiratory function and self-perceived physical and psychological well-being (Meyer et al., 2012; Silverthorne, Khalsa, Gueth, DeAvilla, & Pansini, 2012). Qualitative and case studies of clinic and community-based yoga and mindfulness interventions have reported gains in physical performance (e.g., balance, balance confidence, range of motion, lower extremity strength, endurance, and

walking); psychological well-being (e.g., emotional regulation, stress management, belonging, and meaningful relationships); mental fatigue; and community reintegration after TBI and stroke (Donnelly, Goldberg, & Fournier, 2020; Johansson, Bjuhr, & Rönnbäck, 2012; Schmid, Miller, Van Puymbroeck, & Schalk, 2016). Others have incorporated a yoga-based mindfulness group intervention in residential programs for survivors of TBI with positive benefits on overall and physical health, pain management, relaxation, mood, focus, impulsivity, disinhibition, awareness, and self-reflection (Combs, Critchfield, & Soble, 2018).

Adaptive Yoga Group at the CTN

General Overview and Goals

The adaptive yoga group emphasizes stretching and strengthening using yoga and Pilates poses. It is designed by physical and occupational therapists for survivors with varying physical limitations. Its goals are to improve:

- Balance, coordination, core strength, and flexibility
- Weight bearing, spasticity, and tone
- Body awareness, postural stability, and motor planning
- Endurance
- Auditory processing and following directions
- Deep breathing and relaxation
- Social interactions in groups

Structure and Process

The adaptive yoga group meets weekly for 45 minutes and is run by occupational and physical therapists; our dietitian with a fitness background also helps out. The group accommodates up to eight persons and they receive one-to-one assistance as needed. Patients participate for up to 12 weeks.

Protocol

Patients are discharged when they have demonstrated better flexibility and increased awareness of breathing techniques and their role in relaxation. Figure 5.1 encapsulates sample

• Cat pose	• Seated forward bend
• Child pose	• One leg seated forward bend
• Mountain pose	• Seated spinal twist
• Tree pose	• Cobra pose
• Staff pose	• Butterfly pose

FIGURE 5.1. Sample adaptive yoga group poses.

poses; the number and level of difficulty are determined based on group membership. See Ansari and Lark (1999) and Bondy (2019) as references, complete with photos.

Cooking Skills Training in Post-Acute Neurorehabilitation

Evaluation of functional capabilities is usually the purview of occupational therapists. Assessment tools include questionnaires, such as the Community Integration Questionnaire (CIQ; Willer, Ottenbacher, & Coad, 1994), testing of instrumental tasks like simple cooking, using the telephone, managing medications, and paying bills using the Executive Function Performance Test (EFPT; see Baum et al., 2008, for a review), and a semistructured interview, for example, the Canadian Occupational Performance Measure (COPM; *https://eprovide.mapi-trust.org/instruments/canadian-occupational-performance-measure*). Some investigations have identified efficiency challenges and errors in meal preparation in brain tumor and stroke survivors, implicating frontal lobe dysfunction, motor deficits, and aphasia (Godbout, Grenier, Braun, & Gagnon, 2005; Poole, Sadek, & Haaland, 2011). Some holistic programs have incorporated meal preparation in a group format to develop practical knowledge, gain self-confidence, and share experiences and strategies (Malley et al., 2009).

Cooking Group at the CTN

General Overview and Goals

The cooking group is integral to preparing survivors of ABI for greater self-sufficiency in the home as part of community reintegration. It is for higher-level patients who have met the basic cooking objectives through occupational therapy and who are ready for a group project that will better simulate family life and eventually competitive employment. The group motto is "fun, fluid, and flexible." At the outset, participants are provided with a purpose sheet to explain the group's aims:

- Plan a brunch or dinner meal based on dietary guidelines and time constraints.
- Shop for groceries using paper or electronic checklists.
- Set and follow a budget.
- Safely prepare the meal.
- Implement compensations and adaptive equipment.

Structure and Process

Our cooking group is led by two occupational therapists with generally four to five participants. The group usually spans 3 weeks. It encompasses one or two 45-minute planning sessions, including constructing a shopping list; a 1- to 1.5-hour shopping excursion where patients are each assigned a portion of the ingredients; and a 2- to 3-hour cooking experience, also including eating together, cleanup, and a debriefing.

As part of orientation to the cooking group, everyday examples of skills are reviewed:

- Planning and organization: getting together all ingredients in advance and planning when to cook what dishes so that they are completed at the same time
- Focused attention: making sure food is cooking properly (e.g., not boiling over or burning)
- Flexible thinking: lowering the heat if food is cooking too quickly
- Multitasking: preparing several parts of meals at the same time, while possibly doing something else (e.g., washing dishes, laundry)

Besides building cooking abilities, the format provides chances to remediate team behaviors, namely, communication pragmatics and higher-order cognition, visuoperceptual skills, memory, and various executive functions such as sequencing, planning, flexible problem solving, and time management, in a more distractible and simulated "real-life" environment.

Protocol

Participants coordinate with their primary occupational therapists at the time of enrolling in the group so as to personalize their goals for menu planning, grocery shopping, and cooking (see Form 5.1 for a generic list).

Specific tasks are delegated by the group leaders, based on the patients' proficiencies and home ambitions. They are provided with individualized memory assignments so as to practice their datebook use. For example, for the second planning meeting, each person is asked to bring in a pasta recipe that the group then votes on for selection. Recipes are normally for a one-dish casserole and a salad. Nutritious choices like lean proteins and vegetables are underscored, in accordance with education during the healthy living module of the psychoeducation group (see Chapter 3). While shopping, survivors are exposed to relevant and user-friendly apps for price comparisons, coupons, and grocery lists (see Appendix 5.1 on the book's companion website for a description).

After the cooking exercise, and while eating together, time is designated to do a *post hoc* analysis regarding what went well with the whole process versus observed obstacles. Note-taking on germane concepts is always reinforced. Future time-savers for workers are reviewed, including Instant Pot, crockpot, and air fryer options, preparing meals in advance and preapportioning frozen dinners, purchasing prechopped fruits and vegetables, and regular menu planning during family milieu meetings (see Chapters 8 and 9 for a more in-depth description of family milieu meetings; see also Klonoff, 2010, 2014). Realms for improvement are relayed back to the primary occupational therapists to be further addressed in individual sessions and/or home visits. Concomitantly, any communication pragmatic, behavioral, and/or mood problems are directed to the speech therapist and psychotherapist. At the completion of the group, a folder with recipes and menus based on prior recipes is provided for participants to institute at home as well as a list of resources, including helpful apps for meal planning, shopping, and food logs (again, see Appendix 5.1 at the book's companion website).

Event Planning Training in Post-Acute Neurorehabilitation

A review of the literature indicates a dearth of programming and research on event planning opportunities for survivors of ABI, other than at the CTN. In our clinical experience, an event planning group blends multimodal skills with good applicability to real-life opportunities in a festive atmosphere.

Event Planning Group at the CTN

General Overview and Goals

The event planning group arranges and executes a holiday party every December. Patients are presented a purpose sheet that is reviewed at the outset of each meeting, namely, to improve:

- Executive functions: planning, organization, decision making, judgment, time management, and creative problem solving
- Language and communication: auditory comprehension, verbal expression, and communication pragmatics
- Interpersonal interactions and teamwork
- Memory by using strategies: a datebook, checklists, and notes

Everyday applications are identified as planning a party for a friend or relative, or a vacation, organizing some sort of community happening (e.g., for charity), and/or participating on committees at school or work. This undertaking also reinforces the importance of showing gratefulness to others by recognizing the efforts and dedication of survivors' support networks through a celebration.

Structure and Process

The event planning group holds four weekly 45-minute sessions during the preparation phase. Given that this group recurs yearly, it is advisable to devise a formalized structure for the workload. This includes checklists with the specific time line and what duties are to be completed by what date by participants and therapists, especially on the day of the festivities. This reduces the stress on everyone and facilitates a smooth execution. Of note, clinicians running this group represent the interdisciplinary team: neuropsychologists/rehabilitation psychologists; speech, occupational, physical, and recreational therapists; and the dietitian. They are assigned based on the necessary patient-to-clinician ratio and the application of their expertise to the tasks at hand. There are typically 15 survivors involved.

The event planning group encompasses several committees:

- Decorations: their selection and display
- Invitations: design decision by a participant who possesses all the pertinent information on the event

- Entertainment: choice of games and music
- Emcee: composing a welcome speech and selecting a raffle announcer
- Fundraising: raising money to pay for any guest speakers
- Marketing: creating announcements to be made during milieu sessions and family group
- Greeters: needed on the day of the get-together
- Food: sign-ups by patients, relatives, and therapists for appetizers, sides, salads, and desserts

See Figure 5.2 for sample checklists. Survivors are carefully selected for committees based on their strengths, challenges, and neurorehabilitation goals. Typically, those with higher-level academic and vocational aspirations are assigned to lead subcommittees and for more complex planning endeavors, for instance, crafting an invitation and planning the time line for the day of the party. All tasks are completed in-house, including most of the food preparation, to lessen costs.

Protocol

On the party day, traditionally, the festivities start with a presentation by a local wildlife organization that rescues and rehabilitates injured birds. These birds are unable to be released back to the wild and therefore have a "new vocation" or Plan B (Klonoff, 2010). Money is raised by the patients using a raffle system to cover the cost of the speakers. Survivors, their relatives, and some therapists attend the presentation. Participants are required to complete homework, whereby they learn and recall certain facts and, importantly, relate the material to their own recovery journeys. See Form 5.2 for sample homework questions and Figure 5.3 for customized answers based on the wildlife group's presentation. The form can be a prototype for any outside presentation or media event (e.g., a movie) that promotes self-discovery and gratefulness. After the presentation, patients, families, the staff, and selected hospital and community invitees share a smorgasbord meal, socialize, and engage in a raffle. Games and holiday activities are provided for children, such as decorating gingerbread cookies.

Postevent, the group clinicians and survivors meet for one more 45-minute session for a *post hoc* review of what went well and what can be improved upon; supplemental feedback is obtained during a team meeting, milieu session, and family group. Patients are encouraged to actively partake in the discussion, as this fosters reflective thinking, problem solving, and ownership, especially when things go awry and compensations must be adapted.

Newsletter Group in Post-Acute Neurorehabilitation

Participation in a project-based newsletter group gives the unique opportunity to practice cognition and language, such as reading, writing, comprehension, prospective memory, and executive functions, as well as strategizing in a social atmosphere (Malley et al., 2009).

Invitations Procedures

Goal: Create an invitation for the holiday party and report RSVPs to the group.

Step	Task	Date Completed
1.	List details needed in the invitations.	
2.	Use ideas generated in the group to create an invite (in a one-on-one speech therapy session).	
3.	Review a draft of the invitation with the lead speech therapist (needs to be finalized by [DATE] and have printed before the next event planning group session).	
4.	Update dates to include in the invitations (for guests in departments outside of the CTN).	
5.	Print letters.	
6.	Stuff envelopes (can get help during the next event planning group session).	
7.	Put labels on envelopes.	
8.	Create and/or give the RSVP tracking sheet to the front office secretary.	
9.	Check on the RSVP list weekly.	
10.	Make announcements in milieu sessions to RSVP by the deadline.	

Decorations Procedures

Goal: Make the unit look festive for the holiday party.

Step	Task	Date Completed
1.	Take inventory of the decorations.	
2.	Decide on centerpieces for the tables.	
3.	Assemble and decorate the tree in the lobby.	
4.	Assemble and decorate the tree in the milieu room.	
5.	Check to make sure hangers are on the windows in the milieu room, physical therapy gym, lunchroom, occupational therapy gym, and hall windows.	
6.	Hang decorations on the windows throughout the CTN.	
7.	Hang wreaths on the doors.	
8.	Put tablecloths and centerpieces on the tables on the day of the party.	

(continued)

FIGURE 5.2. Sample holiday party checklists.

Time Line Procedures

Goal: Create a time line and schedule of volunteers for the holiday party.

Step	Task	Date Completed
1.	Generate a list of patients and therapists to help during the party.	
2.	Create/print a sign-up sheet to obtain a list of patients and therapists who are not in the event planning group but who want to help at the party.	
3.	Make announcements and pass around the sign-up sheet in milieu sessions twice per week.	
4.	Use the blank party time line sheet (see below) and work with the therapist to identify which patients and therapists will help at the party (select at least one patient and one therapist for each area).	
5.	Have the therapist make copies of the time line to give to each patient and staff member helping at the party.	

CTN Holiday Party Time Line

Time	Event	Location	Participants	Comments
10:00–10:40 A.M.	Set-up	Gym, milieu room, lobby, lunchroom, kitchen		
11:45 A.M.	Meet wildlife presenters	Third floor of parking garage		
12:00–12:15 P.M.	Greeting and nametags	CTN lobby		
12:15–1:15 P.M.	Emcee welcome speech	Milieu room		
	Wildlife presentation	Milieu room		
	Party set-up (therapists only during presentation)	Gym, lunchroom, kitchen		
	Greetings and nametags	CTN lobby		
1:15–2:45 P.M.	Lunch (serving food)	Gym, lunchroom		
1:15–2:15 P.M.	Raffle ticket sales	Gym		Include two therapists and one patient for each shift
2:15–2:45 P.M.	Raffle	Gym		Need two therapists and two patients
2:45–3:45 P.M.	Clean		All available therapists	

Photographer: (NAME)

FIGURE 5.2. *(continued)*

Name: _____ Date: _____

Complete these questions following the Liberty Wildlife [Name] presentation. Turn them in to Anita [Name] before or during the milieu session on Monday December 17, 2021 [Date].

1. List three facts you learned from the presentation.

- Bald eagles can have neurological problems from eating lead.
- Falcons need night vision.
- Birds of prey are larger and faster.
- Owls have 14 bones in their necks and can turn around to see behind themselves.
- This organization has helped 10,000 birds.
- If I find an injured bird, I can call this organization and they will come and get the bird.
- Only 60% of the injured birds can return to the wild.

2. What did you like best about the presentation?

- The presenters walked around so we could see the birds up close.
- The reminder that part of nature is injuries and recovery.
- The kindness and dedication of the presenters who volunteer so much of their time.
- The birds were able to adapt to their disabilities.

3. Name three ways the information you heard in the presentation relates to your recovery.

- We and the birds got a second chance after our injuries.
- Getting help sooner means a quicker recovery.
- We and the birds are recovering so as to be on our own again.
- Education about injuries increases knowledge and compassion in others.
- Like us, after a head injury, the birds have different personalities.
- Life is different after a serious injury and it takes a treatment plan, steps, and compensations to make improvements.
- After an injury, you can learn to live with your new situation and have a good life.
- It is OK (for the birds and for us) to lean on others while we recover.
- Healing is a process and there needs to be a special plan for each entity to rehabilitate properly.
- Only release the birds and us if the environment is safe.
- We and the birds are still lovable after our injuries.
- Like us, there is maybe a Plan A, back to where we were, or else a Plan B, doing something different, but fun and with a purpose.

4. What are you going to do to show compassion this holiday season?

- Be present and social.
- Be mindful of my mood and have an optimistic and upbeat attitude.
- Say encouraging words to others.
- Treat others with kindness and understanding since I don't know what they might be dealing with.
- Do more at home to help out (e.g., cook).
- Give more to our families who are giving so much to us.
- Pay extra attention to other injured people.
- Volunteer at a food bank.
- Be more grateful for what I have and "pay it forward."

FIGURE 5.3. Liberty Wildlife Presentation Homework.

Newsletter Group at the CTN

General Overview and Goals

The newsletter group produces the CTN newsletter "Things Take Time" (T.T.T.), which is distributed at semiannual CTN graduation ceremonies. The patients are presented with a purpose sheet that is reviewed at the outset of each meeting, namely, to improve:

- Executive functions: planning, organization, time management, judgment, reasoning, prioritization, and decision making
- Language and communication: reading, writing, auditory comprehension, verbal expression, and communication pragmatics

Structure and Process

Our newsletter group is scheduled for one 45-minute session per week and spans 3 weeks. It is run by speech therapists; as this group is highly language-based, other disciplines cotreat. Usually, there are up to 10 participants with a 2:1 or 1:1 patient-to-clinician ratio, based on needs. Given that this group recurs semiannually, it is advisable to devise a formalized breakdown of the workload. This includes preplanning assignments and contributions as well as the time line for completing a rough draft and final copy of the newsletter. Time is taken each session to allow for memory assignments to be entered into paper or electronic datebooks. This expedites a smooth execution as well as nice variation in content. See Figure 5.4 for sample newsletter contributions and responsibilities.

After consultation with his or her speech therapist, each patient is assigned a newsletter portion based on strengths, difficulties, and neurorehabilitation objectives. Speech therapy and/or psychotherapy sessions are utilized for extra assistance and/or to meet deadlines. In general, one survivor with higher-level academic and vocational ambitions is selected as the "guest editor" to stretch higher-level thinking. This person leads conversations and organizes the voting for the newsletter's cover design and color scheme. The guest editor compiles the quotes submitted by group members and determines a system for ranking the top five contributions; he or she then leads the weekly update. Afterward, the guest editor gathers assignments, provides basic corrections to group contributors, and brainstorms vis-à-vis the layout and format of the newsletter with the speech therapists.

Protocol

During the first newsletter group, the purpose, background, and import of the newsletter's name are reviewed. On a ceramic plaque, which was a gift from a visitor from Denmark, is displayed a *grook* by Piet Hein (2004), a Danish scientist, translated as "When you feel how depressingly slowly you climb, it's well to remember that Things Take Time." In addition to specific assignments, all participants are asked to find two inspirational quotes and one idea for the cover design. Newsletters from prior years are examined to generate ideas. Participants are then presented with a planning worksheet on which they record due dates

for their rough drafts and finalized contributions, along with all other group members' projects.

An advantage of this group is peer input. Each week, patients must be prepared to provide verbal updates about their specific contribution. Consensus voting is utilized to decide on the quote, as well as the cover design and color scheme. The members collaborate to create a word search puzzle using CTN lingo. During the third session, there is a peer editing exercise, in which survivors exchange their submissions with other members to provide and receive suggestions. Final due dates are agreed upon, and then memory assignments are given, of which electronic versions are turned in to the patients' speech therapists. The layout and content of the newsletter are finalized by the guest editor and a speech therapist. The newsletter is dispersed to all attendees at the graduation ceremony. See Appendix 5.2 at the companion website for sample newsletter pages.

Staff Roster: Compile a list of the current CTN staff.

Quotes: Submit an inspirational quote you have heard or create one of your own.

Poems: Create a poem about your journey through neurorehabilitation, fellow patients, therapist(s), friends, life, love, or anything you like. If you do not want to create your own poem, you may submit a poem written by someone else.

Community Outings Group: Write a summary about your favorite community outing. Why was it your favorite? What did you learn? Do you or someone else have any pictures that could be included in the newsletter?

Words of Thanks: Is there someone you would like to thank for helping you through your neurorehabilitation process? Write a paragraph thanking, for instance, your family, another patient, staff member.

Patient Perspective: Tell your story and share your perspective on a topic such as your recovery from your brain injury, how attitude can make a difference, your experiences at CTN, and the like.

Interview: Interview another patient or staff member. Share, for example, his/her background, why he/she is at CTN, goals for the future, how CTN is helping to achieve those goals.

Situational Assessment: Write a summary about your situational assessment. How did it prepare you to return to work? What did you learn from it?

Poll: Find a topic of interest and ask patients how they feel about it. Examples are one of your group therapies, current news events, and so on.

Create a Word Search Puzzle: Think of words related to your therapies and recovery using CTN vocabulary and generate a puzzle.

Recipe: Does your family have a favorite recipe? Are you following a special tradition when making it? Share the recipe and your thoughts about it.

Song Lyrics: Choose a song and write a paragraph explaining why it is inspiring to you.

Top 5/Top 10: Compile a "best of" list for the year on the topic of your choosing (movies, books, memorable moments, etc.).

FIGURE 5.4. Newsletter contributions and task responsibilities.

Community Outings in Post-Acute Neurorehabilitation

A central premise of post-acute neurorehabilitation, especially in holistic milieu programs, is incorporating doable pursuits into naturalistic settings. This enables discovery-based and experiential learning (Malley et al., 2009). Community outings provide a safe and supportive way to generalize clinic-initiated compensations; address practical skills, namely, money management, directionality, and phone calls; and then connect these to salient capabilities and identity, like time management and leadership (Klonoff, 2010; Malley et al., 2009).

Community Outings Group at the CTN

General Overview and Goals

The history of community outings at the CTN has been provided previously (for details, see Klonoff, 2010; Klonoff et al., 2000). Given common alterations in patients' hobbies, interests, cognition, behavior, and functional status, community outings and their planning meetings are springboards for boosting survivors' comfort, mobility, communication, demeanor, and pathfinding in various "real-world" settings as well as exposing them to novel, interesting, and worthwhile leisure resources, especially if preinjury options are no longer viable (Klonoff, 2010; Klonoff et al., 2000).

Participants are provided with a purpose sheet that is reviewed during the outing planning session: to increase independence in the community so as to apply skills and compensations learned at CTN to community locales with friends or relatives. They each develop a list of goals, such as improving memory, directionality, executive functions (e.g., decision making, time management, planning, flexible problem solving, initiation, and follow-through), communication pragmatics, self-consciousness, aphasia (e.g., receptive and expressive abilities), behavior (e.g., self-monitoring and impulse control), and mood (e.g., irritability, depression, social anxiety, etc.) with concomitant strategies (Klonoff, 2010). (See Figure 5.5.)

Structure and Process

The community outings group meets midweek (Wednesday) for approximately 3 hours. A couple of days before (Monday), a 45-minute planning session is held. The group and planning sessions are transdisciplinary, incorporating speech, occupational, physical, and recreational therapists (Klonoff, 2010; Klonoff et al., 2000). At times, a neuropsychologist/rehabilitation psychologist or dietitian may attend, depending on the aims of the patients and the community destination. Based on the group mix and injury severities, the clinician-to-participant ratio ranges from 1:1 to 1:2, with a total of approximately six patients. Their readiness for participation in community outings group is determined by their core team and relevant physicians and is also appraised during team meetings. Given the acuity and severity level of many survivors' brain injuries, they will sometimes start with "mini community outings," with about two to three attendees and two therapists, to gradually reintroduce them to the community. Once their competency and adjustment increase, they are mostly invited to attend the larger planning and group outings. Patients generally attend four to eight outings.

Name:	Adam	*Name:*	Anna
Date:	9/16/21	*Date:*	11/3/21
Destination:	Breakfast restaurant	*Destination:*	Art museum
My outing job:	Time management	*My outing job:*	Directions
My Goals		**My Goals**	
Physical therapy	Scan to avoid traffic hazards and people in crowded areas.	*Physical therapy*	Use my walker while looking at the exhibit and navigate obstacles.
Occupational therapy	Stay within the budget.	*Occupational therapy*	Scan artwork carefully and pay attention to the details.
Speech therapy	Demonstrate appropriate table manners.	*Speech therapy*	Do a three-sentence write-up of my favorite painting.
Speech therapy	Stick to appropriate conversation topics and refrain from touching others.	*This relates to work because:* Improving my ambulation, scanning, and writing skills is important for returning to my prior position as a teacher's assistant.	
This relates to work because: Professional work behaviors and safe community mobility are necessary for getting and keeping a job in customer service.		*My outing responsibilities are:* ☐ Follow my phone GPS to get to the art museum using the light rail system. ☐ Direct the other outing members to the different exhibits using a museum map.	
My outing responsibilities are: ☐ Pay attention to how much time it takes to walk to the restaurant. ☐ Write down a time schedule in my datebook. ☐ Cue the group when it is time to leave.			

FIGURE 5.5. Sample goals for community outings group.

The group experience builds camaraderie and simulates social conduct in society, for instance, friendships, dating, and social event planning (Klonoff, 2010). Members also learn by observing and interacting with one another, including differentiating potential pitfalls contrasted with innovative tools. They also enjoy getting out of the clinic, as it is normalizing and fun, especially when they can gravitate back to aspects of their prior life and experience self-sufficiency and quality of life. Use of the datebook, and assistive devices for ambulation and communication, are continually strengthened, both for planning meetings and on the day of the outing.

Protocol

Figure 5.6 summarizes the general procedures for community outings group. Patients collaborate to decide on the outing destination; this breeds openness to viewpoints and

Therapists' Planning Phase

1. Therapists decide who is appropriate to join the community outings group during team meetings:
   a. Consider the therapist-to-patient ratio.
   b. Consider patient readiness and if the group objectives align with the patient's goals.
2. The goal sheet is passed around to the patient's core therapy team. Each discipline chooses specific goals for the patient to work on throughout the community outings group.

Outing Planning Session with Patients: Mondays for 45 minutes

1. Ideas for the week's outing are written on the board (rotate between restaurant, education, active, and life skills [REAL]).
   a. Patients use prior assignments and a resource list to generate and submit ideas.
2. One patient is assigned as the leader and he/she conducts a vote to determine the location of the community outing.
   a. Beforehand, participants review rules (patients get two votes and therapists get one vote).
3. The remaining jobs are distributed among the other patients (money manager, time manager, directions, etc.).
4. Each patient completes the duties for his/her job using task checklists and memory assignments. Therapists provide support.
   a. Part of the leader's job is to prepare a script to read during the next day's milieu session asking each group member to announce his/her job and goal, and how these relate to home and community independence, school, and/or work (see Form 5.3).

Community Outing: Wednesdays 9:00 A.M.–12:00 P.M. or 1:00 P.M.–4:00 P.M.

1. Patients come prepared with compensations and any items assigned during the outing planning session (water and a snack).
2. Patients review their feedback forms from their last community outing to reorient themselves to their target skills (see Form 5.4 and Figure 5.9).
3. Patients initiate their respective duties (making announcements, providing directions, etc.).
   a. They focus on their various goals and complete memory assignments throughout the community outing. Therapist support is provided.
4. Upon returning to the unit, patients are given a 10-minute rest break. During this time, the therapists gather to fill out rating forms for each patient.
5. Therapists meet one-on-one with patients to review the feedback form. The patient takes notes on his/her copy.
6. Patients are given a memory assignment to come up with ideas prior to the next outing planning session (by 9:00 A.M. on Monday).
   a. Therapists will indicate the type of outing (REAL) and what the budget will be.

Therapists' Outing Review Meeting: Thursdays for 45 minutes

1. Therapists meet to:
   a. Check off memory assignments completed by each patient.
   b. Discuss areas of strength and challenge for each patient.
   c. Choose patients' jobs for the following week; try to make sure everyone has a chance to do each job based on appropriate goals.
   d. Enter costs into the budget to track expenses.
   e. Decide which patients should be discharged and added.
   f. Prepare the schedule request for the following week.
   g. Decide which therapists will complete what documentation.
   h. If necessary, call in advance for information about the destination (e.g., adaptive rock climbing, stadium tours, etc.).

FIGURE 5.6. General procedures for community outings group.

compromise. Destinations rotate through four categories (Klonoff, 2010; Klonoff et al., 2000):

- Restaurants: affordable possibilities for breakfast or brunch
- Educational: museums, galleries, a university campus, hobby stores, bookstores, and so on
- Active: zoo, golf range, hiking, bowling, miniature golf, outdoor games at a nearby park, picnics, and the like
- Life skills: for instance, library, grocery store, pharmacy, shopping mall, farmers' markets, light rail and/or sky train trips, airport

Patients rotate through a series of "jobs" for the community outings (Klonoff, 2010):

- Timekeeper: watches times associated with leaving, destination activities, and returning to the unit
- Phone calls: obtains general information about selections, makes reservations
- Weather: looks for potential confounds due to precipitation and temperature
- Expenses: keeps choices within a set budget (ranging from no charge to $15 per person)
- Map and route: determines how to get to the location by foot or van
- Leader: oversees flow of events and instigates problem solving in the moment

Each of these duties has a checklist (see Figure 5.7). During the milieu session on the day preceding the community outing, the leader reads a script and is responsible for reviewing the destination and checking in with each participant regarding his or her job and goal during the outing, and how these relate to future community reintegration (see Form 5.3 that can be used to document such a script and Figure 5.8, a filled-in version of it). (See Chapter 8 for more information about milieu sessions.) This information is reviewed for everyone to hear, as it acquaints others with transitions to societal pastimes. It is also encouraging to newcomers who have not yet had the chance to venture outside the clinic.

At the completion of a community outing, patients and therapists meet for 15–30 minutes to debrief about accomplishments and obstacles. Each person receives written feedback on a Community Outing Skills Log, targeting areas for improvement (see Form 5.4 for a sample log and Figure 5.9, p. 192, a completed version of it). Patients are discharged from the community outings group when they have met their personal objectives.

Vocational Group in Post-Acute Neurorehabilitation

Critical to transitioning survivors of ABI to competitive employment is cultivating prework abilities in the neurorehabilitation clinic and then actively transitioning them to various jobs in the community (Klonoff, 2010). Approaches should include education, work preparation groups, simulated work projects, and volunteer opportunities to lay a foundation for

Directions Checklist				
Step	Procedure	Date of Outing		
1.	Use the internet to locate the address(es) for the destination(s).			
2.	Get directions from CTN to the outing destination(s) using the GPS on your phone.			
3.	Write assignments in your datebook for Wednesday and set alerts for time-sensitive assignments: a. "Bring water and a snack for the outing."			
4.	On the day of the outing, review last week's feedback and read through your job responsibilities. Set alarms and/or record memory assignments, if needed: a. Give clear directions to the driver on the way to the destination. b. Read your job and goals out loud when called on by the leader.			
Time Management Checklist				
Step	Procedure	Date of Outing		
1.	Create a tentative time schedule with a therapist.			
2.	Share information with the participants.			
3.	Write assignments in your datebook for Wednesday and set alerts for time-sensitive assignments: a. "Bring water and a snack for the outing."			
4.	On the day of the outing, review last week's feedback and read through your job responsibilities. Set alarms and/or record memory assignments, if needed: a. Wear a watch or carry a cell phone to keep track of the time line independently. b. Announce the tentative time schedule to the group before we leave or in the van. c. Before heading out, notify participants that if the group becomes separated at the destination, decide on a time and place to meet. d. Cue group members within 10 minutes before needing to head back to the unit.			
Leadership Skills Checklist				
Step	Procedure	Date of Outing		
1.	Discuss possible destinations and take a vote to decide on the final choice.			
2.	Work with a therapist for a backup plan.			
3.	Write a memory assignment in your datebook for Tuesday: "Read community outing script during the milieu session." a. Call on group members to announce their jobs and goals.			
4.	Write assignments in your datebook for Wednesday and set alerts for time-sensitive assignments: a. "Bring water and a snack for the outing."			
5.	On the day of the outing, review last week's feedback and read through your job responsibilities. Set alarms and/or record memory assignments, if needed: a. Gather all members in the kitchen before the outing and take roll call. b. Have each member read his/her job responsibilities aloud. c. Collect resources while on the outing and give these to the therapist as soon as we return to the unit (e.g., menu, brochure, etc.). d. During the drive back, lead the group in a discussion about the pros and cons of the community outing.			

FIGURE 5.7. Sample job checklists for community outings group.

I am the leader for this week's community outing. We are going to:

(location) the Phoenix Art Museum.

My goal for this outing is: Be flexible and patient with others and problem-solve if problems come up and this relates to my home and community independence / school / (work) (circle one) because: I will need to get along with coworkers and go with the flow when issues arise that I'm not expecting.

I will now call on my fellow group members to announce their jobs and goals:

	Job	Goal/Relationship to Community Independence/School/Work
1.	Jimmy: Directions	Read the directions to the van driver for the museum; reading and directionality are necessary for me to return to working for the delivery business.
2.	Annie: Time Manager	Track the times we leave the unit and when we need to return; I need to be punctual for work and keep track of my breaks.
3.	Celeste: Money manager	Let the therapist know after the meal how much it cost and how much a 20% tip would be; I need to track my expenses and function in a restaurant for when I go out with my family.
4.		

FIGURE 5.8. Completed Leader's Script for the Milieu Session.

realistic appraisal of work potential (Klonoff, 2010; Malley et al., 2009; Tyerman, Meehan, & Tyerman, 2017). After ABI, work etiquette, job analysis, emotional coping techniques, and strategy implementation are fundamental for successful reintegration to employment (Klonoff, 2010; Malley et al., 2009).

Vocational Group at the CTN

General Overview and Goals

The purpose of vocational group is to improve awareness, acceptance, and realism about the effect of an ABI on resuming work as well as the abilities necessary to seek, obtain, and maintain competitive employment. Patients are informed how cognitive, language, emotional, interpersonal, and physical limitations impact postinjury employment and the magnitude of generalizing compensations for lasting success. They gain practical experience in work behaviors such as planning, organizing, and carrying out simulated work assignments

Skill Areas/Community Outing Job	Skills to Address
Preparedness and time management • Be ready to leave • Have and manage all necessary belongings • Plan enough time for activities	• *Set alarms to manage time.* • *Bring your backpack to carry all belongings.* • *Make a memory assignment to pack your water and a snack the night before.*
Use of compensations • Refer to your datebook • Use assistive devices • Double-check your work	• *Keep your datebook readily available and check it often.* • *Use assistive technology to repair conversation breakdowns.* • *Take detailed notes so you can share accurate information.*
Community safety • Judgment • Mobility • Attention	• *Do not wander away from the group.* • *Only cross streets at dedicated crosswalks.* • *Buckle and tighten your seatbelt so it is firmly around you.*
Visual scanning • Of written material • In rooms • Outdoors • While crossing streets	• *Take time to scan your environment to find what you need (e.g., entrance, restroom).* • *Look both ways when crossing streets or parking lots.*
Mobility • Use assistive devices • Follow your physical therapist's recommendations	• *Watch your footing when stepping up/down from curbs.* • *Use your cane on uneven terrain.*
Communication pragmatics • Professional behavior • Appropriate interactions	• *Avoid sharing information that is too personal.* • *Take equal turns in conversations.*
Communication • Listen carefully • Understand instructions • Communicate needs clearly	• *Ask questions when you are not sure what someone said.* • *Get all group members' attention before making announcements.* • *Speak loudly and clearly when ordering food in a noisy restaurant.*
Problem solving/flexibility • Find solutions to problems • Think of alternative plans	• *Give yourself time to consider all options before making a decision.* • *Be open to other group members' ideas.*

FIGURE 5.9. Completed Community Outings Group Skills Log.

as a team. This group operates in tandem with job searching in individual therapy sessions; see Chapter 7 for more details about the work re-entry process.

Structure and Process

Virtually all patients in the Work Re-Entry Program participate in some or all of vocational group, based on their neurological status, work history, and vocational goals. At the outset, participants review the purpose of vocational group and the importance of understanding how the aftermath of ABI affects work endeavors. Vocational group is divided into two

segments: *educational* and *work* modules, lasting approximately 18 weeks. Vocational group is led by speech therapists (one of whom is the vocational specialist), occupational therapists, neuropsychologists/rehabilitation psychologists, and sometimes recreational therapists or the social worker. There is normally a 1:1 to 2:1 patient-to-clinician ratio, based on the attendees' needs. Relevant information is also presented in the family group so that caregivers are looped in (see Chapter 9).

Protocols

Educational Modules

Educational modules accommodate 6–14 survivors and involve two 90-minute sessions per week for approximately 8 weeks. There are seven modules, each of which runs for 1–2 weeks. Patients attend only the modules that pertain to their therapeutic goals, although generally all are valuable. A decision with regard to who receives what interventions is made during general team meetings, with weighty input from core providers. Some modules have homework; others focus more on in-session activities. Speech and/or occupational therapists (and the social worker, when appropriate) guide group discussions and/or responsibilities, including personalized investigations vis-à-vis the impact of attaining competitive employment when on medical disability insurance. The social worker also connects survivors to community resources, for instance, case managers, and state agencies for more in-depth instruction about medical benefits with the intent of "do no harm."

The following listing offers a brief description of each module. See Appendix 5.3 (with Forms 5.i to 5.viii and Figures 5.i and 5.ii) on the book's companion website for the specific topics and detailed content, some or all of which can be transferred onto PowerPoint slides and/or handouts.

1. *CTN Work Re-Entry Program:* Teaches patients and caregivers about the CTN return-to-work steps and the pertinence of a variety of interventions and groups.
2. *Résumé, Cover Letter, and Thank-You Note:* Assists with generating and modifying a résumé, cover letter, and a thank-you note to meet individualized circumstances. Patients produce and update their résumés and participate in peer editing and revisions. A "real-life" job posting is used to complete the exercises.
3. *Job Applications:* Provides practice with online and hard-copy job applications and how to make a good first impression. The purpose is to understand all steps for successful applications as a first introduction to the employer and a way to "meet you on paper." Participants use their personal data for the applications and examine typical questions in the personality inventories.
4. *Interview Skills:* Instructs group members how to approach interviews, for instance, recommending not responding to phone calls without a clinician present and also remembering to inquire regarding a job coach attending all potential interviews. Survivors practice creating scripts as a major compensation for answering various interview questions. They then undergo "mock interviews" that are recorded and

reviewed as a group (by therapists and peers) in terms of their positive elements and areas for improvement.

5. *Workplace Professional Behaviors:* Educates participants about various rules and acceptable comportment expected in the workplace to be an effective employee. Various scenarios are studied; role playing is incorporated.
6. *Americans with Disabilities Act (ADA):* Teaches patients the ADA and key terminology, for example, disability, essential job functions, rights, and reasonable accommodations.
7. *Personal Finances:* Informs survivors how brain injuries and postinjury competitive employment impact financial management. Patients are given pointers for money management, like finding a trusted advisor(s) and budgeting principles.

Work Modules

This facet of vocational group encompasses two separate simulated work projects, one in the fall and the other in the springtime. The group accommodates 8–14 survivors. Each section runs for 7–10 weeks, with one to two 90-minute meetings each week. Cognitive, language, and motor capabilities are targeted, such as verbal comprehension, verbal expression, communication pragmatics, mathematics, executive functions (e.g., decision making, problem solving, organization), attention to detail, speed of processing, accuracy, and fine-motor coordination. Work behaviors are addressed, including self-regulation, nervousness, teamwork, and openness to feedback. Rehearsal of procedural checklists is prioritized.

For the first assignment, participants conceive, prepare, and package dog biscuits; the second task is to invent and assemble bookmarks and greeting cards. Products are sold at two different farmers' markets and profits are donated to relatable charities, for instance, the Brain Injury Alliance. It is a priority for patients to attend, given the links to employment and emphasis on teamwork.

Participants are accountable for certain principles that simulate common codes of conduct at a job, including timeliness, a suitable dress code, and professional behaviors. Active listening, didactics, peer exchanges, note-taking, and follow-through are emphasized. Homework is given, namely, researching potential products, taking inventory of supplies, and preparing sales pitches regarding the merits of each idea. Along the way, therapists facilitate open dialogue about how each phase is unfolding, including what is going well versus potential pitfalls. They also provide opinions and input concerning specific cognitive, language, emotional, interpersonal, and physical challenges, and the applicable strategies, always tying these to eventual job scenarios.

On each market day, the group operates as a cohesive team, helping with set-up, sales, and cleanup. Mathematical aptitude is required to accurately sell the products, and appropriate communication is practiced. A final wrap-up meeting reviews all work module constituents, including the market experience. Each patient devises and shares a list of three realms he or she did well in and three domains for improvement. He or she rates performance in relevant arenas, as do the clinicians (see Form 5.5 for a sample rating scale and Figure 5.10 for a completed version of it). Ratings are compared and discussed with each participant during follow-up speech therapy, occupational therapy, and/or psychotherapy sessions.

Name: *Gwen* Date: *4/20/21*

Scale: 1 = unsatisfactory; 2 = needs improvement; 3 = appropriate for work; 4 = good; 5 = excellent

A score of "3" is the MINIMUM level of performance acceptable for work. The overall goal is to achieve a score of "4" or "5" in each of the following areas.

Work Skill	Performance: Self	Performance: Therapist	Comments
Timeliness	1 2 3 (4) 5	1 (2) 3 4 5	Self: I was usually on time.
			Therapist: *About half the time, she needed prompting to be ready with all supplies at the start of the session.*
Communication	1 2 3 4 (5)	1 2 3 (4) 5	Self: I don't have any problems with this.
			Therapist: *Occasionally required extra time to organize thoughts before sharing ideas.*
Communication pragmatics	1 2 (3) 4 5	1 (2) 3 4 5	Self: Therapists wrote comments on my professional behavior logs, but I thought I did well.
			Therapist: *Some challenges with oversharing and dominating discussions.*
Following directions	1 2 (3) 4 5	1 2 (3) 4 5	Self: Most of the time, I did well; I needed some help with complicated steps.
			Therapist: *Some help needed for new and complex instructions.*
Teamwork	1 2 3 (4) 5	1 2 3 (4) 5	Self: I tried to work well with my team.
			Therapist: *Good effort in being a team player.*
Use of compensations	1 2 (3) 4 5	1 (2) 3 4 5	Self: I used my checklist.
			Therapist: *Cues needed to use a ruler and follow all steps on the checklist in order.*
Memory for routine tasks	1 2 (3) 4 5	1 2 (3) 4 5	Self: I did well overall; once I forgot to record my end of shift productivity.
			Therapist: *Learned with practice, but saw occasional forgetfulness a week later.*
Work pace	1 2 (3) 4 5	1 2 (3) 4 5	Self: I met my personal goals.
			Therapist: *Kept up with the average number of cards required each shift.*
Accuracy/ quality of work	1 2 (3) 4 5	1 (2) 3 4 5	Self: Sometimes I had to redo my work.
			Therapist: *Errors observed with attention to detail when cutting the cards and ribbons.*

FIGURE 5.10. Completed Vocational Group Work Performance Scale.

DOG BISCUITS

The first step in this project is to identify a dog biscuit recipe. Survivors look online at various recipe websites and then present their choice to the group. Everyone is invited to "sell" the recipe through a 1- to 2-minute presentation of why his or her recipe is more delectable. Group members take notes on the various recipes and then vote to identify the three most appealing options.

Next, a subset of patients goes to a local grocery store to purchase the ingredients for the three contenders. The dog treats are distributed to the entire CTN community and everyone is invited to conduct a "taste test" with their dogs and rank-order the preferences. The vocational group votes and chooses the best recipe based on factors such as the best taste, quality of the dough, and ease of baking. The production group are the bakers, spending four 90-minute sessions making the dog treats, focusing on teamwork, quality, and efficiency. Through clinician-facilitated brainstorming, these patients decide on a name for the treats (e.g., "Funny Bones," "Wag Bags," "Good to the Bone," "Bone-A-Fido," "Barkalicious Biscuits," and "Woofies"); how to package the goodies (how many each bag should contain); how many dog treats to produce; how much to charge per package; and to what organization to donate the proceeds.

Those on the planning committee have higher-order executive function responsibilities; specific tasks are delegated to them and they report back to the main group. Jobs include:

- Making announcements in the daily milieu session about the taste test
- Tallying the results of the taste test
- Designing tags with the name of the dog biscuit and its list of ingredients
- Creating signs for the table at the market
- Generating a script to read to patrons at the farmers' market
- Performing quality control of the biscuits, namely, ensuring that they are not burnt, misshapen, or broken
- Deciding how long the shifts should be at the market

Everyone joins the packaging committee and spends one 90-minute session wrapping the treats. Prior to attending the market, participants rehearse the written sales script and how to use a cash register. On the day of the market, each survivor assists with taking inventory and selling items using the cash register. Appropriate communication pragmatics and work behaviors are closely monitored, and therapeutic guidance is provided.

BOOKMARKS AND GREETING CARDS

The first step in this project is to identify inspirational quotes for the bookmarks. Each patient finds two examples and explains each's personal connotation to his or her peers. Group participants vote on the submissions, and one person tallies the votes, selecting the top five quotes. The group collaborates on the packet designs. Next, members of the production group are assigned to create the bookmarks and cards, including cutting, folding, stamping, and sorting papers; hole punching; and cutting and tying ribbon. As a decision-making

exercise, patients choose the best color arrangements and determine how many holiday versus generic cards to craft. Clinicians ensure follow-through with step-by-step procedural checklists, task modifications and compensations, and attention to detail, as would be expected in eventual competitive job settings (see Form 5.6 for a sample checklist).

Others designated to be in the planning group ascertain:

- How much to charge for the cards and bookmarks
- How to construct cheaper combination packages
- What to wear at the farmers' market
- Content of the written script
- Transportation to the market
- Shift schedule for market day
- How to track the inventory and sales

A specific appointee oversees quality control, including reviewing the condition of the products. At the wrap-up debriefing, participants routinely express considerable enthusiasm regarding the innovation and fellowship that have emerged with these prework projects.

LESSONS LEARNED

1. With medical oversight, interdisciplinary and transdisciplinary interventions for functional capabilities in a group format are vital components of holistic milieu neurorehabilitation. They promote self-awareness, social connections through peer exchanges, and prospects to generalize competencies and compensations to everyday life.
2. Physical groups in the form of aquatic therapy, adaptive tai chi, and yoga target physical domains using imaginative techniques that nicely lend themselves to healthy community applications. A cooking group fosters practical skills for the home in a collegial atmosphere, which is a building block for higher-level community aspirations.
3. Event planning and newsletter groups are language-based opportunities to assist patients in self-reflection about their neurorecovery and achievements and express appreciation to their tiers of support.
4. Community outings and vocational groups are structured steppingstones to a future defined as increased mastery, productivity, meaning, and quality of life.

Guilford Publications
370 Seventh Avenue
New York, NY 10001
212-431-9800
800-365-7006
www.guilford.com