

OPERANT LEARNING ACTIVITY PACING

HANDOUTS

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OPERANT LEARNING SESSION 1

INTRODUCTION TO THE CONCEPT OF PACING: HANDOUTS

ICEBREAKING ACTIVITY (Handout 1)

- **What is your name?**
- **Where are you originally from?**
- **Two random things about yourself?**
- **What is the most pleasurable hobby or activity that you are still able to practice?**

DATE: _____
dd mm yyyy
PIN: _____

ACTIVITY PACING GROUP AGREEMENT

General guidelines

All group members are expected to participate actively in the activity pacing intervention. Group members will be respectful toward their therapist and each other. They will also agree not to compare themselves or their treatment progress with other group members as everyone will progress at a different rate during the treatment (it is not a contest!). Group members who are having difficulty understanding the material that is presented during group sessions or who have any other concerns are encouraged to talk to their occupational therapist before or after their group session.

Every group member has the responsibility of working in ways that allow them to achieve their personal program goals. These goals will be clear and determined in collaboration with their occupational therapist. Members are also responsible for using their pacing strategies and completing their activity pacing “homework” between sessions. Homework assignments are an important part of the treatment; not completing them will likely prevent you from benefitting from the activity pacing treatment.

Group session attendance

I will attend the eight intervention group sessions on a weekly basis for the first two months and on every two weeks for the third month. I will arrive on time to the group starting at _____ and finishing at _____ even if I do not always feel like it.

After the group treatment sessions end, I will attend my 3rd and 6th month booster sessions in order to maintain my treatment gains. I will also attend a 12th month follow-up session to complete the study and to receive my Activity Pacing certificate.

If, for any reason, I am unable to attend a session, I will contact the occupational therapist at the earliest opportunity. In case of an emergency, I will call the program secretary at 519-646-6000 ext. 61047 as soon as I know I cannot attend, and leave a detailed message.

If I decide to withdraw from the Activity Pacing study, I will advise the occupational therapist responsible for my group. She/He will ask me to discuss my reasons for withdrawing for research purposes. I am free to either answer or not answer her questions.

Group member confidentiality

Strict confidentiality is expected among members of the Activity Pacing treatment group. All of the following must not be disclosed to any person outside of the group:

- Names of the group members
- Any information shared by a group member about themselves during group sessions
- Information gathered about other members, even if it seems public or unrelated to the group
- Information obtained informally, for example, during break from another group member

It might seem harmless and may be very tempting to discuss group content with a relative, spouse, friend or family member. However, this type of disclosure would be a breach of this confidentiality agreement.

By signing you agree to abide by these restrictions. Members who do not respect the confidentiality agreement could be withdrawn at any time from the activity pacing study.

Participant's Name (print): _____

Signature: _____ **Date:** _____ (dd-mm-yyy)

Occupational Therapist (print): _____

Signature: _____ **Date:** _____ (dd-mm-yyy)

WHY PACING? (Handout 2)

- **Increasing your daily activities in major life areas**
 - **Exercise/Sports**
 - **Chores**
 - **Leisure/social activities**
 - **Mental tasks**
 - **Work/volunteering/housework**

- **Reducing your pain and fatigue condition**

- **Reducing unhelpful, learned behaviors that are reinforced by others in your environment**

- **Decreasing your overall level of disability**

- **Improving your quality of life**

- **Increasing your sense of control of your life**

- **Achieving important life goals**

EXERCISE: EXERCISING AND SPORTS (Handout 3)

Instructions:

1. Please list exercises and sports activities in which you are currently involved or that you would like to perform.
2. Please state “yes” or “no” if this activity is realistic for you.
3. On a 0 to 10 scales where 0 = never avoid and 10 = always avoid, please rate how much you avoid each exercise or sport.
4. Please choose and circle: 1 exercise that you avoid the most (between 7 and 10) but that is realistic, and 1 exercise/sport you slightly avoid (between 0 and 3) and that is realistic.

Type of exercise/sports	Realistic? (Y or N)	Avoid? (0 to 10)
1.		
2.		
3.		
4.		
5.		
6.		

EXERCISE: CHORES (Handout 4)

Instructions:

1. Please list chores that you believe you **must do** and those you would **like to do**.
2. For each chore, please rate on a 0 to 10 scale (where 0 = never avoid and 10 = always avoid), how much you avoid doing it.
3. For each "must do" and "want to do" list, please select 3 chores by using the following rules:
 - 1) There should be a minimum of 1 "want to do" activity,
 - 2) There should be a minimum of 1 "always avoid" (between 7 and 10), 1 "preferably avoid" (between 4 and 6), and 1 "slightly avoid" (between 0 and 3) activities.

Put a check mark beside the chosen chores

"Must do" chores	Avoid? (0 to 10)	"Want to do" chores	Avoid? (0 to 10)
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	

EXERCISE: SOCIAL AND LEISURE ACTIVITIES (Handout 5)

Instructions:

1. Please list social or leisure activities that you believe you **must do** and those you would **like to do**.
2. For each social or leisure activity, please rate on a 0 to 10 scale (where 0 = never avoid and 10 = always avoid), how much you avoid doing it.
3. For each "must do" and "want to do" list, please select 3 social and leisure activities by using the following rules:
 - 1) There should be a minimum of 1 "want to do" activity,
 - 2) There should be a minimum of 1 "always avoid" (between 7 and 10), 1 "preferably avoid" (between 4 and 6) and 1 "slightly avoid" (between 0 and 3) activities.

Put a check mark beside the chosen chores

"Must do" social or leisure activities	Avoid? (0 to 10)	"Want to do" social or leisure activities	Avoid? (0 to 10)
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	

EXERCISE: MENTAL TASKS (Handout 6)

Instructions:

1. Please list mental tasks that you believe you **must do** and those you would **like to do**.
2. For each mental task, please rate on a 0 to 10 scale (where 0 = never avoid and 10 = always avoid), how much you avoid doing it.
3. For each "must do" and "want to do" list, please select 3 mental tasks by using the following rules:
 - 1) There should be a minimum of 1 "want to do" activity,
 - 2) There should be a minimum of 1 "always avoid" (between 7 and 10), 1 "preferably avoid" (between 4 and 6) and 1 "slightly avoid" (between 0 and 3) activities.

Put a check mark beside the chosen chores

"Must do" mental tasks	Avoid? (0 to 10)	"Want to do" mental tasks	Avoid? (0 to 10)
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	

EXERCISE: WORK, VOLUNTEERING OR HOUSEWORK (Handout 7)

Instructions:

1. Please list work, volunteer or housework that you believe you must do and those you would like to do. If you don't work or volunteer use your chores and mental tasks lists to do this exercise.
2. For each task, please rate on a 0 to 10 scale (where 0 = never avoid and 10 = always avoid), how much you avoid doing it.
3. For each "must do" and "want to do" list, please select 3 work, volunteer or housework by using the following rules:
 - 1) There should be a minimum of 1 "want to do" activity,
 - 2) There should be a minimum of 1 "always avoid" (between 7 and 10), 1 "preferably avoid" (between 4 and 6) and 1 "slightly avoid" (between 0 and 3) activities.

Put a check mark beside the chosen chores

"Must do" tasks	Avoid? (0 to 10)	"Want to do" tasks	Avoid? (0 to 10)
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	

OPERANT LEARNING SESSION 2

ACTIVITY AND REST CYCLING: HANDOUTS

ACTIVITY PACING RULES (Handout 8)

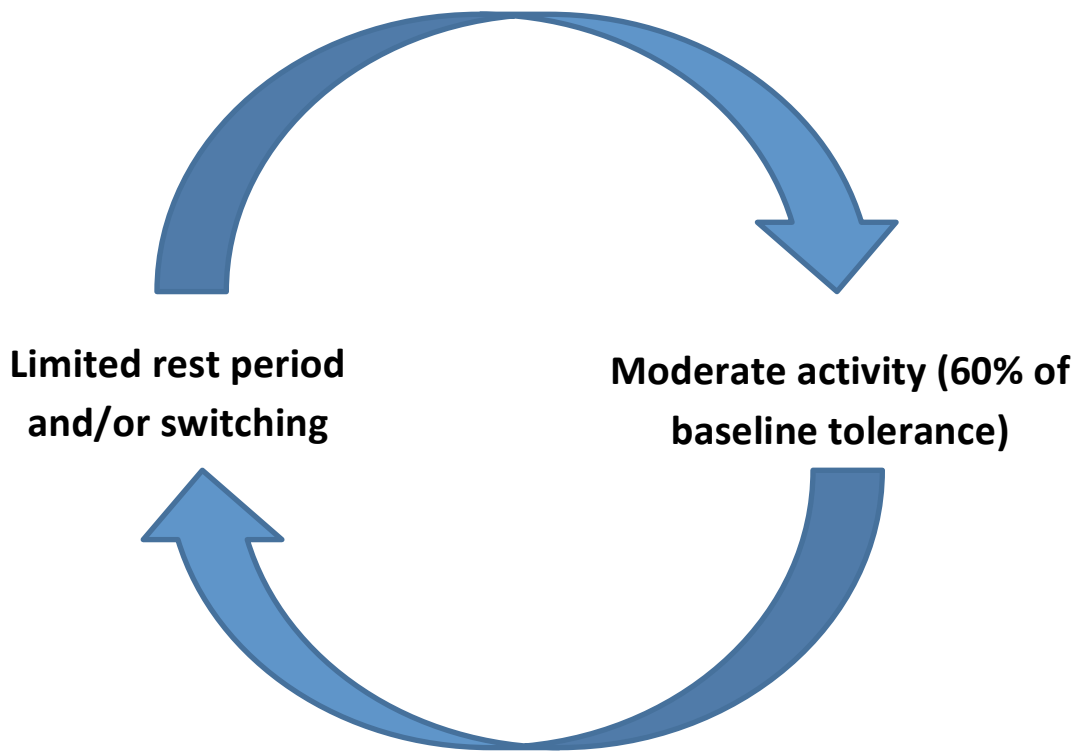
Therapist and participants should:

- **Ignore pain and fatigue complaints or comments**
- **Ignore pain and fatigue behaviors**
- **Motivate and encourage participants to achieve their goals**

The purpose of these 'rules' is:

- **To stop reinforcement of pain and fatigue behaviors by not giving paying attention to them**
- **Unlearn pain and fatigue behaviors (as opposed to pain and fatigue, *per se*)**
- **To make sure that activities are not pain and/or fatigue contingent**

ACTIVITY AND REST CYCLE (Handout 9)



HOW TO REST (Handout 10)

- **Select tasks that are not physically or mentally demanding such as:**
 - **Deep breathing**
 - **Stretching**
 - **Sitting in a relaxed position**
 - **Eating a healthy snack**
- **Rest has to be limited to a specific amount of time that is determined prior to doing your goal-based activities.**
- **Rest has to occur after an activity has been completed, so that it acts as a reward for doing it.**

HOW TO SWITCH (Handout 11)

- **Task switching can be an alternative to resting when you can't take a break (e.g., at work)**
- **Task switching involves stopping an activity to use another group of muscles or changing from a physical to a mental task in order to rest from the previous tasks**
- **Task switching, like rest, has to be determined in advance as part of your weekly goals.**

HOW TO BREAK TASK INTO PIECES (Handout 12)

- **Think of ways that you could break your activities into achievable pieces**
- **Each piece has to be balanced with rest or task-switching periods during and after the task**
- **Each piece could be distributed throughout an entire day or even 2-3 days depending of the length of the task**
- **Each piece has to be planned according to quotas or time-based quotas with limited predetermined rest time, in order to keep your activity goal contingent rather than pain or fatigue contingent**

HOW TO SPEED UP (Handout 13)

- **Slowly increasing your speed will be related to increasing your activity tolerance**
- **Increasing your speed will allow you to achieve more within the same amount of time**
- **To speed up, you need to set new quantity or time-based quotas when planning your weekly goals**
- **Speeding up is rewarding, since you will achieve your goals in a shorter amount of time**

INDIVIDUAL EXERCISE (Handout 14)

Exercise/sports	Activity 1:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 2:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
Week 4:	
Week 5:	

Social/Leisure Activities	Activity 1:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 2:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 3:
Week 1 (<i>Baseline</i>):	
Week 2:	
Week 3:	
Week 4:	
Week 5:	

Work/Volunteering/housework	Activity 1:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 2:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 3:
	Week 1 (<i>Baseline</i>):
	Week 2:
Week 3:	
Week 4:	
Week 5:	

Chores	Activity 1:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 2:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 3:
	Week 1 (<i>Baseline</i>):
	Week 2:
Week 3:	
Week 4:	
Week 5:	

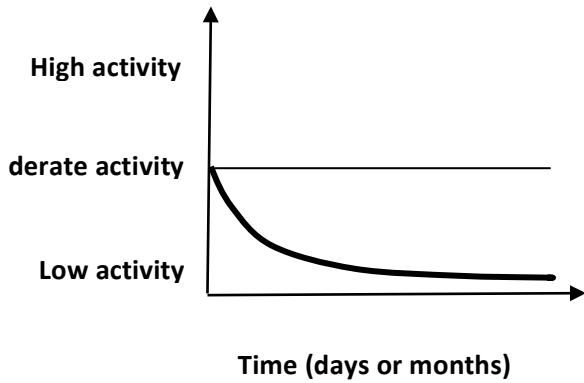
Mental Tasks	Activity 1:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 2:
	Week 1 (<i>Baseline</i>):
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Activity 3:
	Week 1 (<i>Baseline</i>):
	Week 2:
Week 3:	
Week 4:	
Week 5:	

OPERANT LEARNING SESSION 3

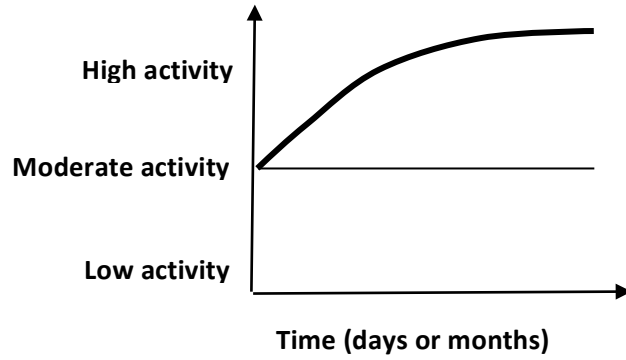
OVER-DOING, UNDER-DOING AND REINFORCEMENT: HANDOUTS

ACTIVITY PACING PATTERNS (Handout 15)

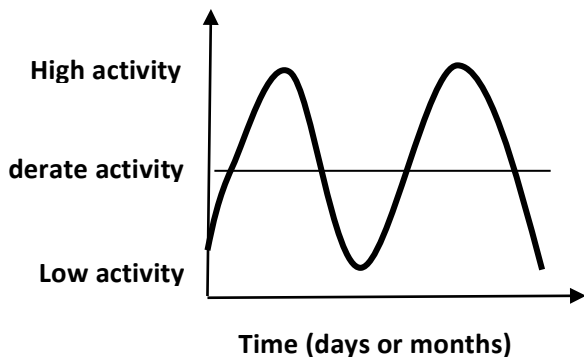
Underactive



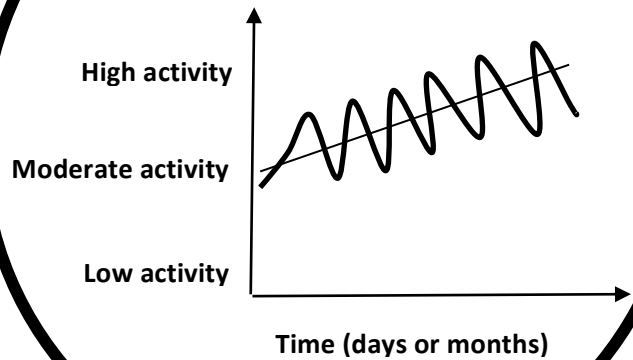
Overactive



Yo-Yo Patterns



Activity Pacing



REINFORCEMENT, PUNISHMENT AND EXTINCTION (Handout 16)

- **Reinforcement is obtained after an activity that is time or quota contingent, rather than being pain or fatigue contingent. Reinforcers include such things as:**
 - **Rest**
 - **Sense of accomplishment**
 - **Attention and feedback**
 - **Rewards**
- **Doing moderate activities with limited rest is a good way to not be punished by aversive and unpleasant experiences such as pain and fatigue**
- **Extinction (stopping) of pain and fatigue behaviors by eliminating reinforcers will decrease the likelihood that these behaviors will continue. These behaviors will no longer be reinforced.**

OPERANT LEARNING SESSION 4

ADDRESSING PACING CHALLENGES: HANDOUTS

ASSERTIVENESS AND ACTIVITY PACING (HANDOUT 18)

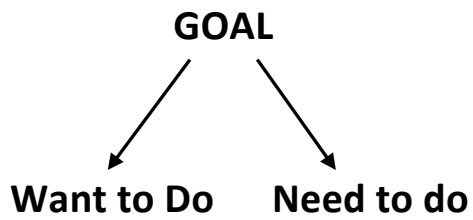
- **Don't hesitate to say YES to demands from others that are "Must do" and "Want to do" activities.**
- **Avoidance, present pain, and fatigue levels should not be part of your decision when deciding to accept requests from others.**

- **Make sure to pace your activity by:**
 - **Using a time limit or quota approach when doing a task (60-75% under baseline tolerance level)**
 - **Preplanning and respecting limited-time rest periods and task switching before doing the activity**
 - **Explain your plan to others**
 - **Accept the positive attention and feedback**

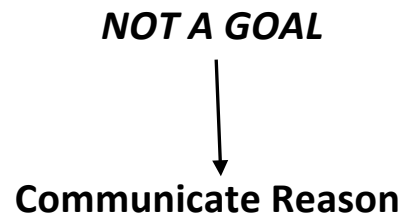
- **Change your communication with others by:**
 - **Talking less about your pain and fatigue and more about what you are actually doing**
 - **Stopping or reducing pain and fatigue behaviors when interacting with others**
 - **Acknowledge your pacing accomplishments**

GROUP EXERCISE: (Handout 19)

Task Scenario - Assertiveness Communication



OR



Communicate Level of Participation in Task Scenario

ACTIVITY PACING PROBLEM SOLVING (HANDOUT 20)

- **Identification of the activity pacing problem:**
 - **Clarify the situation and put it into context**

- **What are the challenges that need to be solved so that I maintain my activity and rest cycling?**
 - **When you are preplanning**
 - **When you are confronted by unexpected situations**

- **What are the possible pacing solutions?**
 - **Don't limit your ideas – think outside the box.**
 - **Use your imagination, be creative!**

- **What are the pros and the cons of every solution**
 - **Make a pros and cons column for each solution**
 - **Weigh the pros and cons of each solution**

- **Select specific pacing solutions:**
 - **Prioritize solutions that help you best manage your activities**
 - **Solutions can also include a combination of strategies such as task switching.**

- **Evaluating the results**
 - **If your strategies are working, look at ways that they could further be improved.**
 - **If they are not working, go back to your list and try another solution.**

OPERANT LEARNING SESSION 5

PAIN AND FATIGUE AVOIDANCE: HANDOUTS

SOCIAL INTERACTION (Handout 21)

- **Improve your social interaction with others by:**
 - **Being less fatigue- and pain-focused**
 - **Remembering to reduce pain behaviors**
 - **Clarifying expectations of others**
 - **Taking back your responsibilities**
 - **Refusing to let people be overly helpful**
 - **Refocusing your interactions with others so that they focus on positive topics rather than illness**
 - **Communicate your need to complete your ‘must do’ and ‘want to do’ activities**
 - **Give others time to talk about themselves, their needs, interests, etc. during your interactions with them**

PAIN AND FATIGUE AVOIDANCE (Handout 22)

- **Pain and fatigue avoidance are learned behaviors which means they can also be unlearned by**
 - **Putting yourself in the situations that you have been avoiding**
 - **When you begin a task that you have been avoiding, make sure you complete it (using your pacing techniques)**
 - **Be aware of environmental cues and safety behaviors related to your avoidance pattern**
 - **Break down the task into small parts and work each of these bit by bit until you are able to do the whole task**
 - **Do avoided tasks before preferred tasks (Premack Principle)**
- **Don't forget to reinforce yourself with rest, rewards, attention - sense of accomplishment**

GROUP EXERCISE (Handout 23)

Discriminative Stimuli

Safety Behaviors

Questions for Discussion with Partner:

- Are these good strategies for managing activities?
- What is the outcome of using these strategies?
- Is there a better way to manage the situations?

GROUP EXERCISE (Handout 24)

SHAPING AND PREMACK PRINCIPLE

Activity #1: _____

SHAPING:

PREMACK PRINCIPLE:

Activity #2: _____

SHAPING:

PREMACK PRINCIPLE:

OPERANT LEARNING SESSION 6

REASSESSING ACTIVITIES: HANDOUTS

PAIN AND FATIGUE BEHAVIOR MANAGEMENT

(Handout 25)

- **Your previous pain and fatigue behaviors are no longer reinforced, which leads to their reduction or extinction**
- **You have learned a new set of helpful behaviors that include your 'must do' and 'want to do' activities.**
- **You could observe other people who pace their activities well and use them as examples of how to modify your own behaviors**
- **It is important to remember that positive reinforcements (e.g., support and feedback from others, rewards) occur intermittently in life.**
- **Your life will be generally more rewarding if you eliminate your pain and fatigue behaviors and replace them with those that are more adaptive!**

INDIVIDUAL EXERCISE (Handout 26)

Exercise/sports	Activity 1:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
Week 11:	
Week 12:	

Social/Leisure Activities	Activity 1:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:

Work/volunteering/housework	Activity 1:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:

Chores	Activity 1:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:

Mental Tasks	Activity 1:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:

HEALTH PROMOTING DEVICES (HANDOUT 27)

There are various devices available that can help achieve your goals, such as:

- A timer is a device used for measuring and signalling the end of time intervals (timer on stove, egg timer, watch, phone)
- A pedometer is a device, usually portable and electronic or electromechanical, that counts each step a person takes, by detecting the motion of the person's hips.
- A heart rate monitor is a personal monitoring device which allows a subject to measure his or her heart rate in real time or record his or her heart rate.
- An odometer is an instrument that indicates distance traveled by a vehicle or bicycle.

OPERANT LEARNING SESSION 7

USING PROPER BODY MECHANICS: HANDOUTS

SITTING (Handout 28)

- Place feet flat on the floor with your knees bent at a 90° angle. Footrests can be a helpful to support your feet
- Chin in, earlobes over shoulders and hips; support natural curves of the spine
- Place buttocks at the back of the chair
- The lower back must be supported – try a lumbar support
- Resting arms on armrests in a proper position allows the neck and shoulders to relax
- Keep upright during sitting without slouching or slumping

STANDING (Handout 29)

- Wear good, low-heeled supportive shoes (i.e. runners)
- During standing, place feet shoulder-width apart (body weight evenly distributed over both feet)
- Keep head up and chin in with arms and shoulders relaxed
- While standing upright there should be an imaginary straight line that passes through your ears, shoulders, hips, knees and ankles
- Abdominals should be tight and buttocks tucked-in to help in maintaining the lumbar curve of the back
- Raise one foot on a stool, promoting tilting of the pelvis & minimizing excess curve of the lower back
- Avoid standing in one position for prolonged periods of time

SLEEPING POSITIONS (Handout 30)

- Sleep on a mattress that is not too firm or too soft
- Sleeping on your side and back are the best positions for maintaining a neutral position - sleeping on your stomach twists your neck to extreme ranges of motion and causes your back to arch and places stress on the spine
- Place a pillow between your knees (for side sleeping) or behind your knees (for back sleeping)
- Use a pillow that allows you to keep your head in alignment with the rest of your body

LIFTING AND CARRYING (HANDOUT 31)

- Bend at knees (not waist)
- Keep back straight
- Lift with leg muscles
- Hold objects close to body
- Use both arms to carry weight evenly
- Keep loads light
- Make several trips when carrying a load
- Ask for help

AVOID OVERREACHING AND TWISTING (HANDOUT 32)

- Move your body close to the object that you are trying to reach to avoid overreaching
- Keep within your arc when reaching
- Keep regularly used items within easy reach
- Limit bending, twisting, and straining to reach
- Keep nose and toes in the same direction
- Use a step stool if required

COMPUTER ERGONOMICS (HANDOUT 33)

- Monitor should be at eye level and directly in front of you
- Keyboard should be positioned so wrists are neutral
- The mouse should be at the same level as the keyboard
- A lumbar roll or support should be used to provide lower-back support
- Feet need to be supported and placed flat on the floor (may need to use a footrest)
- Shoulders should be relaxed (not elevated) with forearms relaxed alongside your body and elbows held at 90 degrees
- Use a document holder to avoid excessive neck flexion

**APPLYING PROPER BODY MECHANICS TO
ACTIVITY STATIONS**

(COMPUTER SET UP, SWEEPING THE FLOOR, PACKING BOXES, LAUNDRY, MEAL PREP)

(HANDOUT 34)

- What principles of body mechanics can be used?
- What straining postures are you able to avoid?
- What changes can you make (your technique /environment)?
- What principles of operant learning could apply to the scenarios?
- Can you use any ergonomic tools (i.e. document holder) and health promoting devices (i.e. timer, pedometer)?

OPERANT LEARNING SESSION 8

REACHING GOALS AND USE OF STANDARDS: HANDOUTS

PRIORITIES AND STANDARDS (Handout 35)

- **It is important that you define your high, medium and low priorities, based on your “Must do” and “Want to do” list, before planning your weekly goals**
- **Your personal standards are linked to your activities and the priorities you select when setting your goals**
- **Standards have a tendency to change throughout life as people reassess priorities. Different people also have different standards**

PRE-PLANNING GOALS (HANDOUT 36)

- **You will need to set goals for yourself if you want to maintain a satisfying quality of life**
- **Goals can be:**
 - **Short-term: 2 weeks to 1 month**
 - **Medium-term: 1 month to 3 months**
 - **Long-term: 3 months to 1 year**
- **Goals are achievable if:**
 - **Their accomplishment is rewarding**
 - **Tasks are broken into pieces**
 - **Task switching and goal-contingent rest are used**
 - **Avoidance-escape behaviors are stopped**
 - **Activity pacing strategies (problem solving, communication, shaping, modeling, reducing safety behaviors, assertiveness, etc.) are used**

SMART GOALS (HANDOUT 37)

- **Specific**
 - **Well-defined goal: You must state your goal as specifically as possible.**
 - **Ask yourself the questions, “who, what, when, where and how?”**
- **Measurable**
 - **You need to have a way of measuring progress towards your goal**
- **Attainable**
 - **Your goal should be meaningful to you**
 - **Achievable and Action–focused**
- **Realistic**
 - **Goals should be ambitious, but not impossible**
 - **Do not set yourself up for failure**
- **Timely**
 - **What kind of time frame are you looking at for your goals (short, medium, or long-term)?**
 - **Is there a specific time when will you finish your goal, or is it a lifestyle change?**

SMART GOALS (CONT'D)

EXAMPLE: Rest breaks during gardening

- **Specific:** schedule limited rest breaks during weeding
- **Measurable:** 5 minute break every 30 minutes
- **Attainable:** 3 times/week instead of once/week
- **Realistic:** Feasible, since I have one day off of work during the summer
- **Timely:** Complete within 3 weeks

GOAL-SETTING EXERCISE (HANDOUT 38)

Instructions: Take 5-10 minutes to complete your short-, medium- and long-term goals list. Put a priority (high, medium, low) beside every goal.

	Priority
My short-term goals are?	
My medium-term goals are?	
My long-term goals are?	

ACTIVITY PACING IN A REALISTIC WAY (HANDOUT 39)

- **Understand your actual physical limits**
- **Be aware of the difference between a physical limitation and pain, fatigue or avoidance behaviors**
- **Physical limitations don't necessarily equal being disabled**
- **Maintaining a realistic balance in your activity level can be challenging, but it will become easier when pre-planning has become part of your lifestyle**
- **Knowing your physical limitations will allow you to pace your activities in a more realistic way and help you to achieve your weekly goals. This, in turn, will improve your quality of life**

DON'T DO LIST (HANDOUT 40)

Instructions: Complete the following list according to your health professional's recommendations. Make sure that the list is based on your current health condition and include the extent to which you can and cannot do something.

My 'Don't do' recommendations are...

Limitation 1. _____

With this physical limitation, I can still do:

1) _____

3) _____

2) _____

4) _____

Limitation 2. _____

With this physical limitation, I can still do:

1) _____

3) _____

2) _____

4) _____

Limitation 3. _____

With this physical limitation, I can still do:

1) _____

3) _____

2) _____

4) _____

Limitation 4. _____

With this physical limitation, I can still do:

1) _____

3) _____

2) _____

4) _____

ACTIVITY – REASSESSING PHYSICAL LIMITATIONS (HANDOUT 41)

1) I have _____

(problem/limitation), but can still do

_____.

2) I have _____

(problem/limitation), but can still do

_____.

OPERANT LEARNING SESSION 9

GETTING BACK TO A NORMAL LIFE: HANDOUTS

NORMALIZING ACTIVITY LEVELS (HANDOUT 42)

- **An important goal of activity pacing is to re-establish more normal levels of activity, to increase your functionality and your quality of life**
- **By slowly increasing (with limited rest periods) your activity level, you will reach a point where you will attain your goals (e.g. 'ceiling effect')**
- **The final goal to consider is how to function at a normal life level based on your "Must do" and "Want to do" activities**
- **When you have increased an activity to the point that you are functioning normally, it is important to maintain these gains by using activity and rest cycling and positive reinforcement**

ACTIVITY PACING WHEN EXERCISING (HANDOUT 43)

- **Exercising on a regular basis (minimum 3 times a week, 30 minutes) is good for your health**
- **When you are exercising, you need to gradually increase your**
 - **Speed**
 - **Endurance**
 - **Flexibility**
 - **Strength**
 - **Balance**
- **Gentle, slow, smooth, and sustained stretching before and after exercising is a good way to reinforce yourself and to make sure that your muscles don't tighten up**
- **When exercising:**
 - **Warm-up and cool-down**
 - **Drink water**
 - **Find reinforcers (e.g. having a friend to exercise with, eat a snack etc.)**
 - **Use devices such as timers, pedometers, and odometers to help increase your tolerance**

PACING AT THE WORKPLACE (HANDOUT 44)

- **Tasks that are done routinely are predictable and therefore task switching and rest periods can be more easily planned**

- **Set priorities and use your activity pacing strategies**
 - **Communicate effectively with others and reduce your pain and fatigue behaviors**
 - **Adapt your work station to make it more ergonomic**
 - **Use appropriate body positioning**
 - **Use activity-pacing problem-solving strategies adapted to your workplace environment**
 - **Do not avoid tasks you can do**
 - **Be aware if you are underdoing (e.g. procrastinating) or overdoing (e.g. overtime)**

- **Use positive reinforcement from colleagues, employers**

- **Plan your short-, medium- and long-term goals (e.g. new work position, retirement)**

GROUP EXERCISE (HANDOUT 45)

1. Pick one member of your team and ask this person to describe their work (or volunteer) situation.
2. Share and discuss how that person could use activity pacing strategies in their workplace.
3. Try preplanning a one-day schedule that includes work time and rest periods.
4. Write down which type of strategy could be used to help pace each activity.

Monday	Type of activity	Type of activity pacing strategy used	Type of rest (break)
Morning			
8:00			
9:00			
10:00			
Lunch			
11:00			
12:00			
1:00			
2:00			
Afternoon			
3:00			
4:00			
5:00			
6:00			

OPERANT LEARNING SESSION 10

MAINTAINING ACTIVITY PACING SKILLS: HANDOUTS

MANAGING SETBACKS (LAPSES AND RELAPSES) (Handout 46)

- **Lapse** - a small “slip” or a brief interruption of your activity pacing plan. If a treatment lapse is caught early, it is fairly easy to “get back on track”.
 - **Examples of a Lapse:**
 - Over-exerting yourself doing chores in response to demands from others, and feeling ‘too busy’ to use pacing strategies
 - Forgetting to pace yourself on a busy day or on the weekend
 - Being in a bad mood for 2-3 days, doing very little and focusing on pain and fatigue

- **Relapse** - a serious and prolonged interruption of your self-management plan. When this occurs, people often give up entirely
 - **Examples of Relapse:**
 - Prolonged avoidance of some of their weekly activities
 - Resuming a general overexertion/crash (‘yo-yo’) activity pattern for more than two weeks

THREE-MONTH FOLLOW-UP SPECIFIC GOALS (Handout 47)

Activity 1:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Your tolerance level for this activity:

Steps to achieve your goal:

- a)
- b)
- c)
- d)
- e)
- f)

Activity 2:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goal:

- a)
- b)
- c)
- d)
- e)
- f)

Activity 3:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goal:

- a)
- b)
- c)
- d)
- e)
- f)

Activity 4:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goals

- a)
- b)
- c)
- d)
- e)
- f)

Activity 5:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goals

- a)
- b)
- c)
- d)
- e)
- f)

Activity 6:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goals

- a)
- b)
- c)
- d)
- e)
- f)

BUILDING THE THREE-MONTHS FOLLOW-UP
WEEKLY GOALS (Handout 48)

Exercise/sports	Activity 1:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
Week 11:	
Week 12:	

Social/Leisure Activities	Activity 1:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
Week 10:	
Week 11:	
Week 12:	

Work/volunteering/housework	Activity 1:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
Week 10:	
Week 11:	
Week 12:	

Chores	Activity 1:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
Week 10:	
Week 11:	
Week 12:	

Mental Tasks	Activity 1:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 2:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
	Week 10:
	Week 11:
	Week 12:
	Activity 3:
	Week 1:
	Week 2:
	Week 3:
	Week 4:
	Week 5:
	Week 6:
	Week 7:
	Week 8:
	Week 9:
Week 10:	
Week 11:	
Week 12:	

MANAGING PAIN AND FATIGUE FLARE-UPS (Handout 49)

- **Pain and fatigue flare-ups should be rare and are usually related to other factors (ex: having a cold)**

- **If you are in a flare-up and you cannot pace your activity as usual:**
 - **Don't eliminate activity**
 - **Maintain routine as usually planned (e.g. time of the day)**
 - **Increase your determined rest periods and relax**
 - **Reinforce yourself more with rewards and sense of accomplishment instead of punishing yourself with criticism**

ACTIVITY PACING STRATEGIES (HANDOUT 50)

Baseline Setting: Identify your pain (or fatigue) tolerance level. Tolerance is defined as either: (1) the length of time you can do an activity before your pain/fatigue increase by 2 points out of 10 on the pain (or fatigue) scale or (2) the number of repetitions that you can do before your pain/fatigue increases by that amount. You also need to determine the rest time that you need to recuperate after completing a task. To set your activity weekly goals, start by cutting down your baseline tolerance by 60%. Increase your tolerance every week and gradually reduce your rest time until you get back to a normal activity level.

Preplanning: Involves planning your monthly, weekly and day-to-day schedule ahead of time in order to achieve your weekly goals. Your baseline tolerance level will help you to pre-plan wisely and effectively. Make sure you include goals from all life domains (exercise/sports, chores, leisure/social activities, mental tasks, work/volunteering/housework) that are in your “Must do”, and “Want to do” lists, including the activities you usually avoid.

Activity and rest cycling: The most important pacing principle. Instead of underdoing, overdoing or using a “yo-yo” pattern, the activity and rest cycle involves doing a moderate amount of activity (quota or time-based) followed by a limited rest period and/or switching tasks. You need to pace using this cycling process until you have met your weekly activity goals. By using activity and rest cycling, your activities will become quota or time contingent rather than pain or fatigue contingent.

Breaking tasks into pieces: Think of ways that you could break your tasks into smaller achievable pieces. Cycle between activity and rest by setting quotas for each piece of the task (how long you do it, or how many repetitions). Each of these pieces should also be followed by an appropriate rest period, or by a switch to an easier task. You can distribute pieces of a task throughout an hour, an entire day, or even longer depending of the length of your task.

Rest and task switching: Rest has to be restorative and time limited. The amount of time taken to rest is determined prior to starting the activity. Rest breaks can be scheduled at intervals throughout a prolonged activity, or just at the end of a relatively short activity. Resting should always be done as a reward for successful completion of a planned activity. It is important that your activity goals be achievable and rest periods actually restful. Instead of resting, you can also choose to switch to a different, easier task (task-switching) when you are in a situation where 1) you can't take a break (e.g. work) or 2) you are able to choose an alternate activity that uses different muscles or (3) you can change from a physical to a mental task. Task-switching also has to be predetermined, quota or time contingent, and not done in response to pain or fatigue.

Positive reinforcement: Reinforcement is obtained after an immediate goal or longer-term (e.g., weekly) goals have been met. There are many different types of positive reinforcements, including rest, a sense of accomplishment, attention and feedback from others, and material rewards (e.g., eating a favourite snack). The positive reinforcer must be something that you want. It is very important to make sure that these “rewards” occur only after meeting a goal. If you reward yourself when you have not met a goal, you will be undermining

your pacing program. Positive reinforcement is not necessary each and every time that you accomplish a task. It can be expected that reinforcement will become intermittent as a normal part of the operant learning process.

Punishment: Punishment includes negative responses from others, such as anger, withdrawal, ridicule, and removal of pleasurable activities. The experience of pain and fatigue is also punishing. You need to remove your punishers and to increase positive reinforcement in order to pace better and to increase your functionality and quality of life.

Extinction: Extinction occurs when the contingent relationship between a behavior and its consequence is removed. For example, if a person stops resting (and continues to exercise) when they feel a slight increase in pain or fatigue, their fear of exercise will decrease.

Assertiveness and Communication: Accept requests from others based on your “Must dos” and “Want to dos”. Pain or fatigue avoidance, should not be part of your decision to accept request from someone. Allow yourself to accept positive attention and feedback from others when you succeed in doing an activity. Explain your pacing plan to others so they can support your efforts. When you need it, ask for support from others to motivate yourself to do tasks that you usually avoid. Change your communication style by being less fatigue and pain focused, reduce your pain and fatigue behaviors, clarify your expectations of others, take back your responsibilities, refuse to let people be overly helpful, refocus your interactions with others on positive topics rather than illness, and give others time to talk about themselves when interacting with them.

Problem-solving: Identify the activity pacing problem and put it into context. What are the challenges that need to be solved so that you maintain your activity and rest cycling? Think about possible pacing solutions and assess the pros and the cons of each and every solution. Select a specific pacing solution and evaluate the results. If it is not working, go back to problem-solving, identify another solution, and try that one.

Escape-avoidance: Escape-avoidance behaviors occur when you become fearful of engaging in activities, in the eventuality that they would increase your symptoms. This fear of pain, fatigue, or further injury causes you to avoid activities and makes you more disabled. This behavior persists because it is reinforced by the reduction of anxiety that occurs when the feared activity is avoided. It is important for you to confront your escape-avoidance patterns in order to get a clearer idea of your physical capacity, by setting goals to perform activities that you usually avoid.

Completing avoided tasks: You should confront avoided activities by scheduling them so that you learn that nothing bad happens (e.g. severe pain or exhaustion). It is important that you complete your “avoided” activity without engaging in escape-avoidance behavior, or else your fear and anxiety will become worse. You should stick to your plan no matter what! To maximize your chances of success, you should set your goals low at first, and increase them slowly.

Discriminative stimuli: These stimuli (situations, people, physical sensations, time of day, etc.) act as cues or “signals” that indicate that a particular behavior (e.g. lying down, taking medication, rubbing painful area, limping, asking for help, etc.) is likely to result in a particular consequence. Pain and fatigue behaviors often come under the control of discriminative stimuli so that the behavior continues to occur even when no negative consequence occurs.

Safety behaviors: Safety or protective behaviors are also an important part of learned escape-avoidance activity. They are maintained by your fear of engaging in activities that you actively avoided. They can take many forms, such as guarding, holding, bracing, seeking help, physical support, etc.

Premack Principle: You can use the activities that you avoid less to reinforce the ones that you avoid the most to help you modify your pain and fatigue behaviors. This principle states that you should do activities that are less desirable or avoided before more desirable activities. This more desirable activity will serve as a positive reinforcer for doing the usually avoided activity.

Shaping: Involves reinforcing behaviors that help the person move closer to the “target behavior”. Shaping involves providing reinforcement for behaviors that gradually get closer to that target (successive approximation) and continue until the target is reached.

Modeling: Learning from watching other people who are successful at pacing their activities. For example, if you see someone with pain doing something that you are afraid to do, you are likely to feel more confident in your own ability to do it.

Planning short, medium and long-term goals: To maintain a satisfying quality of life and to promote your activity pacing skills it is important that you set some short-term (2 weeks to one month), medium-term (one month to three months) and long-term (three month to one year) goals that you want to accomplish in the future. Use the SMART goals to help you set goals that are specific, measurable, attainable, realistic and timely.

Speeding up: You can slowly increase the speed at which you do a task so you can achieve more within the same amount of time. This increase will occur over time as your activity tolerance increases. To speed up, you need to set new, realistic quotas (an increased length of time or increased number of repetitions within the same time) when planning your weekly goals. Speeding up can be rewarding if you are able to accomplish more during your day.

Normalizing activity levels: You will reach a point where your activity can't be increased anymore (ceiling effect). When you think you have reached your maximum for a specific activity, you need to maintain that level over time by using your preplanning and activity/rest cycling skills.

OPERANT LEARNING

THREE-MONTH BOOSTER: HANDOUTS

THREE MONTH FOLLOW-UP/BOOSTER SESSION

QUESTIONS FORM (HANDOUT 51)

PART I

Please rate your average level of day-to-day functioning over the past week? (0 = not functional and 10 = very functional) _____/10

How would you rate your average quality of life level over the past week? (0 = no quality of life and 10 = excellent quality of life) _____/10

Over the past 3 months, how many days per week (on average) have you used one or more of your activity pacing strategies? _____/7 days per week

PART II

What is your most successful pacing situation?

What helped/What was the main strategy used?

What other strategies and tools did you find helpful in this situation?

What is your most challenging pacing situation?

What specific barriers did you experience?

How did you recover from setbacks? (lapses or relapses)/What helped?

ACTIVITY PACING STRATEGIES (HANDOUT 52)

Baseline Setting: Identify your pain (or fatigue) tolerance level. Tolerance is defined as either: (1) the length of time you can do an activity before your pain/fatigue increase by 2 points out of 10 on the pain (or fatigue) scale or (2) the number of repetitions that you can do before your pain/fatigue increases by that amount. You also need to determine the rest time that you need to recuperate after completing a task. To set your activity weekly goals, start by cutting down your baseline tolerance by 60%. Increase your tolerance every week and gradually reduce your rest time until you get back to a normal activity level.

Preplanning: Involves planning your monthly, weekly and day-to-day schedule ahead of time in order to achieve your weekly goals. Your baseline tolerance level will help you to pre-plan wisely and effectively. Make sure you include goals from all life domains (exercise/sports, chores, leisure/social activities, mental tasks, work/volunteering/housework) that are in your “Must do”, and “Want to do” lists, including the activities you usually avoid.

Activity and rest cycling: The most important pacing principle. Instead of underdoing, overdoing or using a “yo-yo” pattern, the activity and rest cycle involves doing a moderate amount of activity (quota or time-based) followed by a limited rest period and/or switching tasks. You need to pace using this cycling process until you have met your weekly activity goals. By using activity and rest cycling, your activities will become quota or time contingent rather than pain or fatigue contingent.

Breaking tasks into pieces: Think of ways that you could break your tasks into smaller achievable pieces. Cycle between activity and rest by setting quotas for each piece of the task (how long you do it, or how many repetitions). Each of these pieces should also be followed by an appropriate rest period, or by a switch to an easier task. You can distribute pieces of a task throughout an hour, an entire day, or even longer depending of the length of your task.

Rest and task switching: Rest has to be restorative and time limited. The amount of time taken to rest is determined prior to starting the activity. Rest breaks can be scheduled at intervals throughout a prolonged activity, or just at the end of a relatively short activity. Resting should always be done as a reward for successful completion of a planned activity. It is important that your activity goals be achievable and rest periods actually restful. Instead of resting, you can also choose to switch to a different, easier task (task-switching) when you are in a situation where 1) you can’t take a break (e.g. work) or 2) you are able to choose an alternate activity that uses different muscles or (3) you can change from a physical to a mental task. Task-switching also has to be predetermined, quota or time contingent, and not done in response to pain or fatigue.

Positive reinforcement: Reinforcement is obtained after an immediate goal or longer-term (e.g., weekly) goals have been met. There are many different types of positive reinforcements, including rest, a sense of accomplishment, attention and feedback from others, and material rewards (e.g., eating a favourite snack). The positive reinforcer must be something that you want. It is very important to make sure that these “rewards” occur only after meeting a goal. If you reward yourself when you have not met a goal, you will be undermining

your pacing program. Positive reinforcement is not necessary each and every time that you accomplish a task. It can be expected that reinforcement will become intermittent as a normal part of the operant learning process.

Punishment: Punishment includes negative responses from others, such as anger, withdrawal, ridicule, and removal of pleasurable activities. The experience of pain and fatigue is also punishing. You need to remove your punishers and to increase positive reinforcement in order to pace better and to increase your functionality and quality of life.

Extinction: Extinction occurs when the contingent relationship between a behavior and its consequence is removed. For example, if a person stops resting (and continues to exercise) when they feel a slight increase in pain or fatigue, their fear of exercise will decrease.

Assertiveness and Communication: Accept requests from others based on your “Must dos” and “Want to dos”. Pain or fatigue avoidance, should not be part of your decision to accept request from someone. Allow yourself to accept positive attention and feedback from others when you succeed in doing an activity. Explain your pacing plan to others so they can support your efforts. When you need it, ask for support from others to motivate yourself to do tasks that you usually avoid. Change your communication style by being less fatigue and pain focused, reduce your pain and fatigue behaviors, clarify your expectations of others, take back your responsibilities, refuse to let people be overly helpful, refocus your interactions with others on positive topics rather than illness, and give others time to talk about themselves when interacting with them.

Problem-solving: Identify the activity pacing problem and put it into context. What are the challenges that need to be solved so that you maintain your activity and rest cycling? Think about possible pacing solutions and assess the pros and the cons of each and every solution. Select a specific pacing solution and evaluate the results. If it is not working, go back to problem-solving, identify another solution, and try that one.

Escape-avoidance: Escape-avoidance behaviors occur when you become fearful of engaging in activities, in the eventuality that they would increase your symptoms. This fear of pain, fatigue, or further injury causes you to avoid activities and makes you more disabled. This behavior persists because it is reinforced by the reduction of anxiety that occurs when the feared activity is avoided. It is important for you to confront your escape-avoidance patterns in order to get a clearer idea of your physical capacity, by setting goals to perform activities that you usually avoid.

Completing avoided tasks: You should confront avoided activities by scheduling them so that you learn that nothing bad happens (e.g. severe pain or exhaustion). It is important that you complete your “avoided” activity without engaging in escape-avoidance behavior, or else your fear and anxiety will become worse. You should stick to your plan no matter what! To maximize your chances of success, you should set your goals low at first, and increase them slowly.

Discriminative stimuli: These stimuli (situations, people, physical sensations, time of day, etc.) act as cues or “signals” that indicate that a particular behavior (e.g. lying down, taking medication, rubbing painful area, limping, asking for help, etc.) is likely to result in a particular consequence. Pain and fatigue behaviors often come under the control of discriminative stimuli so that the behavior continues to occur even when no negative consequence occurs.

Safety behaviors: Safety or protective behaviors are also an important part of learned escape-avoidance activity. They are maintained by your fear of engaging in activities that you actively avoided. They can take many forms, such as guarding, holding, bracing, seeking help, physical support, etc.

Premack Principle: You can use the activities that you avoid less to reinforce the ones that you avoid the most to help you modify your pain and fatigue behaviors. This principle states that you should do activities that are less desirable or avoided before more desirable activities. This more desirable activity will serve as a positive reinforcer for doing the usually avoided activity.

Shaping: Involves reinforcing behaviors that help the person move closer to the “target behavior”. Shaping involves providing reinforcement for behaviors that gradually get closer to that target (successive approximation) and continue until the target is reached.

Modeling: Learning from watching other people who are successful at pacing their activities. For example, if you see someone with pain doing something that you are afraid to do, you are likely to feel more confident in your own ability to do it.

Planning short, medium and long-term goals: To maintain a satisfying quality of life and to promote your activity pacing skills it is important that you set some short-term (2 weeks to one month), medium-term (one month to three months) and long-term (three month to one year) goals that you want to accomplish in the future. Use the SMART goals to help you set goals that are specific, measurable, attainable, realistic and timely.

Speeding up: You can slowly increase the speed at which you do a task so you can achieve more within the same amount of time. This increase will occur over time as your activity tolerance increases. To speed up, you need to set new, realistic quotas (an increased length of time or increased number of repetitions within the same time) when planning your weekly goals. Speeding up can be rewarding if you are able to accomplish more during your day.

Normalizing activity levels: You will reach a point where your activity can't be increased anymore (ceiling effect). When you think you have reached your maximum for a specific activity, you need to maintain that level over time by using your preplanning and activity/rest cycling skills.

THREE MONTHS FOLLOW-UP SPECIFIC GOALS (Handout 53)

Activity 1:
How much do you avoid the activity ("0 = always avoid " to "10 = never avoid")? ____/10 Your tolerance level for this activity: Steps to achieve your goal: a) b) c) d) e) f)
Activity 2:
How much do you avoid the activity ("0 = always avoid " to "10 = never avoid")? ____/10 Baseline tolerance level : Steps to achieve goals a) b) c) d) e) f)
Activity 3:
How much do you avoid the activity ("0 = always avoid " to "10 = never avoid")? ____/10 Baseline tolerance level : Steps to achieve goals a) b) c) d) e) f)

Activity 4:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goals

- a)
- b)
- c)
- d)
- e)
- f)

Activity 5:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goals

- a)
- b)
- c)
- d)
- e)
- f)

Activity 6:

How much do you avoid the activity (“0 = always avoid “ to “10 = never avoid”)? ____/10

Baseline tolerance level :

Steps to achieve goals

- a)
- b)
- c)
- d)
- e)
- f)

OPERANT LEARNING

SIX-MONTH BOOSTER: HANDOUTS

SIX-MONTH FOLLOW-UP/BOOSTER SESSION

QUESTIONS FORM (HANDOUT 54)

Please rate your average level of day-to-day functioning over the past week? (0 = not functional and 10 = very functional) _____/10

How would you rate your average quality of life level over the past week? (0 = no quality of life and 10 = excellent quality of life) _____/10

Over the past 3 months how many days per week (on average) have you used one or more of your activity pacing strategies? _____/7 days per week

ACTIVITY PACING STRATEGIES (HANDOUT 55)

Baseline Setting: Identify your pain (or fatigue) tolerance level. Tolerance is defined as either: (1) the length of time you can do an activity before your pain/fatigue increase by 2 points out of 10 on the pain (or fatigue) scale or (2) the number of repetitions that you can do before your pain/fatigue increases by that amount. You also need to determine the rest time that you need to recuperate after completing a task. To set your activity weekly goals, start by cutting down your baseline tolerance by 60%. Increase your tolerance every week and gradually reduce your rest time until you get back to a normal activity level.

Preplanning: Involves planning your monthly, weekly and day-to-day schedule ahead of time in order to achieve your weekly goals. Your baseline tolerance level will help you to pre-plan wisely and effectively. Make sure you include goals from all life domains (exercise/sports, chores, leisure/social activities, mental tasks, work/volunteering/housework) that are in your “Must do”, and “Want to do” lists, including the activities you usually avoid.

Activity and rest cycling: The most important pacing principle. Instead of underdoing, overdoing or using a “yo-yo” pattern, the activity and rest cycle involves doing a moderate amount of activity (quota or time-based) followed by a limited rest period and/or switching tasks. You need to pace using this cycling process until you have met your weekly activity goals. By using activity and rest cycling, your activities will become quota or time contingent rather than pain or fatigue contingent.

Breaking tasks into pieces: Think of ways that you could break your tasks into smaller achievable pieces. Cycle between activity and rest by setting quotas for each piece of the task (how long you do it, or how many repetitions). Each of these pieces should also be followed by an appropriate rest period, or by a switch to an easier task. You can distribute pieces of a task throughout an hour, an entire day, or even longer depending of the length of your task.

Rest and task switching: Rest has to be restorative and time limited. The amount of time taken to rest is determined prior to starting the activity. Rest breaks can be scheduled at intervals throughout a prolonged activity, or just at the end of a relatively short activity. Resting should always be done as a reward for successful completion of a planned activity. It is important that your activity goals be achievable and rest periods actually restful. Instead of resting, you can also choose to switch to a different, easier task (task-switching) when you are in a situation where 1) you can't take a break (e.g. work) or 2) you are able to choose an alternate activity that uses different muscles or (3) you can change from a physical to a mental task. Task-switching also has to be predetermined, quota or time contingent, and not done in response to pain or fatigue.

Positive reinforcement: Reinforcement is obtained after an immediate goal or longer-term (e.g., weekly) goals have been met. There are many different types of positive reinforcements, including rest, a sense of accomplishment, attention and feedback from others, and material rewards (e.g., eating a favourite snack). The positive reinforcer must be something that you want. It is very important to make sure that these “rewards” occur only after meeting a goal. If you reward yourself when you have not met a goal, you will be undermining

your pacing program. Positive reinforcement is not necessary each and every time that you accomplish a task. It can be expected that reinforcement will become intermittent as a normal part of the operant learning process.

Punishment: Punishment includes negative responses from others, such as anger, withdrawal, ridicule, and removal of pleasurable activities. The experience of pain and fatigue is also punishing. You need to remove your punishers and to increase positive reinforcement in order to pace better and to increase your functionality and quality of life.

Extinction: Extinction occurs when the contingent relationship between a behavior and its consequence is removed. For example, if a person stops resting (and continues to exercise) when they feel a slight increase in pain or fatigue, their fear of exercise will decrease.

Assertiveness and Communication: Accept requests from others based on your “Must dos” and “Want to dos”. Pain or fatigue avoidance, should not be part of your decision to accept request from someone. Allow yourself to accept positive attention and feedback from others when you succeed in doing an activity. Explain your pacing plan to others so they can support your efforts. When you need it, ask for support from others to motivate yourself to do tasks that you usually avoid. Change your communication style by being less fatigue and pain focused, reduce your pain and fatigue behaviors, clarify your expectations of others, take back your responsibilities, refuse to let people be overly helpful, refocus your interactions with others on positive topics rather than illness, and give others time to talk about themselves when interacting with them.

Problem-solving: Identify the activity pacing problem and put it into context. What are the challenges that need to be solved so that you maintain your activity and rest cycling? Think about possible pacing solutions and assess the pros and the cons of each and every solution. Select a specific pacing solution and evaluate the results. If it is not working, go back to problem-solving, identify another solution, and try that one.

Escape-avoidance: Escape-avoidance behaviors occur when you become fearful of engaging in activities, in the eventuality that they would increase your symptoms. This fear of pain, fatigue, or further injury causes you to avoid activities and makes you more disabled. This behavior persists because it is reinforced by the reduction of anxiety that occurs when the feared activity is avoided. It is important for you to confront your escape-avoidance patterns in order to get a clearer idea of your physical capacity, by setting goals to perform activities that you usually avoid.

Completing avoided tasks: You should confront avoided activities by scheduling them so that you learn that nothing bad happens (e.g. severe pain or exhaustion). It is important that you complete your “avoided” activity without engaging in escape-avoidance behavior, or else your fear and anxiety will become worse. You should stick to your plan no matter what! To maximize your chances of success, you should set your goals low at first, and increase them slowly.

Discriminative stimuli: These stimuli (situations, people, physical sensations, time of day, etc.) act as cues or “signals” that indicate that a particular behavior (e.g. lying down, taking medication, rubbing painful area, limping, asking for help, etc.) is likely to result in a particular consequence. Pain and fatigue behaviors often come under the control of discriminative stimuli so that the behavior continues to occur even when no negative consequence occurs.

Safety behaviors: Safety or protective behaviors are also an important part of learned escape-avoidance activity. They are maintained by your fear of engaging in activities that you actively avoided. They can take many forms, such as guarding, holding, bracing, seeking help, physical support, etc.

Premack Principle: You can use the activities that you avoid less to reinforce the ones that you avoid the most to help you modify your pain and fatigue behaviors. This principle states that you should do activities that are less desirable or avoided before more desirable activities. This more desirable activity will serve as a positive reinforcer for doing the usually avoided activity.

Shaping: Involves reinforcing behaviors that help the person move closer to the “target behavior”. Shaping involves providing reinforcement for behaviors that gradually get closer to that target (successive approximation) and continue until the target is reached.

Modeling: Learning from watching other people who are successful at pacing their activities. For example, if you see someone with pain doing something that you are afraid to do, you are likely to feel more confident in your own ability to do it.

Planning short, medium and long-term goals: To maintain a satisfying quality of life and to promote your activity pacing skills it is important that you set some short-term (2 weeks to one month), medium-term (one month to three months) and long-term (three month to one year) goals that you want to accomplish in the future. Use the SMART goals to help you set goals that are specific, measurable, attainable, realistic and timely.

Speeding up: You can slowly increase the speed at which you do a task so you can achieve more within the same amount of time. This increase will occur over time as your activity tolerance increases. To speed up, you need to set new, realistic quotas (an increased length of time or increased number of repetitions within the same time) when planning your weekly goals. Speeding up can be rewarding if you are able to accomplish more during your day.

Normalizing activity levels: You will reach a point where your activity can't be increased anymore (ceiling effect). When you think you have reached your maximum for a specific activity, you need to maintain that level over time by using your preplanning and activity/rest cycling skills.