

The ProSolv Manual:
**Materials for Supporting Problem Solving Skills Training
Following Brain Injury**

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Introduction

- The ability to effectively and efficiently tackle life's everyday problems is one of our most important cognitive abilities. Unexpected changes in plans, missed appointments, misplacing the keys, family illness, and traffic snarls happen.
- Problem solving taps several different cognitive abilities that can be affected by brain injury, including: attention, speed of processing, memory, language, decision making, initiation and follow through, self-reflection, and confidence in one's own ability to effectively solve a problem.
- The ProSolv Manual provides clinicians (speech-language pathologists, occupational therapists, counselors, and neuropsychologists) with materials to support their clients with brain injury as they learn problem solving strategies to tackle everyday challenges.
- The ProSolv Manual and materials are designed to complement existing therapy goals and objectives.
- ProSolv was developed as part of a three-year grant from the National Institute on Disability, Independent Living, and Rehabilitation Research – 90IF0087/H133G130309



The ProSolv materials are designed to support functional problem solving, not treat personal problems that could require the skills of a licensed mental health professional. Professionals are encouraged to monitor clients for such needs and make appropriate recommendations and referrals, as indicated.

National Suicide Prevention Lifeline: 1-800-273-8255

National Domestic Violence Hotline: 1-800-799-7233

Contact medical and mental health care professionals available locally.

Problem Solving Steps

- The ProSolv problem solving framework is based on abundant research that supports systematically instructing a step-by-step approach to problem solving following brain injury.
- We've chosen to emphasize the key categories and words **Problem-Solution - Effect** with specific questions for each these categories.

Problem

- What is the problem?
- What do I already know about the problem?
- What else do I need to know?

Solution

- What are possible solutions to the problem?
- What solution(s) will I try?
- What is my plan for trying out the solution(s)?

Effect

- How effective was the solution(s)?
- What changes are needed?

ProSolv Materials

The ProSolv Materials include:

- ***The Problem Inventory Worksheet;***
- ***The Think Through the Problem Worksheet;***
- ***The Problem-Solution-Effect Worksheet.***

These worksheets are designed to be individualized and used flexibly as clients with brain injury and their clinicians work through problems together, come up with possible solutions, make a plan, then review the effect (impact) of the solutions. The ***Examples of Common Problems and Solutions*** sheet provides a reference tool of common problems and solutions following brain injury. ***The Support Strategies for Clinicians*** sheet offers tips for clinicians as they help clients work through specific challenges with the problem-solving process. For those interested in using technology to support problem solving, ***Examples of Apps to Support Problem Solving*** might be useful. See also (a) the ***Tip Sheet for Instructing Problem-Solution-Effect steps***, (b) the ***Work Sheets with Examples***, (c) a ***Client's Perspective concerning the importance of problem solving training*** and (d) a ***list of Selected Resources***.

Problem Inventory Work Sheet

Directions: Use this sheet to capture a range of problem areas shared during one-on-one sessions.

Sample questions to get started:

What is a typical day or week like?

What is going well?

What is difficult? Describe this.

Next steps:

Select one problem area to start with.

Fill out the *Think Through the Problem* worksheet for the problem selected.

Think Through the Problem Worksheet

Directions: Use this worksheet to think through problem details.

What is the problem? (Describe briefly)

What do I already know about the problem? What else do I need to know?

- What is my attitude toward this problem? How do I feel about it?
- Is this a big-deal or little-deal problem for me? For others?
- When does it occur? (time of day, day of the week)
- How often? (frequency)
- Where does it occur?
- Who else is involved?
- What triggers the problem?
- When is it *not* a problem?
- Have I solved similar types of problems?
- If yes, what solution(s) worked?
- How confident am I that I can solve it?

Next steps:

If needed, revise “What is the problem?” based on these answers.

Begin filling out the *Problem-Solution-Effect* worksheet.

Problem-Solution-Effect Worksheet

Directions: Use this sheet to think through possible solutions and make a plan.

PROBLEM

What is the problem?

What do I already know about the problem? What else do I need to know?

SOLUTIONS: What are possible solutions to the problem?

Solutions	Pros	Cons

What solution(s) will I try? What is my plan for trying out the solution(s)?
(Define specific steps including who else is involved, where and when the plan will take place and what materials are needed.)

Solution #1:

Solution #2:

Do the Plan – Afterwards, determine EFFECT

How effective was the solution(s)? What changes are needed?

Examples of Common Problems and Solutions

Common Problems	Common Solutions
Excessive fatigue Feeling as if “in a fog”	<ul style="list-style-type: none"> • Pace activities; Avoid over-scheduling • Schedule transition (“settling in”) time • Take frequent breaks, including naps • Communicate needs to others
Easily frustrated Acting without thinking	<ul style="list-style-type: none"> • Know your triggers • Slow down; Take a deep breath • Stop and think; Count to 10 • Remove yourself from the situation, if appropriate
Difficulty concentrating	<ul style="list-style-type: none"> • Reduce distractions, including noise and visual clutter • Avoid distracting environments • Do one thing at a time • Take breaks
Misplacing or losing things	<ul style="list-style-type: none"> • Keep everything in its place • Double check for items before leaving a place; “Scan the room”
Difficulty remembering new information	<ul style="list-style-type: none"> • Immediately write down/record new information, including new names, appointments, and tasks • Regularly review and practice using the information to help it stick
Forgetting to initiate and/or complete scheduled tasks, including appointments	<ul style="list-style-type: none"> • Use a weekly calendar • Enter then respond to alerts (cell phone/smart phone, tablet) • Review schedule for the next day before going to bed, then again in the morning • Use checklist; check off completed activities
Difficulty with multi-tasking	<ul style="list-style-type: none"> • Do one thing at a time, when possible • Mark your place before switching tasks • Use key phrases (“What am I doing now?” “What is my next step?”)
Feeling overwhelmed with too much to do	<ul style="list-style-type: none"> • Set small, achievable goals • Break a complex task down into small, achievable steps • Give yourself more time to complete a task • Ask for help

For more information: brainline.org;

Also, TBI Model Systems Knowledge Translation Center: msktc.org/tbi

Support Strategies for Clinicians

Directions: Use this as a reference tool for managing different types of challenges as you work through the ProSolv materials with clients with brain injury.

Item	Client Challenge	Coach Response
ATTITUDE		
Thoughts	<p>Self-defeating thoughts; negative attitude toward his/her ability to solve problems.</p> <p>“I am pretty hopeless when it comes to figuring things out when something unexpected happens. I just freeze up.”</p>	<p>Help client look for the positive</p> <p>“Describe an example of a time when you were able to figure something out, even if at the time it didn’t seem like that big a deal to you. How were you able to do that?”</p> <p>If client has trouble remembering specific examples, offer some examples to help stimulate ideas:</p> <ul style="list-style-type: none"> • Helping out a neighbor in need • Listening to someone else going through a tough time • Figuring out the DVD player • Switching gears when an appointment was cancelled
Approach	<p>Impulsive approach to problem solving; jumps in before thinking things through. [Clients may or may not be aware they do this.]</p> <p>“I figure, why not just jump in and figure it out.” OR “I’m always putting my foot in my mouth.”</p>	<p>Reframe</p> <p>“The desire to hop in is a good thing. It means you’re motivated and want to take on a challenge. Sometimes, though, if someone is too quick to act, it can end up backfiring.”</p> <p>“What are some ways you can get the best of both worlds?”</p>
Activities	<p>Lack of meaningful activities that would require problem solving skills.</p> <p>“I don’t have much going on in my life. I just stay at home and watch TV. Every day is pretty predictable. No big issues come up.”</p>	<p>Find out more about interests, goals</p> <p>“Tell me more about the kinds of activities you enjoyed before your injury.”</p> <p>“What are some pieces of those activities you might be interested in picking back up again?”</p> <p>“What are some goals you have for yourself?”</p>

PROBLEM		
<p>What is the problem?</p>	<p>Difficulty succinctly describing a problem.</p> <p>“I’m having difficulty figuring out how to get things done around the house when my wife is away at work. There’s so much to do, and I’m tired all the time. She just gets upset at me.”</p>	<p>Break it down. Encourage clients to use their own words to describe the problem.</p> <p>“It sounds like there could be 2 or 3 problems here:</p> <ol style="list-style-type: none"> 1) Planning what needs to get done 2) Actually getting things done 3) Fatigue <p>Does that sound about right to you?”</p>
	<p>Coping with immediate problems vs. how to prevent problems in the future.</p> <p>“I seem to live from crisis to crisis, and I can’t seem to get on top of anything.”</p>	<p>Support client in using ProSolv to both manage immediate problems and prevent future problems.</p> <p>Examples:</p> <p>Coping with immediate problem: Know your warning signs Stop and think</p> <p>Planning for improvement: Plan frequent breaks Don’t over-schedule</p>
	<p>Problem has to do with complex interpersonal and/or mental health challenges.</p> <p>“My wife and I are struggling with physical intimacy. She doesn’t want anything to do with me in that way.”</p> <p>“I’m feeling very lonely and isolated. My friends have all drifted away.”</p> <p>“I’m pretty down most of the time. I hate to leave the house, and when I do, I just get anxious.”</p>	<p>Acknowledge the issue; establish ProSolv program boundaries. Also acknowledge that problem solving is a skill and applying this skill to smaller problems will help with handling the bigger problems.</p> <p>“This is a common, difficult aspect of life with a brain injury. Our work together is not designed to tackle these types of challenges. Instead, it’s designed to help with more day-to-day problems such as forgetting medications, getting things done around the house, and planning activities.”</p> <p>“You might try using ‘Problem-Solution-Effect’ to think through possible solutions to these issues. Talking to a counselor can also be very helpful.” <i>[Have site-specific counselor contact information numbers available.]</i></p>

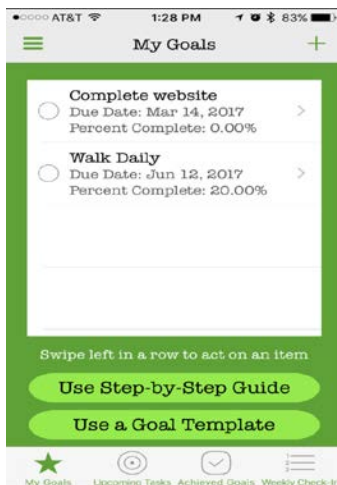
	<p>Uses self-critical language to describe problem.</p> <p>“I’m such a loser, forgetting what I’m supposed to do around the house.”</p>	<p>Reframe with neutral or more positive language.</p> <p>“Sometimes simply rewording the problem can lessen the negative feelings attached to it.”</p> <p>“Would a brief description like ‘forgetting household chores’ work?”</p>
<p>What do I already know about the problem?</p>	<p>Difficulty identifying when, where, and with whom the problem occurs, triggers, etc.</p> <p>“Just sitting here trying to think how often this happens... It’s kind of difficult. I can’t remember.”</p>	<p>Use the <i>Think Through the Problem</i> and/or PSE worksheets as a home journal to help generate ideas.</p> <p>Ask the client if s/he would like to involve knowledgeable others in this process.</p> <p>“What do you think about working with your spouse to fill out some of these worksheets at home this next week? As real problems surface during the day, you can jot them down and think it through together.”</p>
	<p>Overwhelmed working through all the questions on the <i>Think Through the Problem</i> worksheet</p>	<p>Acknowledge and reframe</p> <p>“It might feel a bit overwhelming trying to answer all these questions. That’s okay. Here’s another way to look at it. Taking apart and looking at different pieces of a problem can make it a bit less frustrating and can often lead to helpful solutions.”</p> <p>“Also, you don’t have to answer all the questions. Some will be more useful to answer than others, depending on the problem.”</p>
	<p>Problem is very frustrating to the client but only happens on rare occasions.</p> <p>“This problem happens just around the holidays, like Thanksgiving and Christmas, but it really bugs me.”</p>	<p>Acknowledge problem.</p> <p>Discuss whether to enter problem into worksheet.</p> <p>Focus on other, more frequent (daily, weekly, monthly) problems.</p>

SOLUTION		
What are possible solutions to the problem?	<p>Difficulty generating ideas for solutions.</p> <p>“I just can’t think of how to deal with this problem.”</p>	<p>Encourage brainstorming.</p> <p>Ask the client to tell some success stories of overcoming past problems, which helps with brainstorming and might inspire some solutions for the current problem.</p> <p>Use the Thinking Through the Problem or PSE worksheet to help generate ideas.</p>
What solution(s) will I try?	<p>Difficulty weighing the pros and cons of solutions.</p> <p>“I get really confused when it comes to figuring out which solution is best. I can’t hold all of it in my mind.”</p>	<p>Use the PSE worksheet to think through pros and cons on paper before entering into app.</p> <p>“No problem. Let’s work through the problem and possible solutions on this sheet first, and then take it from there.”</p>
What is my plan for trying out the solution?	<p>No clear idea of when or where s/he will try out the solution.</p>	<p>Encourage use of calendar to schedule practice with the solution in appropriate contexts.</p> <p>Involve knowledgeable others (family member, friend, co-worker) to support this process, as needed.</p>
EFFECT		
How effective was the solution(s) ?	<p>Forgets to review the solutions.</p>	<p>Review & discuss if there were opportunities to try out the solution(s), how it went, and what adjustments need to be made.</p> <p>With the client’s permission, also discuss with knowledgeable others.</p>

Technology to Support Problem Solving

The ReachMyGoals App:

<https://bestconnections.org/apps-home/reachmygoals/>



Goal setting and problem solving are often thought of as “two sides to the same coin.” The **ReachMyGoals app** could be used to support the **Problem-Solution-Effect** process by providing clients a way to frame problems as goals with the added benefit of having the app easily available on one’s smartphone or iPad.

ReachMyGoals lets you:

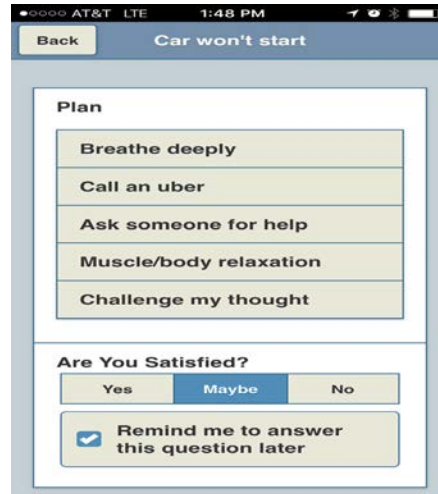
- Set personalized, specific, measurable goals.
- Break down the goals into tasks with due dates.
- Set multiple reminders for each task.
- Reorder steps into most logical order.
- Identify goal-related challenges and successes.
- Use templates to get you started.
- Use step-by-step guides to create SMART goals (Specific, Measureable, Achievable, Relevant, Timely).

Available at the App Store:

<https://itunes.apple.com/us/app/reachmygoals/id1161789364?mt=8>

Technology to Support Problem Solving (Cont.)

SwapMyMood



SwapMyMood is based on the evidence-based problem-solving and emotion regulation strategies developed and evaluated at the Brain Injury Research Center of Mount Sinai. These strategies are used extensively at other brain injury rehabilitation centers, including Shepherd Center, where the mobile app was developed.

The SwapMyMood app:

- Guides you through the multiple steps involved in problem-solving and emotion regulation.
- Provides links to strategy banks and other useful tips.
- Records and saves information input for future reference to assist with identifying effective strategy use.

For more information on this approach see Reference Section – Cantor, J., Ashman, T., Dams-O'Connor, K., et al. (2014).

For more information on the SwapMyMood mobile app, contact Tracey Wallace - Tracey_Wallace@shepherd.org

Tip Sheet for Instructing the Memorization of the Problem-Solution-Effect steps

Directions: Some clients may want to memorize the Problem-Solution-Effect key words and questions so they don't have to rely on the worksheets. Here are some scripts illustrating how to do this, emphasizing clear, simple clinician models and lots of distributed recall and application practice for the client.

Step 1. Learn the Key Words

1. Clinician: *You've learned that there are three key words to the problem-solving process—these are Problem-Solution-Effect. Repeat those words.*
2. Client: *Problem-Solution-Effect*
3. Clinician: *Correct!* (then after a short break)
4. Clinician: *Again, what are the three words you can tell yourself when there's a problem?*
5. Client: *Problem-Solution-Effect*
6. Clinician: *Nice job!*

Repeat Steps 4 and 5 with increasingly longer breaks in between until the client can recall the three words independently. Some individuals may want to stop here. Others will want to move on to Step 2.

Step 2. Learn the Key Word Questions & Apply to a Problem

1. Clinician: *There are questions that go with each of the key words. Let's start with Problem. There are three questions you can ask yourself about the Problem. It's fine to look at your Problem-Solution-Effect worksheet to help you remember these. They are:*
 - *What is the problem?*
 - *What do I already know about the problem?*
 - *What else do I need to know?*
2. Client repeats: *What is the problem? What do I already know about the problem? What else do I need to know?*
3. Clinician: *Great!* (then after a short break)
4. Clinician: *Again, what are three questions you can ask yourself about a problem?*

5. Client repeats: *What is the problem? What do I already know about the problem? What else do I need to know?*

Repeat Steps 4 & 5 with increasingly longer breaks in between until the client can recall the questions independently. If the client struggles recalling the questions as a group, break the task down to just one key question at a time and repeat the sequence.

6. Clinician: *Let's review. What are the three key words you can tell yourself when there's a problem?*
7. Client repeats: *Problem-Solution-Effect*
8. Clinician: *Great! What are the key questions you can ask about the Problem?*
9. Client repeats: *What is the problem? What do I already know about the problem? What else do I need to know?*
10. Clinician: *You've got it! Let's apply these questions to a real-life example.*

Client and Clinician then apply the questions to at least one personally relevant problem (e.g., missing medications; late for appointments). Use a problem from the client's previous Problem-Solution-Effect work sheets and/or a new problem that is important to them.

11. Clinician: *Let's move on to the key questions for Solutions.*

- *What are possible solutions to the problem?*
- *What solution(s) will I try?*
- *What is my plan for trying out the solution(s)?*

12. Client repeats: *What are possible solutions to the problem? What solution(s) will I try? What is my plan for trying out the solution(s)?*

(then after a short break)

13. Clinician: *What are three key questions you can ask about solutions?*

14. Client: *What are possible solutions to the problem? What solution(s) will I try? What is my plan for trying out the solution(s)?*

Repeat steps 13 and 14 with increasingly longer breaks in between until the client can recall all three questions independently. Apply these solution questions to the problem examples used above.

Repeat the above model-practice sequences with the Effect questions – *How effective was the solution(s) and What changes are needed?*

Examples of Problem-Solving Scenarios

Directions: It's preferable to use the client's personal examples of everyday problems when going through the ProSolv worksheets. However, sometimes it can be helpful to have other examples available to get the process rolling. Here are just a few:

Short

1. You left your smart phone on the bus. You know that you have a doctor's appointment sometime tomorrow, but you don't know what time the appointment is.
2. You want to see a movie that is closing today, but you also really want to get your hair cut for a wedding that you are going to tomorrow.
3. Your lease is up in 3 months, and it will not be renewed. Your friends tell you that it's really hard to find an apartment these days.
4. You want to go out to dinner, but your friend wants to go to the movies. Your friend is complaining to you that you always "get your way."
5. You thought you were doing a good job at work. But your boss just called you into her office and told you that you need to keep better records because your weekly reports are too disorganized. You are afraid to tell your boss about your cognitive problems.

Long

Your sister-in-law, her husband, and their two young daughters have been staying with you and your family for an extended visit. You welcomed their visit, but having out-of-town guests stay in your home is always a little stressful for everyone, and you've been under pressure planning your son's bar mitzvah.

Late one evening, your brother-in-law took his daughters out for pizza, and they didn't return until about 11PM. He promptly went to bed, leaving his girls unattended. The girls were loud, boisterous, and full of energy (probably from drinking soda).

Meanwhile, your wife and her sister also stayed up having a loud conversation in the living room. Between their conversation and the two hyper, screaming little girls, you couldn't get to sleep.

You felt miserable as you laid awake in your bed, hoping that the conversation would end soon and that the girls would be sent to bed. You tossed and turned as you thought to yourself, "Oh well, I can't do anything about it. I don't want to rock the boat. Even if I tried to do something, I'd be ineffective." You wound up being kept awake for hours, and you were tired and irritable the next day.

-Adapted from Sherr et al. (2001)

Problem-Solution-Effect Checklist

Problem

- What is the problem?
- What do I already know about the problem?
- What else do I need to know?

Solution

- What are possible solutions to the problem?
- What solution(s) will I try?
- What is my plan for trying out the solution(s)?

Effect

- How effective was the solution(s)?
- What changes are needed?

Example - Problem Inventory Work Sheet

Directions: Use this sheet to capture a range of problem areas shared during one-on-one sessions.

Sample questions to get started:

- What is a typical day or week like?
- What is going well?
- What is difficult? Describe this.

My week is pretty full trying to keep up with family demands.

I do a pretty good job getting all the family activities down on the calendar---the kids after school practices, ball games, etc.

But I just can't keep up with everything. Tired all the time.

And meals are a problem - Dinner is always late; I don't have all the ingredients I need. I'm trying to get dinner on the table while the kids need help with their homework. It's too much!!!

Next steps:

Select one problem area to start with. *Meals*

Fill out the *Think Through the Problem* worksheet for the problem selected.

Example - Think Through the Problem Worksheet

Directions: Use this worksheet to think through problem details.

What is the problem? (Describe briefly)

Overwhelmed feeding the family

What do I already know about the problem? What else do I need to know?

- What is my attitude toward this problem? How do I feel about it?
Makes me feel like I'm failing as a parent.
- Is this a big-deal or little-deal problem for me? For others?
Big deal—cuz it effects all of us - me, my kids and my spouse.
- When does it occur? (time of day, day of the week)
Mostly on the weeknights
- How often? (frequency) *Pretty much all the time.*
- Where does it occur? *At home*
- Who else is involved?
I'm the only one responsible for meals, but it effects everyone.
- What triggers the problem?
Not having a clear idea of what I'm going to fix for dinner, not having the necessary ingredients, starting too late.
- When is it *not* a problem?
At breakfast and on the weekends when there's more time to fix dinner.
- Have I solved similar types of problems?
Yes, work projects
- If yes, what solution(s) worked?
Preparing project materials for the next week the Friday before.
- How confident am I that I can solve it?
Somewhat confident.

Next steps:

If needed, revise "What is the problem?" based on these answers.

Not eating well prepared family dinners on time.

Begin filling out the *Problem-Solution-Effect* worksheet.

Example - Problem-Solution-Effect Worksheet

Directions: Use this sheet to think through possible solutions and make a plan.

PROBLEM

What is the problem?

Not eating well prepared family dinners on time

What do I already know about the problem? What else do I need to know?

Happens during the week; missing a lot of ingredients; lots of distractions while I'm trying to prepare dinner; delays dinner

SOLUTIONS: What are possible solutions to the problem?

Solutions	Pros	Cons
<i>Prepare and freeze meals ahead of time for the weekdays on the weekends</i>	<i>Less meal prep to do during the week when it's busier</i>	<i>Takes away from family time on the weekends</i>
<i>Create a better tracking system for grocery items</i>	<i>Hopefully decrease the # of missing items when I shop</i>	<i>It's another "list" I need to organize myself around.</i>
<i>Ask if my spouse can help the kids with their homework</i>	<i>Decreases distractions while cooking</i>	<i>My spouse is tired at the end of the day too!</i>

What solution(s) will I try? What is my plan for trying out the solution(s)?

(Define specific steps including who else is involved, where and when the plan will take place and what materials are needed.)

Solution #1: *Create a better system tracking system for grocery items (smart phone list or paper fridge list). Schedule time on Friday mornings to plan meals for the weekend and following week. Add items to shopping list. Grocery shop before picking up kids at school. Don't schedule anything else that day, if possible.*

Solution #2: *Prepare and freeze meals ahead of time. Make extra amounts of weekend meals for freezing and use during the week. Prepare at least one simple casserole in addition.*

Do the Plan – Afterwards, determine EFFECT

How effective was the solution(s)? What changes are needed?

Difficult to do both solutions at once. Need to focus on just Solution #1 for now and perhaps add in “ready-made” meals for the weekdays to the grocery list, ones that only need to be warmed up.

A Survivor's Perspective on Problem Solving

Take a moment to learn what it feels like to struggle with problem solving following brain injury and why systematically instructing problem solving skills can be useful. Cory sustained a brain injury several years ago.

CORY'S CORNER

PROBLEM SOLVING FOLLOWING BRAIN INJURY: A PERSONAL PERSPECTIVE

Reflecting back on my life before and after the brain aneurysm, I was reminded of the incredible changes that took place, both physically and cognitively. Prior to my injury, I was a type "A" personality, meaning there weren't too many problems or details that I could not handle. I had traveled around Europe, had a few college credits under my belt, and was settling into my life as a working wife and mother with plans to return to school the following term to pursue a nursing degree. I was physically fit and enjoyed biking, skiing, and gardening and was looking forward to the coming changes in my life. The aneurysm changed all of that. In addition to the physical impairments, my cognitive impairments were significant, especially my inability to retain information and problem-solve everyday challenges. These became even more pronounced as my reintegration into everyday life progressed and my responsibilities increased.

Generally, those who *haven't* sustained any injury respond to life's daily problems as if on autopilot, giving little thought to the mechanics involved. But injury or insult can make this "simple" process morph into something much more problematic and difficult.

Problem solving skills are important to successfully managing everyday life. These skills are usually acquired through trial and error over a lifetime and used on a daily basis. However, after a brain injury these skills are often lost and need to be systematically re-learned. Although that is not an easy task, learning to use a program (like ProSolv) to support problem-solving skills can make a huge difference in one's coping skills and functioning in everyday life.

Selected Resources & References

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