

Tutorial: Initiation

(See Tutorials on [Motivation](#), [Noncompliance](#))

WHAT IS INITIATION?

Initiation, or starting an activity or thought process, is typically included in lists of functions that comprise a person's executive or self-regulatory system. Initiation can be accomplished either by cuing from others (e.g., when a teacher tells a student to begin working on an assignment) or by self (i.e., self-initiation). An act of self-initiation is not required when environmental events trigger a thought or action. However, when there is no such trigger or cue, an act of self-initiation is required.

A part of the brain on the dorsal (top) side of the left frontal lobe is believed to be responsible for the initiation of thoughts or activity when external cues are not present. Individuals with damage to that part of the brain experience initiation impairment or "adynamia". Students with initiation impairment may have adequate knowledge of academic and social rules, routines, and expectations, but nevertheless not act on that knowledge unless prompted by others. In cases of mild-to-moderate initiation impairment, this problem is often misdiagnosed as laziness or, in some cases, depression.

Some activities place more demands on the initiation system than others. Playing a familiar board or card game may require little initiation. Once started, the rules of the game carry the activity without requiring ongoing acts of initiation. In contrast, a conversation may place heavy demands on initiation. Unless the conversation partner continues to ask questions, it may be necessary for the person to think of new things to say and new topics, each requiring an act of initiation. Thus conversations can be stressful for individuals with initiation impairment. In working with students with initiation impairment, staff should be sensitive to the degree of initiation required by activities and should try to stay within the comfort zone of the student.

WHY IS INITIATION IMPORTANT FOR MANY STUDENTS AFTER TBI?

Initiation impairments following TBI are due to damage to the dorsal (top) side of the frontal lobes. Because dorsal damage is less common than damage to the ventral (bottom) sides after TBI, initiation impairment is less common than inhibition impairment or impulse control problems. However, initiation problems do occur and can be troubling for the student, his friends, family, and school staff. In some cases, students may have both initiation and inhibition problems. It may be difficult to get these students started, but once started, it may be difficult for them to stop an action. **[See Tutorial on [Inhibition](#).]**

Initiation problems can be confused with laziness. One sometimes hears parents or teachers say, "He has no trouble getting started when it comes to football or video games. He's just lazy when it comes to school work." In some cases, this may be an accurate judgment. But in cases of mild-to-moderate initiation impairment, it is understandable that an initiation threshold is crossed with highly motivating activities, but not with less motivating activities. Effective management requires that the contribution of initiation impairment be acknowledged and addressed. In working with individuals with initiation impairment, staff should be sensitive to the degree of initiation required by activities and should try to stay within the comfort zone of the student.

Similarly, initiation problems can be confused with depression, another common consequence of TBI. **[See Tutorial on [Depression](#).]** Students who are relatively inactive and non-expressive may be considered depressed when the problem may rather be some degree of initiation impairment. Once again, effective management requires that the contribution of initiation impairment be acknowledged and addressed.

Other cognitive impairments can create the appearance of an initiation problem. For example, a disorganized student may remain inactive in the face of an organizationally demanding task not because of initiation problems, but rather because of organizational impairment. Similarly, a student with memory

problems may not remember what to do and therefore appear to lack initiation. The same may be true of students with problem-solving impairment. In each case, the contributing issues should be teased out using procedures presented in the hypothesis-testing sections of this web site.

WHAT ARE THE MAIN THEMES IN INSTRUCTION AND SUPPORT FOR STUDENTS WHO APPEAR TO LACK INITIATION?

Understanding the Problem

As always, the first task for teachers and parents is to correctly understand the problem. As indicated above, impaired initiation can easily be misidentified as a behavior problem, an emotional problem, or a specific cognitive problem. In most cases, impaired initiation interacts with these other areas of functioning in complex ways. But it is important to recognize the role played by impaired initiation and to implement intervention and support strategies specifically designed to address the initiation component of the problem.

Initiation and Medication

In some cases, pharmacologic interventions for other problems can reduce the student's initiation. In other cases, pharmacologic intervention (e.g., medications for depression) can be used for the initiation problem itself. If initiation is reduced as a side effect of medications, consultation with the prescribing physician might be needed to arrive at the best balance between pharmacologic effectiveness and processing efficiency.

Accommodations and Environmental Supports

1. Well established and understood daily routines: Students with initiation impairment should thoroughly understand the sequence of activities that comprise their daily routines at home and at school. If they also have organizational or memory impairments, the daily routine should be graphically represented (e.g., a sequence of photographs, drawings, or written outline) for easy viewing and understanding. **[See Tutorial on Organization.]** The greater the routine or “automaticity” of activities, the lower the demand on the student to initiate an action.

2. Well understood instructional routines: Teachers should ensure that all components of the instructional routine are similarly well understood and as automatic as possible. **[See Tutorial on Instructional Routines]**

3. Initiation cues that are as strong as necessary while avoiding “nagging”: Initiation impairment results in a need for frequent initiation cues from others. However, frequent cuing from others can result in the student perceiving that he is constantly being “nagged”. This perception may in turn result in negative or oppositional student behaviors. For this reason, initiation cues should be negotiated with the student so that they are as appealing as possible. Often cues that do not involve other people are useful. For example, homework time might be signaled by a timed alarm paired with written instructions. Some students tape record their morning instructions so that morning initiation cues come from a tape recording of their own voice rather than a parent's voice that could be interpreted as nagging. A student with physical disability who has a home program of physical exercises can work with staff to create a “self-instruction exercise video” so that the home program can be completed by watching the self-instructions and self-modeling rather than having to respond to parental instructions.

4. Organizational supports: Students with initiation impairment often have organizational problems as well – or in some cases the organizational problems are a contributor to the impaired initiation. **[See Tutorial on Organization.]** These organizational problems are often more serious than they appear on the surface to be. Students with organizational problems usually benefit from advance organizational supports. Advance organizers can be as simple as a checklist or outline of a task, or a written schedule of activities to be

accomplished in a given time frame. Often the advance organizer is a graphic organizer for the task (e.g., a series of photographs that indicate the sequence of an activity; a series of boxes and connecting arrows depicting the key elements of a story and their organization). In some cases the organizer can be as explicit as a series of photos of the student moving through the steps of the task.

5. Ongoing monitoring of student activity: It is easy to assume that students will continue an activity that they have begun (e.g., homework) until the task is completed. However, students with initiation impairment may stop at transition points in the task (e.g., when completing homework, stopping after one page of math problems is completed). These students often require another initiation cue to continue the task to completion. Teachers and parents should frequently check to see that the students are continuing to work on their tasks to completion.

6. Activities that require minimal initiation: For students with initiation impairment, activities that require ongoing initiation can be difficult and stressful. For example, casual conversation often requires ongoing topic initiation; thus students with initiation impairment find such conversations stressful. At the other extreme, activities that present few initiation demands are easier and less stressful. For example, once begun, a familiar board game proceeds on its own momentum, with each move being a trigger for the next. Staff and family should try to make judgments about the initiation demands of activities and engage the student in as many low initiation demand activities as possible.

7. Peer support: Students with initiation impairment sometimes benefit from being paired with peer buddies who can assume responsibility for the initiation demands of their activities.

Interventions for the Student

If the initiation problem is a consequence of damage to specific initiation centers in the left frontal lobe, there are no specific training programs designed to improve initiation across all domains of activity. Addressing other cognitive problems and using compensatory approaches are usually indicated:

1. Other primary problems: If initiation is weak because of attention problems, organization problems, memory problems, or other cognitive problems, staff and family should use intervention and support procedures that target the underlying problem. **[See Tutorials on [Attention](#), [Organization](#), [Memory](#).]**

2. Automatic routines: As routines become more and more automatic, the impact of initiation problems can be minimized. Thus there is a great advantage in automatizing routines for individuals with initiation impairment. This includes routines of everyday living at home, instructional routines at school, social routines, and the like.

3. Request for help: Students with initiation impairment should be taught to advocate for themselves by saying, with confidence and comfort, words like “Could you get me started on _____ at such and such a time”.

4. Start early: Like students who process information slowly and work slowly, students with initiation impairment should create a habit of starting assignments and projects early so that they do not get rushed for time.

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