Tutorial: Motivation

(See also Tutorial on Executive Function/Self-Regulation Routines; Sense of Self; Noncompliance

WHAT IS MOTIVATION?

Motivation is that which activates a student's behavior and gives it direction. Motivation can be either intrinsic or extrinsic. Intrinsic (internal) motivation is an internal state or condition that drives choices and behavior. Extrinsic (external) motivation refers to direction from outside the person, including the promise of rewards, the threat of punishments, intimidation, and coercion. Both intrinsic and extrinsic motivation are essentially related to goals.

Intrinsic Motivation: Put simply, intrinsically motivated students act in certain ways because they desire and like the outcomes and their actions are satisfying for them. Intrinsic motivation may be determined by any of the following:

- 1. Bodily State/Needs: The student may seek sensory stimulation or seek to decrease hunger, thirst, or other physical discomfort.
- 2. **Emotional Needs:** The student may seek to calm over-aroused emotions, increase good feelings, decrease negative emotions, maintain optimism and enthusiasm, develop a sense of productivity, or increase self-esteem.
- 3. Cognitive Needs: The student may seek to increase knowledge and understanding, maintain attention to interesting and personally meaningful events and activities, solve problems, or resolve uncertainty or confusion.
- 4. Social Needs: The student may seek to be like a role model, to be part of a group, to help others, or to be accepted by peers and have friends.
- 5. **Volitional/Self-Determination Needs:** The student may seek to achieve goals that she has set for herself, take control of her affairs, reduce others' control over her (become self-determined), or pursue her dreams.

In summary, intrinsically motivated students act as they do because they are driven by their own needs, goals, and wants versus external inducements, they like the outcomes, and the outcomes make them feel good – give them a sense of satisfaction. The agent of motivation is inside the person; they have an internal locus of control.

Extrinsic Motivation: Put simply, extrinsically motivated students act in certain ways because they believe they will receive rewards offered by others, avoid punishments threatened by others, or please others by doing so. The agent of motivation is outside of the students; they have an external locus of control. Management systems in many rehabilitation centers, schools, and homes are based on the assumption that students are extrinsically motivated – that they will not engage in positive behavior without external inducements. The underlying belief is that most students engage in activities because they are directed to do so, because they are required to do so, or because they are provided with either promises of rewards or threats of punishment in order to sustain their participation. Thus rewards (e.g., points, stickers, food) are offered for activities as basic as being present at assigned classes or therapy sessions.

The Danger of Over-Reliance on Extrinsic Motivation:

Over the past 40 years, a large number of studies of many populations of people with and without disability have demonstrated the following two important points.

- 1. Over-reliance on extrinsic motivation destroys intrinsic motivation. It has been shown repeatedly that adults and children alike become less interested in activities if they are given artificial inducements (e.g., food, stickers, points, money) to engage in the activities that they were originally willing to engage in with no inducement.
- 2. Over-reliance on extrinsic motivation leads to learned helplessness and learned dependence. Learned helplessness is a state in which the individual does not believe that she is capable of influencing important outcomes in her life. The more students' behavior is determined by others' directions and external inducements, the more the students will lose their sense of self-determination and self-efficacy.

These are very serious threats. The conclusion is not to ban stickers or point systems from classrooms or to tell teachers that they should wait for students to decide for them to do what they are supposed to do. Good judgment is mandatory. Firm instructions and external inducements (e.g., promise of a reward) may be necessary to engage a reluctant student at the outset. However, as quickly as possible, staff should emphasize management systems that are based on principles of intrinsic motivation and selfdetermination. (See below)

WHY IS MOTIVATION IMPORTANT FOR MANY STUDENTS AFTER TBI?

Motivation is an important theme for many students after brain injury in part because (1) some brain injury related impairments may be misinterpreted to be motivation impairments and in part because (2) motivation is understandably dampened when the student is unable or not allowed to engage in activities that were motivating before the injury. Occasionally specialists in brain functioning describe a system of brain areas that underlies motivation, that is, motivation circuitry in the brain. As expected, these areas are largely in the frontal lobes. However, it is hard to distinguish between motivation circuits, on the one hand, and areas of the brain that subserve initiation, activation, task orientation, working memory, and other functions that, if damaged, result in behaviors that are easily mistaken for lack of motivation.

- 1. Brain Injury Related Impairment: Initiation Impairment: Students with damage to the dorsal (top) parts of the frontal lobes may have some degree of initiation impairment. That is, there is a part of the brain that enables a person to start and sustain an activity that he wishes to do or is supposed to do. When that part of the brain is damaged, the student may appear "lazy", "unmotivated", or possibly depressed. Because these conditions look so similar, students with brain injury-related initiation impairment are often labeled lazy, unmotivated, or depressed. Intervention for initiation impairment is quite different from intervention for true laziness, lack of motivation, or depression. Furthermore, treating initiation impairments as though they are motivational difficulties can result in an escalation of behavioral challenges. [See Tutorials on Initiation; Depression]
- 2. Brain Injury Related Impairment: Fatigue: One of the most common consequences of both mild and severe TBI is fatigue. Fatigue can be a result of the ongoing healing efforts inside the body or of the extra effort needed to perform even simple activities. Studies of individuals with TBI show that larger amounts of brain activation is required to accomplish tasks that may be fairly automatic (and require less mental effort) for people without brain injury. This requires energy and depletes energy supplies. Even the cognitive effort needed to maintain attention and focus on everyday tasks may cause greater than expected fatique. (See Tutorial on Fatigue.)
- 3. Reduction in of the Domain of Self-Motivating Activities: Students with ongoing disability after brain injury inevitably face reductions in their domains of intrinsically motivating activities. For example, a motivated athlete may not be able to return to favored sports. A motivated student may not be able to engage in or succeed at academic activities that were previously motivating. A socially motivated student may not be able to keep up with old friends and may face social isolation. In each of these cases, not only are formerly motivating activities no longer possible, but also the general level of motivation that these activities had yielded for the student is no longer available.

WHAT ARE THE MAIN THEMES IN INSTRUCTION AND SUPPORT FOR STUDENTS WITH APPARENT MOTIVATIONAL DIFFICULTIES?

First, it is important to think clearly about the concept of motivation. To the extent that staff and family believe that it is their responsibility to "motivate the student", the student will remain unmotivated. "Unmotivated" means dependence on others for motivation. This is not to say that there is nothing that staff and family can do to help a student become motivated. Rather it is to say that the ultimate goal is the student's internal motivation, not an extended dependence on other's ongoing provision of external "motivators".

Second, as always an understanding of the problem must precede intervention. Motivation problems must first be distinguished from difficulties with initiation and fatigue. Motivation problems must also be distinguished from general problems with learned helplessness (e.g., "Nothing I do makes a difference"), depression (e.g., "I can't do anything right"), and task orientation (e.g., "I don't know what I'm supposed to do"). Procedures to address these problems are different from procedures to address specific motivational difficulties. [See Tutorials on Initiation; Depression; Learned Helplessness; Instructional Routines]

Important Principle: "Motivating" students externally (e.g., with rewards like food, stickers, points, or money for completing academic tasks) may produce short-term results in student engagement and compliance. However, these rewards will not produce motivated students; they may encourage the opposite. When parents or staff say that they are motivating the student by promising rewards or threatening punishments, they may achieve short term compliance, but not a motivated student. In fact, promises of rewards or threats of punishment may ultimately reduce the student's internal motivation to engage in positive behavior, like studying for exams, doing household chores, and the like. Therefore, although extrinsic motivation may be needed for a period of time, that period should be as short as possible and dependence on extrinsic motivators should be reduced as soon as possible.

Motivation, Goals, and Interests: Motivational Analysis: Motivational analysis has two parts: (1) An exploration of the student's life and interests (via observation, parent interview, student interview) to determine what activities are intrinsically motivating and what goals the student may have. These intrinsically motivating activities may then be used in helping the student gain interest in broader domains of activities. For example, a student may have interests and goals (e.g., sports) that appear to have little to do with academic work, but can be used creatively to generate greater interest in and motivation for academic work.

(2) An exploration of the student's life (via observation, parent interview, student interview) to identify external motivators that can be used as external inducements to increase short-term compliance and motivation. This is to answer the question that teachers often ask, "What will the student work for?"

Often motivational analysis is restricted to #2. But motivation produced by external inducements yields only short-term benefits. Therefore it is important to look for flickers of interest that may help to develop long-term internal motivation (#1)

Goal Orientation: Executive Function/Self-regulation Routines: Motivation is nothing if it is not oriented to goals. Therefore routines of instruction and interaction should highlight goals as the student engages in academic work. The highlighted goals might be immediate or short-term (e.g., ""You'll be proud of yourself when you finish this paragraph" or "Do these 10 problems and you are done for the day"), social reward goals (e.g., "____ will be proud of you when you finish"), or long-term goals (e.g., "This will be important for the job you want to get"). The Goal-Obstacle-Plan-Do-Review script/routine described in the tutorial on Self-Regulation/Executive Function Routines should be used as a component of the staff and family focus on increasing internal motivation.

Goal Setting and Planning: Teachers should help students learn how to set achievable goals and create plans for achieving those goals. Initially this will be done collaboratively with the student. Small steps to

reach the goal can be written down or pictured so that the student does not feel overwhelmed by the task or the distant goal. There should be as much student choice as possible in these plans. Choice is strongly linked to motivation.

Reviewing, Self-Monitoring, and Self-Rewarding: Teachers should also help students create self-monitoring systems (e.g., record their efforts in studying for an exam or completing an assigned project, and then relate those efforts to the grade they received). Regular review of these self-monitoring systems may help the student grasp the relation between effort and outcome. Furthermore, review of performance over time may help the student recognize that she can learn and improve skills. An understanding that effort results in improvement is essential for motivation. Students should also be encouraged to reward themselves (e.g., play a video game; call a friend) after achieving a short-term goal (e.g., completing 20 math problems). (See **Tutorial on Self-Monitoring.)**

Minimal Reliance on External Motivation Systems: External motivational systems - inducements like stickers, food, money, points to be cashed in for rewards later, and the like - can be effectively used to achieve short-term engagement and compliance. However, they should be reduced as soon as possible to avoid growing dependence on external inducements and decreasing internal motivation.

Praise: Praise is a useful social reward and possible motivator if used wisely. First, praise is effective only if the opinion of the person offering the praise is valued. Second, praise should have an appropriate target. For example, "These answers are all correct; good job!" and "This paragraph is well organized and includes well constructed sentences; good job!" are effective praise because they highlight some specific work that was done well. Effort should also be praised, particularly in the case or poorly motivated students: "Great effort!! You see, when you work on it, it turns out much better!"

General praise, like "Great job!" is less effective, particularly if the student does not know what was done well or, worse, if nothing was done well. Empty or false praise - praise in the presence of nothing to praise is counter-productive. Students lose respect for the person offering empty praise and genuine praise may become less meaningful.

Recognition of Natural and Logical Consequences: Associated with praise, students need to clearly grasp the relation between their efforts and their satisfying successes (or between lack of effort and failure). These relations should be highlighted by staff: "You see? You studied for this test and you got a B; last week you didn't study and you got an F. See how that works? And it feels good to get a good grade, doesn't it?"

Correct Attribution of Success and Failure: Connected with targeted praise and natural consequences is the need for students to understand why they succeed and why they fail. Many students attribute their successes and failures to chance (e.g., "I don't know why I failed; it just happened"), luck (e.g., "Other kids are lucky; I can't catch a break"), the whimsey or arbitrary decisions of teachers (e.g., "My teacher just doesn't like me"), or generally negative self-perception (e.g., "I can't do anything right"). Ideally students can be brought to the point where they explain their successes and failures correctly: "When I work hard and use my strategies, I do OK; When I don't, I do badly"; "Reading is harder for me than for other students, but I can get it if I give myself enough time and use my strategies."

Staff and Family Modeling of Enjoyment of Academic Tasks: Poorly motivated students need to be in the presence of people who get joy from learning, reading, and other academic tasks. This pleasure should be made obvious. Some students simply do not understand that academic work – and the skills and knowledge that result from it - can be a source of pleasure and satisfaction. Staff and family should use words like "interesting", "exciting", "intriguing", and the like when introducing tasks to students. Similarly, staff and family should highlight the pleasure they take in reading and other education-related activities.

Success: Poorly motivated students need to experience success with academic tasks and the satisfaction that comes with being successful and with producing a competent product. Success breeds motivation: failure breeds frustration and lack of motivation. Achieving success may require a great deal of support from staff. (See Tutorial on Instructional Routines.)

Expert Role: Help Others: Many students with brain injury are discouraged because they are unable to perform and achieve at the level they were accustomed to before the injury. When these students are invited to help other students with greater need, they may begin to revise their self-judgment and recognize some of their strengths. Motivation is enhanced when students perceive themselves as competent. Playing the role of teacher helper can also contribute to this goal.

Expert Role: Projects: When the students' lack of motivation takes the form, "I don't need to work on that; I can do it already", it is sometimes effective to take them seriously and reply, "Good! So will you help me help others who are not so good at it?" The student can then work with the teacher or therapist to develop a manual or tip sheet or video designed to help students with difficulty in that domain. The goals of the Project are (1) to give the poorly motivated student an expert role that enhances motivation and (2) to create opportunities for the student to practice the target skill while working on the Project.

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