PROJECT ACCESS FACT SHEET #7

COLLECTING DATA FOR CHANGING SELF-INJURIOUS BEHAVIOR

John is a 15-year-old adolescent with a ten-year history of self-injurious behavior (SIB). John typically hits himself with a closed fist either on the top right side of his head just above the forehead or on his right upper thigh.

A frequency chart was developed using the last three months of anecdotal records that were kept via a personal journal that travels between home and school. Upon charting the journal information for a functional assessment of behavior it appears that John's head hitting behavior clusters approximately one month apart. It's possible that he may be more susceptible to headaches during this time.

John's thigh hitting behavior is obviously more frequent and appears to be related to avoidance of task and/or transition from one activity/task to another.

Because the message of John's head hitting behavior appears to be motivated by pain, a medically-supervised intervention was initiated. He was tested for allergies and sinus sensitivity. Appropriate medicine was prescribed and John's head hitting behavior dropped dramatically (see Chart 2).

John's thigh hitting behavior was obviously more frequent. In analyzing Chart 1, one needs to average the number of times hitting behavior occurs in order to determine a realistic reduction percentage to use in the measurable goal outcome.

In order to write a realistic appropriate measurable goal, one must choose the correct data summarization. After data is recorded/charted, it must be summarized. Generally speaking, data may be summarized as raw scores, percentages, rates, or averages. For those, like me, who have a mental block (breakdown is more like it!) when it comes to math, a little refresher course may be in order.

Raw Scores are the total numbers one gets before anything is done to them. If one is monitoring the fre-quency of a student's behavior, raw score is the total number of times the student engaged in that particular behavior. If one is monitoring the duration of a student's behavior, raw score is simply the number of minutes and/or seconds the student engaged in that behavior.

Percentages: When dealing with percentages, one collects data on the frequency of a student's behavior and divides the total number of opportunities the student had to engage in the behavior into the total number of times he actually engaged in it. (Example: Student has opportunity to call out answers in class 30 times, but only calls out 10 of those times. Thirty (30) is divided by 10 to get .33 (x 100) to equal student called out 33% of the time.) When monitoring duration, take the total time the student is observed divided by the number of minutes (s)he engaged in the target behavior. (Example: Student is observed 60 minutes and is seen in "out of seat" behavior for 32 minutes, i.e., 32 divided by 60 equals .53 or 53%. In other words, the student was "out of his seat" 53% of that observed period of time.

Rate is usually defined as average number of times (frequency of response) a student engages in a particular behavior during a given amount of time. (Example: Mary is observed for 5 minutes and swears 10 times. There-fore, Mary's rate of swearing is 2 swear words per minute - 10 divided by 5 equals 2). Remember, rate is NOT percentage. Multiplying by 100 to get rid of the decimals is not part of figuring out rate. Maybe the following table will help:

.001 = 1 response per 1000 minutes

.01 = 1 response per 100 minutes

.1 = 1 response per 10 minutes

1 = 1 response per 1 minute

Average is typically used to summarize data. For example, in looking at John's thigh hitting behavior over the course of February, March, and April, we find during 18 days in February he hit himself 79 times, during 21 days in March he was observed to hit himself 78 times, and during 19 days he was observed in April, he hit his thigh 79 times. This is an overall total of 236 hits in 58 days of observation OR one could say that John hit himself an average of 4.07 times per day. 4.07 hits per day is the average rate of intensity that John engaged in hitting his thigh.

In order to write a meaningful, measurable goal, this is important information from which to attain realistic outcomes.

The goal could read: John will reduce his thigh hitting behavior by 25% over the next six weeks. Ask yourself:
What does that mean? To reduce 4.07 hits per day by 25% would basically mean to determine 25% of 4.07. This is 1.02; therefore, John will reduce his rate of thigh hitting behavior by 1 hit per day.

In order for that goal to be measured and met, a functional analysis of the behavior had to be accomplished. It was determined that John's message for the thigh hitting behavior was about avoidance and/or transition. The following interventions were implemented:

In addition to his existing visual schedule, John was given an egg timer, which quietly displayed the last five minutes of an activity. This gave him ample warning and time to "get ready" for the task or activity to be "finished." John was given a "break" card to hold up when he felt he needed to take a break.

After the break, he was always brought back to task in order to "finish."
After especially difficult tasks/activities that John usually tried to avoid, reinforcements were added to John's visual schedule that he could physically remove from the schedule to reward himself for "finishing." The same goal, written to emphasize the positive aspect of John's future behavior, might read: **John will increase by 25% over the next six weeks appropriately asking for a break during tasks** difficult for him and appropriately transitioning between tasks. Both versions of John's goal require him to reduce hitting behavior and to increase appropriate behavior.

These interventions were put in place and Chart 2 shows that during the 21 days in May John was observed, 35 hits occurred and during the 11 days in June he was observed, 16 hits occurred. Over the course of those 32 days, a total of 51 hits took place. This is an average rate of 1.6 hits per day. It can be concluded that there has been a 61% reduction in thigh hitting behavior over the past 32 days. (4.07 - 1.6 = 2.47; 2.47 divided by 4.07 = 61%) By subtracting 1.6 hits from the original rate of 4.07, it can be seen that the thigh hitting behavior has been reduced by an average rate of 2.47 hits per day. This is a 61% reduction from the original rate because 2.47 is 61% of 4.07.