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A Behavioral Protocol for Increasing Initiation, Decreasing Adynamia

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Part 1: Task Analyses

Task Analysis involves breaking any task or chore or complex procedure into single, logically sequenced steps & recording the steps in a Checklist. The checklist allows checking off each step as it is completed. Task analyses always make task initiation, completion & follow through much easier. Performing a Task Analysis and generating a checklist can greatly improve ability to perform tasks in persons with limitations in memory, attention, energy, initiative, ability to sustain performance, organization, or almost any other difficulty.

Task Analysis Checklists are also extremely useful in minimizing fatigue by reducing the demand for, and energy consumed by reasoning and problem solving associated with planning, organizing & having to recall, make decisions & prioritize appropriate steps and sequences for a task. Task analyses are useful for both basic and complex behaviors. Most importantly, Task Analyses allow re-establishing the efficient routines that make up normal everyday human behavior and activity. When the procedures assisted by Task Analyses are repeated consistently, they eventually become automatic [habits] and become as natural as tying a shoe.

The ingredients for rebuilding these automatic habits are the 3 P's: **Plan**, **Practice**, **Promotional Attitude** (see additional handout). The result is *rehabilitation*, or removing obstacles to independence, and systematic achievement of incremental goals in desirable life areas.

Case Study #1:

Rehabilitation Loss of Initiative - Drive Following Anterior Communicating Artery Stroke

Background:

AT is 52yo high school principle who sustained an ACoA aneurysm that produced three week coma, inability to return to work. Premorbidly, AT worked 50 - 55 hours per week, and engaged in activities with children, yardwork, weekend activities, etc., and was reported to have a slightly above average activity level. He was seen 1.5 yrs post, about the time his wife was trying almost a last effort before divorce, because he wouldn't get out of bed most mornings before early afternoon, would return to bed after getting out and completing only one or two poorly executed grooming or washing tasks, and wouldn't shave, do nails, get haircut, etc. Patient complained of primary, pervasive lack of energy ("I got no get up and go...it's too hard...just let me sit/lay here a while...").

Intervention:

Amantadine was initiated, with only the slightest noticeable improvement. Psychostimulants produced side effects greater than energy / initiative increase.

A behavioral plan was initiated that included designing a Task Analysis (see below), represented as a poster check list. AT was cued by his wife, family, to follow steps, and showed almost immediate improvement with structured task analysis. Within three weeks, he was able to complete the routine without fail and even without referring to the check list, although he did initially require some supervision with getting out of bed to start the routine. Eventually, he was able to set and respond consistently to the alarm and independently initiate and complete the routine. Concurrently, a contingency management plan was adopted, involving patient rating difficulty of tasks preferred by wife, wife rating desirability of these, patient rating desirability of a few hard to identify motivating appetitive interest rewards (only a few could be identified at first: foot massage, home made chocolate cream pie, sex, etc; over a couple months, a list of approx. 20 was identified, with increased activity being associated with identifying new motivating rewards), wife rating difficulty of providing rewards, with results compiled into a simple multiplication calculation (i.e., desirability X difficulty on 1-10 rating scale) that produced points for performed activities that could be exchanged for appetitive desires.

Outcome:

Data are represented in a proliferation in number of activities, increasing from an average of about 10 per week pre-program (with requirement of considerable effort and cueing) to an agreed quota of 50 per week, usually with minimal cueing, after implementation. Patient become semi-autonomous with activity completion, needing only minimal supervision from wife most of time (e.g., occasional calls, reminders about chores that could be completed), and more intense supervision, cues, phone call reminders, at other times. Every change in routine (e.g., holidays) produced regression and return for a booster treatment session, but the behavioral management strategies were mostly adopted by his family so reduced need for formal intervention was noted. Eventually, his family devised a contingency wherein patient could 'prime' his own pump by increasing activities back to quota to avoid having to visit psychologist (1 hour drive, and extremely fatiguing and unpleasant trip)

Task Analysis Sample

AT's Initiative(Automatic Habit/Energy) Retrainer

MORNING

- Wash Face
- Shave
- Apply medication to face if needed
- Brush Teeth
- Comb Hair
- Dress before "morning" nap
- Check finger nails & toe nails; trim when needed
- Check hair length and get a haircut as needed
- Shower and wash hair
- Perform an Activity/Chore (Choose from Menu)
- Check Schedule (e.g., M,W,F=Y; Tues=RedX)
- Check your appearance before leaving the house
- **AFTERNOON**
- Fill Out Chart (Behavioral Activity Monitor & Points)
- Eat Lunch

- PowerRelaxationNap (PRN; Use Tape)
- Perform Activity or Chore (Choose from Menu Provided)
- **EVENING**
- Eat Dinner
- PRN (PowerRelaxationNap; Use Tape)
- Engage in Evening Activity
- 10:00pm: Complete Chart (Behavioral Activity Monitor & Tally Pts)
- Shower (if not done in am; or, again?)
- Watch TV News
- Prep for Bed (PJ's, Brush Teeth, etc.)
- BedTime

Part II: Behavioral Contingency Management Programs

PURPOSE: Increase the frequency of highly desirable but infrequently occurring behaviors by rewarding their performance with highly desired outcomes or rewards.

METHOD: Identify highly reinforcing events and highly desirable behaviors and design a formal behavioral contingency program which allows exchange of points earned by performing desirable behaviors for highly rewarding events, as follows:

- (1) Explain program rationale and Identify Reinforcers (motivating rewards)
- Complete a list of reinforcers through a collaborative effort involving therapist and client/patient, as well as caretaker/family member/staff. Interview and survey homework which includes completion of the Motivating Rewards Survey, is usually necessary; for couples or family members, administration of the "Communication Enhancement Strategies: Pleasures/ Displeasures Survey" may be helpful.
- Rate Reinforcers (from 1 to 10) according to:
 - Amount of perceived Enjoyment/Reward (usually completed by the client, patient, etc.)
 - Amount of perceived Provision Difficulty (usually completed by the caretaker, spouse, parent, staff, etc.)
- (2) Identify Desirable Behaviors (reward worthy desirable behaviors)
- Complete a list of desirable behaviors or behaviors which are targeted for increase in frequency of occurrence, through collaboration between therapist and caretaker/family members/staff, as well as client/patient. Interview and Homework, including completion of structured lists, is usually necessary; for couples of family members, administration of the "Communication Enhancement Strategies: Pleasure/ Displeasure Survey" may be helpful Administration of the Neurobehavioral Symptom Checklist is recommended.
- Rate Desirable Behaviors (from 1 to 10) according to:
 - Desirability, or how desirable they are (usually completed by the spouse, caretaker, staff, etc)
 - How Difficult they are to Provide (usually completed by the client, patient, etc.)
- (3) Compute Point Values
 - Reinforcer Values or Motivating Rewards, representing number of points required for purchase (formula: Reward Value = Enjoyability rating X Provision Difficulty rating)
 - Desirable Behavior reward points, representing number of points awarded (formula: Earned Points = Desirability rating X Provision Difficulty rating)
- (4) Complete Motivating Rewards and Rewardable/Desirable Behavior Goals Forms. Review, discuss and modify as deemed appropriate
- (5) Provide a form for recording transactions regarding point accumulation for desirable behavior completion and exchanging earned points for motivating rewards (i.e., "The Bank"). Instruct participants in program function, and begin program

- (6) Assess results, solicit feedback and revise program to increase effectiveness (i.e., alteration of point values, addition of new rewards or desired behaviors, reinforce, etc.)
- (7) Reinforce progress, continued participation, perceptions of control, etc.

Case Study#2

Rehabilitating Efficiency in Everyday Routine Following Traumatic Brain Injury.

Background:

Brain Injury Rehab Professional who sustained a complicated mild TBI with 8 hr. PTA and right parietal bleed that spontaneously resolved. Despite returning to work within one week to regular job, part time, and increasing to full time in one month, it was noted, after almost two years post injury, with adequate adaptation at work and no reported change from preinjury level of performance, that many ordinary daily routines were significantly less efficient, more time consuming, etc., with subsequent reduction in time for personal life. For example, taking more time to dress in am meant getting to work later, having to stay later, returning home in greater fatigue, reducing time available for desirable activities, etc. A task analysis was employed to identify employed tasks and sequences employed prior to injury.

Outcome:

Upon implementation, reinstatement of approximate premorbid level of everyday efficiency, as gauged by self reported estimate of time required to dress in am, maintain a relatively clean house, engage in social activities, pursue dating, etc. The list was employed for several weeks before storing away and only reviewing once or twice in the following year. Follow up one year later revealed that most, albeit not all, efficiency habits had been maintained (e.g., house cleaning habits were less consistently followed).

Single Doctor Chores CheatList (summary)

BATHROOM

- Dust around the Mirror and Light and Window, including the tops of the light and mirrors and window sills.
- Dust, with a damp cloth, around the windowsills, on the front of the blinds and the back (reverse sides by adjusting slats up and down), and along the tile division.
- **Tub and Toilet** (bi-weekly)
- Wipe down the bathtub walls, going to the ceiling.
- Use cleanser and a brush to quickly wipe grime in the tub, and scum stains on the wall.
- Use soapy brush to quickly wash and rinse the inside shower curtain.
- With a soapy disinfectant, clean the toilet top, seat, behind the seat, and under the seat, along the walls to the floor
- Fold all tiles neatly on the tile racks
- **Floor** (weekly)
- Sweep the floor, including behind the toilet.
- Take out the rug and shake it off of the porch vigorously to remove dirt and dust.
- Remove and empty the garbage can.
- Mop the floor, using ammonia or Clorox and be sure to get behind the toilet.
- Use a rag to get the floor behind the toilet. Be sure to get in all the nooks and crannies along the edges of the floor, near the tub, etc.
- **LIVING ROOM** (bi-weekly)
- Dust Furniture, including all shelves

- Use broom/duster to dust along all baseboards, window sills, ceiling molding & fireplace mantle
- Sweep and Vacuum Under Rugs
- Sweep and Vacuum Floors
- Vacuum the couch, love seat, and chair
- **KITCHEN** (weekly)
- Empty Trash Can
- Clean Top of Refrigerator and Microwave (Wet Soapy Cloth)
- Clean Inside Refrigerator and Microwave
- Wash Any Dishes and Clean Sink with Cleanser
- Clean Sink and Surrounding Countertop
- Sweep, and then Mop Floor
- **STUDY/OFFICE, DINING ROOM ...**

BEDROOM

- Dust dresser tops, around doors and windows, and along baseboard and ceiling molding
- **LAUNDRY**
- 9:00am Saturday: Take Clothes to Dry Cleaners before 10:am
- 5:00pm Saturday: Pick up clothes from Dry Cleaners and Arrange in closet
- 10:00am Sunday: Launder socks, underwear, bathroom towels, bed sheets, etc.
- 11:00am Sunday: Use Dryer & Fold & replace clothes when done. Hang Dry other clothes
- 11:20am Sunday: Steam mist to refresh any pants, shirts in need
- Sunday 9:00pm: Fold, hang, put away dry clothes