

Working Together: Parents and Time! Contingency Management Strategies and Time's Influence on Motivation!  
By John K. Durall, M.A.

AD/HD is theorized to be a developmental delay of self-control (Barkley, 1997). Self-control results from brain actions identified as "executive functions." Just as a business has an internal executive officer to oversee management functions, so does the human brain. In the brain's self-management operations, it is not a person, but rather "time" that becomes its executive director (Barkley, 1997). The person with AD/HD needs substitutions to compensate for the slowed maturational growth of self-control systems. One such external substitution is a parent-managed motivation program to influence the child's behavior. In parent implemented behavioral motivation programs, the parents need to align themselves with "time," and become co-executive directors.

"IF-THEN" means that "if" a person does a specific behavior, "then" he/she will receive a resultant negative or positive consequence. Let's explore how time controls motivation and resultant adaptive behavior via "if-then" contingencies. To do this we will step into the shoes of Charlie, a child with AD/HD. Since we have the ability to empathize (a skill which is often lacking with AD/HD) we can put our own mature insight into his thinking.

Charlie's Knowledge: "Sure, I know it is good to get good grades and I even want to get a good grade on this test today."

Charlie's Motivation: "But this test is on information that has nothing to do with what is happening in my life right now! It is so irrelevant to me. I'll just keep playing."

If-Then insight: If Charlie would study then he would get a good grade.

Charlie's Knowledge: "Sure, I want to have a good job when I grow up."

Charlie's Motivation: "But school is so ridiculous! Right now I want to play Nintendo. There will always be time for school."

If-Then insight: If Charlie would study now and for the next four years then he could go to college. He could then study for four more years and then get an interview to get a job. He would then have a chance to get a job.

Charlie's Knowledge: "Sure, I want to sign up to play basketball on weekends."

Charlie's Motivation: "But right this minute I do not feel like going down to the park to register. There is a lot of time left."

If-Then insight: If Charlie would just get up and go to the park, then he could register to be on a team. Then he could play basketball for the next 10 weekends.

Those with AD/HD have difficulty with contingent "if-then" behavior (Barkley, 1997). Various forms of compensations can be actively sought. On a behavioral level, parents can substitute the child's diminished "if-then--" abilities with "time embraced contingency management strategies."

Try to imagine being an animal trainer with a task of motivating a dolphin to dive through a hoop. The animal trainer will initiate a simple contingency management program consisting of: (1) holding an edible fish on the other side of the hoop. The dolphin must dive through the hoop to get the food item; (2) immediately upon getting through the hoop the dolphin's behavior is reinforced with the fish. This process is repeated consistently, and very quickly the dolphin's behavior is guided by the motivation of an immediate reinforcer. Initially the dolphin felt no internal reason to jump through the hoop, and thus no motivation to perform. When an external reinforcer is present, the dolphin performs as a result of the reinforcer. That is, an event (receiving a fish) occurred during or immediately upon completion of a behavior (diving through the hoop). This sequence of training seems quite appropriate and effective.

On the surface, it seems that a contingency management program is so easy to do - just tell your child that if they do the task then they will get the reinforcer. In reality, contingency management strategies implemented without saving time as your co-director may be doomed from the start. Returning to the dolphin trainer, we will view a major yet very simple error in how we apply contingency management to our children. If the dolphin trainer did what most people would do, this would be the process: (1) look at the dolphin and say " if you dive through the hoop, "then" on the weekend you will get a fish; (2) wait until the weekend and give the dolphin a fish. Most often, and unknowingly incorrect, parents apply this second way of implementing a program. That is, the parent tells their child that he/she will get the reinforcer at the end of the day, the end of the week or the end of the month. Many parents may argue that unlike the dolphin's brain, a human brain has the ability to think ahead, and thus the human brain would say to itself: "I will get something special on the weekend for what I am supposed to do today. So I'll do this now and wait for my special thing. If I want it badly enough, then I'll just keep reminding myself that I will eventually get it." However, the ability to effectively deal with the complications of the span of "time" and the required thinking ahead is a significant part of what is posited as developmentally delayed in AD/HD (Barkley, 1997).

Although they have great intentions, parental interventions are often based on the belief that the child does have appropriate capabilities in (1) thinking ahead, (2) remembering that thought over time, and (3) constantly using that information to self-motivate. But just as the dolphin will not benefit from contingencies that ignore time, neither will the child with AD/HD. To accept AD/HD as a delay in self-control underscores the need to develop contingency management strategies that assume the child is not able to think ahead. For a contingency management program to be effective, we must model the example of the more successful animal trainer. The "then" (or reinforcement motivator) must follow immediately upon the completion of the "if" (or required task). Tokens may be used to temporarily bridge the time gap. The "token" becomes the "then" and must follow the "if" immediately upon completion. The "token"

must be able to be exchanged for something of value to the child. This token exchange is a second "if-then" sequence in a compound "if-then" chain. If the child has enough tokens, then he/she may buy the reinforcer. Again, we must always remember the example of the effective animal trainer. The tokens must be exchangeable as soon as possible. If too much time passes, then we are back to being the ineffective second animal trainer.

Sample Contingency Management Strategy Focusing on Decreasing a Behavior  
TARGET: Decrease the number of incidences in which Mary focuses away from doing math homework during a 15-minute at-home study time.

1. Observe a baseline of how many times she typically focuses away in several 3-minute periods (ex: average of 10 times)
2. Select for improvement a reasonable target number of times focusing away (ex: 5 times)
3. Set a timer for three minutes.
4. If Mary focuses away six times before the three-minute timer rings, then the timer is immediately stopped without finishing. No tokens are given, but the timer is restarted for another three-minute time period. During every time period, regardless of length, give praise instantly upon her refocusing from distractions. Give encouragement.
5. If at the end of the three minutes, Mary has focused away five times or less, she is "instantly" reinforced with 10 tokens at the ringing of the timer. During each three-minute period give praise immediately upon her refocusing from distractions. Continue with additional three-minute time periods.
6. This process continues for the 15-minute study period.
7. "Immediately" at the conclusion of the designated 15-minute study period, Mary cashes in her earned tokens for activities or items from a level-based reinforcement menu. Level-based means having two or more categories of desired reinforcers with one level costing more tokens than another level. When is "time" embraced? (1) Using a timer. (2) Reinforcers are given "instantly" following the ringing of the timer - not later.

Possible times to use "decreasing" strategies When There is Excessive:

- Talking out/interrupting
- Use of bad words
- Playing when dressing
- Yelling
- Sibling rivalry in the car
- Speed when eating

Sample Contingency Management Strategy Focusing on Increasing a Behavior  
TARGET: Increase the speed in which Mary gets dressed on school mornings.

1. Define "dressed" (ex: shirt, pants, socks and shoes)
2. Observe a baseline over 10 days of how much time she typically takes to get dressed (ex: average of 25 minutes)
3. Select for improvement a reasonable target amount of time in which to get dressed. (ex: 10 minutes)
4. Set a timer for 10 minutes and stay in the room. The purpose of staying in the room is not to spy or coach, but rather to be able to give the reinforcer "instantly" upon task completion. Staying in the room can later be faded out.
5. If Mary is dressed before the timer rings, she is immediately reinforced with 50 tokens.
6. If Mary has not gotten dressed before the timer rings, you re-set the timer for an additional five minutes. Tell her that if she dresses before the timer rings this second time, then she may earn only 10 points rather than the original 50 points. If Mary dresses before the timer rings at five minutes, she is "immediately" reinforced with 10 tokens. Give encouragement.
7. Prior to having started this program, her time schedule is changed so that she gets up 15 minutes earlier than before. This will allow for an added 15-minute reinforcement period before leaving for school. "Immediately" at the designated 15-minute period before leaving for school, Mary cashes in her reinforcement tokens for what they represent - activities or items from a level-based reinforcement menu. When is "time" embraced? (1) Using a timer. (2) Reinforcers are given immediately upon hearing the timer ring - not later.

Possible times to use "increasing" strategies

- Completing more homework in a designated time period.
- Completing clean room tasks in a designated time period.
- Using more polite words.
- Turning in completed homework when arriving at class.
- Giving Home-School daily report card to parents when arriving home.

Contingency Management Reminders

1. Think about time, embrace it, and work with it! Give reinforcers immediately following the desired behavior. Use timers and clocks

2. Use tokens as immediate, yet temporary reinforcers Tokens may bridge the time gap, but only for so long. Tokens should be cashed in as soon as possible. If too much time passes the power of the token is lost.
3. Tokens should be age appropriate Use physical objects (ex: chips) for younger children. Written points would be useable for older children.
4. Tokens are motivating only if they purchase rewards If too much time passes, the motivating power is lost. Think about time, embrace it, and work with it!
5. Make reinforcement schedules consistent and continuous Random reinforcement may be less helpful with AD/HD.
6. Keep motivation systems active for a seemingly long time Be careful about removing the system too soon. AD/HD children need it longer into their development.
7. Reinforcers need to be highly desired by the child Constantly change reinforcers (provide variety). Harder jobs get (need) bigger reinforcers.
8. Occasionally and for no reason, just give a jackpot! Then look for and immediately reinforce desired behaviors.
9. There are reinforcers that do not have to cost money Use normal activities as reinforcers to reduce dollar cost. Use the activities to form levels of reinforcers.
10. Embrace time when using levels or categories Allow for more fluid changing of levels or categories.
11. Work with only 1 to 4 target behaviors at one time Include one behavior that the child already does. Do one step of a sequence of tasks, then continue.
12. Be firm, fair and consistent.
13. Take into consideration the context (the whole picture) - the child's life, the family, the community, etc.

## BIBLIOGRAPHY

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## RECOMMENDED READING

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