Differential Reinforcement Strategies: A Guide for Parents

Valerie A. Alchier
University of Pittsburgh
Table of Contents

What is Differential Reinforcement? ........................................2
Terms to Know ........................................................................3
Case Study – Applying Differential Reinforcement ..........4
Discussion Questions .............................................................5
Frequently Asked Questions ......................................................6
Annotated Bibliography .........................................................7
What is Differential Reinforcement?

- Differential reinforcement or DR, is planned use of a reinforcement

- This decreased a negative behavior(s)

- At the same time increases positive behavior
Terms to Know

DR- Initials for “differential reinforcement”

Reinforcement- this is something that is used as a reward or punishment, which alters a response. Whatever you choose to be the reinforcer, make sure it is something meaningful to your child.

Undesirable behavior- The behavior you would like to see replaced.

Modeling- Perhaps one of the most important components of differentiated instruction, this is when you show your child what is expected of them and demonstrate the behavior you would like to see. You will have to show your child what you would like them to do. By setting an example for them to follow, you increase the chances of the child adopting the new behavior.

Target Behavior- This is the positive behavior you replace the undesirable behavior with, the one you want to see.
Case Study – Applying Differential Reinforcement

William A. Flood and David A. Wilder of The University of the Pacific in Stockton, CA studied one participant for their article for the use of differential reinforcement with caregivers and children with separation anxiety disorder or (SAD). The subject is described as an eleven year-old boy with the diagnosis of separation anxiety disorder. He had difficulty separating from his mother and displayed a high level of anxiety and distress when his mother left him for any extended period of time.

The researchers set up a situation in a play room where the boy’s mother leaves him for a predetermined period of time while he works on homework. If he demonstrated emotional behaviors during this time he was able to speak to his mother via cell phone, but does not earn his “preferred items”. If the boy does not exhibit emotional behaviors during the period of time that his mother is away he receives access to his preferred reward items, various toys. The results of this study were positive. It showed that with the right amount of communication, reinforcement, and fading between the parent and child SAD symptoms can be reduced and possibly eliminated for the child. Results also indicated diminished anxiety for the parent.
Discussion Questions

➢ If you find that using differential reinforcement is successful for changing minor negative/undesirable behaviors with your child what other behaviors do you think you could successfully use it for?

➢ Do you think you could use DR in other areas of your life? If so where?
Frequently Asked Questions

Q. What if my child does not respond to the reinforcement?

   A. Don’t Stop! Continue to be positive and reinforce every time they demonstrate the desired behavior. You may need to model the behavior more than once, and the undesired behavior may get worse before it gets better, but if you stay consistent you will see success! Look for support in others around you and your child. The more consistency your child has contact with the better and faster your results will probably be.

Q. What should I do if my child improves but then regresses back to the undesired behavior?

   A. Once again, model the desired behavior and start to reinforce consistently if you had been tapering off of the reinforcers.

Q. What should I do if my partner (spouse, other parent…) is not as consistent with the reinforcer and in turn is giving our child mixed signals?

   A. Sit down with your partner and talk to them about what you are trying to do. Explain to them the importance of consistency and help them understand the need for everyone to work together toward one common goal. Show them some of this information so they can see what you are trying to accomplish.
Annotated Bibliography

Useful references for more information on differential reinforcement.


William A. Flood and David A. Wilder of The University of the Pacific in Stockton, CA studied one participant for their article for the use of differential reinforcement with caregivers and children with separation anxiety disorder (SAD). While this may not be the most comprehensive of studies they do present some valid points within their study and paper. Their research itself is complete and very well described. The subject is described as an eleven year-old boy with the diagnosis of separation anxiety disorder. The researchers set up a situation in a play room where the boy’s mother leaves him for a predetermined period of time while he works on homework. If he demonstrated emotional behaviors during this time he was able to speak to his mother via cell phone, but does not earn his “preferred items”. If the boy does not exhibit emotional behaviors during the period of time that his mother is away he receives access to his preferred reward items, various toys. The results of this study were positive. It showed that with the right amount of communication, reinforcement, and fading between the parent and child SAD symptoms can be reduced and possibly eliminated for the child. Results also indicated diminished anxiety for the parent. The researchers acknowledged the limitations of only having one subject participate in their study.
The information from this article is useful for the topic of differential reinforcement for parents because the study related directly to working with and using strategies with parents and their children. The approach that was presented was easy to replicate and not very complicated. It might be a good strategy to use with an unsure or anxious client.


The author, Dr. TaliHeiman, is the chair of the Department of Education and Psychology and a member of the senior faculty of The Open University of Israel. Her article is an insightful piece illustrating how families of children with disabilities cope with special needs. The researchers conducted comprehensive interviews of thirty-two sets of parents in Israel. The information gathered was in three parts. The first section addressed the family’s past-prior to a diagnosis of special needs in the present. The second section probed for current levels of coping. The final section considered expectations and concerns that the parents had for their child. The data gathered showed that initially the parents reacted negatively as predicted by previous studies. It also showed that they had a remained positive and realistic about the future which shows resilience. This article is an interesting and sensitive look into how parents react and deal with the diagnosis of their child. Although it is an interesting piece of research it is not helpful for my topic of differential reinforcement. It did not highlight any examples or specific studies on the topic.

Dr. Pat Mirenda holds many certifications, degrees, and has received recognition for her work and research. Her corresponding author, Stephanie Jull works with her as a lab affiliate at the University of British Columbia in Vancouver, Canada. Together they researched and wrote this article which investigates the impact parents of children with Autism have on their preschool age children’s social development if they act as play date facilitators. The article is very informative in the beginning. It sites many examples from other studies and articles on the importance and success of similar interventions. If you read further into the article and look at the data you learn that there were actually only two actual participants in the study. These children were accompanied by their mothers, who facilitated the play dates with “typically developing peers” who were relatives, a sister and cousin. The authors note that this was a limitation and should be addressed in future research, but this does not present as a very thorough study. Although I would not use this information in my research it does present some interesting information about the merits of parents playing an active role in their children’s social lives.


JuHee Park, an assistant professor of special education at Wheelock College in Boston, MA co-authored this article with Sheila R. Alber-Morgan, and Courtney
Fleming who are an associate professor and doctoral student in the special education program, respectively at the Ohio State University in Columbus, OH. The article offers a comprehensive approach to collaborating with parents to help implement behavioral interventions. Each section of the article highlights a step of the process clearly. The author defines the first steps addressing how to understand the family and the “challenging behaviors” as well as helping parents understand the behavioral approach. Throughout the article, as the authors explain each step they also support understanding with a case study example. Collaboration with parents on many different levels is also very clearly described. Assisting parents with behavior interventions is clearly outlined and described in depth. The authors also give examples of how to chart and graph collected data and websites to visit for more information. This article is clearly written and useful for professionals who are looking to enhance their efforts with parents. This particular article is very helpful for research on different types of differential reinforcement for parents.


Jason C. Vladescu and Tiffany Kodak, who works at the Center for Autism Spectrum Disorders, Munroe-Meyer Institute Nebraska Medical Center, Omaha, Nebraska looked at the current research on differential reinforcement in early intervention.

They reviewed and discussed a variety of different studies that have already evaluated the use of differential reinforcement in early intervention programs.
Although, looking at the research they have not found the best method for providing this therapy within the intervention programs. The authors believe that future research should look at these issues and investigate them further.

This article has some very good points and cites some good examples of previous research, but I did not learn any new information about differentiated reinforcement. It could however be used as a good source of information since it cites so many previous studies.