DARLING POINT SPECIAL SCHOOL

POSITIVE BEHAVIOUR SUPPORT

POSITIVE REINFORCEMENT

USE OF POSITIVE SUPPORTS IN SCHOOL-WIDE, SPECIFIC AND INDIVIDUAL SETTINGS

School-wide, specific setting and individual person approaches are essential components of this school's protocols to ensure morale, life quality and effective learning and teaching.

The following points provide a summary of the essential criteria that form the basis of our shared work and expectations for each other as members of the staff team, of students, and of their parents and carers. This way, we establish the best possible climate for all members of our school community.

The summary criteria are:

SCHOOL WIDE	SPECIFIC SETTING	INDIVIDUAL PERSON
Clearly defined expectations	Clearly defined appropriate	Two people to give suggestions
	behaviours	
Students and staff know	Consequences for inappropriate	Supervisors can observe and
expectations and consequences	behaviour are defined	suggest
Appropriate behaviours are taught	Positive behaviour is	Collaboration amongst staff is
	acknowledged	encouraged
Behaviour supports are	Staff have a clear, simple system to	Staff understand, have time to
implemented consistently	report problem settings and achieve	implement and follow through on
	collaboration analysis and	functional analysis and positive
	resolution	plan implementation when problem
		behaviours are encountered
Student positive behaviours are	Collaborative team effort achieves	Simple, effective support
acknowledged	positive support plans	mechanisms are implemented to
		promote team effort and behaviour
		support technologies
Clear, non-aversive crisis	Straightforward risk assessments	All staff have participated in
management plans are in place to	and practical solutions are	specific training in positive
safely manage and resolve	developed prior to curriculum and	behaviour support technologies, are
dangerous situations	teaching initiatives being	committed to the quality of life
	implemented and to support	philosophy of positive behaviour
	students who demonstrate	support, and are supported to
	difficulties in specific situations	implement strategies and enhance
		knowledge, skills, competencies
		and confidence
Student behaviour is monitored and	Student behaviour is monitored and	Student behaviour is monitored and
team members, students and	team members, students and	team members, students and
parents/carers provide mutual	parents/carers provide mutual	parents/carers provide mutual
support and feedback	support and feedback	support and feedback
		Behaviour support planning
		involves all members of the
		student's wider team

POSITIVE REINFORCEMENT

"If you have a behaviour that could be changed through the use of aversive contingencies, then it could also be changed through positive contingencies". LaVigna, 1997.Some basic rules of positive reinforcement

- * Meaningfulness
- * Contingency of reinforcement
- * Deprivation / satiation
- * Immediacy
- * Frequency
- * Amount
- * Amount of work required
- * Reinforcer novelty
- * Reinforcer variety
- * Reinforcer sampling rule
- * Competing contingencies
- * Schedules of reinforcement

Contingent reinforcers if used at all should represent extra incentives that go beyond the non-contingent quality of life we would want everybody to enjoy.

COMPARISON BETWEEN POSITIVE REINFORCEMENT AND PUNISHMENT AS TECHNOLOGIES TO CHANGE STUDENT BEHAVIOUR

The following comparison serves to assist our shared understanding of positive reinforcement as a validated mechanism for changing student behaviour.

	POSITIVE REINFORCEMENT	PUNISHMENT	
Relies on		Relies on	
*	Non aversive stimuli and events to increase frequency and/or response strength of a positive behaviour	* the contingent presentation of an aversive stimulus or event results in a future decrease in response strength of a problem behaviour.	
*	Individualized contingencies to provide stimuli or events that the student likes and enjoys	* The contingent withdrawal of a desired stimulus or event results in a future decrease in response	
*	Stimuli and events to promote life quality and good feelings	strength of a problem behaviour.	
*	Incentives		
*	Withdrawal of a less desired stimulus or event.		

POSITIVE REINFORCEMENT

Introduction

The purpose of this section is to provide detailed information about the concept of positive reinforcement.

In the first part of this section, the concept of positive reinforcement is defined and illustrated in six example/non-example pairs. In an example/non-example pair, an example of a concept is slightly altered to form a non-example; this enables the student to tell the difference between examples and non-examples that have similar content.

In the second part of this section, examples and non-examples are provided to assist in consolidating understanding about the use of positive reinforcement. This task gives opportunity to respond to novel examples and non-examples. A web link is provided for readers who wish to complete this activity with feedback on responses.

Concept Definition: Positive Reinforcement

Positive reinforcement is one of the key concepts in **behaviour analysis**. Positive reinforcers are something like rewards, or things we will generally work to get. However, the definition of a positive reinforcement is more precise than that of reward. Specifically, we can say that positive reinforcement has occurred when three conditions have been met:

- A consequence is presented dependent on a behaviour.
- The behaviour becomes more likely to occur.
- The behaviour becomes more likely to occur because and only because the consequence is presented dependent on the behaviour.

Reinforcement

The term reinforce means to strengthen, and is used in psychology to refer to anything stimulus which strengthens or increases the probability of a specific response. For example, if you want your dog to sit on command, you may give him a treat every time he sits for you. The dog will eventually come to understand that sitting when told to will result in a treat. This treat is reinforcing because he likes it and will result in him sitting when instructed to do so.

This is a simple description of a <u>reinforcer</u> (Skinner, 1938), the treat, which increases the response, sitting. We all apply reinforcers everyday, most of the time without even realizing we are doing it. You may tell a child "good job" after he or she cleans their room; perhaps you tell your partner how good he or she looks when they dress up; or maybe you got a payrise at work after doing a great job on a project. All of these things increase the probability that the same response will be repeated.

There are four types of reinforcement: **positive**, **negative**, **punishment**, and **extinction**. We'll discuss each of these and give examples.

Positive Reinforcement. The examples above describe what is referred to as positive reinforcement. Think of it as adding something in order to increase a response. For example, adding a treat will increase the response of sitting; adding praise will increase the chances of your child cleaning his or her room. The most common types of positive reinforcement or praise and rewards, and most of us have experienced this as both the giver and receiver.

Negative Reinforcement. Think of negative reinforcement as taking something negative away in order to increase a response. Imagine a teenager who is nagged by his mother to take out the garbage week after week. After complaining to his friends about the nagging, he finally one day performs the task and to his amazement, the nagging stops. The elimination of this negative stimulus is reinforcing and will likely increase the chances that he will take out the garbage next week.

Punishment. Punishment refers to adding something aversive in order to decrease a behaviour. The most common example of this is disciplining (e.g. spanking) a child for misbehaving. The reason we do this is because the child begins to associate being punished with the negative behaviour. The punishment is not liked and therefore to avoid it, he or she will stop behaving in that manner. Recent research confirms that whilst punishment is effective in reducing problem behaviour amongst those school students who are generally well-behaved, it is not an effective or reliable technology for changing in a positive direction, the behaviour neither of people who have consistently difficult or challenging behaviours, nor for those people who have intellectual or developmental disabilities such as autism. Therefore, within a Positive Behaviour Support approach, punishment is not used.

Extinction. When you remove something in order to decrease a behaviour, this is called extinction. You are taking something away so that a response is decreased.

As mentioned above, research has found positive reinforcement is the most powerful of any of these. Adding a positive to increase a response not only works better, but allows both parties to focus on the positive aspects of the situation. Punishment, when applied immediately following the negative behaviour can be effective, but results in extinction when it is not applied consistently. Punishment can also invoke other negative responses such as anger and resentment.

In summary, positive reinforcement works well when we:

1. Make it personal. No one reinforcer works with everyone, so find out what each person values.

2. Make it earned. People respect most what they earn. It's your job to set up opportunities for people to earn positive reinforcement.

3. Make it immediate. When you see desirable behaviour, reinforce it immediately. The more immediate the reinforcement, the more effective it is. Try to catch people in the act of doing what you want.

4. Make it frequent. It takes many reinforcers to turn desirable behaviour into a habit.

In the final analysis, the best way to build a high-performance culture is to put the power of positive reinforcement to work for you and your team.

WHY POSITIVE REINFORCEMENT WORKS

"If a child lives with approval, he learns to live with himself."

Dorothy Law Nolte After a long day at the office, with more work facing you at home, the last thing you might feel like doing is being positive. But it is crucial that, even during conversations aimed at correcting behaviour, you keep your tone positive. **What is positive communication?**

Positive communication is a tool to reinforce good behaviour and eliminate bad behaviour; it builds self-esteem and inspires confidence in children. And it's easy — once you get the hang of it! Children's feelings of esteem are very highly influenced by their interaction and relationship with their parents. All children need to feel loved and accepted, and you can communicate those feelings to your children by the way you speak.

Once you develop the habit of consistent positive reinforcement at home, you'll see that communicating is easier, and you will also be helping your son or daughter learn to communicate with the outside world. By the time they are in elementary school, kids need the self-esteem boost gained when positive reinforcement is in practice.

RULES OF THE ROAD

- Face the child or young person and maintain eye contact.
- Always allow the child or young person to finish talking and complete his/her statements.
- "Labelling is disabling" label the *behaviour* instead of the *child*. **Incorrect:** "Billy, you are a bad boy." **Correct:** "Billy, it is irresponsible to leave your toys all over the place."
- Help the child or young person to learn to talk positively.
- Try to start your statements with a reinforcer, such as, "Sara, you are a very bright girl; now, let's talk about the best way to get your homework finished." People are more responsive to positive statements, but make sure your compliments are truthful. Children, as well as adults, will see through false flattery.

CORRECTING BEHAVIOUR

In the book *Meta-Emotion: How Families Communicate Emotionally*, by John M. Gottman, Lynn Fainsilber Katz, and Carole Hooven, the authors discuss educator and psychologist Dr. Haim Ginott's basic plan for positive reinforcement.

The four basic parts are:

- 1. Recognize and acknowledge the child's wish.
- 2. State the limit calmly and clearly.
- 3. Point out ways that her wish may be partially fulfilled.
- 4. Help the child express the resentment that arises when limits are imposed. "I know you would like to watch the TV show now, but we will tape it and you can watch it after your homework."

REWARDING VS. BRIBING

Reinforcers vary from child to child. You should be aware of the reinforcers that your child values, and use them. Extra TV time, phone privileges, a Saturday at the mall — most kids enjoy these things. Use rewards when you feel your child has finished a difficult task, such as making the honour roll at school, getting a B (or even a C+) on a difficult test, or not arguing with her brother for two weeks. Don't confuse rewarding with bribing! You should not offer extra treats, money, or gifts for tasks you expect your child to do on a daily basis. Instead, use reinforcers and positive communication — to encourage your child to use the same form of communication with others.

Try this:

Here are some time-tested hints for positive communication with children and young people:

- Be firm and consistent.
- Try not to force petty, time-consuming decisions, such as "Which colour toothbrush do you want?"
- Give children chores and responsibilities when they are young. Chores build self-discipline and a sense of responsibility, but remember that a child may need many calm reminders to complete them.
- Accept the fact that children need to be told things over and over. If you have to repeat a direction, say it as if it were the first time.
- A short list of chores is better than a long, possibly confusing or frustrating list. In general, lists (in either words or pictures) are better than simply telling children and young people what to do, because a list addresses two learning styles auditory and visual and a list lets children and young people be in control by checking off each task as they completes it.
- Remember that some children and young people do not process multiple requests quickly or accurately. Get children and young people's attention first, and never shout from one room to the other.
- Speak slowly; it will help children and young people absorb more of what you are saying.
- If a child or young person has a learning or developmental disability, s/he may be disorganized, and may have trouble relating an event in proper sequence. Keep a calm, uncritical, and non-irritable manner when explaining something to the child or young person.

James Baldwin once said, "Children have never been very good at listening to their elders, but they have never failed to imitate them." By being positive with your child and reinforcing the behaviour you want repeated, you give her the blueprint for interacting with people outside of your home.

SOME EXAMPLES TO TEST YOUR KNOWLEDGE AND UNDERSTANDING OF POSITIVE REINFORCEMENT

You can choose to complete these here or work through the examples on the internet at:

http://psych.athabascau.ca/html/prtut/reinpair.htm

ILLUSTRATIVE EXAMPLE/NON-EXAMPLE PAIR #1: THE IMPORTANCE OF AN INCREASE IN THE LEVEL OF THE BEHAVIOUR

1.

Example of positive reinforcement of smiling:

Stephan and Cody were boys with intellectual impairment who seldom **smiled** at other people. Their teacher used a procedure in which he would take them for walks, and if they smiled at passers-by, he would give them some pieces of M & M's candy. This procedure caused Stephan and Cody to smile much more often than they had before.



Non-example of positive reinforcement of smiling:

Stephan and Cody were boys with intellectual impairment who seldom **smiled** at other people. Their teacher used a procedure in which he would take them for walks, and if they smiled at passers-by, he would give them some pieces of M & M's candy. Stephan and Cody ate the candy quickly.



Analysis

The first item is an example of positive reinforcement. First, a consequence was presented dependent upon the target behaviour. The candy was dependent on smiling because there was an if-then relationship between smiling and candy: If smiling occurred, candy was presented; but if no smiling occurred, no candy was presented. Second, there was an increase in the level of smiling. Third, the increase in the level of smiling was due to the relationship between smiling and candy.

The second item is not an example of reinforcement because there is no mention of an increase in the level of the target behaviour. There must be an increase in some measure of the behaviour in order to say that reinforcement has occurred.

Source: Hopkins (1968)

2. Importance of Response-Dependent Consequences

Example of positive reinforcement of cooperative play:

Martha was a five-year-old girl who attended preschool. She seldom played with the other children. Workers at the preschool began praising and admiring Martha when she engaged in **cooperative play** with other children. As a result of this procedure Martha's level of **cooperative play** with the other children increased.

Non-example of positive reinforcement of cooperative play:

Martha was a five-year-old girl who attended preschool. She seldom played with the other children. Workers at the preschool began praising and admiring Martha more than they had before. As a result of this procedure, Martha's level of **cooperative play** with the other children increased.



Analysis

The first item is an example of positive reinforcement. First the praise and admiration were presented dependent on cooperative play because there was an if-then relationship between cooperative play and praise and admiration. Second, the level of cooperative play increased. Third, the increase in cooperative play was due to the dependency between cooperative play and praise.

The second item is not an example of positive reinforcement because the presentation of the consequences, praise and admiration, was not response-dependent. In order to say that an increase in behaviour is due to reinforcement, the behaviour must have a response-dependent consequence; there must be an if-then relationship between the behaviour and the consequence. In this example, there is no mention of an if-then relationship between the cooperative play and presentation of praise and admiration. When there is no consistent if-then relationship between a response and a stimulus presentation, the stimulus presentation is said to be response-independent.

Source: Hart, Reynolds, Baer, Brawley, and Harris (1968)

3. Using Rules or Instructions to do Something More Often is not Positive Reinforcement

Example of positive reinforcement of quiz answers:

Students in a class were given a weekly quiz. The students' **percentage correct quiz responding** on the first quiz was low, so their teacher began praising the performance of those students who answered the quiz questions correctly. As a result of this procedure, the students' quiz performance improved on the rest of the quizzes.

Non-example of positive reinforcement of quiz answers:

Students in a class were given a weekly quiz. Over the years their teacher had given a lecture in which he emphasized two rules for success in his class: study hard, and pay careful attention to your work. The teacher would sometimes give the rules before the students had done any work, and would sometimes give it after they had taken several quizzes. No matter when he gave the lecture, it would always improve the students' **percentage correct quiz responding**.



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Analysis

The first item is an example of positive reinforcement. Praise was dependent on correct quiz responses, correct responses increased, and correct responses increased because of the dependent relationship of responses and consequences.

The second item is not an example of reinforcement. Here the increase in the target behaviour is due to a rule or instruction to engage in a behaviour, not to positive reinforcement. Giving a rule or an instruction to engage in a behaviour can sometimes strengthen a behaviour, but this strengthening is not due to response-dependent consequences. That the strengthened behaviour in the second item was not due to a response-dependent consequence is shown by the fact that the teacher's rules improved the students' performance even when they were presented before the target behaviour had occurred. In general, do not classify items in which rules or instructions to engage in the behaviour are used as examples of reinforcement.

4. Positive Reinforcement, the Consequence is Dependent on Behaviour Occurrences, not Behaviour Non-occurrences

Example of positive reinforcement of on-feet behaviour:

Dee was a three-year-old girl enrolled in nursery school. She crawled, crouched, or sat 93% of the time at school and was on her feet only 7% of the time. The teachers implemented a procedure in which Dee was not given any attention for off-feet behaviour. Conversely, when she was on her feet the teachers gave Dee special attention and tried to make her feel liked and appreciated. This procedure resulted in Dee engaging in **on-feet behaviour** almost all the time like the other children at the school.

Non-example of positive reinforcement of on-feet behaviour:

Dee was a three-year-old girl enrolled in nursery school. She crawled, crouched, or sat 93% of the time at school and was on her feet only 7% of the time. The teachers implemented a procedure in which whenever Dee was off-feet, she was made to stand in a corner of the room for five minutes with her back to the room. This procedure resulted in Dee engaging in on-feet behaviour almost all the time like the other children at the school.

Analysis

The first item is an example of positive reinforcement because presentation of attention was dependent upon the target behaviour of being on-feet, and this resulted in an increase in the level of the target behaviour.

The second item is not an example of positive reinforcement because there was no stimulus presentation dependent upon the target behaviour. Instead, in the second item, the stimulus change was dependent upon behaviour other than the target behaviour (i.e., dependent on not engaging in the target behaviour). In order to say that positive reinforcement has occurred, a stimulus must be presented following and dependent upon the target behaviour, not dependent on behaviour other than the target behaviour or dependent on the failure to engage in the target behaviour.

Source: Harris, Johnston, Kelley, and Wolf (1964)

5. Undesirable Consequences can be Positive Reinforcers if They Function to Strengthen a Behaviour

۲ Example of positive reinforcement of disruptive classroom behaviour:

> In an elementary school classroom research was conducted to study the effects of teacher behaviour on student behaviour. During one phase of the study, the teacher began disapproving of the students' disruptive behaviours when they occurred. This resulted in an increase in the level of disruptive behaviours.

Non-example of positive reinforcement of disruptive classroom behaviour:

In an elementary school classroom research was conducted to study the effects of teacher behaviour on student behaviour. During one phase of the study, the teacher began disapproving of **the students'** disruptive behaviours when they occurred. This resulted in a decrease in the level of disruptive behaviours.



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Analysis

The first item is an example of positive reinforcement because teacher disapproval was presented dependent on the disruptive behaviours, and this caused an increase in the level of the target behaviours. The second item is not an example of positive reinforcement because the procedure caused a decrease in the target behaviour levels, not an increase.

As illustrated in the first item, stimuli and events that seem negative, undesirable, or even painful can act as positive reinforcers.

Source: Thomas, Becker, and Armstrong (1968)

6: Positive Reinforcement Involves Stimulus Presentation, not Stimulus Removal

Example of positive reinforcement of physiotherapeutic behaviour: ۲

> Phoenecia was a 67-year-old woman who had had a stroke six months earlier. As a result she was unable to use her left forearm, because she could not flex her left elbow. To solve this problem, a researcher set up an apparatus in which a counter indicated a number of points. Phoenecia earned points on the counter by flexing her left elbow 5 degrees. After the physiotherapy session, Phoenecia could exchange the points for money. As a result of this method, Phoenecia flexed her left elbow much more often than she had before. After 19 sessions, Phoenecia could flex her elbow as much as 70 degrees.



Non-example of positive reinforcement of physiotherapeutic behaviour:

Phoenecia was a 67-year-old woman who had had a stroke six months earlier. As a result she was unable to use her left forearm, because she could not flex her left elbow. To solve this problem, a researcher attached electrodes to Phoenecia's right forearm and administered an electric shock. Phoenecia could turn off the shock by **flexing her left elbow 5 degrees**. As a result of this method, Phoenecia flexed her elbow much more often than she had before when the shock came on. After 19 sessions, Phoenecia could flex her elbow as much as 70 degrees.

Analysis

The first item is an example of positive reinforcement, because presentation of points was dependent on flexing the elbow, and the procedure caused an increase in the level of flexing the elbow. The second item is not an example of positive reinforcement because the removal of a stimulus, the shock, was dependent on the target behaviour. Positive reinforcement involves the response-dependent presentation of a stimulus, not the response-dependent removal of a stimulus.

Source: Ince (1969)

POSITIVE REINFORCEMENT: FREQUENTLY ASKED QUESTIONS

Question: I've heard that rewarding children for good behaviour is a bad idea because this will decrease their intrinsic motivation. Is this true?

Although there are certain conditions that can cause rewards to diminish the intrinsically reinforcing value of an activity, rewards do not have a general or pervasive harmful influence on motivation to perform a task. Rewards can have a negative influence on motivation if (a) a high-interest task is involved; (b) rewards are tangible; and (c) rewards are not closely tied to a performance criterion. These problems are typically avoided in behaviour-analysis interventions that do not provide reinforcers for behaviours already occurring at an adequate rate, use tangible rewards only as a transition to natural reinforcers, and use clear and specific criteria for reinforcement.

The controversy surrounding the supposed harmful influence of rewards is unfortunate some parents and carers have been misled to avoid, for example, praising children because they think this might somehow be harmful. Praise is a particularly powerful positive reinforcer that helps children learn. Meta-analyses of studies have shown that praise increases the intrinsic interest people have in activities even after praise is no longer forthcoming (Cameron, Banko, and Pierce, 2001). Although any reinforcer can be over used and interfere with the transition to natural reinforcers, a more serious problem in our culture is with the failure to use praise when children are behaving well (i.e., "catch 'em being good"). The maxim "Catch 'em being good" sounds anomalous to us because we are steeped in a cultural tradition of aversive control with children, with catching them being bad.

Note that a general goal of positive reinforcement procedures is to ensure that desirable behaviour is eventually maintained by natural reinforcers. Therefore, when contrived reinforcers are used to induce desirable behaviours, behaviour analysts (e.g., Grant & Evans, 1994; Martin and Pear, 1992) recommend programs to shift to maintenance of behaviours to natural reinforcers. Grant and Evans (1994) suggest that identifying natural reinforcers can be done by examining what reinforcers maintain the behaviour of experts in a given subject matter domain. So, for example, the behaviour of most scientists on the cutting edge of a field of knowledge is maintained by the reinforcers associated with discovery, with tying together known facts, the opportunity to move on to new research questions posed by current discoveries, and so forth. Attention and admiration from colleagues probably plays an important role as well, even for experts. Whereas a child's or a student's incipient scientific activities are often maintained by course grades, it is important in the longer run to establish natural reinforcers for scientific behaviour. In media coverage of behaviour-analysis programs, much emphasis is placed the use of extrinsic and tangible reinforcers, but it should be understood that with most populations, such reinforcers are very often used to get weak behaviour to occur with the expectation than once a reliable performance is established, the extrinsic and tangible reinforcers will be faded out in favour of natural reinforcers. In the same sense, grades are an important feature of schooling, but wise educators use grades with the expectation that there will be a transition to natural reinforcers for the behaviours acquired as a part of schooling.

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For reviews of research in this area, see <u>Cameron, et. al. (2001)</u>, <u>Eisenberger, Pierce, and Cameron (1999)</u>, <u>Cameron and Pierce (1994)</u> and <u>Eisenberger and Cameron (1996)</u>. The myth that rewards have generally and pervasively harmful effects on motivation has perhaps been most widely propagated by <u>Kohn (1993)</u>.

Question: Isn't using positive reinforcement to strengthen behaviour the same as bribery?

The American Heritage Dictionary defines a bribe as "Something, such as money, offered or given to induce or influence a person to act dishonestly." As such, other than situations in which a positively reinforced behaviour is dishonest or illegal, positive reinforcement cannot be properly identified with bribery.

We live in a culture in which using positive reinforcement to motivate people is less familiar than using punishment and other methods of aversive control (Sidman, 1989). Therefore, when someone proposes using positive reinforcement in a context where aversive control is typically used, there is a tendency to compare positive reinforcement to bribery because, as products of an aversive-control culture, we lack a context for understanding the use of positive reinforcement. To describe positive reinforcement, we therefore turn to the nearest available metaphor, that of bribery, even though it is a poor metaphor.

Question: Isn't positive reinforcement when it is in the form of praise, the same as flattery?

It is said that flattery will get you everywhere, and the psychological principle behind flattery is positive reinforcement. The American Heritage Dictionary defines the primary meaning for the verb "to flatter" as "to compliment excessively and often insincerely".

Praise is such a powerful reinforcer that it gives rise to abuse, and for this reason the concept of flattery carries a negative meaning. It is of course often necessary to examine the motives behind flattery and not take it at face value.

Behaviour analysts generally do try to use more praise than is the norm in order to harness the power of positive reinforcement and make the world a more pleasant place in which to live. However, most behaviour analysts have adopted a rule of thumb in employing praise. It is to avoid using praise in a forced manner and instead only praise when you think to yourself that someone has done something well or at least better than they have done before. In this way praise is sincere and flattery is avoided but at the same praise is more generous because instances in which we would ordinarily only think well of another person are turned into instances of overt praise. As such the rule for praise, "if you think it, then say it" allows you to praise more often without the insincerity associated with flattery.

Next

This exercise provides you with opportunities to respond to several different types of examples and nonexamples of positive reinforcement. If you wish to complete the activity on line, the computer will keep track of your success rate.

1. But I Get a Kick Out of You

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Eldon sometimes **made insulting remarks**. to Nanette because of her sloppy appearance. One day this angered Nanette so much that she gave Eldon a kick in his rear end. She continued doing this whenever Eldon made the insulting remarks. As a result of this relation, Eldon made the insulting remarks to Nanette about her sloppiness more often than he ever had before she began kicking him.

Ye<u>s</u>, an example No, not an example

2. The Scold

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.



Mr. Lang was a student teacher who sternly scolded children in his second-grade classroom when they **talked to their classmates when their teacher was addressing the class**. This continued for several weeks. As a result of this procedure, the students in the classroom talked to their classmates more often than they had previously when Mr. Lang was addressing the class.

Yes, an example No, not an example

3. It Could Happen to You

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

After many years of **entering contests and lotteries** Ken hit the jackpot and won one million dollars in a government-sponsored lottery. Ken felt great. His wildest dream of riches had come true. He was dizzy with excitement trying to figure out what to buy for his family, which had lived for years barely making it from paycheque to paycheque.

Ye <u>s,</u> an example	No, not an example
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4. Creativity can be Taught

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Three four-year-old girls were participating in research designed to study creative behaviour. The children were given building blocks and invited to play with them. The teacher began using a procedure in which she expressed delight and enthusiasm when a child had **constructed a shape or form she had not constructed before** (i.e., a novel form). As a result of this procedure, the number of novel forms increased.

Ye<u>s</u>, an example No, not an example

5. Back on the Chain Gang

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Seth worked as a guard at a prison farm and wanted to encourage the inmates at the prison to **study their distance education courses**. In order to do this, for every day in which an inmate studied his course for at least an hour, Seth would remove the ball and chain from the inmate's leg for the remainder of the evening. As a result of this method, the inmates studied their course material much more often than they had in the past.

Ye<u>s</u>, an example No, not an example

Analysis: This is not an example of positive reinforcement. There was an increase in the frequency of the target behaviour, studying, due to the procedure. However, the procedure involved the response-dependent removal of a stimulus, the ball and chain. Positive reinforcement involves the response-dependent presentation of a stimulus, not the response-dependent removal of a stimulus.

6. Field Trips of Dreams

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Mrs. Bogolea knew her class liked to go on field trips, so every day at the end of the day she put a mark on a board. When the board has accumulated 30 marks, the children could go on a field trip. Mrs. Bogolea found that as a result of this procedure, the children in her class made more **correct responses on daily quizzes** that she administered and she was pleased with the results.

Ye<u>s</u>, an example No, not an example

Analysis: This is not an example of positive reinforcement. Although the children engaged in the target behaviour of responding correctly on the quizzes more often, there was no consequence dependent on this behaviour. If this illustration had specified that Mrs. Bogolea put the marks on the board only when the students did well on their quizzes and not when they did poorly then the field trips would have been dependent on quiz performance.

7. Addicted to Heroin

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Three heroin addicts were in a drug treatment program in which they took methadone, a drug that allows addicts to cease taking heroin without encountering unpleasant heroin withdrawal symptoms. As a part of the program, several desirable target behaviours were defined including **passing drug-use tests**, **arriving on time to the treatment centre**, **and gaining body weight** When a desirable target behaviour occurred,

the addict threw a die. If a winning number came up on the die, the addict would receive points that could be traded for things such as methadone home-delivery, tickets to events, bus tickets, desirable foods, and free lunches. If the winning number did not come up on the die, the addict received nothing. This procedure strengthened the target behaviours of the three addicts.

Yes, an example No, not an example

8. The Creative Employees

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Mr. Neubauer was director of a computer software firm where he was always trying to get the employees to come up with new and creative ideas. In order to do this, he put signs saying, "THINK" all around the office. As a result of this method, Mr. Neubauer found that there was an increase in **submissions of creative ideas** both at company meetings and in the employee suggestion box.

Yes, an example No, not an example

Analysis: This is not an example of positive reinforcement because there was no response-dependent consequence for the target behaviour. The increase in the target behaviour was due to rules/instructions to engage in the target behaviour, not to a response-dependent consequence. The "THINK" signs represented instructions to engage in the target behaviour.

9. Walking Tall

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Employees at a state mental hospital volunteered for a program designed to **maintain correct posture.** The employees wore a device that sounded an unpleasant tone whenever they failed to maintain correct posture. As a result of this method, the employees maintained correct posture much more than they had before they used the device.

Yes, an example No, not an example

Analysis: This is not an example of positive reinforcement. In positive reinforcement a stimulus is presented dependent upon occurrence of a target behaviour and this dependency causes that behaviour to increase in frequency. In this illustration no stimulus is presented dependent upon the occurrence of the target behaviour, maintaining correct posture. Instead, the stimulus, the unpleasant tone, is presented dependent upon **not** maintaining correct posture (i.e., dependent on the failure to maintain correct posture -- or dependent on the non-occurrence of correct posture). This is an example of strengthening a behaviour through escape and avoidance learning.

10. The Psychotic Talker

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Two behaviour analysts were working with a woman who had been committed to a mental institution. They were trying to get the nurses at the institution to weaken the woman's **psychotic talk about her imaginary illegitimate child and men who were pursuing her**. A problem occurred during treatment. A social worker not involved in the treatment appeared on the scene and was talking to the woman, paying attention to the woman when she engaged in psychotic talk. As a result of the social worker's attention, the

woman's psychotic talk increased in frequency.

Yes, an example No, not an example

Analysis: This is an example of positive reinforcement because the social worker's attention was dependent upon psychotic talk and caused psychotic talk to become more frequent. As illustrated in this example, undesirable behaviours can sometimes be positively reinforced, often unintentionally.

11. Have a Seat

Decide if the following item is an example of positive reinforcement. Focus on the highlighted target behaviour to determine if it was positively reinforced. Provide a reason for your answer.

Patients at a hospital in Scotland who had been identified as schizophrenic spent most of their time sitting in the ward. In order to induce the patients to do something more productive that might contribute to their longer-term success, some experimenters permitted the patients to sit for 90 seconds only if they engaged in a **prevocational activity involved in uncoiling copper wire from a spool**. As a result of use of this procedure, the patients engaged in the prevocational activity much more often than they had previously.

Yes, an example No, not an example

Analysis: This is an example of positive reinforcement because the presentation of the opportunity to sit was dependent upon the target behaviour and caused the level of the target behaviour to increase.

This is an example of a positive reinforcement procedure known as the Premack Principle. The Premack principle states that the opportunity to engage in a high-probability behaviour may be used to reinforce a lower-probability behaviour. In this case high-probability sitting activities were used to reinforce lower-probability prevocational activities.

WHAT ARE DIFFERENT TYPES OF REINFORCER?

Natural and Direct Reinforcement: This type of reinforcement results directly from the appropriate behaviour. For example, interacting appropriately with peers in group activities will lead to more invitations to join such activities.

The natural reinforcement for appropriate bids for attention, help, participation, etc. is providing the attention, help and opportunity to participate. *The goal should always be to move the student to natural and intrinsic reinforcement*.

<u>Social Reinforcers</u>: These are reinforcers that are socially mediated by teachers, parents, other adults, and peers who express approval and praise for appropriate behaviour. Comments ("Good job," "I can tell you are working really hard," "You're nice"), written approval ("Super"), and expressions of approval (nodding your head, smiling, clapping, a pat on the back) are all very effective reinforcers.

<u>Activity Reinforcers</u>: Activity reinforcers are very effective and positive for students. Allowing students to participate in preferred activities (such as games, computer time, etc.) is very powerful, especially if part of the reinforcement is being allowed to choose a classmate with whom to participate in the activity. This also provides social reinforcement from the partner.

Tangible Reinforcers: This category includes edibles, toys, balloons, stickers, and awards. Edibles and toys should be used with caution. Parents may have reason to object to edibles as reinforcement (for example, if a student has a weight problem) and toys can make other students envious. Awards can be in the form of certificates, displaying work, and letters home to parents commending the student's progress. These are powerfully motivating reinforcers.

Token Reinforcement: Token reinforcement involves awarding points or tokens for appropriate behaviour. These rewards have little value in themselves but can be exchanged for something of value.

USE OF TOKENS

The delivery of tokens for specific behaviours or performances and the exchange of tokens for 'backup' reinforcers is a useful strategy within the application of positive reinforcement.

Points to consider:

- * Types of tokens
- * Age appropriateness
- * Ease of administration across settings
- * Tokens adapted to show progress relative to the reinforcer
- * Accessibility
- * Endemic value of tokens
- Individualized tokens
- * Self-mediation
- * Novelty of delivery of tokens
- * Violation of free access rule
- * Review of protocols.

MEDIATING SYSTEMS

When designing reinforcement schedules, consider

- * By whom?
- * How?
- * Is it meaningful for the student concerned?
- * What creative delivery strategies can be designed?
- * Novelty?
- * Variety?
- * Is it exciting and interesting for the student?
- * If is fun for the student? For the staff?
- * Is the atmosphere conducive to learning and live quality?
- * Does it fit with the student's multi-element plan, with the class program and the school-wide approach?

REINFORCEMENT SCHEDULES

Know that we understand the four types of reinforcement, we need to understand how and when these are applied (Ferster & Skinner, 1957). For example, do we apply the positive reinforcement every time a child does something positive? Do we punish a child every time he does something negative? To answer these questions, you need to understand the schedules of reinforcement.

Applying one of the four types of reinforcement every time the behaviour occurs (getting a raise after every successful project or getting spanked after every negative behaviour) is called a Continuous Schedule. It is continuous because the application occurs after every project, behaviour, etc. This is the best approach when using punishment. Inconsistencies in the punishment of children often results in confusion and resentment. A problem with this schedule is that we are not always present when a behaviour occurs or may not be able to apply the punishment.

TYPES OF CONTINUOUS SCHEDULES:

FIXED RATIO

A fixed ratio schedule refers to applying the reinforcement after a specific number of behaviours. Spanking a child if you have to ask him three times to clean his room is an example. The problem is that the child (or anyone for that matter) will begin to realize that he can get away with two requests before he has to act. Therefore, the behaviour does not tend to change until right before the pre-set number.

FIXED INTERVAL

Applying the reinforcer after a specific amount of time is referred to as a fixed interval schedule. An example might be getting a raise every year and not in between. A major problem with this schedule is that people tend to improve their performance right before the time period expires so as to "look good" when the review comes around.



When reinforcement is applied on an irregular basis, the procedures are called variable schedules.

VARIABLE RATIO

This refers to applying a reinforcer after a variable number of responses. Variable ratio schedules have been found to work best under many circumstances and knowing an example will explain why. Imagine walking into a casino and heading for the slot machines. After the third coin you put in, you get two back. Two more and you get three back. Another five coins and you receive two more back. How difficult is it to stop playing?



VARIABLE INTERVAL

Reinforcing a behaviour after a variable amount of time is the final schedule. If you have a boss who checks your work periodically, you understand the power of this schedule. Because you don't know when the next 'check-up' might come, you have to be working hard at all times in order to be ready.

In this sense, the variable schedules are more powerful and result in more consistent behaviours. This may not be as true for punishment since consistency in the application is so important, but for all other types of reinforcement they tend to result in stronger responses.

THE PROCEDURES OF APPLIED BEHAVIOR ANALYSIS

Numerous interventions have been devised and scientifically verified as effective by behaviorists. Below are some of the procedures used most often in schools and clinics.

A. TASK ANALYSIS

Task analysis identifies the sequence of steps to be followed in order to fully display a complex, multistep behaviour (e.g., making a bed, riding the bus, completing a long division problem).

B. CHAINING

In chaining, the individual is reinforced for displaying a certain number of the steps in a sequence of simple behaviours (identified via task analysis) that comprise a complex behaviour

Forward chaining - The individual completes an increasing number of steps in early part of the sequence of simple behaviours before another person completes that sequence.

Backward chaining - Another person completes the earlier steps in the analysed task before the individual completes an increasing number of steps at the end of the sequence.

Total chaining - The individual completes all steps in the sequence each time with help (e.g., physical assistance, directions, hints, prompts) provided as needed

C. MANIPULATION OF THE ANTECEDENTS AND CONSEQUENCES

By identifying the antecedent (stimulus) to a behaviour, one can prevent it's occurrence in hopes of stopping the appearance of the behaviour (response). For example, a teacher might change the seating of a talkative student, thus preventing the occurrence of the antecedent for the talking behaviour; the nearby presence of a friend. One might also attempt to activate a new behaviour by presenting a stimuli/antecedent. For example, a teacher might stimulate raising of a hand to answer a question by saying "What do we need to do if we know the answer?" Of course, if the behaviour is to be strengthened and maintained, the teacher will have to assure that the new behaviour is followed by a desirable (to the student) consequence.

D. SHAPING

Also known as "successive approximation", it is a plan that identifies responses that become sequentially more similar to a final desired response. The individual is reinforced for displaying responses that become progressively closer to the identified desired behaviour. Once a designated behaviour is being regularly shown in response to the stimulus, a new and more advanced behaviour is required in order to receive reinforcement. Eventually, the individual displays the complex final behaviour.

E. DIFFERENTIAL REINFORCEMENT

The DR procedures involve the use of positive reinforcement (instead of punishment) to eliminate undesirable behaviours. Only the desired behaviour is reinforced.

<u>Differential reinforcement of lower rates of behaviour (DRL)</u> - Reinforcement is presented only if the individual displays the undesirable behaviour fewer times than previously observed (as determined by behavioural recording assessment)

DRL

- * Differential reinforcement of low rates of responding
- * The reinforcement of the undesired response, if more than a specific period of time has elapsed since the last response

or

- * If fewer than a specified number of responses occurred during a preceding interval of time.
- * Reinforcement is not tied to the number of markers left but whether any markers are left.

<u>Differential reinforcement of other behaviours (DRO)</u> - Reinforcement is presented if the individual withholds undesirable behaviour for a time period that is longer than usual (as determined by behavioural recording assessment)

DRO (Remember the Goldilocks rule)

- * Differential reinforcement of other behaviour where reinforcement is provided after a specified period of no undesired responding
- * Time interval (IRT) = observation time / number of responses

DRO reset schedules

* Reset the time every time the response target behaviour occurs.

DRO fixed interval schedules

* Provide the reinforcer as long as the target behaviour has been performed during the previously established time interval.

DRO increasing interval schedules

* Use thinning or fading of reinforcement

DRO RE-SET

- * High rate of behaviour
- * When a fixed interval pay-off is not available

DRO Fixed interval

- * High rate behaviour
- * To establish initial control
- * To avoid reinforcement becoming a stimulus for the problem behaviour
- * Evenly distributed problem behaviours.

DRO increasing interval

* To fade out a DRO after establishing initial control

OR

* To establish control.

DROP

- * Low rate behaviour
- * Individuals needing more frequent feedback.

DRO assists generalization with few side effects, results in minimal behavioural contrast in other settings, achieves rapid control, is socially valid, and is easy to do.

DROP (progressive schedules)

- * Constant interval
- * Amount or kind of reinforcement increases over time.

<u>Differential reinforcement of incompatible behaviour (DRI)</u> - Reinforcement is presented for displaying a designated response that prevents the occurrence of the undesirable behaviour. In other words, the reinforced behaviour is one that cannot be demonstrated at the same time as the undesirable action. By displaying the desired behaviour, the undesirable one is "blocked" or prevented from occurring.

<u>Differential reinforcement of alternative behaviour (DRA)</u> - DRA is similar to DRI in that a substitute behaviour for the undesirable one is reinforced. However, unlike DRI, DRA does not promote an incompatible behaviour. DRA focuses on creating a more appropriate behavioural response.

DRA

- * The selective reinforcement of those behaviours that are topographically different from the positive / desired behaviour
- * The alternative behaviour is something that the person needs to do or might enjoy doing.
- * The learner must already have the alternative response in his/her repertoire

OR

- * Prompts and prompt-fading must be used to develop the alternative response.
- * The alternative behaviour must be incompatible with the positive / desired behaviour.
- * The 100% rule must apply.

F. RESPONSE COST

Demonstration of an inappropriate behaviour results in a penalty (e.g., a token taken away from one's pile of earned tokens)

G. SELF-EVALUATION

In this procedure, the individual keeps track of how often a behaviour is displayed (self-monitoring). If a goal is met, the person provides him/herself with some desirable thing (self-reinforcement).

H. TIME-OUT

This is the removal of reinforcement when an undesirable behaviour is demonstrated. In a common form, an individual is taken from an environment that is believed to be reinforcing the undesirable behaviour, to one where no reinforcement is available. It is critical that practitioners ensure that time out strategies are not aversive as this practice is inconsistent with that of positive behaviour support and non-linear multi-element programming.

I. TOKEN/POINT SYSTEMS

The individual is given a reinforcer (an item or point) if a behavioural goal is met. The items or points can later be traded for desired objects or privileges.