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Smacking children 2:

The dangers of misguided and outdated applications of psychological principles

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In three weeks our daughter celebrates her second birthday. According to Prof. Lynn's recent article in the Irish Psychologist (November, 1993, pp. 44-45) she should be smacked regularly throughout the next four years ("from 2-6 years of age") whenever she is "naughty." We have never smacked her yet and find it a bit difficult to understand why we should start now.

Prof. Lynn (p. 44) states that

... the prevailing view in mainstream psychology is that children are not naturally endowed with a sense of respect for the feelings and wishes of others ...

and that they

... typically display a variety of selfish behaviours such as hitting, kicking, biting, stealing, rudeness, defiance and throwing temper tantrums.

He argues that children have to

... learn that these behaviours are socially unacceptable ...

and that the best way to ensure that our children are not "naughty," is to smack them.

The reader may be excused if s/he is somewhat confused by this assertion. You may ask: if children are not naturally endowed with a sense of respect why should they be naturally endowed with 'naughtiness,' i.e. a sense of disrespect? This does not make sense to the lay person, never mind a psychologist. Surely, if respect can be learned, then the behaviours listed by Prof. Lynn as "naughty" or disrespectful might also be learned. You may go on and ask: If parents (and teachers etc.) are responsible for teaching children respect and pro-social behaviours (and no one argues that this is not the case), who is responsible for teaching them disrespectful or "naughty" (i.e., anti-social) behaviours?

This question is promptly answered by Prof. Lynn when he recommends that parents should smack (i.e., engage in anti-social behaviour with) their children. In other words, he is suggesting that some people in the child's environment should be encouraged to behave anti-socially towards them. Since children are usually particularly good at imitation learning and are likely to come into contact with a variety of anti-social behaviours (e.g., people who have learned that hitting, smacking, lying, stealing are effective ways of getting what they want), it should come as no surprise to find that children imitate and thus learn some anti-social behaviours. Furthermore, anti-social acts often lead to success quicker (i.e., are reinforced more effectively) than pro-social acts (Sidman, 1989) and are therefore more likely to be imitated and/or repeated. In other words, an adult who smacks a child is more likely to use this method again in the future if smacking has the immediate effect of halting behaviour. Similarly, the likelihood that a child who steals or throws a temper tantrum will engage in this behaviour again depends on the consequences that follow these behaviours.

This line of reasoning has evidently not percolated through to the higher echelons of British academia. The lay person might very well retort that it is all very well in theory to speculate about the origins of anti-social behaviour, but that s/he is left unclear about what should actually be done to handle unruly behaviour. Obviously life would have been a lot easier if anti-social behaviours had not been inadvertently reinforced in the first place. So what is to be done?

Prof. Lynn claims that he has the answer:

.. it is common ground among psychologists that punishment effectively inhibits undesirable behaviour. (p. 44)

Professionals interested in the analysis of behaviour reserve the term 'punishment' for a label that describes how certain consequences of behaviour reduce the probability of that behaviour occurring again in the future. As Catania (1992) put it:

As an operation, punishment is arranging a consequence of responding that makes responding less likely. (p. 91)

There is an important distinction between this functional definition of punishment and Lynn's assertion that

... it is accepted by all informed psychologists that physical punishment inhibits the specific behaviours to which it is applied. (p. 45)

Clearly, Lynn is equating punishment with the infliction of physical pain, an outdated and blinkered view of punishment that, as we shall see later on, is severely flawed and limited when contrasted with its proper functional definition:

... the punishment effect must depend on the relation between responses and punishers (contingency) and not simply on the delivery of punishers . (Catania, 1992, p. 94)

Problems with punishment

Instead of basing our opinion about the desirability of punishment on our feelings, religious or moral convictions, or flawed data, we can reach rational conclusions on the basis of valid evidence. (Sidman, 1989, p. 60)

The following list of problems with punishment (à la Prof. Lynn) is based on extensive evidence gathered by behaviour analysts engaged in research in experimental and applied settings.

1. Punishment often leads to aggressive behaviour.

Prof. Lynn states that

... it is sometimes argued that it [physical punishment] has the undesirable side effect of developing aggressive behaviour. The research evidence shows that this is not the case. (p. 45)

The emphasis of his explanation for aggressive behaviour focuses on the notion that

... aggression has an appreciable heritability of about 50 per cent. (p. 45)

Let us look at evidence regarding the first part of the statement. As mentioned above children are particularly good at observational learning. Observational learning is aided by success of the model. Consequently, if children observe violent, aggressive behaviour and see that their model is successful, they are likely to imitate this behaviour. Bandura's (1973) experiments clearly showed that when children observed aggressive play with dolls and saw the model reinforced for the behaviour, they were more likely to play aggressively themselves, i.e., imitate the behaviour of the model. In terms of physical punishment, this means that

... while one person is punishing another, the immediate success of punishment is visible, but the various problems with punishment are not as visible. If the person does not have a repertoire of more positive skills for coping successfully with others, aggressive behaviour may be one of the more reinforcing means of dealing with others and may become a high probability response.
(Baldwin & Baldwin, 1986, p. 254)

With reference to the second part of the argument, Prof. David Suzuki, Professor of Genetics at the University of British Columbia clarified the role of genetics on behaviour when he said that:

Human behaviour takes place in a cultural context. The way genes affect us depends on our circumstances. So if you read in the newspapers that scientists have discovered a gene for alcoholism, criminality, or intelligence, or whatever, take it with a pinch of salt. To tell how a particular gene affects someone the scientist would need to know everything about that person's environment as well, and even then that might not be enough.
(Suzuki, 1993)

Behaviour analysts have for a long time taken into consideration the cautionary note made by Suzuki above. Millenson and Leslie (1979) discuss evidence demonstrating that the occurrence of aggressive behaviour can be traced directly to changes in the environment. They note that direct experience of painful stimuli can elicit unconditioned aggressive responses. Furthermore, these aggressive responses can even become predominant. Millenson and Leslie saw the clear implications of these findings when they wrote that

... this is highly undesirable and would seem to be sufficient reason to reject the use of punishment contingencies that involve painful stimuli, if alternatives can be found. (p. 308)

2. Punishment causes vigorous responding.

When a person receives intense aversive stimuli the person is likely to show a general increase in muscle tension and increase in vigour or responding. ... whatever responses the person emits next are likely to be more intense than they would otherwise have been.
(Baldwin & Baldwin, 1986, p. 255)

This fact becomes particularly pertinent following smacking of a child. Smacking is aggressive behaviour and when used to punish the child, he/she might imitate it more vigorously than aggressive behaviour which is learnt in other situations.

3. Punishment produces only temporary response suppression.

Punishment is only a temporary solution to the problem of undesirable behaviour, unless the person wielding the punishment is willing and able to continuously monitor

and frequently punish the unwanted response... Delayed and intermittent punishment is not as effective as immediate ... punishment in suppression behaviour, hence people who rely on social punishment as a primary method of socialisation often fail to achieve the desired results. (Baldwin & Baldwin, 1986, p. 255)

As Sidman (1989) observed undesired behaviour will return after a time and it takes severe punishment to inhibit undesirable behaviour in the long term. Consequently, if we were to follow Lynn's advice we would have to constantly increase the level of physical punishment imposed on our children, and taken to the extreme you could say that "Certainly, capital punishment gets rid of behaviour - it does so quite directly, by exterminating the behavior." (Sidman, 1989, p. 59)

4. The recipient of punishment learns to avoid both the punishment and the people who punish.

Whenever people use punishment, they set up conditions that negatively reinforce any response that are successful in avoiding punishment. (Baldwin & Baldwin, 1986, p. 256)

In other words, the child learns to avoid the punishment as well as the punisher. In the extreme, children run away or commit suicide.

Runaways physically distance themselves from excessively aversive households. ... Some commit suicide - the ultimate means of avoiding aversive experience. (Baldwin & Baldwin, 1986, p. 256)

5. Punishment produces negative emotional conditioning.

Parents who punish their child for running into the street may condition the child to fear playing near traffic (which is adaptive); but they may also condition the child to fear the parents (which is not adaptive). (Baldwin & Baldwin, 1986, p. 257)

Smacking is an unconditioned aversive stimulus which elicits an unconditioned pain response combined with unconditioned negative emotions. Clearly, when smacking is associated with other formally

neutral stimuli (such as the sight of a parent) these will become conditioned stimuli and elicit conditioned negative emotional responses.

6. Punishment can lead to generalised response suppression.

When behaviour X is punished, not only behaviour X but other similar responses are suppressed, too. (Baldwin & Baldwin, 1986, p. 257)

In the extreme this generalisation effect produces the

... inhibited' person, the person who is afraid to speak up, the person who never takes the lead, the person who fears aversive consequences at every turn. (Baldwin & Baldwin, 1986, p. 257)

Scientific analysis of punishment has shown that

...when we take all of its effects into account, punishment's success in getting rid of behaviour will seem inconsequential. The other changes that take place in people who are punished, and what is sometimes even more important, the changes that take place in those who do the punishing, lead inevitably to the conclusion that punishment is a most unwise, undesirable, and fundamentally destructive method of controlling conduct. (Sidman, 1989, p. 68)

It has also been argued that

... the evil effects of punishment techniques ... produce Vietnam type wars, rootless, disillusioned youth, anaemic, suicidal adults, disaffected ethnic minorities, ... Fortunately behaviour can be controlled in a better way, in a way that produces expressive rather than suppressive individuals, a way that is rewarding and reinforcing rather than punishing. Nearly everything that can be done by punishment can be done better and with fewer bad side effects through reinforcement. (Wheeler, 1973, p. 6)

Alternatives to physical punishment

Wheeler (1973) recognised a problem for society at large when he said that we "... cannot imagine how a non-punishing world would work, even though it is clear that the punishing world we have does not work." (p. 4) Perhaps too many of us are not aware that the application of the science of behaviour (i.e., behaviour analysis) has already supplied us with a vast variety of measures that we can use effectively to change behaviours and which do not have the kind of harmful side effects of physical punishment outlined above. As Catania (1992) put it "... too many better alternatives do not require spanking at all" (p. 91).

Below is a list of some of the most effective ways to change undesired behaviour that are successfully used by practitioners in the area of Applied Behaviour Analysis. The reader is reminded that the main focus of Applied Behaviour Analysis lies in increasing adaptive and pro-social behaviours and in teaching new behaviours. However, given the context of this paper we will concentrate on the contribution of Applied Behaviour Analysis in the reduction of undesired behaviours. Educating parents about these principles is a more constructive approach than simply prohibiting them from smacking their children. The list is by no means complete and the interested reader is referred to the references in this paper for further reading.

1. Differential reinforcement of other behaviour (DRO).

Probably one of the most effective and least punitive methods for decreasing the frequency of a particular anti-social behaviour is the use of differential reinforcement of other behaviour that is incompatible with the anti-social behaviour. DRO can have long-lasting effects since the improvement in the behaviour causes a snowballing effect of positive reinforcement; in other words, new sources of reinforcement become available to the child. Usually natural reinforcers soon replace arbitrary ones.

Once a person taps into a new source of reinforcers, the person may never go back to the earlier problematic behaviour. (Baldwin & Baldwin, 1986, p. 258)

2. Extinction.

When the reinforcer(s) that maintain behaviour is no longer available the frequency of the behaviour decreases. While extinction is a behavioural fact (i.e., it will operate whether we are aware of it or not) its use in behavioural change programmes can be complicated. As Baldwin and Baldwin (1986) observed

... extinction does not produce as immediate and rapid a decline in response rate as does punishment, it is [therefore] harder for people to learn to use. (p. 258)

However, extinction can successfully be used in conjunction with DRO or other techniques.

3. Reducing behaviour with response cost procedures.

Response cost is the withdrawal of specific quantities of reinforcers contingent on a response. (Sulzer-Azaroff & Mayer, 1991. p. 436)

If used properly, response cost usually produces a strong and rapid behavioural reduction, it can promote discrimination learning, has possible long-lasting effects and can be very convenient, especially when used in conjunction with token or point systems.

4. Reducing behaviour with stimulus control procedures.

Using stimulus control to reduce undesired behaviours means developing "... antecedent stimuli [which] then begin to inhibit given behaviours" (Sulzer-Azaroff & Mayer, 1991, p. 446).

Antecedent stimuli may be signals which protect young children from dangers such as when a parent shakes his/her head and says "No!" as the child approaches the open fire. Karen Pryor (1984), in her best-selling book *Don't shoot the dog*, describes a vast variety of non-aversive behaviour change procedures. For example, in the context of stimulus control she suggests a particularly innovative procedure. She trains the undesired behaviour in the presence of a particular stimulus and then reduces the behaviour by simply not offering the stimulus (see also Martin & Pear, 1992).

5. Reducing behaviour with time-out from positive reinforcement.

In time-out procedures "... positive reinforcement is reduced for a particular time period, contingent upon a response."

(Sulzer-Azaroff & Mayer, 1991, p. 449)

Time-out from positive reinforcement means either a removal of the reinforcer from the child's environment for a time, or removal of the child from all possible reinforcers for a short specified period of time. It can be used effectively to reduce a variety of behaviours such as aggressive responses or 'temper tantrums. It is most effectively used in conjunction with DRO.

6. Eliminate an early component of a behavioural chain.

Sometimes, an undesired behaviour is part of a consistent behavioural chain. It is therefore sometimes possible to eliminate an undesirable behaviour by eliminating an earlier component of the chain that leads up to it.

(Martin & Pear, 1992, p. 235)

Martin and Pear give a lovely example of a retarded girl, who frequently during the day took jewellery from her mother's bedroom and flushed it down the toilet. To eliminate an early component of this behavioural chain, the child was taught alternative, incompatible behaviour (i.e., putting the jewellery into a jar in the kitchen). The behavioural chain was interrupted and the girl stopped flushing jewellery down the toilet, in fact she eventually "... stopped playing with mother's jewellery altogether." (Martin & Pear, 1992, p. 235)

7. Observational learning.

As we have seen earlier, humans learn vast amounts of their behavioural repertoire by imitation. Imitation learning can therefore effectively be utilised in behavioural change programmes.

Models can provide information and vicarious reinforcement that decreases undesirable behaviour and

increases desirable alternatives.
(Baldwin & Baldwin, 1986, p. 259)

Martin and Pear (1992) cite an example where Martin and his wife modelled and rehearsed coping strategies (i.e., assertiveness) in role plays with their young child. The child's previous aggressive responses to a bullying play mate were drastically reduced and the two young boys in question soon learnt to play co-operatively with each other.

8. Reasoning and rules.

The usefulness of reasoning and rules for behavioural control needs no introduction. What is important in this context is that

... reasoning can be useful at any age, but people who have been raised with reasoning ever since childhood are most likely to use it and respond quickly when others use it with them in adulthood. (Baldwin & Baldwin, 1986, p. 261)

While Prof. Lynn argues that corporal punishment of very young children is to be recommended as an effective way to change behaviour it should by now have become apparent that there are numerous alternatives available which produce not only more effective behavioural change but do so at less cost.

Nobody likes to be punished. Yet we readily hand out or condone punishment. Rarely do we ask whether punishment is the only or even the best way to make people act as we want. (Sidman, 1989, p. 58)

In conclusion, we find Prof. Lynn's assertions questionable and dangerous on at least two accounts. From a purely scientific point of view, his misguided and superficial understanding of basic behavioural principles is used to promulgate the use of aversive methods of control. Behaviour analysis, both experimental and applied, has discovered a range of behavioural principles that account for human as well as non-human behaviour. A thorough understanding of these principles could be used to help us achieve a less coercive world. To use his own words: "All sorts of things which are sensible in moderation can be abused if taken to excess" (Lynn, 1993, p. 45). We think it is clear that Prof. Lynn has excessively misled his audience about the proper thrust of a science of human behaviour.

Moreover, from an applied viewpoint Prof. Lynn's statements are not only bad advice for parents but positively dangerous. Many parents neither have the knowledge nor the confidence to argue with a Professor of Psychology. Parents are generally taught to respect and trust Professors and to be guided by their advice. Consider, however, the potential damage that could be done by a Professor who entitles an article "The psychology of smacking children" and argues that "sensible parents" should administer a smack as a technique in dealing with anti-social behaviours. Many children might suffer at the hand/pen of Prof. Lynn's deliberations and many child protection workers will have their work cut out in picking up the pieces.

A fitting conclusion to this paper is to be found in the words of B. F. Skinner, who devoted his life to teaching others that there are many ways to enrich our life through the effective use of reinforcement contingencies.

Civilised man has made some progress in turning from punishment to alternative forms of control. ... The birch rod has made way for the reinforcements naturally accorded to educated man. Even in politics and government the power to punish has been supplemented by a more positive support of the behaviour which conforms to the interests of the governing agency. But we are still a long way from exploiting the alternatives, and we are not likely to make any real advance so long as our information about punishment and the alternatives to punishment remains at the level of casual observation.
(Skinner, 1953, pp.192-193)

References

- Baldwin, J. D. & Baldwin, J. I. (1986). Behavior principles in everyday life (2nd Edition). Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A. (1973). Aggression: A social learning analysis. Englewood Cliffs, N. J.: Prentice Hall.

Catania, A. C. (1992). Learning (3rd Edition). Englewood Cliffs, N.J.: Prentice Hall.

Martin G. & Pear J. (1992). Behaviour modification. What it is and how to do it. USA: Simon & Schuster Company.

Millenson, J. R. & Leslie, J. C. (1979). Principles of behavioral analysis (2nd Edition). New York: Macmillan Publishing Co., Inc.

Pryor, K. (1984). Don't shoot the dog. The new art of teaching and training. U.S.A., London: Bantam Books.

Sidman, M. (1989). Coercion and its fallout. Boston: Authors Cooperative, Inc., Publishers.

Skinner, B. F. (1953). Science and human behavior. New York: Macmillan.

Sulzer-Azaroff, B. & Mayer, G. R. (1991). Behavior analysis for lasting change. U.S.A., London: Holt, Rinehart & Winston, Inc.

Suzuki, D. (1993). Cracking the code. British Broadcasting Co-operation.

Wheeler, H. (Ed.) (1973). Beyond the punitive society. Operant conditioning: Social and political aspects. San Francisco: W. H. Freeman & Co.