

# Understanding Behaviour – A classical Approach to Modern Day Teaching.

---

An analysis of how the theory behind reward and punishment underpins teaching styles.

*By Tamara Brill*

## *Introduction*

Behind the establishment of every behaviour management strategy typically lies an attempt to determine the motivating forces that energize, direct, and sustain a child's behaviour. The traditional conceptualization of behaviour – that is the result of interactions between individuals and their environmental factors – is still widely accepted, although historically, major controversy surrounds the relative importance of each factor as a determinant of action as well as the extent to which other concepts (such as needs and proclivities) are innate or learned (Ayers, Clark, and Murray, 1990). Cognitive theorists argue that the individual's cognitive processes play a vital role in determining behaviour, whilst reinforcement theorists would retort with the impossibility of examining such unconscious processes to any great extent (Ibid.). Whilst undoubtedly playing a role in determining the content and direction of behaviour; with its infinite shapes and hues, analysis of the subconscious would be far beyond the scope of this essay. As such, this work will display and examine the existing theory behind the basic principle of reward and punishment employed, albeit with variations, throughout schools, as part of an effective and holistic behaviour management system.

## *Vygotsky's Zone of Proximal Development (Z.P.D.) as the Foundation for*

### *Disciplinary Measures*

As defined by Vygotsky, the Z.P.D. is:

“the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under guidance or in collaboration with more capable peers” (Vygotsky 1978, 86).

This concept is typically thought of in relation to academic advancement and learning, however, as will be immediately submitted, this notion may equally be applied to the social development of a child.

The concept of development that results from Vygotsky's work, may be summarised by the following of his arguments:

"The very essence of...development is therefore the conflict between the evolved cultural forms of behaviour with which the child comes into contact and the primitive forms which characterise its own behaviour...The new stage emerges not by virtue of what is already potentially contained in what was before, but from a real conflict between organism and environment and from active adaptation to the environment" (Vygotsky 1997b, 90-91).

As such, it has become apparent within the context of his other works, that Vygotsky does not consider development as resting solely with the narrow confines of academic improvement. Moreover, one sees within Vygotsky's characterisation, a contradiction between the internal and external factors that contribute to development. Unlike Piaget, who favours the embryonic model, which would either hamper or favour external conditions (Desjarlais 1985), Vygotsky posits the existence of pre-existing inclinations, that are shaped through a child's confrontation with the social conditions to life (Holzkamp 1985). It is precisely this facet of the Z.P.D. that a system of reward and punishment seeks to harness in order to shape behaviour in a classroom, as will be demonstrated below.

## *Quest of the Behaviourists*

The behavioural model states that learning occurs through both Classical and Operant conditioning (the result of environmental influences). That is to say, many behaviourists, including Pavlov (Classical) and Skinner (Operant), have suggested that conditioning occurs upon the association of a response with a stimulus (Payne 2015). Consequently, behaviourists advocate the rewarding of desirable patterns of behaviour and the punishment of undesirable patterns, which would then fade away, leaving only those behaviours that are regarded as being conducive to learning.

Granted, the emergence of cognitive theories in the 1980s saw a move away from the extrinsic motivators of rewards and punishments, preferring to explore the value of intrinsic motivation provided through the way in which learners handle new information in relation to their perception of their own capabilities (Bandura 1986, Zimmerman 1990). It must nevertheless be noted, that such an approach may only be applied to children of secondary school age, for there must be a certain level of proficiency in the subject's art of critical thinking (Costică 2014), which is why such studies tend to limit themselves to said age-group (Payne 2015). Since the sample groups available to the author of this work are exclusively of primary school age, the aforementioned cognitive theories present no application to the study thereof and will consequently receive no-further consideration.

Returning to both Pavlov and Skinner, whilst classical conditioning would simply see behaviour as a chain of conditioned responses, operant conditioning would demand the modification of behaviour by the reinforcing or inhibiting effect of its own consequences (Ayers, Clark, and Murray, 1990). These systems of psychology can be considered as closely analogous to the case

of a wine-maker. The adept winemaker is able to produce almost any type of vintage, within reason. For instance, one would be unable to create a fine wine from rotten grapes, meaning that a certain measure of importance is ascribed to the initial fruit. However, some individuals may attach more importance to knowing *why* certain wines are the product of particular conditions, as opposed to knowing *how* to produce such wine. To truly understand wine-making, one might argue, one must first establish a theory of fermentation. Upon further consideration of this metaphor, it becomes clear, that since the master wine-maker knows which kind of vintage results from the use of certain grapes in the relevant ratios etc., operationally speaking, there is no mystery surrounding the process of fermentation. Moreover, to speculate about the underlying process of fermentation would be to leave the realm of observable facts for the realm of the intangible – or as Skinner would argue, simply an unnecessary distraction (Ibid.).

Skinner's notion recognises an important reality – that it would frankly be impossible for a teacher to take into consideration every single thought, feeling and whim that directs the actions of each child in their class. Therefore, when contemplating the immense task that educators are charged with – managing the behaviour of thirty or so children – such an approach may certainly be considered to be the most pragmatic.

## *Case Study*

Over the course of a three-month period, beginning in October 2018 and ending in December 2018, a single class of Year 1 pupils were taught daily in English and Mathematics by the same teacher (Z). At the beginning of said teaching, the following rules were laid out:

- Children are to refrain from calling out when seated and must raise their hands in order to pose a question.
- Children are to remain seated until otherwise instructed, even upon conclusion of their work.

It should be noted, that the former teacher, who instructed the children in these subjects up until the commencement the Z's placement had no such rules in effect, preferring the children to line up at her desk once they had completed their work, in order to have their work marked. This often resulted in a boisterous and chaotic classroom environment, especially when approaching the end of a lesson.

The new behavioural expectations were made clear to the children upon the instatement of Z. Whenever a child spoke out of turn, there was an immediate negative verbal repercussion, coupled with a look of disapproval. As children fell into old patterns of behaviour, lining up next to Z with their completed work, they would swiftly be sent back to their seats with a curt, "Wait patiently in your seat, just like [insert name of model child here]." When children would protest stating, "But X was doing it too," Z would retort with, "Well, in that case, you should tell X to behave sensibly, just like you all know how to." However, should the children have persisted in attempting to have Z examine their work, they would simply have been ignored.

After consistent application of these same responses, by the end of the three-month period, the number of children who violated the rules set out above over the course of an entire lesson could be counted on one hand. Furthermore, should any child have spoken out of turn during their time on the carpet, all that was now required to affect a behavioural adjustment was a stern look of disapproval. The Year 1 children now also corrected one another independently, when 'bad behaviour' was spotted.

Thus, one sees the effectiveness of both classical (the pure requirement of a stern look) and operant (consequence of Z ignoring the pupil) conditioning, demonstrating the value of taking into account the type of behaviour one wishes to eradicate and adjusting one's conditioning accordingly. Closer examination of this case study also reveals links to the slightly narrower interpretation of Vygotsky's Z.P.D. – that development is achieved through peer-assistance – for by the end of the test period, one sees that the children also take note of and follow the good behaviour of their classmates, whilst also correcting one another when they falter.

Consequently, it has been shown through Skinner's expansion of Vygotsky's Z.P.D., that teaching generates tension between the present and the future, between what the child is already capable of – towards which he is orientated and orientates himself, by initially taking as a reference point what Vygotsky considers to be the ideal form of development: direction through the adult environment.

## *The Vices and Virtues of Punishment*

“Spare the rod and spoil the child” (Proverbs 13:24), a great many teachers have argued, as others contend that punitive inhibitory techniques may actually have deleterious effects (Parke and Deur 1972). Since the requirement of adult intervention in socialising children has been demonstrated, specifically with regard to the application of conditioning through the reward and punishment system in the classroom, the following question now arises: How ought the punishment aspect to conditioning be administered for greatest effect?

Findings from earlier research have indicated that the effects of punishment are complex, depending on a variety of parameters such as the timing, intensity and consistency of the punishment (Deur and Parke 1970). Interestingly, the one factor that has been found to increase the effectiveness of each of these parameters and which will therefore be analysed below, has been the provision of verbal rationale (Parke 1969). Simply put, if a child does not understand what is expected of them, compliance is unlikely. Furthermore, children may disagree with the approach to a task taken by an educator and neither the use of punishment nor its absence will eliminate such disagreement. Common-sense therefore dictates, that if teachers generally demonstrate sound reasoning behind the behaviour they require, they are more likely to instil within the children that such behaviour is warranted, than if they were simply to mete out punishments for having chosen undesirable behaviour.

Whilst such an assertion may certainly be made of older children, with regard to younger age groups, it must be noted, that rationales acting as determinants of resistance to deviation tend to have less of an effect, should the rationale provided be abstract in nature – for instance the invocation of the Property Rule. Since such a rationale is predicated upon the assumption that



the child in question understands the rights of others (Kohlberg 1964). It demands a level of sophisticated moral development which younger children would not necessarily have reached, thereby rendering it meaningless. Therefore, whilst almost any kind of rationale may be employed when addressing older children, in terms of application in primary schools, the use of concrete rationales must be adopted – that is to say, an emphasis on the physical consequences of an action (Kohlberg 1964).

It has now been established that the most effective form of punishment is one accompanied by the detailing of an appropriate rationale. Consequently, it may come as a surprise that research into rationale-based compliance indicated, that amongst younger children, when any given rationale was accompanied by peer-endorsement, age related trends in rationale effectiveness were entirely absent! (Allen and Newton 1972) Of course, the importance of the rationale to the subject may vary with the presence of other accompanying parameters – specifically, the relative importance of the source (peer versus adult). Perhaps, if a rule is endorsed by peers, the specific content of the accompanying rationale is less important, than it is if the rule is not endorsed by peers. The author of this essay would venture to suggest, in the typical pragmatic Skinnerian fashion, that, providing class compliance, a teacher need not spend much time focussing on the intricacies of a given rationale.

## *The Vices and Virtues of Reward*

When employing any system of reward and punishment, it is of critical importance that teachers not be ensnared in the trap of assuming that children are able to remember instructions for longer periods of time than is reasonable or that they are capable of doing things that they are not yet able to. In such cases, naturally, misbehaviour is inevitable, with punishment being an ineffectual, not to mention grossly objectionable course of action. Rather, as will be considered below, clearly maintained, high standards need not be coupled with punishment at all. For the purposes of this work, the term “reward” is to be interpreted, not merely as an item or privilege given in recognition of service, effort, or achievement. More specifically, this designation will be considered as any sort of affirmation provided to a child.

Dweck cogently argues, that changes in cognitive factors, such as persistence, resilience and motivation may not only produce a greater degree of inhibition than the simple use of punishment but that they may also result in greater rule transmission (Erdley and Dweck 1993). It was hypothesised, that if traits are viewed as rigid categories (termed a ‘fixed’ mindset) rather than flexible ones (termed a ‘growth’ mindset), judgments may become more unyielding, and traits may limit, as opposed to facilitate, the effective use of social information (Ibid.). Thus, in terms of behaviour management, it would seem reasonable to develop within children, the ability to correctly interpret negative thoughts about their own capabilities or behaviours performed by peers and how they may use such information in proceeding to make judgments.

Since negative data about an individual is more rarely encountered, it is usually assumed to be indicative of that person's character or capabilities (Fiske 1980). As such, Dweck argues that through the encouragement of the 'growth' mindset, one teaches a child that the inability to grasp a particular concept does not demonstrate a deep failure on the part of the pupil but provides them with the opportunity to bridge a gap of knowledge. Similarly, when addressing misbehaviours through the lens of the 'growth' mindset, one emphasises that a misstep is not indicative of a persistent flaw in the character of a child but a response (albeit a misguided one) to the circumstance they find themselves in (Erdley and Dweck 1993).

The notion presented by Dweck is given further import through consideration of The Cultural Spill-over Theory. This is an amalgam of explanations, asserting behaviour to be learned through the imitation of models and adoption of norms supported by groups with whom an individual associates (McCord 2009). Accordingly, it is to be expected that a child will attempt to replicate the contact experienced or witnessed between a teacher and pupils, with other children and adults. The 'growth' mindset therefore becomes an indispensable weapon in the arsenal of every teacher, since one is modelling behaviour and thought patterns which may then not merely remain within the realm of the classroom but potentially be carried through to all other spheres of interaction.

## *Building on the Previous Case Study*

As was noted in the previous case study, by the end of the three-month period of Z's conditioning techniques, not only were the children more likely to inhibit their 'deviant' impulses over the course of a lesson, but they were also more likely to attempt to prevent their peers from similar rule violations. In light of Dweck's theory, such high rates of compliance may be attributed to the fact that Z would empower the children to make the 'right' decision, for instance, through rewarding compliant children with the praising of their effort to sit quietly during relevant portions of the lesson. By contrast, should a child have called out whilst another was speaking, Z would indirectly address the rule violation with a simple, "Unfortunately, I can't hear what you're saying, X, because there are some children who are behaving rudely, by speaking at the same time." Similarly, for miscellaneous rule infractions, such as rocking backwards on a chair, formulations would be akin to the following, "X, I care about you so much, that I will make you stand up for the rest of the lesson, if you won't stop rocking on your chair, because it's dangerous and I don't want you to hurt yourself."

In accordance with both the 'growth' mindset and provision of rationale, the negative statements chosen by Z, refer purely to the behaviour of the children, assiduously avoiding sweeping statements about their character, as this would create an expectation of bad behaviour from that point forward on the part of the pupil. Moreover, positive reinforcement is applied, rationales provided are kept concrete, expectations – reasonable, and the indirect address of rule infractions by pupil

s aids in preventing unnecessary embarrassment, therefore automatically avoiding some of the typical deleterious effects of the more direct punitive inhibitory techniques, such as the desire to rebel against the classroom authority out of spite.

It is therefore clear, that for high standards to be maintained, they need not be coupled with direct punishment. Reasonably, it is more difficult to rear well-behaved children in environments where the lures for misbehaviour are plentiful, as is the case in a classroom equipped with many distractions. As such, it has been shown that teachers must be fastidious in setting and enforcing clear standards, which, as has been demonstrated, ought not be confused with punishing disobedience.

## *Conclusions*

It has been the aim of this enterprise to establish the theoretical framework behind the principle of reward and punishment and to analyse the effectiveness of cognitively based inhibitory tactics in this light. Skinner, through his expansion of Vygotsky's Z.P.D., has provided the teacher with a workable model for behaviour management, that is adult-led yet child-oriented, in that it leaves room for peer-learning and motivation – the (positive) modifying impact of which has also been demonstrated. This present work has to conclude that, although punishment plays a role in childhood socialization, there is a growing body of evidence (not least from the case study presented) which suggests that punitive inhibitory tactics may have deleterious side effects, if not exercised with the cautionary measures suggested in this work. The author would therefore suggest a combination of punishment with a shift to the use of alternative inhibitory techniques, such as the encouragement of a 'growth' mindset, which been empirically proven an effective behaviour management technique and may aid in avoiding some of the disadvantages of punishment altogether.

# References

Ayers, H., Clark, D. and Murray, A., (1990). *Perspectives on Behaviour: A Practical Guide to Effective Interventions for Teachers*, 2<sup>nd</sup> ed. London: Routledge, Taylor and Francis Group.

Allen, V. L., and Newtson, D. (1972). Development of Conformity and Independence, *Journal of Personality and Social Psychology*, Vol. 22, pgs. 18-30.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs: Prentice Hall.

Costică, Stan Emil. (2014). International Conference on Education & Educational Psychology 2013 (ICEEPSY 2013): About Rules, Punishments and Rewards in Education, *Procedia - Social and Behavioural Sciences* 112, pgs. 1160 – 1166.

Desjarlais, Lionel, (1985). Une Alternative Psychopédagogique, *Revue de la Pensée Éducative*, Vol. 19, No. 2 (August 1985), pgs. 117-133.

Deur, J. L., and Parke, R. D. (1970) The Effects of Inconsistent Punishment on Aggression in Children, *Developmental Psychology*, Vol. 2, pgs. 403-411.

Erdley, Cynthia A. and Dweck, Carol S. (1993). Children's Implicit Personality Theories as Predictors of Their Social Judgments, *Child Development*, Vol. 64, No. 3, pgs. 863-878.

Fiske, S. T. (1980). Attention and Weight in Person Perception: The Impact of Negative and Extreme Behaviour, *Journal of Personality and Social Psychology*, Vol. 38, pgs. 889-906.

Holzkamp, Klaus. (1885). *Grundlegung der Psychologie*. New York: Campus Verlag.

McCord, Joan. (2009). *Crime and Family: Selected Essays of Joan McCord*. Philadelphia: Temple University Press.

Kohlberg, L. (1964). Development of Moral Character and Moral Ideology, Eds. M. L. Hoffman and Lois W. Hoffman, *Review of Child Development Research*, Vol. 1, pgs. 383-431.

Parke, R. D. (1969). Effectiveness of Punishment as an Interaction of Intensity, Timing, Agent Nurturance and Cognitive Structuring, *Child Development*, Vol. 40, pgs. 213-236.

Parke, R. D., and Deur, J. L. (1972). Schedule of Punishment and Inhibition of Aggression in Children, *Developmental Psychology*, Vol. 7, pgs. 266-269.

Payne, Ruth, (2015). Using Rewards and Sanctions in the Classroom: Pupils' Perceptions of Their Own Responses to Current Behaviour Management Strategies, *Educational Review*, 67:4, pgs. 483-504.

*The Torah with Rasbi's commentary*. (2003) The Sapirstein Edition. New York: Mesorah Publications.

Vygotsky, L.S., (1997b). *The Collected Works* (Ed. Rieber, R.W.), Vol. 3. New York: Plenum Press.

Vygotsky, L. S., (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Zimmerman, B. J. (1990). Self-regulating Academic Learning and Achievement: The Emergence of a Social Cognitive Perspective, *Educational Psychology Review* 2 (2), pgs. 173–201.