# The Development of Morality in Adolescence

### The Training of Character

There would be general agreement that antisocial behaviour among adolescents has become more apparent in the last decade in the very societies, like the United Kingdom, where its putative causes in poverty, bad housing, and social inequality have in fact diminished. Eysenck offers an alternative theory to that of sociological cause and effect that is based on a development of "conscience" by prolonged Pavlovian conditioning, a process that would be weakened by such toleration of bad behaviour as is involved in "permissiveness." Further, he identifies evidence for a process whereby a genetic factor in the cortex, that influences certain personality traits, also renders individuals less able to acquire such conditioned responses quickly and lastingly. Hypotheses would suggest that those children and adolescents that exhibit certain traits of personality would benefit from a regime of conditioning more rigorous than is needed for others.

Schools have always had a dual purpose, namely that of teaching knowledge and that of teaching behaviour. Clearly the latter is not identical with the former; it is possible to teach knowledge about values and morality, but this is quite a different matter from teaching children to behave in a moral and ethically responsible fashion. It is well known that criminals possess cognitive knowledge about right and wrong, but their conduct clearly does not agree with their knowledge.

Teachers have acquired some expertise in teaching knowledge, and there is a reasonable amount of empirical evidence as to good and bad methods in this respect. Obvious limitations are set to the success of the teaching enterprise by the intelligence of the children (Eysenck, 1979), and their personality also determines what they prefer to study, how they prefer to study it, and whether they will be successful or unsuccessful (Eysenck, 1978). In the field of character training however, as it has usually been referred to in England, there are many

theories but few facts, and the deterioration of adolescent behaviour, in school and out, that is so characteristic of recent years, must lead one to question the usefulness of current theories and methods.

It would probably be fairly accurate to say that we tend to adopt a sociological view of behavioral problems in school and out, arguing that this behaviour is environmentally determined, and that such factors as poverty, social inequality, and alienation play a dominant part in the causation of antisocial conduct, vandalism, delinquency, and so on. The evidence does not support such a view. We find that in the last 30 years antisocial behaviour, vandalism, and delinquency have increased, while poverty, social inequality, bad housing, and all the other alleged social "causes" have been drastically reduced in their impact. Thus instead of finding a positive correlation between antisocial behaviour and poverty we find a negative one; as our standard of living increases, and social inequalities lessen, crime prospers, more and more. A serious scientific theory that predicts the opposite of what is actually happening must surely revise its axioms and attempt to take such facts into account.

## The conditioning theory of conscience

There is in existence an alternative theory, and I believe that a considerable body of experimental and observational evidence exists to support it. It has been published in considerable detail elsewhere (Eysenck, 1977), and I can only present it here in a very brief and necessarily dogmatic fashion. The theory has two parts, the first of which is general, the second of which is more specific and related to personality differences. To take the first part first, what is suggested is that our actions are by and large determined by their consequences. Actions which are punished and socially disapproved of will tend to be abandoned, and actions which are rewarded, and socially approved of, will increase in frequency. Insofar as rewards and punishments are obviously seen to be administered by society, this is simple commonsense. The difficulty arises when, as in the case of much antisocial and criminal activity, the culprit sees no obvious way in which he would be detected, and believes that he can indulge in his antisocial conduct without incurring any kind of penalties. In other words, few people would commit a crime under the eye of a policeman, but what happens when the policeman (or the teacher) is not there? Cognitive knowledge of the fact that society disapproves of the conduct in question is, as we have seen, not enough; something else is needed. What is this "something else"?

The answer, quite briefly, is that human beings (and animals too) have a "conscience" which, when sufficiently strong, punishes them for wrong-doing (through guilt feelings, strong anxieties and the like); which therefore serves to encapsulate the rules of society in their cortex (and more importantly, in their limbic system); and which replaces the policeman or the teacher, when the possessor of the conscience is faced with temptation. Theory suggests that this conscience is not, as used to be thought, something implanted by God, but

rather that it is the result of a long drawn-out history of Pavlovian conditioning. To be a little more precise, children and adolescents, when they misbehave and indulge in antisocial practices, are punished, scolded, or made to feel in other ways that their conduct is not approved of. On all of these occasions the conduct in question is the conditioned stimulus, the punishment is the unconditioned stimulus, and the resulting pain, fear, or anxiety is the unconditioned response.

The thousands of occasions on which this conditioning process is brought into play ensure that the resultant conditioned response is a very strong one, and the conditioned stimuli coalesce into a generalised "conscience" through the process of stimulus generalization, aided and abetted by the fact that the disapproved practices are usually labelled in a manner which identifies them as members of a group — naughty, wicked, wrong, bad, or whatever the adjective used may be that identifies the behaviours in question as antisocial. Thus morality is imparted through a process of conditioning, rather than ordinary teaching, and there is a good deal of experimental and observational evidence, both from children and from animals, to support this view. Experiments have been done in which particular acts have been identified by the experimenter as "wicked," and where a process of Pavlovian conditioning has been brought into play to alter the behaviour of the child, or the animal, even after the experimenter himself has left the situation, and apparently can no longer inflict punishment when the taboo act is performed.

We may now have an explanation of why, in spite of the growing wealth of western societies, and the disappearance of social inequalities, there has been such an increase in crime, particularly juvenile crime; what has happened is a greater toleration of bad behaviour, usually referred to by some such term as "permissiveness." Permissive parents, teachers, and others in authority reduce drastically the number of occasions on which the conditioning process is called into play, and consequently the conditioned "conscience" of the adolescent is very much weaker than it would normally have been. A recent study by Rutter et al. (1979) provides good evidence to show that more permissive schools, reasonably well equated for intake, socioeconomic status, and so on, have a far worse record with respect to antisocial conduct, vandalism and criminality, as well as scholastic achievement, than do less permissive schools. This is an important prediction made by the theory, and the Rutter study, as well as many others, seems to bear it out.

#### Genetic causes for antisocial conduct?

While this theory suggests an answer, clearly it cannot be the whole answer. Under all conditions of social reinforcement, there are still huge individual differences; within the same family, we often find one "black sheep" in an otherwise well-behaved family, and equally we often find a solitary "white sheep" in families that seem doomed to criminality. How can we account for these facts? The answer is indicated by the fact, now almost universally con-

ceded, that antisocial behaviour has a strong genetic base. There are several ways of demonstrating this. The first is by means of concordance studies. Prisons are searched for convicts who are twins, and then the other twin is looked for to see whether he is a) concordant for criminality or not, and b) whether the twins are monozygotic or dizygotic. If there is a strong genetic factor in criminality, then monozygotic twins would be expected to be concordant far more frequently than dizygotic twins. This has been found to be so in some ten studies, carried out in many different countries; it seems that MZ twins are concordant over four times as frequently as dizygotic twins. This is strong support for the genetic theory.

These children receive their genetic endowment from their biological parents, but their environment is completely furnished by their adoptive parents. This makes it possible to investigate the question of whether the adopted children, in their social or antisocial and criminal conduct, behave more like their biological parents, or their adoptive parents. The answer has been pretty clear-cut, and indicates that they behave like their biological parents, and hardly at all like their adoptive parents. This too, therefore, supports the genetic hypothesis quite strongly.

## Crime and personality

The third proof has direct relevance to the problem we are dealing with, but it requires a slight excursion into what might at first appear unrelated territory. I have put forward the theory that certain personality traits, particularly those related to extraversion, are produced by a lack of arousal in the cortex, produced by the weak functioning of the reticular formation (Eysenck, 1967). This leads to the prediction that extraverts would have weaker conditioned responses, and take longer to learn these, simply because arousal mediates the conditioning process. This deduction has frequently been verified, and it immediately leads to the prediction that extraverts should show antisocial behaviour more frequently than introverts, provided that other conditions are similar or equal. This has been found to be so, in a whole series of studies, both in England, but also in countries of the Third World, like India, and in Communist countries, like Hungary and Czechoslovakia. Extraversion is particularly important in relation to antisocial conduct in the younger age groups of children and adolescents; when dealing with incarcerated criminals it becomes rather more difficult to obtain valid measures, although even there significant differences can still be obtained.

There are other personality traits which are relevant (Eysenck, 1977), but it would take us too far to go into these here. It must also be pointed out that there are other consequences of low arousal which lead extraverts into criminal and antisocial conduct; thus low cortical arousal is experienced as extreme boredom, and this inevitably leads to attempts at "sensation seeking" in order to escape from the boredom. This sensation often leads to activities like pub brawls, van-

dalism, and car stealing, which produce an arousal jag which is satisfying but socially undesirable.

It is important in this connection to remember that extraversion, like the other personality dimension involved, has strongly genetic roots (Eysenck, 1980). Thus the mediating link between criminality and antisocial conduct, on the one hand, and genetics on the other, may be through these personality traits and the mechanisms which mediate the various behaviours characteristic of these personalities.

## Implications for character training

It is often said, in criticism of this view, that to ascribe criminal behaviour to genetic causes is to adopt a completely reductionist and determinist attitude, which makes any effort at social improvement impossible. This objection is clearly mistaken. In the first place, what is asserted is simply that genetic factors play a part in the production of antisocial conduct; they do not cause it directly, and the operation leaves ample room for the operation of environmental causes too.

What is inherited, to simplify grossly, is arousal level, and a corresponding capacity or incapacity for acquiring conditioned responses quickly, strongly, and lastingly. This, however, is not an all or none question, but a quantitative difference between extraverts and introverts. Extraverts too can be conditioned, provided that a sufficient number of conditioning experiences are brought into play. Pavlov already found that salivary conditioning could be produced in some dogs by a few repetitions of the CS-UCS paradigm, whereas other-dogs might need two or three hundred repetitions. Thus dogs are genetically predetermined to form conditioned responses either quickly or not; Basenjis for instance are born psychopaths and very difficult to condition, whereas German Shepherd dogs are typical introverts, and very easy to condition. Nevertheless, this genetic difference can be overridden by using many more conditioning experiences for those dogs which are difficult to condition; eventually practically all dogs will learn, and perform the conditioned response when the conditioned stimulus is presented.

Thus all that is being said is that permissiveness is particularly bad for extraverted children and adolescents, and those showing the other personality traits associated with antisocial behaviour. The subjecting of such children and adolescents to a more rigorous regime of conditioning would be predicted to have a very beneficent effect, and there is a good deal of evidence that this is indeed so.

Some of this evidence comes from the application of the so-called "token economy" method of conditioning to adolescents picked up for criminal conduct and sent for treatment to special hostels. It has been found that this special

method of conditioning produces much better behaviour in the hostel, and reduces recidivism as compared with a control group by something like 50%. This is far from perfect, but it should be compared with the completely negative results of psychoanalytic and psychotherapeutic treatment as reported, say, from Underwood Prison in England, which was especially founded to provide such types of treatment and which discovered that the methods produced no effect whatsoever on the recidivism rates of inmates as compared with orthodox prisons.

I am not here suggesting that the theories developed are necessarily correct. or that, even if along the right lines, they cannot be improved. Clearly we are only at the beginning of the investigation of the psychology of abnormal conduct, and much more will have to be learned about the process of socialization before we can give the teacher advice about the treatment of adolescents with any degree of confidence. However, there is already a good deal of evidence to suggest that there is at least some truth in these hypotheses and theories and that they can be tested both experimentally in the laboratory, and by controlled observation in the school situation. So far these experiments and observations have given positive support to the theory, as have the direct genetic and personality studies mentioned. If future work is equally positive, then I think we may have here the beginning of a scientific understanding of morality, its development, and its place in human nature. Such an understanding could have very important consequences for the development of a better society, free from criminality, vandalism, cruelty, delinquency, and other types of antisocial conduct so rampant nowadays.

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