AFFECTIVE RESPONSES TO MEDIA:

BANDURA'S "SOCIAL LEARNING THEORY"

As Bruner identifies in his article 'The Uses of Immaturity', man has in common with other Simians or Great Apes the capacity to learn a great deal by observation, rather than by direct contingent experience. And this capacity has been most fully explored in humans by Albert Bandura, in the form of psychological modeling, which has led to the development of Bandura's "Social Learning Theory" (S.L.T.). A useful summary of S.L.T. is to be found in Bigge's "Learning Theories for Teachers" (Chapter 7) and here we find S.L.T. described as a blending of behaviouristic reinforcement theory and purposive cognitive psychology aimed at a balanced synthesis of cognitive psychology with principles of behaviour modification.

For Bandura, except for elementary reflexes, people are not equipped with inborn repertoires of behaviour. They must be learned and within the learning process they are acquired either by direct or observational experiences. Instead of considering people to be mechanical products of environmental forces, as in Skinnerian S-R theory, Bandura regards them as information processing and interpreting animals who operate on the basis of insightful expectations. He observes that human operations would be quite boring and trying if solutions to problems could be achieved only by enacting possible alternatives and suffering the consequences. Higher mental capacities enable people to use thought instead of action in solving problems. To quote Bandura:

> *By representing foreseeable outcomes symbolically people convert future consequences into current motivations of behaviour.*
> Behaviour Theory and the Models of Man American Psychologist, Dec. 1974, p859-869.

He says that our theories of learning have been incredibly slow in acknowledging that man can learn by observation as well as by direct experience. The early proponents of behaviourism, having renounced cognitive determinants, advanced the doctrine that learning can only occur by performing responses and experiencing their effects. He concludes that the rudimentary form of learning based on direct experience has been exhaustively studied, whereas the more pervasive and powerful mode of learning by observation has largely been ignored. Thus, as Bandura sees it, the capacity to represent modeled activities symbolically (and perhaps he also means 'iconically') enables man to acquire new patterns of behaviour observationally, without reinforced enactment. From observing others one forms an idea of how certain behaviour is performed, and on later occasions the coded information serves as a guide to action. Research conducted within the framework of social learning theory shows that virtually all learning phenomena resulting from direct experience can occur on a vicarious basis by observing other people's behaviour and its consequences for them. The abbreviation of the acquisition process through observational learning is vital for survival. Modeling reduces the burden of time-consuming performance of inappropriate responses (this may be seen as the antithesis of Piaget's 'learning by doing'). Since errors can produce costly, if not fatal, consequences, the prospects of survival would be slim indeed if people had to rely solely on the effects of their actions to inform them about what to do.

According to Bandura, a major function of modeling stimuli is to transmit information to observers about how response elements must be organized to produce required patterns of behaviour. I have mentioned the research concerning vicarious experience - learning by observing other people's behaviour. Bandura goes further and states that response information can be conveyed through physical demonstration, through pictorial representation, or through verbal description. Much social learning occurs through casual or direct observation of performances by real-life models, and imitative learning in young children depends almost entirely upon behavioural modeling. But as linguistic competence is acquired, verbal modeling is gradually substituted for behavioural modeling. People are aided in assembling and operating complicated mechanical equipment, in acquiring social, vocational and recreational skills and in learning appropriate behaviour for almost any situation, by consulting written descriptions in instruction manuals. Verbal forms of modeling are used extensively because one

can transmit through words an almost infinite variety of behavioural patterns that would be exceedingly difficult and time consuming to portray behaviourally. Bandura suggests that we can learn almost anything vicariously that can be acquired through direct experience.

Attempts have been made to understand just how we translate and encode the information acquired by observation. An experiment by Gerst used training in the sign-language of the deaf to help analyse the encoding procedures.

Seventy-two subjects in three different groups observed and later reproduced motoric responses consisting of intricate movements of the arms, hands and fingers. Ten signs from a group of 100 were chosen because of their verbal codability:

five were highly verbally codable
five were low in verbal codability.

The signs were recorded on film and shown in alternate sequences of high and low codable items. Subjects were told that the experiment was concerned with the way people remember visually presented materials. They were informed that they would see a filmed demonstration, after which they would be required to carry out a specific activity for one minute, and then they would be asked to reproduce the items demonstrated in the film. The "specific activities" were encoding strategies, and there were four of these:

1) Imaginal coding: subjects told to close their eyes and to visualize the actions in vivid and detailed imagery. They were asked to continually restate these images during the entire one minute period.

2) Verbal coding: subjects told to describe aloud the specific movements and positions of actions as concretely and accurately as possible and to continue repeating these for one minute. They were specifically asked not to use analogies or similes such as "it looks like she is making a square" or "she seems to be covering a pot".

3) Summary labeling: subjects told to develop a summary label that would encompass the constituent elements eg. a movement would call to mind some action or object.

4) Control: subjects were asked to count to the beat of a metronome.

There were two measures taken:

1) immediate
2) delayed, all S's read Gauss's "The Prince of Mathematics" aloud for 15 minutes.

RESULTS: Table 1 indicates that the highest overall performance for reproduced responses was for the immediate testing of the imaginal coding group. There are consistent differences between the high and low verbalizable sets of actions, but with the interesting result that the low-verbalizable actions seem to be least susceptible to the effects of a delay in performance for the summary labeling group.

Table 1. **Mean Percent of Modeled Responses Reproduced as a Function of Coding Activities, Verbalizability of Modeled Responses, and Time-Reproduction Test.**

	Immediate		Delay		
	HV	LV	HV	LV	Overall Means
Summary Labeling	78.86	72.18	43.22	42.82	59.27
Imaginal Coding	81.43	72.05	41.76	28.31	55.89
Verbal Description	74.54	60.19	38.40	29.61	50.68
Control	61.74	53.89	35.51	22.98	43.53
Overall Means	74.14	64.58	39.72	30.93	
	69.36		35.33		

HV = High Verbalizable items
LV = Low Verbalizable items

Figure 1. **Total Percentage Reproduction Scores For All Groups**

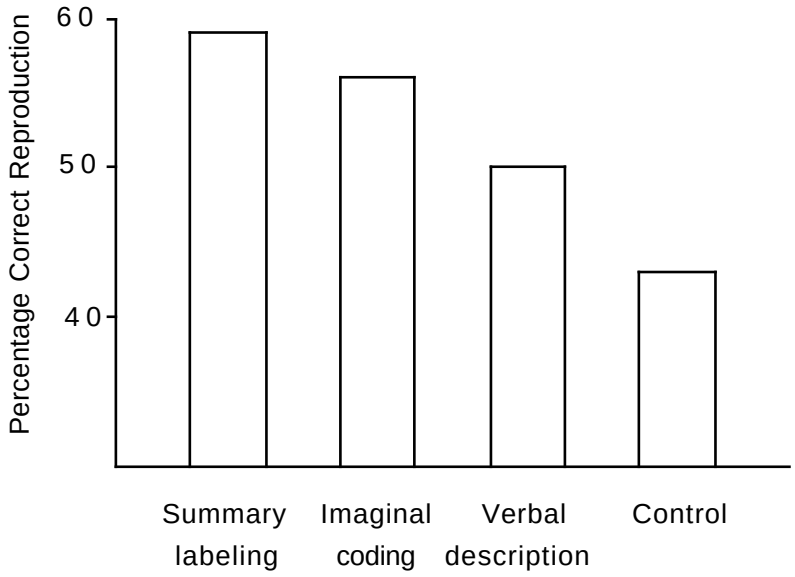


Figure 1 clearly shows the overall effect for high and low codability and immediate and delayed testing, with the summary-label strategy producing results superior to the imaginal condition. This appears to be a result of the memory's imaginal storage system being susceptible to delays in performance.

The results of this experiment appear to confirm the ideas of Bruner and Bandura, that learning by observation is readily accomplished and that there are a variety of ways of effectively encoding and storing the information, which can be retrieved at a later stage when required. There are several terms

that you will encounter in this field and the major terms modeling, imitation and observational learning are defined by Rimm and Masters as follows:

> *Modeling is often used as a general term to summarize both learning that occurs from observation of others and any imitative change in behaviour that may follow. Specifically, modeling may be said to refer to the behaviour of the individual who is observed, that is, who acts as the model.*
>
> *Imitation, in its specific sense, refers to the behaviour of one who observes the actions of another and then copies them. It is a term signifying the behaviour of the observer, not the model, and it reflects* ***performance*** *and not necessarily any enduring learning by the observer.*
>
> *Observational learning is the term whose denotation is perhaps most obvious. This term is used to refer to* ***learning*** *that occurs from the observation of others. Occasionally it is helpful to specify the learning that has occurred from observation because learning may occur in the absence of immediate imitative performance. Children, for example, may learn much from the observation of adults or older peers about how to* ***behave*** *in various circumstances but may not actually behave in such a fashion (that is, actually imitate) until some later time when they find themselves in an appropriate context or when they*
> *finally reach the age when the behaviour is appropriate.*
> DC Rimm and JC Master (1979) Behaviour Therapy, Chapter 3: Modeling Procedures

The Gerst research utilized a filmed model of behaviour and it is this aspect of Social Learning Theory which has attracted most attention. Television, films and other audio-visual displays provide an influential source of symbolic modeling for all ages. There is a large body of evidence demonstrating that both children and adults acquire attitudes, emotional responses and complex patterns of behaviour through exposure to pictorially presented models. In view of the efficacy of pictorial modeling and the large amount of time that people spend watching television productions, mass-media may play an influential role in shaping behaviour and social attitudes.

With further developments in communication technology whereby any desired activity can be portrayed on request, at any time, on remote television consoles, parents, teachers and other traditional role models may occupy less prominent roles in the social learning process, as increasing use is made of symbolic modeling influences. Bandura has been very concerned that these symbolic modeling influences may not be good models, in terms of the healthy functioning of society: a major source of aggressive conduct is the abundant symbolic modeling provided by the media, according to Bandura. The advent of TV has greatly expanded the range of models available to a growing child. Both children and adults today have unlimited opportunities to learn the whole gamut of violent conduct from a television model within the comfort of their own homes.

SOCIAL LEARNING THEORY AND TV VIOLENCE

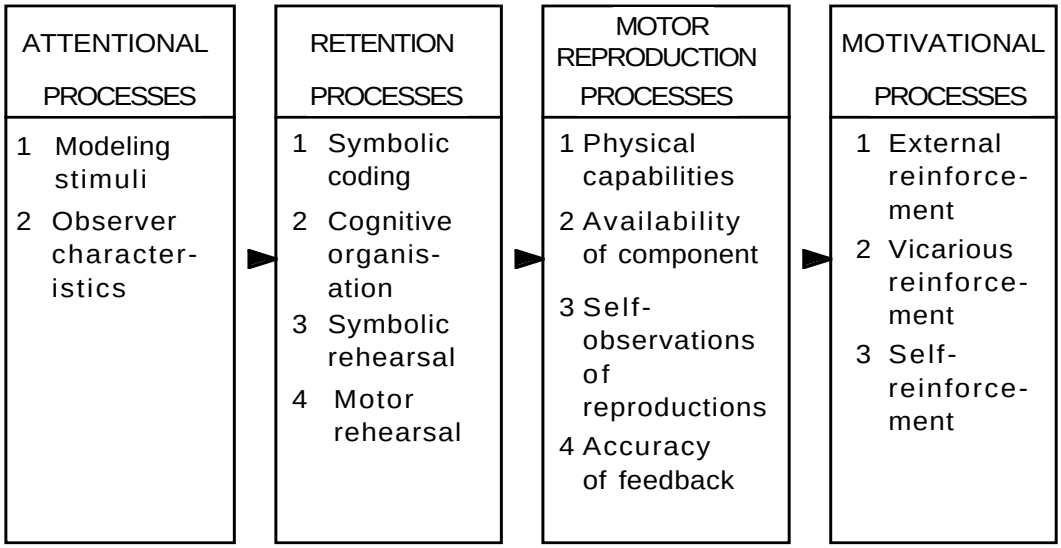
With the advent of film and television much vicarious learning takes place using symbolic modeling in the media, and, in view of the fact that in the first eighteen years of live the average youth spends more time watching television than in any other activity except sleep, it can be viewed as having a tremendous potential effect on developing minds. Children can acquire a vast array of behavioural skills vicariously through television, attitudes are influenced and models of social behaviour are demonstrated.

Bandura has this to say about television's potential: TV is an effective tutor. Both laboratory and controlled field studies in which young children and adolescents are repeatedly shown either violent or non-violent fare, disclose that exposure to filmed violence shapes the form of aggression and typically increases interpersonal aggressiveness in everyday life. Further - adults who pursue a life of crime improve their criminal skills by patterning their behaviour after the ingenious styles portrayed in the mass media. Being an influential tutor, television can foster humanitarian qualities, as well as injurious conduct. Programs that portray positive attitudes and social behaviour foster co-operativeness and sharing and reduce interpersonal aggression.

Bandura mentions criminals who improve their skills by patterning their behaviour after the ingenious styles portrayed in the media. Models also teach more general lessons: from observing the behaviour of others people can extract general tactics and strategies of behaviour that enable them to go beyond what they have seen or heard and by synthesizing features of different models patterns into new amalgams, observers can evolve new forms of behaviour. An amusing example of this is given by Eysenck and Nias (Sex, Violence and the Media, 1978):

> *A more conscious decision to imitate is illustrated by the annoying tendency for crime prevention films to be followed by a wave of crime. "Break-in" was a TV programme in which a former burglar showed in detail how to enter property. The aim was to advise people on how to stop housebreaking but within hours of the programme going out 'carbon copy' burglaries were being reported.*

The component processes governing observational learning are, according to Bandura:



I would like to pursue one area of particular interest to students of the media and that area is the modeling of aggressive or violent behaviour in television. If television merely reflected life there would, perhaps, be little concern for its possible pernicious effects. It is, however, obvious that portrayals of violence and aggression attract audiences and that within a capitalist system which anticipates large profits from advertising revenues on television, people will get what they want if it means that they will tune in to the TV programme, and what people seem to want on TV is fast, violent action. Much of what follows concerns TV in America, but it is indicative of TV more generally in the so-called 'Western' World.

On the assumption that TV does reflect life in general what percentage of programmes would you imagine would contain scenes of violence and aggression (we'll look at definitions a little later on): 2O%, 3O% or more? And what about the number of violent acts per programme (on average)? Look at the following chart and I think you'll agree that the results are rather astonishing:

Figure 2. Violence on Television. Adapted from Liebert et Al. (1982) The Early Window, p.107.

	% of Programmes Containing Violence		Number of Violent Acts per Programme	
	All Progs	Week-end	All Progs	Week-end
1967	81.3%	93.8%	4.9	4.7
1969	83.5%	98.3%	5.2	7.0
1971	80.6%	87.8%	4.7	5.9
1973	72.7%	94.9%	5.3	6.7
1975	78.1%	94.9%	5.4	5.2
1977	76.7%	90.6%	5.2	4.9
1979	80.9%	91.9%	5.0	4.6

But it is necessary to define exactly what constitutes a violent act and Gerbner's analyses are often at odds with other studies which use the definition 'acts intended to harm or threaten people or property' - Gerbner includes humorous acts and accidents within his categories.

Presumably everyone would agree that purposeful stabbing and shooting are violent, but what about verbal insults, what about threats of violence? If there is a sequence on-going (a fist fight/shoot out) would it count as one act of violence or several? And there is the problem of sampling: Which programmes should be sampled, does one only look at prime time or at other times?

Also, how reliable are measures of violence? Essentially if we ask two people to rate a programme or sequence to what extent will they agree. Obviously, it is necessary to ensure that there is a fair degree of agreement before the measure can have any meaning at all.

There have been several early attempts at analysis. 1954 saw two research reports on the portrayal of violence on TV: during one week there were 3,42l acts of violence or threats. In children's programmes there were four times as many violent acts per programme when compared with general drama programmes and one-and-a-half times as many as in crime-detection programmes.

Gerbner's Studies, 1968

George Gerbner was Dean of School of Communication at Pennsylvania State University. He proposed a definition of TV violence which raters could be trained to use through apprenticeship and by following a manual related to videotaped examples.

For the purposes of Gerbner's study, violence was defined as:

> *the overt expression of physical force against others or self, or the compelling of action against one's will on pain of being hurt or killed. The expression of injurious or lethal force had to be credible and real in symbolic terms of the drama. Humorous and even farcical violence can be credible and real, even if it has a presumable comic effect....*

But idle threats, verbal abuse or comic gestures with no real consequences were not be considered violent. Gerbner's report in 1969 found that about eight in ten plays contained violence and the level of violence was about five per play and nearly eight per hour (a play is the equivalent of an episode, so that an hour may contain several plays, e.g. half hour cartoon programme). Further, the most violent programmes were those designed exclusively for children - cartoons:

> *The average cartoon hour in 1967 contained more than three times as many violent episodes as the average adult dramatic hour. The trend towards shorter plays sandwiched between frequent commercials on fast-moving cartoon programmes further increased the saturation. By 1969, with a violent episode at least every two minutes in all Saturday morning cartoon programming ... the average cartoon had nearly six times the violence rate of the average adult television drama hour and nearly twelve times the violence rate of the average movie hour.*

Well, TV violence seems to be at an alarmingly high rate - if TV was largely inaccessible to children as are certain films in the cinema, then the possible effects may be minimal BUT as I have mentioned because of its accessibility we find that TV viewing (through 1st, 6th and 1Oth grades) surpasses all other activities except sleep and school (Lyle and Hoffman 1972). They found that of ten and sixteen year olds in their sample 25% watched at least five and a half hours on a given school day; and more than 3O% of six year olds watched four or more hours. Violent programmes were broadcast while the six year olds were watching and generally such programmes attracted a majority of such viewers.

The recent DES report 'Popular TV and School children' (1983) indicates that in England young people between five and fourteen years of age spend an average of twenty-three hours per week watching television, and with this amount of exposure it is difficult to believe that a medium in which so much advertising capital is invested has no influence on young peoples' attitudes and values.

Now, in terms of normal daily life, Bandura concludes that because people have direct contact with only a small sector of the physical and social environment, seeing the same people, traveling the same routes, they form impressions of the social realities with which they have little or no contact partly from televised representations of society. BUT the world of television is heavily populated with villainous and unscrupulous people and it can distort knowledge about the real world. Research has demonstrated that heavy viewers of television are less trustful of others and over-estimate their chances of being criminally victimized more than do light viewers (Gerbner and Gross 1976 Journal of Communications pp l73-199). Heavy viewers see society at large as more dangerous regardless of their educational level, sex, age and amount of newspaper reading.

Many misconceptions that people develop about certain occupations, nationalities, ethnic groups, sex roles and other aspects of life are cultivated through modeling of stereotypes by TV.

Let us return now to Social Learning Theory. Models are utilized in all cultures to promote the acquisition of socially sanctioned behaviour patterns - and children frequently acquire in the course of imitative role-playing, numerous classes of inter-related responses *in toto*, apparently without proceeding through a gradual and laborious process of response differentiation and extinction or a lengthy period of discrimination training. Bandura and his colleague Richard Walters were in the tradition of post-WW II academic psychologists who tried to extend theories of learning which had been developed in the 193O's based on research with laboratory animals into useful tools for social applications with human beings. But at the same time they wanted their claims to stand on a research base that was reputable in the eyes of their academic colleagues. In order to demonstrate the importance of modeling objectively and vividly they conducted a series of controlled laboratory experiments on the modeling of play aggression. These have become known as the BOBO doll experiments. A major purpose of the experiments was to demonstrate that there are two distinct effects of exposing young children to aggressive models: a teaching effect and a motivating effect. There are of course ethical problems with regard to displaying and measuring aggression in young children and indeed even with students of the media (which has precluded demonstrations in the course).

The Bobo doll studies were designed to see under what conditions children will copy observed, novel aggressive acts. This clearly relates to the concern that viewers in general (and children in particular) will copy what they have seen on the television.

The target for aggression in the experiments was the Bobo doll, an unfortunate inflatable clown doll designed as a punch bag for children (with a sand-filled base so that it bounced back when punched and a nose that squeaked when struck).

The child saw a filmed demonstration presented to look like a TV programme in which another individual was seen displaying a series of novel aggressive acts against the clown. After exposure to the demonstration the child was watched at play with the doll and other toys and his or her imitative aggressive acts were monitored by trained observers.

Bandura and Walters distinguish between the child's acquisition of such responses and the actual performance and the classic Bobo doll experiment investigated both aspects of modeled aggressive behaviour. This is how Bandura described it:

> *The film began with a scene in which an adult male model walked up to an adult-size plastic Bobo doll and ordered him to clear the way. After glaring at it for a moment, the model exhibited four novel aggressive acts each accompanied by a distinctive verbalization: First he laid the Bobo doll on its side, sat on it and punched it on the nose while remarking - "Pow, right on the nose, boom, boom." Then he raised the doll and pommeled it on the head with a mallet, accompanied by "Sockeroo - stay down." Next the doll was kicked around the room by the comment "Fly away; Fly away." Finally, the model threw rubber balls at the Bobo doll, each strike punctuated with "Bang". The sequence was repeated twice.*

For one group of children the experimental sequence ended at this point, but for another group there was an additional scene showing the consequences of the aggressive act. This 'consequences' group was further subdivided into model rewarded and model punished conditions:

> *In the rewarded sequences a second adult appeared with an abundant supply of sweets and soft drinks. He informed the model that he was a strong champion and his superb aggressive performance clearly deserved a generous treat. He poured out a large glass of 7 UP and gave him additional sweets. The admirer engaged in considerable positive social reinforcement while the sweets and drink were consumed.*
>
> *In the model punished condition the second adult entered the scene shaking his finger at the model, exclaiming "Hey there you big bully. You quit picking on that clown - I won't tolerate it." As the model drew back he tripped and fell while the other adult hit him with a rolled up newspaper reminding him of his aggressive behaviour. Finally, as the model ran off cowering he was warned "If I catch you doing that again, you big bully, I'll give you a hard spanking. You quit acting that way."*

Bobo Doll tests

1. Performance:

After viewing film, children taken individually into an experimental room which contained a plastic Bobo doll, three balls, a mallet, a pegboard, plastic farm animals, doll's house with furniture and a doll. These items permitted imitative play or non-aggressive alternative play. The child's play was observed for ten minutes behind a one-way observational mirror. The results showed that for the no consequence or rewarded conditions there was a marked tendency for spontaneously imitated aggressive acts. Boys performing at a higher rate than girls. For the punished consequence condition there was virtually no spontaneously imitated acts.

2. Acquisition:

Social learning theory predicts that observed consequences of behaviour have a controlling effect and would predict that although the aggressive acts were not spontaneously demonstrated in the punished condition they had nevertheless been acquired. To test this the experimenter re-entered the situation and offered incentives (sweets etc) for each repetition of the observe aggression. This condition led to high rates of reproduction for all groups.

Now, we have mentioned the violent content of cartoons - but can we seriously expect children to imitate cartoon violence? Bandura and Ross investigated this aspect again using a Bobo doll. One group saw the aggression committed by an adult as described. The other group saw the same acts perpetrated by a cartoon character called Herman the cat. The results showed that learning occurred almost as readily from the cartoon as from the human model. Other research using Bobo dolls has shown that the children exposed to such films could still produce the effects 6-8 months later. And it has been demonstrated that pre-school children would spontaneously imitate aggression against human clowns, taking the results out of the realm of completely harmless play - this occurred even when there was no vicariously observed reward and the children were not provoked or frustrated in any way.

Disinhibitory effects

Bandura and Walters recognize that learning and copying were only two of many effects resulting from observation. Equally important are disinhibitory effects ie. the observation of a particular class of actions results in an increase in other different responses from the same class. One experiment (Lovaas, 196l) showed children a film (cartoon) of children engaged in very aggressive play, or a film of co-operative play. Following the film, the children were presented with two toys: with one toy a wooden doll could be made to hit another doll over the head with a stick, the other caused a wooden ball enclosed in a cage to jump through a series of obstacles. Children who saw the aggressive film used the hitting doll toy more often than children who had seen the co-operative film.

Bandura, Ross and Walters (1961) conducted a similar experiment, which is described in The Early Window:

> *In view of the fact that most television programs appeared to depict aggression as a potent technique for power and achievement, investigations which focused upon the inhibiting and disinhibiting effects of consequences accruing to a model for aggression are of particular importance. In one such study, Bandura, Ross, and Ross (196l) exposed one group of nursery school boys and girls to a simulated television program in which one character, Johnny, refused another, Rocky, the opportunity to play with some toys. The program goes on to show a series of aggressive responses by Rocky, including hitting Johnny with a rubber ball, shooting darts at Johnny's cars, hitting Johnny with a baton, lassoing him with a hula-hoop, and so on. At the end of this sequence, Rocky, the aggressor, is playing with all of Johnny's toys, treating himself to sweet beverages and cookies, and finally departs with Johnny's hobby horse under his arm and a sack of Johnny's toys over his shoulder. At this point, a commentator announces that Rocky was victorious. In a second group, the program was rearranged so that after Rocky's initial aggression, Johnny retaliated in kind by administering a sound thrashing to the aggressor. Two other groups served as controls; in one, a nonaggressive but highly expressive television program was observed, and in the second no television program was seen. Children's subsequent aggressive responses while playing for 20 minutes in a special test room constituted the primary dependent measure. The results clearly showed that those who observed a rewarded aggressor showed far more aggression themselves than children in the other groups. Moreover, at the conclusion of the experiment the children were asked to state which of the characters, Rocky or Johnny, they would prefer to emulate. Sixty percent of those who observed Rocky rewarded for his behaviour indicated that they would select him as a model; only 20 of those who saw him punished indicated that they would choose to emulate him. Additionally, the authors noted a classic example of how socially reprehensible but successful modeled aggressive acts may influence children. One of the girls, who had expressed marked disapproval of Rocky's aggressive behaviour as it occurred, later exhibited many of his aggressive responses. Finally, in an apparent effort to make her emulation of the ruthless but successful Rocky complete, she turned to the experimenter and inquired, "Do you have a sack here?" A number of other studies by other investigators in the 1960s also used aggressive play as a measure of aggression; all found that subjects who viewed an aggressive film model engaged in more aggressive play than children who were not so exposed (Hartmann & Gelfand, 1969; Nelson, Gelfand, & Hartmann, 1969; Rosenkrans & Hartup, 1967; Walters & Willows, 1968).*
> (Liebert et al., 1982, The Early Window, p.58-59)

The Aggression Machine

The limitation of so many of the studies is that they are measuring play activities - beating and punching plastic dolls designed for that purpose does not seem shocking or antisocial - so what about real aggression?

The aggression machine was originally devised by Arnold Buss enabling him to study how and why people may be induced to cause injury to others. The machine is designed to give electric shocks to another person eg. in one version subjects are told that the effect of punishment on learning are being tested and that the subject is to take the place of the teacher. The 'teacher' is free to choose the intensity of the shock given for each wrong answer by the other person. However, the 'other person' (the one being shocked) is a confederate of the experimenter's and does not really receive a shock - although in some experiments he is in full view of the "teacher" and reacts as if he had been shocked (shouting, screaming and on occasions collapsing altogether).

Walters used the "machine" in 1963 to assess the effects of one scene from Rebel Without a Cause (knife-fighting scene) or a scene showing co-operative activities. The subjects were hospital attendants, high school boys and young women.

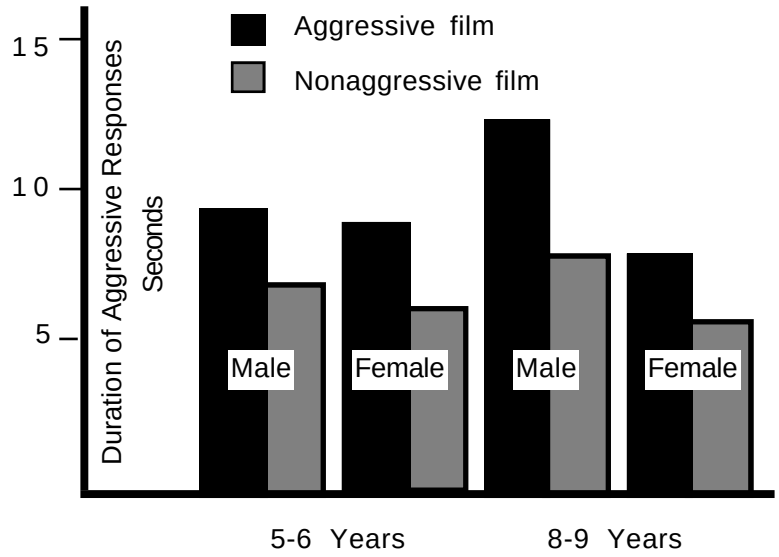
Both before and after viewing one of the film clips the subjects were asked to take part in a learning experiment which involved giving shocks to persons making errors. The measure used was the difference in the intensity of the shocks administered. In all three groups those subjects who had seen the aggressive film clip gave stronger shocks.

In another study (Hartman 1969) delinquent adolescent boys saw one of three films, two, of which were aggressive in content. The boys were either angered or treated neutrally before the film in order to determine the effects of the two variables. Regardless of whether they had been angered or not, seeing the aggressive film produced more aggression (shocks) with the "aggression" machine.

One more example of an aggression-type machine in action: Liebert and Baron (1972) 136 boys and girls 5-9, taken to a room and allowed to watch TV while waiting for the experimenter. The TV consisted of two minutes of attention grabbing commercials followed by three minutes of the "experimental" film, which was either a sequence showing a chase, gunfight, two shootings and a knifing or an exciting sports sequence.

In the next room there were wires leading from a console which had two buttons, labeled HELP and HURT. The experimenter explained that the wires went to another room in which another child was playing with a game which involved turning a handle. The two buttons could help the child by making the handle easier to turn or make it more difficult to turn. The longer the button was pressed the more the other child was helped or hurt.

Figure 2. Mean Total Duration of Aggressive Responses. Liebert and Baron,1972



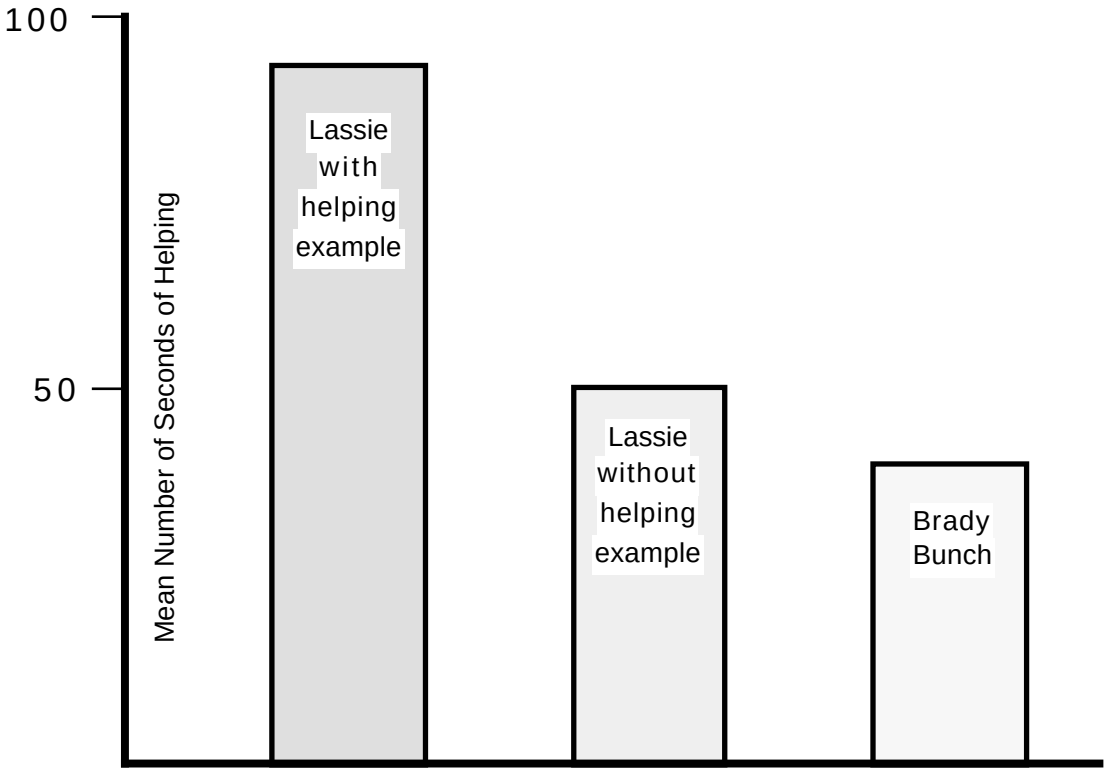
The children who viewed the three minutes of violent film were found to be statistically more willing to hurt another child than were those who watched the sports sequence. The programmes made no difference to the total duration of the help response.

Pro-Social Effects

TV clearly has an effect. Advertisers have recognized this from its inception. Violent programmes seem to activate violence and aggression, but the corollary of this is that programmes showing pro-social behaviour (co-operation, consideration) also have an effect. Perhaps the most well-known of programmes specifically designed with the intention of showing pro-social behaviour is Sesame Street. It is now the most famous and popular children's TV series. It was designed for pre-school children, particularly socially disadvantaged children.

After several years of planning Sesame Street was broadcast in 1969. It used attention holding tactics such as fast movement, humour, slapstick and animation, with a carefully planned curriculum designed to foster skills such as recognition of the letters of the alphabet and numbers, as well as attitudes and behaviour.

Figure 3. Duration of Children's Helping in the Sprafkin, Liebert, & Poulos (1975) Study.



An example of an experimental study dealing with the pro-social effects of TV Sprafkin, Liebert and Poulos (1975) selected two episodes of Lassie which in many ways were similar, the critical difference being an act of altruism in which the main character risks his life to save a puppy. A third film was also used as a control. The general aim was to see whether children exposed to the pro-social behaviour would be more willing to help than other groups. The test situation involved children choosing between alerting adults that an animal was in need of help, or earning points towards a prize.

In a situation of having to choose between sacrifice and self-interest the children (1st graders) who saw the altruistic act were more willing to help than those from the other groups. Average time spent helping Lassie with helping sequence: 90 seconds Lassie without helping sequence: 50 seconds The Brady Bunch: 30 seconds.

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