Albert Bandura – A social learning theory of personality

Behaviourism neglected determinants of people's behaviour arising from their cognitive processes. For Bandura, human beings possess superior capabilities that provide them with some measure of self-direction.

From Bandura's perspective, people are neither driven by intrapsychic forces nor buffeted by environmental ones. Instead, the causes of human behaviour are to be understood in terms of a continuous reciprocal interaction of behavioural, cognitive and environmental influences. In this approach to analysing the causes of behaviour, which Bandura has termed **reciprocal determinism**, dispositional and situational factors are considered to be interdependent causes of behaviour.

Moreover, while behaviour is influenced by the environment, the environment is also partly a product of person's own making, so that people can exercise some influence over their own behaviour. Thus, in Bandura's view, people are not simply reactors to external stimulation. Because of their extraordinary capacity to use symbols, human beings are able to think, create and plan – cognitive processes that are constantly revealed through their overt actions.

According to Bandura, most human behaviour is not controlled by immediate external reinforcement. As a result of prior experiences, people come to expect that certain kinds of behaviour will have the effects they value, others will produce undesired outcomes, and still others will have little appreciable impact. Our behaviour is therefore neglected to a large extent by **anticipated consequences** (Bandura, 1971). For example, as homeowners we do not wait until we experience the trauma of a burning house to buy fire insurance. Instead, we rely on information gained from others about the potentially devastating consequences of lacking fire insurance in making our decision to purchase it. We can imagine the consequences of being inadequately prepared and take precautionary steps. Through our capacity to represent actual outcomes symbolically, future consequences can be translated into current motivators that influence behaviour in much the same way as potential consequences. Our higher mental processes thus provide us with the capability for both insight and foresight.

Finally, Bandura also believes that new patterns of behaviour can be acquired in the absence of external reinforcement. He notes that much of the behaviour we eventually display is acquired through the influence of example: we simply attend to what others do and repeat their actions. This emphasis on **learning by observation** or example, rather than by direct reinforcement, is the most distinctive feature of Bandura's theory.

Self-regulation and Cognition in behaviour:

Another distinguishing feature of social learning theory is the prominent role it assigns to the unique human capacity for self-regulation. Bandura contends that our superior intellectual capacity to engage in symbolic thought provides us with a powerful means of dealing with our environment. Through verbal and imaginal representations we process and preserve experiences in ways that serves as guides for future behaviour. Our ability to form images of desirable future fosters behavioural strategies designed to lead us toward long-range goals. On the strength of our symbolizing powers, we can solve problems without having to resort to actual, overt-trial-and-error behaviour, and we can thus foresee the probable consequences of different actions and modify our behaviour accordingly. To illustrate, a child anticipates that if she breaks her younger sister's toy, she will cry, bring out their mother to investigate the commotion, blame the toy-breaker, and institute some form of punishment. Realizing the probable consequences, the child would probably choose to play with her own toys, thus avoiding parental wrath and keeping intact positively reinforcing maternal approval. In other words, the child's ability – rooted in her symbolic powers – to foresee the consequences of different actions enables her to behave appropriately.

Bandura's classic Bobo doll study:

Bandura's classic study in observational learning involved having a preschool child in a room in which the experimenter and a model interacted with toys in the room in front of the child (Bandura et al., 1961). In one condition, the model interacted with the toys in a nonaggressive manner, completely ignoring the presence of a 'Bobo' doll (a punch-bag doll in the shape of a clown). In another condition, the model became very aggressive with the doll, kicking it and yelling at it, throwing it in the air and hitting it with a hammer.

When each child was left alone in the room and had the opportunity to play with the toys, a camera fitted through a one-way-mirror caught the children who were exposed to the aggressive model beating upon the 'Bobo' doll in exact imitation of the model. The children who saw the model ignoring the doll did not act aggressively towards the doll. Obviously, the aggressive children had learnt their aggressive actions from merely watching the model – with no reinforcement necessary.

In later studies, Bandura showed a film of a model beating up the 'Bobo' doll. In one condition, the children saw the model rewarded afterward. In another, the model was punished. When placed in the room with toys, the children in the first group beat up the doll, but the children in the second group did not but when Bandura told the children in the second

group that he would give them a reward if they could show him what the model in the film did, each child duplicated the model's actions. Both groups had learnt from watching the model, but only the children watching the successful (rewarded) model imitated aggression with no prompting (Bandura, 1965). Apparently, consequences do matter in motivating a child (or an adult) to imitate a particular model.

Learning through Modelling

Verbal transmission of information and observation of competent models (that is, other people) provide the basis for the acquisition of most complex human behaviours. Indeed, Bandura maintains 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.

In many instances, the behaviour modelled must be learnt in essentially the same way it is performed, for example, riding bicycles. However, in addition to transmitting specific response patterns, modelling influences can create innovative behaviour. Should a child learn to share jelly beans with her dolly, it is but a short leap for her to share toys with peers, attention to her baby brother, chores with her mother, and later in life, share her money with many unfortunate people she has never met. Through the modelling process, observers extract common features for seemingly diverse responses and formulate rules of behaviour that enable them to go beyond what they have seen or heard.

According to Bandura, one forms a cognitive image of how certain behaviours are performed through the observation of a model, and on subsequent occasions this coded information (stored in long tern memory) serves as a guide for one's action. Furthermore, Bandura believes that because people can learn what to do from example, at least in appropriate form, they are spared the burden of needless mistakes and time consuming performance of inappropriate responses.

Processes of Observational learning

The key assumption of social learning theory is that modelling influences generate learning chiefly through their informative function (Bandura, 1977). During exposure, observers (learners) acquire mainly symbolic representations of the modelled activities which serve as prototypes for both appropriate and inappropriate behaviours. Observational learning is governed by four interrelated components or processes: attentional, retention, motor reproduction and motivational processes,

1. Attentional processes: Perceiving the model

A person cannot learn much by observation unless he or she attends to, or accurately perceives, the salient cues and distinctive features of the model's behaviour. Attentional processes influence what is selectively perceived in the model and what is acquired from such exposure.

Several factors, involving the observer, the modelled activities and the structural arrangement of human interactions can greatly influence the modelling process. Bandura (1977) indicates that among the attentional determinants influencing modelling, **associational patterns** are of utmost importance. The people with whom one regularly interacts, either by preference or imposition, restrict the types of behaviour that will be observed and hence learnt most thoroughly. Opportunities for learning altruistic behaviour, for example, differ markedly for members of assaultive gangs or religious groups. Similarly, within any social group some individuals are likely to command greater attention by virtue of their status and assigned roles than others. The functional value accompanying the behaviours displayed by different models (that is, who metes out rewards and punishments) is therefore highly influential in determining which models people will observe and thus emulate and which they will ignore. Attention to models is also governed by their interpersonal attractiveness. Models who personify charismatic qualities are generally sought out, while those who demonstrate displeasing qualities are usually ignored or rejected. We tend to be more strongly influenced by models who are similar to ourselves (in lifestyles and goals) than by models who differ from us in obvious and significant ways (Rosenkrans, 1967). Models who appear high in competence, are alleged experts, or celebrities or superstars command greater attention than models who lack these attributes (Rosenbaum and Tucker, 1962). In general, any set of characteristics that causes a model to be perceived as intrinsically rewarding for prolonged periods of time increases the probability of more careful attention to the model, and consequently, the probability of modelling.

2. Retention process: Remembering the Model

The second process involved in observational learning concerns long term retention of activities that have been modelled at one time or another. Without the capacity to recall what the model did, the observer is unlikely to demonstrate any enduring behavioural change.

In order for a person to benefit from the behaviour of a model when it is no longer present to serve as a guide, the model's responses must be coded into some symbolic form (e.g., words or images) that may later be recalled to duplicate the performance.

Bandura proposes **two main internal representational systems** as the means by which the model's behaviour is retained and converted into later action. The first is **imagery**. As the person is observing modelling stimuli, a process of sensory conditioning produces relatively enduring and easily retrievable images of what has been seen. The mental images are formed so that any reference to events previously observed immediately calls forth a vivid image or picture of the physical stimuli involved. Visual imagery plays a central role in observational learning during early developmental stages when linguistic skills are lacking, as well as in learning behaviour patterns that do not lend themselves readily to verbal coding.

The second representational system involves the **verbal coding** of previously observed events. While observing a model, a person might verbally recite to himself or herself what the model is doing. These sub vocal descriptions (codes) can later be rehearsed internally, without an overt enactment of the behaviour, for example, a person might silently "talk through" the steps involved in mastering a complicated motor skill, e.g., downhill skiing. In effect, the person is silently rehearsing a sequence of modelled activities to be performed at a later time, and, when he or she wishes to perform the skill, the verbal code will provide the relevant cues.

3. Motor reproduction processes: Translating memories into behaviour

The third basic component involved in observational learning consists of translating the symbolically coded memories into appropriate action. The fine or delicately balanced movements involved in highly skilled motor acts (e.g., driving, skiing, playing an instrument etc) may be learnt by watching someone else (perhaps with the aid of slow-motion audio-visual reproduction), and the symbolic representation of the model's behaviour may be repeated silently a number of times, but the translation into actual behaviour will likely be clumsy and uncoordinated at first. Mere observation in such instances is not sufficient to ensure a smooth and coordinated performance of the act. Persistent practice in performing the motor movements (and self-corrective adjustment on the basis of informative feedback) is essential if one is to perfect the behaviour.

4. Motivational processes: From observation to action

The fourth and final component involved in modelling concerns reinforcement variables. These variables influence observational learning by exerting selective control over the types of modelling cues to which a person is most likely to attend, and they also affect the degree to which a person tries to translate such learning into overt performance.

Bandura points out that no matter how well people attend to and retain the modelled behaviour or how much ability they possess to perform the behaviour, they will not perform it

without sufficient incentive or motivation. If positive incentives are presented, modelling is promptly translated into action. Positive reinforcement also influences the person's attentional and retentional processes.

One way in which a person's desire to attend to, retain, and perform a modelled behaviour may be influenced is through the **anticipation of reinforcement or punishment** for so doing. The observation that another's behaviour brings about positive reward, or prevents some aversive condition, can be compelling incentive to attend to, retain, and later (in a comparable situation) perform that behaviour. In this case, the reinforcement is experienced vicariously, after which the person can anticipate that enactment of the same behaviour will lead to similar consequences.

Reinforcement in Observational learning

Bandura believes that while reinforcement often serves to facilitate the learning process, it is not necessary in order for learning to occur. We do not have to be reinforced, for example, to attend to fire sirens, flashes of lightning and novel stimuli. When our attention to modelled activities is gained through the sheer impact of physical stimuli, the addition of positive incentives does not enhance observational learning. This fact is borne out of by research showing that children who watched a model on television in a room darkened to minimise distractions later displayed the same amount of imitative learning regardless of whether they were told in advance that such imitations would be rewarded or given no prior incentives to learn the modelled performances. In short, reinforcement can aid modelling, but it is not vital to it (Bandura, 1971).

Bandura's treatment of the role of reinforcement in observational learning reveals his cognitive orientation. He proposes that external reinforcement seldom operates as the automatic determiner of behaviour. More often, it serves **two other functions**, as **information** and as **incentive**. Reinforcement following a given response indicates, or at least enables the individual to form hypotheses about what the correct response is. This informative, or feedback function can operate whether the reinforcement is experienced directly or vicariously. For example, witnessing someone else being punished for a certain deed is as informative as being punished oneself. In addition, reinforcement informs us what to expect as a result of making the correct or incorrect response. This kind of information – usually called incentive – is essential if we are to correctly anticipate the probable consequences of our actions and to regulate our behaviour accordingly.

Vicarious reinforcement:

Vicarious reinforcement is operative whenever an observer witnesses an action of a model who experiences some external outcome while the observer perceives to be contingent on the model's earlier action. Vicarious positive reinforcement is said to occur when observers increase behaviour for which they have seen others reinforced, whereas vicarious punishment occurs when observed negative consequences reduce people's tendency to behave in similar or related ways.

How does vicarious reinforcement work?

Bandura (1971, 1977) has proposed six regulatory mechanisms, or functions, through which vicarious reinforcement can affect the thoughts, feelings, and actions of observers. These functions are informative, motivational, emotional learning, influenceability, modification of model status and valuation respectively.

In the **informative function**, the learner, through observing what happens to a model for some particular kind of behaviour, guides his or her own behaviour accordingly, for e.g., a student who observes a fellow student's detected plagiarism on a term paper being severely punished will not be inclined to plagiarize in similar situations.

The **motivational function** involves the arousal of observer expectations as the result of having seen others reinforced, for e.g., a female student observing the reinforcements accruing to a female professor may thereby increase her own motivation to pursue an independent, self-sufficient and similarly rewarding life style and career.

The **emotional-learning function** refers to emotional arousal or general heightening of responsiveness that takes place in observational learning situations, for e.g., a child's observation of a sibling spanked arouses fear and anxiety; the fear, in turn, suppresses not only the specific responses the child made, but any response from the observer he or she may turn attention elsewhere or flee the anxiety-arousing situation entirely.

In the **influenceability function**, the learner's susceptibility to direct reinforcement is increased through observation of the model's responses to similar reinforcements, for e.g., the student who observes another student excited and happy about receiving an "A" in a difficult course thereby becomes more susceptible to the reinforcing properties of "A" and in her or his own difficult courses.

The **modification of model status function** means that a model's social status can rise or fall as a function of being rewarded or punished, for e.g., an athlete praised by the coach for a good performance rises in status on the team; other team members will thus be more inclined to emulate the performance.

Finally, the mechanism termed **valuation function** refers to situations in which reinforcement applied to a model alters the observer's perceived valuation of both the reinforcing agent and the model, for e.g., an otherwise law-abiding person may be provoked to break the law without remorse by watching what he or she believes to be unjust punishment applied to a model for breaking that law.

Together, these six regulatory mechanisms help to explain how reinforcement applied to one person can powerfully affect learning in another.

Self-reinforcement:

From the perspective of social learning theory, many of our actions are governed by self imposed reinforcement. Indeed, Bandura argues that behaviour is extensively **self-governed through self-produced consequences** for one's own actions.

According to the concept of self-reinforcement, human actions are not at the mercy of external influences. Instead, people possess self-reactive capacities that allow them to exercise control over their own feelings, thoughts, and actions – behaviour is therefore regulated by the interplay of self-generated and external sources of influence (Bandura, 1977).

Self-reinforcement is evident when people set standards of performance or achievement and proceed to reward or punish themselves for attaining, exceeding, or falling short of their own expectations.

How self-regulation occurs?

Self reinforcement involves a process whereby individuals improve and maintain their own behaviour by giving themselves rewards over which they have control whenever they attain certain self-imposed standards of performance. Since both negative as well as positive self-reactions are possible, Bandura uses the more inclusive term self-regulation to encompass both the enhancing and reducing effects of self-evaluative influences.

Self-regulated incentives increase performance mainly through their motivational function. By making gratification of tangible rewards conditional upon realizing certain accomplishments, individuals motivate themselves to expend the effort needed to attain the desired performance.

There are **three component processes** involved in the self-regulation of behaviour by self-produced consequences: self-observation, judgemental and self-response processes.

Human behaviour typically varies along a number of **self-observation** dimensions, for example, the quality or rate of one's responses. The functional significance of these dimensions depends on the type of activity in question.

The second component involved in the self-regulation of behaviour is the **judgmental** process. It is often the case that whether a given performance will be regarded as commendable and hence rewardable or unsatisfactory and hence punishable depends upon the ***personal standards*** against which it is evaluated. In general, those actions that measure upto internal standards are judged positively whereas those that fall short of the mark are judged negatively.

Bandura (1977) maintains that a wide spectrum of human behaviour is regulated through self-evaluative consequences as expressed in the form of self-satisfaction, self-pride, self-dissatisfaction, and self-criticism. Thus, the third and final component involved in behavioural self-regulation concerns **self-response** processes, particularly, ***self-evaluative reactions***. Other things being equal, positive self-appraisals of performance give rise to ***rewarding self-reactions***, whereas negative appraisals inspire ***punishing self-responses***. Moreover, self-evaluative reactions acquire and retain their rewarding and punishing value through correlation with tangible consequences, that is, people usually engage in self-gratifications after achieving a sense of self-pride, whereas they treat themselves badly when they judge themselves self-critically (Bandura, 1977).