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Aggression

Beyond Bandura's Bobo Doll Studies

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BACKGROUND TO THE CLASSIC STUDY

When Bandura conducted his Bobo doll studies, the field of developmental psychology was heavily steeped in behaviorism as conceptualized by Skinner (1953). The main mechanism through which individuals were believed to learn aggression (or any behavior) was through operant conditioning. That is, if an individual's behavior was reinforced by some form of reward, which could be something tangible such as money or possession of a desired object or intangible such as praise, this reinforcement would increase the likelihood that the individual would behave in that way again in the future. In contrast, if an individual's behavior was met with some form of punishment, such as the removal of a privilege or a reprimand, this punishment would decrease the likelihood that the individual would behave that way again in the future. In the case of aggression, if, for example, a boy hit a girl to be able to take away her toy, he might be rewarded by then being able to play with the desired toy, increasing the likelihood that he would hit again in the future to obtain other desired toys. On the other hand, if instead of being allowed to play with the toy, an adult intervened and gave the toy back to the girl and isolated the boy from the other children, this punishment might serve to decrease the likelihood that the boy would hit to obtain toys in the future.

The principles of behaviorism make good sense and can account for the development of aggression and other learned responses in many situations. However, behaviorism falls short in explaining how individuals come to behave in particular ways when they have received no previous reinforcement for that behavior. To address that limitation, Miller and Dollard (1941) introduced the idea that individuals could learn new behaviors by imitating others. However, in Miller and Dollard's procedure for studying imitation, individuals witnessed a model being rewarded for engaging in a particular behavior, and they themselves then

had the opportunity to engage in the same behavior, also receiving rewards for it. Bandura, Ross, and Ross (1961) made a tremendous contribution to understanding learning by demonstrating that aggressive behavior could be learned even in the absence of any rewards and solely by observing the behavior of an adult model.

DESCRIPTION OF THE CLASSIC STUDY

Bandura and his colleagues (1961) recruited a sample of 72 children ranging from 37 to 69 months in age from the Stanford University preschool. The children were rated by their teacher and an experimenter on aggressive behavior they displayed in the preschool classroom. Children were put into groups of three on the basis of their aggression scores and gender. One member of each triplet was then randomly assigned to be in one of three groups: an experimental group exposed to an aggressive model; an experimental group exposed to a non-aggressive model; and a control group that was not exposed to any model. In each of the two experimental groups, half of the children were randomly paired with a same-sex model, and the other half of the children were paired with an opposite-sex model.

Each child in the experimental groups was invited into a playroom and was seated in a corner of the room that was provisioned with supplies for designing pictures with potato prints and stickers. The experimenter then brought the adult model to the room's opposite corner, which was provisioned with a five-foot inflated Bobo doll, a mallet, and tinker toys. The experimenter then left the room. In the aggressive model condition, the model assembled the tinker toys for approximately one minute and then spent the remaining time aggressing against the Bobo doll. Children might be likely to engage in certain forms of aggression such as punching the Bobo doll, even without witnessing a model first engage in the behavior. To provide children with the opportunity to learn behaviors that they would be unlikely to engage in without imitation, the model engaged in both physically and verbally aggressive acts with the Bobo doll that (based on pilot testing) were determined to be behaviors that children would not naturally engage in with the Bobo doll. The physically aggressive acts included placing the Bobo doll on its side, sitting on it, and punching it repeatedly in the nose; throwing the Bobo doll into the air and kicking it; and hitting the Bobo doll on the head with the mallet. The verbally aggressive acts included saying, "Sock him in the nose ...," "Hit him down ...," "Throw him in the air ...," "Kick him ...," and "Pow!" The model also made two non-aggressive comments, "He keeps coming back for more" and "He sure is a tough fella." In the nonaggressive model condition, the model assembled the tinker toys in a quiet and subdued way, ignoring the Bobo doll.

After ten minutes, the experimenter came back into the room to get the child and bring him or her into a playroom in a different building. The new room was

provisioned with a fire engine, a train, a fighter plane, a cable car, a spinning top, and a doll set. The child was allowed to play with these objects for approximately two minutes but was then told by the experimenter that these were her best toys and that she would need to save them for other children; this functioned as a mild aggression arousal procedure. The experimenter then told the child that he or she could play with any of the toys in the next room instead. The child was brought into an adjacent room that was equipped with a number of toys that tended to elicit aggressive play (e.g., dart guns) or non-aggressive play (e.g., plastic farm animals). The room also contained a Bobo doll and mallet. The child played alone in this room for 20 minutes while being observed through a one-way mirror by trained assistants who coded the child's behavior.

The 20-minute observation period was divided into five-second intervals, leading to a total of 240 coded time intervals. Coding categories reflected several kinds of child behaviors that involved imitative aggression (if the child engaged in one of the specific aggressive acts demonstrated by the model), non-imitative aggression (if the child engaged in aggressive play that had not previously been demonstrated by the model; e.g., shooting the Bobo doll with a toy gun), and imitative non-aggression (if the child repeated the model's nonaggressive verbal responses; e.g., "He sure is a tough fella").

The analyses addressed three main questions. First, they addressed the question of to what extent children engaged in complete or partial imitation of the model's aggressive behavior. Participants in the control group and in the non-aggressive model experimental group engaged in almost no behavior that was coded as imitative aggression, meaning that they were spontaneously very unlikely to engage in the specific aggressive acts that the models demonstrated to the aggressive experimental group. Participants in the aggressive model experimental group were significantly more likely to engage in imitative aggression. Second, the analyses addressed the question of whether children in the aggressive model experimental group engaged in more non-imitative aggression than did the other groups; the children who had been exposed to the aggressive model engaged in more non-imitative aggression than did the children who had been exposed to the non-aggressive model. Third, analyses of children in the aggressive model group addressed whether the sex of the model and sex of the child influenced the child's engagement in imitative aggression. Boys were more likely to reproduce the model's physically aggressive acts than were girls, but boys and girls were equally likely to reproduce the model's verbal aggression. Furthermore, boys who were exposed to the aggressive male model were more likely to engage in both imitative and non-imitative aggression than were girls who were exposed to the aggressive male model, whereas girls who were exposed to the aggressive female model were more likely to engage in imitative verbal aggression and non-imitative aggression than were boys who were exposed to the aggressive female model.

IMPACT OF THE CLASSIC STUDY

The impact of the Bobo doll study has been far-reaching and long-lasting. The most immediate impact of the study was that it led to a paradigm shift in how developmental scientists regarded learning. Instead of conceptualizing learning as being limited to behaviors that were directly reinforced or punished, Bandura and his colleagues demonstrated clearly that it was possible to learn new aggressive behaviors solely through imitation, with no reinforcement or punishment attached to the behaviors for either the adult models or the child. This breakthrough finding led to the formulation of social learning theory, with the major tenets that people learn from observing, imitating, and modeling other people (Bandura, 1977).

Although in some ways, the idea that children learn through imitation is taken for granted and regarded as obvious today, this was by no means the case when the Bobo doll study was published in 1961. Notably, even today, several domains have generated fierce debate about whether children learn aggressive behavior through imitative processes. For example, in the case of children viewing violent television programs or playing violent video games, the entertainment industry has tried to argue that there is no evidence that exposure to violent media causes increases in children's aggressive behavior (see Bushman & Anderson, 2001). However, the scientific evidence linking exposure to violent media with increased risk of aggressive behavior is nearly as strong as the scientific evidence linking smoking with increased risk of lung cancer and stronger than the link between condom use and reduced risk of HIV transmission and many other widely-accepted links in public health (Bushman & Anderson, 2001). Studies of whether children learn aggressive behaviors through various kinds of modeling remain timely and important.

In many respects, the studies documenting links between violent media exposure and aggressive behavior are natural extensions of the Bobo doll work. Bandura et al. concluded their classic study by acknowledging that they did not yet have an adequate theory to describe the mechanisms underlying imitative learning. Many subsequent studies have tried to provide theories regarding these mechanisms. In the case of learning aggression through exposure to violent media, for example, Anderson and Bushman's (2001) General Aggression Model describes how individuals' cognition, affect, and arousal are altered through repeated exposure to violent media, thereby contributing to aggressive behavior. According to the model, each exposure to violent media teaches individuals ways to aggress, influences beliefs and attitudes about aggression, primes aggressive perceptions and expectations, desensitizes individuals to aggression, and leads to higher levels of physiological arousal (Anderson & Bushman, 2001). These mediating variables then lead to more aggressive behavior. Although more aggressive children tend to seek out violent media, there is also convincing empirical evidence that even controlling for initial levels of aggression, exposure to violent media contributes to increases in aggressive behavior (Huesmann, Eron, Berkowitz, & Chafee, 1991).

Bandura's work also had an impact on the study of the development of aggression by introducing the concept that aggressive behavior can be the result of forces outside the realm of behaviorism. This concept opened doors for scientists to begin thinking about aggression as being shaped by a variety of environmental factors. For example, not only could aggression result from imitative learning from an aggressive model in a laboratory setting, but aggression could be learned through witnessing interparental violence (Jouriles, Norwood, McDonald, Vincent, & Mahoney, 1996), experiencing corporal punishment (Gershoff, 2002), living in a dangerous neighborhood (Colder, Mott, Levy, & Flay, 2000), and a host of other experiences that have now come to represent a range of factors that put a child at risk for developing aggressive behavior problems.

This large body of literature examining how various environmental factors contribute to the development of aggression is complemented by a literature examining genetic contributions to the development of aggression and how genetic and environmental factors interact to confer risk (e.g., Belsky & Pluess, 2009; Dick et al., 2006). In assigning participants to control and experimental groups in the Bobo doll study, Bandura et al. recognized that children initially predisposed to aggressive behavior might be more susceptible to imitating novel aggressive behaviors than children not predisposed to aggressive behavior would be and therefore matched children on levels of aggression before randomly assigning them to a control or experimental group. There is now empirical evidence that particular genes confer risk for the development of aggressive behavior, but this genetic risk can be moderated by environmental factors (Caspi et al., 2002; Dodge, 2009). For example, variants of the CHRM2 gene are differentially associated with trajectories of externalizing behavior (including aggression), but links between the risky variant of CHRM2 and externalizing are exacerbated for adolescents who affiliate with deviant peers (Latendresse et al., 2011). Dick et al. (2009) demonstrated that adolescents carrying a risky GABRA2 genotype were likely to have persistently high levels of externalizing behavior from early adolescence into adulthood; however GABRA2 genotype interacted with parental monitoring such that the link between GABRA2 and high externalizing behavior was weakened by high levels of parental monitoring. These and other studies show that genetic and environmental factors work in concert to influence the development of aggressive behavior.

Major developmental models of aggression following Bandura's work have focused on a range of factors that contribute to trajectories of aggression over time (e.g., Loeber & Stouthamer-Loeber, 1998; Moffitt, 1993; Patterson, 1982). Moffitt (1993) proposed a life-course-persistent versus adolescence-limited developmental taxonomy of aggression. The hallmark of life-course-persistent offenders is the continuity of antisocial behavior across the life-course, with the form this behavior takes changing with development (e.g., biting and hitting at age four, robbery and rape at age 22; Moffitt, 1993). According to Moffitt, life-course-persistent antisocial behavior is rooted in neuropsychological deficiencies that are present early in childhood, coupled with an adverse childrearing environment. In

contrast to these offenders whose antisocial behavior begins early in life and persists across development, there is a much larger group of individuals whose antisocial behavior begins and ends during adolescence. Moffitt argues that this surge in antisocial behavior occurs largely because there is a gap between adolescents' desires for independence and access to adult privileges and the reality of remaining largely dependent upon, and controlled by, parents and other adults. Moffitt hypothesizes that many adolescents begin engaging in antisocial behavior as a way of "proving that they can act independently and conquer new challenges" (Caspi & Moffitt, 1995, p. 500). As these individuals move through adolescence and access to desired outcomes no longer requires antisocial acts, such behavior ends with the transition to young adulthood. Thus, apart from similarities in antisocial activity during the peak offending adolescent years, the developmental trajectories for life-course-persistent and adolescence-limited offenders is dramatically different.

Patterson's (Patterson, Capaldi, & Bank, 1991) early versus late starter model is similar to Moffitt's taxonomy in emphasizing a distinction between individuals whose antisocial behavior begins at different developmental stages, with the early starters in Patterson's model hypothesized to be at greater risk for chronic antisocial behavior that extends beyond adolescence and into adulthood (like the life-course-persistent group in Moffitt's model). Patterson's early vs. late starter model differs from Moffitt's in the factors hypothesized to place individuals on the different antisocial paths. Patterson argues that the early starter path is initiated by poor family management practices, particularly unskilled discipline that is characterized by negative reinforcement of children's coercive and non-compliant behavior. In the typical exchange, a parent's attempts to discipline a child are ignored or met with protest. Rather than calmly but firmly enforcing the demand, the parent reacts in a neutral or even positive manner and often withdraws. The child's non-compliance is thus reinforced, and when such exchanges are consistently repeated, the child learns to use coercive behaviors to gain control over family members. These behaviors often extend to similar behaviors with other people in other settings, and eventually to more serious antisocial behaviors that include aggressing. In Patterson's model, "training" and support for antisocial behavior by a deviant peer group leads late starting youth to become involved in aggression. Unlike early starters, however, these adolescents have generally acquired the social and academic skills that enable them to desist from antisocial behavior when shifting environmental contingencies make other options more attractive. Thus, Patterson's explanation for desistance among later starters is similar to Moffitt's account of desistance in her adolescence-limited group.

Currently, there is some disagreement among researchers as to whether the development of aggression requires a separate explanation from the development of antisocial behavior more broadly defined. Patterson and his colleagues (Patterson, Reid, & Dishion, 1992) argue that serious aggression is generally preceded by a variety of antisocial acts during childhood and adolescence rather than a distinct developmental pathway that is unique to aggression. In contrast, Loeber and Stouthamer-Loeber (1998) believe it is important to preserve the

distinction between overt (i.e., aggression) and covert (i.e., property crime) forms of antisocial behavior and note that orderly developmental progressions of each type have been identified (Loeber et al., 1993). In the overt pathway, bullying and annoying behaviors develop into physical fighting, which in turn may develop into rape and other forms of violent attacks (see Loeber & Stouthamer-Loeber, 1998). In contrast, in the covert pathway, behaviors such as shoplifting and lying may develop into vandalism and other forms of property damage, which might in turn develop into fraud and burglary. Loeber and Stouthamer-Loeber (1998) assert that a single causal model to explain the development of antisocial behavior is not adequate, and will hamper efforts to uncover developmental precursors that are specific to different types of offending. Thus, these researchers propose a distinct developmental model for aggression, in contrast to Moffitt's and Patterson's models, which do not distinguish pathways to aggression versus other types of antisocial behavior.

Broad environmental and genetic factors contribute to the long-term development of aggression, but what accounts for whether an individual will behave aggressively at a particular moment in time? Social information processing theory describes a series of four steps involving cognitive mechanisms that can account for whether an individual behaves aggressively or not in real time. The first step involves encoding information from the social environment; individuals who have problems taking in relevant information to be able to understand situations fully are more likely to behave aggressively (Dodge, Bates, & Pettit, 1990). The second step involves making attributions for why other people behaved as they did or why an event occurred; individuals who make hostile, as opposed to benign, attributions are more likely to behave aggressively (Dodge, Price, Bachorowski, & Newman, 1990). The third step involves generating possible responses to a given situation; individuals who generate fewer possible responses overall and who generate more aggressive responses are more likely eventually to behave aggressively (Asarnow & Callan, 1985). The fourth step involves evaluating different possible responses; individuals who believe that aggression will lead to desired instrumental and interpersonal outcomes and that it is a good way to behave in a given situation are more likely to behave aggressively (Smithmyer, Hubbard, & Simons, 2000).

Individuals do not usually process these steps consciously but instead move through them quickly in the course of their everyday lives. For example, a child might be faced with provocation in a situation with peers, such as if a peer spills milk on the child. The child encodes that the peer has spilled milk on her and may or may not encode other relevant information such as that the peer tripped right before spilling the milk. The child then makes either a hostile or benign attribution about the peer (e.g., the peer was trying to be mean to me vs. it was an accident). The child then generates possible responses (e.g., hitting the peer, calling the peer a name, telling the teacher, cleaning up the milk) and evaluates those possible responses (e.g., I could get in trouble and other people would not like me if I hit or call names). Each of those steps presents a cognitive mechanism

that makes an aggressive response more or less likely. These steps are similar in some ways to those of attention, retention, reproduction, and motivation that Bandura (1986) proposed in his social-cognitive theory many years after the Bobo doll studies.

Advances in understanding the diverse factors that contribute to aggression have led to interventions to prevent aggression and to reduce aggression when it has occurred already. For example, the Promoting Alternative Thinking Strategies curriculum has been demonstrated to reduce aggression by teaching children problem-solving skills, self-control strategies, and emotional awareness (Greenberg, Kusche, Cook, & Quamma, 1995). Olweus's Bullying Prevention Program reduces bullying and victimization in schools through school-wide, classroom, and individual components that focus on raising awareness regarding the problem of bullying, enforcing rules against bullying, and increasing supervision of students in areas where bullying frequently occurs (Olweus, Limber, & Mihalic, 1999). The Fast Track Project has been successful in reducing aggression among high-risk children through a combination of parent training, home visits, social skills training, academic tutoring, and classroom interventions (Conduct Problems Prevention Research Group, 2007). These programs are among several interventions selected as model or promising approaches to violence prevention from a review of over 900 violence prevention programs (Blueprints for Violence Prevention, 2011). One of the key reasons that these programs are effective is that they are guided by theory and research on developmental antecedents of aggressive behavior.

CRITIQUE OF THE CLASSIC STUDY: ALTERNATIVE INTERPRETATIONS AND FINDINGS

Despite its far-reaching impact and importance to the field, scholars have raised concerns with respect to the ethics, generalizability, and validity of the original Bandura et al. study. First, since the time of Bandura's work, researchers have become much more accountable to university Institutional Review Boards (IRB) regarding the ethical treatment of research participants. Some critiques have questioned whether Bandura's study would have been approved by a 21st century IRB given the explicit modeling of aggression to which the children were exposed as well as the provocation in denying them access to the attractive toys that was meant to elicit the children's own aggressive responses.

Second, scholars have questioned the generalizability of the findings given that the child participants were all recruited from the Stanford University preschool, and, thereby, more socioeconomically advantaged than the general population. The original study does not provide information about the children's race, ethnicity, parents' education, or other sociodemographic variables that are typically reported in the literature today. Subsequent research has documented sociodemographic differences in children's mean levels of aggression. For example, children

with more educated parents (Nagin & Tremblay, 2001), from families with fewer stressors (Sanson, Oberklaid, Pedlow, & Prior, 1991), and from two-parent households (Vaden-Kiernan, Ialongno, Pearson, & Kellam, 1995), on average, demonstrate lower levels of aggression than do children with less educated parents, from families with more stressors, and from single-parent households, respectively. However, the lack of attention to sociodemographic characteristics of the children in the original study would only pose a problem if these characteristics moderated links between exposure to an aggressive model and one's own imitative learning of aggression. To date, evidence of this kind of moderation does not exist, suggesting that even in the face of mean level differences in aggression across sociodemographic groups, the processes leading to aggressive behavior may be the same.

Third, some researchers have questioned the ecological validity of the findings given that the aggression took place in a laboratory setting, which may not have shared certain key features with real-life settings, and that children's aggression was coded in close temporal proximity to when they witnessed the adult model's aggression. Given these limitations, it was not clear from the original study whether children would imitate aggression in real-life settings or would imitate aggression following a delay or over long periods of time. More recent studies have established that children do imitate aggression in a variety of contexts and even following lengthy delays between exposure to violence and behaving aggressively (Bushman & Huesmann, 2010; Guerra, Huesmann, & Spindler, 2003; Slater, Henry, Swaim, & Anderson, 2003).

Many researchers modified key aspects of the original Bobo doll study in subsequent investigations designed to test the extent to which children would learn aggressive behavior in a variety of contexts and under varying conditions. For example, Bandura, Ross, and Ross (1963) themselves followed up on their initial study by conducting a similar study in which children watched a film of an adult model aggressing against a Bobo doll or a film that included an adult dressed as a cat with cartoon features aggressing against a Bobo doll. Children who had watched the films of aggressive acts were as likely to imitate the acts of aggression as were those children who had viewed the live model acting out the aggression, and all three experimental groups engaged in more aggressive behavior than the control group that had not witnessed an aggressive model.

Along with questions regarding ethics, generalizability, and validity, some critics have questioned whether the Bobo doll study constitutes evidence regarding children's imitation of aggression or merely behaviors the children regarded as play. This argument hinges on how aggression is defined. Contemporary researchers generally define aggression as an act perpetrated by one individual that is intended to cause physical, psychological, or social harm to another (Anderson & Bushman, 2002). It is plausible that the intention to harm was missing from children's imitative behaviors toward the Bobo doll, even if by their nature (e.g., kicking, hitting), they seem aggressive. Regardless of whether the children were engaging in aggressive acts with the intent to cause harm or merely playing, the main takeaway message remains the same. Namely, children can learn to engage

in new behaviors by observing and imitating models, even if no rewards or punishments are attached to the behaviors.

CONCLUSION: HOW THE STUDY ADVANCED THINKING, BUT HOW THINKING HAS SUBSEQUENTLY ADVANCED

Bandura's Bobo doll study advanced thinking beyond a behaviorist orientation to understanding that it is possible to learn aggression in the absence of rewards simply via observation and imitation of a model. Much thinking since that time has focused on understanding under which circumstances aggression is learned and for whom. For example, after interacting with aggressive peers, not all children imitate their peers' aggression and become aggressive themselves. Instead, children who are temperamentally predisposed to aggression or who have already begun to engage in aggression are more likely to imitate aggressive peers than are children who are not already predisposed to behaving aggressively (Boxer, Guerra, Huesmann, & Morales, 2005; Lavalley, Bierman, Nix, & Conduct Problems Prevention Research Group, 2005). Furthermore, early adolescence is a developmental period in which children are more vulnerable to being influenced by aggressive peers than they are either earlier in childhood or later in adolescence (Dishion, Dodge, & Lansford, 2006). In addition, protective factors such as supportive relationships with parents can buffer children from risks incurred by interacting with aggressive peers (Dishion & Dodge, 2006). Taken together, these findings suggest that learning aggression via observation and modeling is not a simple, uniform process but rather a complex, dynamic one that depends on the characteristics of the child involved and the rest of the environmental context.

Some of the major advances in understanding aggression since the time of the Bobo doll studies have been in understanding different forms of aggression. Bandura et al. distinguished between physical and verbal aggression. Researchers today still make that distinction but have also added a distinction between direct aggression and indirect aggression (sometimes called social or relational aggression). Relational aggression has been defined as harming others through purposeful manipulation and damage of their social relationships (Crick & Grotpeter, 1995). Relational aggression can take many forms, such as spreading rumors about someone, saying mean things behind someone's back, and excluding someone from a peer group. Early work suggested that girls were more likely to engage in relational aggression than boys (Crick & Grotpeter, 1995), but more recently, there has been controversy in the literature regarding whether there are gender differences in relational aggression (Delveaux & Daniels, 2000; Salmivalli & Kaukiainen, 2004; Underwood, Galenand, & Paquette, 2001).

Researchers today also distinguish between proactive aggression and reactive aggression (Dodge & Coie, 1987). Proactive aggression is described as being

unprovoked and goal-directed (Crick & Dodge, 1996), and is predicted by having aggressive role models (Bandura, 1983), friendships with other proactively aggressive children (Poulin & Boivin, 2000), and physiological underarousal (Scarpa & Raine, 1997). In contrast, reactive aggression is described as being an angry retaliatory response to perceived provocation (Dodge & Coie, 1987). Precursors of reactive aggression include a developmental history of physical abuse (Dodge, Lochman, Harnish, Bates, & Pettit, 1997), peer rejection (Dodge et al., 1997), more reactive temperament (Vitaro, Brendgen, & Tremblay, 2002), and physiologic overarousal (Scarpa & Raine, 1997). Proactive aggression is associated with evaluating aggression positively (Smithmyer et al., 2000) and holding instrumental (e.g., obtaining a toy) rather than relational (e.g., becoming friends) goals in social interactions (Crick & Dodge, 1996), whereas reactive aggression is associated with making inappropriate hostile attributions in the face of ambiguous or benign social stimuli (Dodge & Coie, 1987). Thus, different life experiences, social information processing, and physiologic mechanisms may be precursors to the display of different types of aggression.

Bandura and his colleagues conducted their Bobo doll study in a historical context that embraced behaviorism as the driving force for human behavior, with rewards and punishments regarded as the major forces through which children learned new behaviors. Therefore, Bandura's study made a major contribution by introducing evidence that aggressive behavior can be learned by observing a model, in the absence of any rewards or punishments. This breakthrough finding led to studies that have since documented a range of environmental and genetic factors that contribute to the development of aggressive behavior, as well as cognitive models that account for whether children will behave aggressively at a given point in time. Bandura's work remains highly relevant today as researchers continue to examine whether children imitate aggressive behavior learned from modern forms of violent media, and his work has relevance as policymakers try to discern which protections are appropriate to minimize children's exposure to violent models. Understanding that people learn from observing, imitating, and modeling other people is a long-lasting contribution of Bandura's early Bobo doll studies.

FURTHER READING

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