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THE EFFECT OF JUST AND UNJUST PUNISHMENT ON THE IMITATION OF AGGRESSION

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Abstract

Twenty four male children aged from five to eight years old were rand omly divided into three groups to watch three different films. One group of children witnessed an adult punishing a boy who ignored her warning. One group of children witnessed an adult punishing a boy who didn't commit any transgression. The third group of children just watched a similar scene but without any punitive adult. All the subjects were asked to make decision of punishing two boys on the second film who behaved similarly to the boys on the first film. It was shown that both experimental groups who witnessed punitive punishment done by an adult tended to punish the boys who beared the same behaviors as the ones punished by the adult than the control group regardless of whether the imitated punishment was just or unjust. The manipulation of justice and unjustice of punishment by the adult failed to produce discernable effect probably because of the subjects' young age.

The Effect of Just and Unjust Punishment on the Imitation of Aggression

"There was a current movie called 'taxi driver'. The male character, a taxi driver in New York city, after having been frustrated by the rejection of a loved girl, began to exercise his muscle building and collected various kinds of killing weapons. At the end of the movie he killed three persons whom he considered

damned in spite of no hostility between him and them".

On February 14, 1977 there happened a very similar event, but it was not a scene on the movie but in real life situation. "In New Rochelle, N.Y. a hulking furniture mover, F. W. Cowan, who was unable to make friendship with girls, contented himself instead with gun collecting and muscle building. Cowan's attic bedroom was jammed with rifles, pistols, bayonetts and hand grenades.

On Feb. 14, Cowan packing five guns, burst into his moving company's warehouse shot to death four co-workers, three of them are blacks. In Cowan's mind, blacks and Jews are damned. (Time, 1977)

The events of coincidence between film program and realife occurred not infrequently and elicited lots of attention to the function of movie and television in the audience's imitation. For the past two decades, people wondered about "why people hate each other and kill each other". Now, in addition to the large scale killing on the battle field, there is an increasing trend that some persons kill innocent victims whom they even not know. It seems to become a season of savagery and rage. What is the underlying mechanism for human aggression? Since the beginning of social psychology, human aggression has always been one of the top topics, but it is also the most complex topic to be studied scientifically majorly because of the nonconsensus of definition of aggression (Tedeschi, 1976). Novertheness, at the current stage social learning theory about aggression got more popular attention among psychologists. According to the definition of social learning theory (Bandura, 1973), aggression is treated as a complex events including behavior that produces injurious and destructive effects as well as social labeling process. The elements consisted in the social labeling process are (1) behavior that is likely to produce aversive consequences, (2) the intensity of response; behaviors of high magnitude that exceed the tolerance levels of others, (3) expression of pain and injury by receipients, and (4) intent of aggressor which is typically inferred from social context of the act, the role status of the perpetrator of the act, and recent or more antecedent conditions.

For the purpose of experimental research, a high degree of specificity is required to delimit the range of phenomena of aggression. As consequence, it is expected that the diverse activities subsumed under the label "aggression" may have not the same determinant. Usually, researchers hold such attitude that it matters little what the activity is called as long as it is clearly desingnated. Derived from the above propositions about social labeling process of aggressive

behavior, the definition of aggression may be extended to include the behavior that is likely to produce aversive consequence after a delay of time period.

Once a time frustration-aggression theory guided most of the experimental studies about human aggression. According to frustration-aggresion theory led by Dollard and Miller (1939), frustration produces a ready states to aggression, or in other word, aggression is always preceded by frustration and frustration results from the blocking of a sequence of goal directed acts. The typical design for studying this theory can be represented by an experiment done by Rule and Pereival (1971), in which the subjects were assigned the role to teach a confederate subject to learn a list of nonsense syllables and punished the learner with electric shock when he committed error.

Half the subjects were induced to believe the task was easy to learn while the other half believed it was difficult to learn. The confederate subject purposively committed a standard number of errors. Therefore the subjects who expected that the task was easy felt frustrated and they gave more shocks, more intense shocks and shocks of longer duration to the confederate. This result clearly supported frustration-aggression hypothesis. However, another line of investigation indicated that aggression might have antecedents other than frustration. Witnessing violent event accompaning the arousal by frustration was found to be an important factor in several studies. Berkowitz (1962) considered that cue-elicited responses shown in a just witnessed violent event provided the frustrated arousal persons a direction of action. The same kind of process was also found by two experiments by Bandura, Ross and Ross (1961, 1963) in children subjects. Some children watching an adult aggressively attack a Bobo doll either in real situation or showing on the TV screen and some children didn't view any attacking response, then the children were frustrated by preventing from playing attractive toys and given the opportunity to contact with the Bobo doll and other material suitable for expressing aggression. The results indicated no matter with which kind of exposure mode, mere observation of adults displaying aggressive behavior, not only facilitate the learning of new aggressive responses but also weakens competing inhibitory responses and thereby increases the probability of occurrence of previously learned patterns of aggression. Another significant result showed in the 1963 study is that, of the three exposure modes, exposuring the aggressive human model on the film produced the most influential consequence in eliciting and shaping aggressive behavior. In another study,

Green and Berkowitz (1967) frustrated their male adult subjects for solving a seemingly simple puzzle, then showing them a violent film or a neutral film. Those subjects of frustration and violent film condition gave more shocks to a confederate than those who were frustrated but saw neutral film.

Berkowitz (1969) agrees with the view that frustration creates arousal, but he considers it unlikely that this undifferentiated arousal will lead to specific and directed responses by the organism. These responses are guided by cues in the environment, while the intensity of the responses may be attributed to the degree of arousal experienced by the organism. These viewpoints are labled as cue-arousal theory in modification of frustration-aggression theory. As summarizing the results from those experiments about aggression mentioned on the above, it may be said that frustration is a condition which leads to aggression in humans, but it is not the only condition that does so, nor is it the most powerful one. Frustration's relation to aggression is its enhancement of aggressive reactions to stimuli associated with violence.

One step further as proposed by social learning theory, frustration or anger arousal is a facilitative but not a necessary condition for aggression.

Frustration is most likely to provoke aggression in people who have learned to respond to aversive treatment with aggressive attitude and action. Then, how and where the aggressive attitude and action learned? Learning through observation is a unique characteristic of human learning. Miller and Dollard proposed that there existed a drive to imitate and matching the responses of others is a rewarded responses in its own right. In the case of imitative learning, the behavior of a model serves to introduce several cues to the observer. The relationship between the model and the observer and the salience of cues to imitation are two key factors. The observer tends to match his behavior to a model who is in some manner in a higher relative position and depends on him for appropriate cues as to when and what to do. Bandura emphasizes the function of cognitive symbolization in human's social learning by imitation (Shaw, 1970). Bandura labeled his theory of imitation as mediational-stimulus contiguity theory. According to this approach, during the period of exposure, modeling stimuli elicit in observing subjects configuration and sequences of sensory experiences which become centrally integrated and structured into perceptual responses and which can be retrieved when the observer is placed in behavioral field after a delay of time and become discriminative stimuli for overt matching patterns of

behavior. There might be three effects resulting from exposure to models, (1) the observer acquires novel responses through the cognitive integration of contiguous sequence of cues, (2) the observer acquires inhibitory and disinhibitory effects which modify his existing class of behavior, (3) the model's behavior may facilitate the occurrence of previously learned responses.

The delayed occurrence of imitative behavior was indicated in an experiment by Bandura (1965), in which observers witnessed a model exhibited a sequence of responses and thus acquired possessing cue properties that were capable of eliciting, at some time after the demonstration, overt responses corresponding to those that had been modeled. For Bandura, reinforcement is not a necessary condition for acquisition of imitative behavior. Bandura (1966), Walters and Parke (1964) showed the condition that the observation of a model who displayed either rewarded or unpunished socially disapproval responses led to increments of the same or similar class of behaviors in the observer. One point be emphasized that with regard to aggressive or other deviant responses displayed by a model, lack of negative reinforcement is as powerful as positive reinforcement in promoting imitative responses.

While the display of aggression on the movie or TV screen is more likely to increase the probability of aggressive behavior by the observer, the hightened likelihood of aggression is not always apparent. As Berkowitz demonstrated in one of his experiments, aggressiveness habits activated by witnessing hostility often remains as latent. Other appropriate aggression-evoking cues must be present before the observed violence can lead to strong aggressive responses by the observer. These cues are stimuli in the post-observation situation which has some association with the depicted event or which may be connected with previous aggressive instigating situations. In addition, the judgment of the observer plays an important role in the mediation of imaginal representation of modeling aggression to real appearance of aggression (Berkowitz & Rawling, 1963). If the observers regarded the depicted aggression as being unwarrented or morally wrong, inhibition will be aroused. Such restraints against aggression can weaken the intensity of the aggressive action shown by the observers. Berkowitz and Green (1966) also found the observers who watched a justified aggression film displayed more aggressive behavior than those who watched a less justified aggression film. For justified condition, the receiver of aggression was portrayed in a unfavorable light so that the observers would regard the received punish-

ment was relatively proper. For less justified condition, the protogonist was depicted in a more favorable light, so that the observers considered the punishment was inappropriate, thereby elicited inhibition against aggression in the observers. Lerner and Simmons (1966) also found subjects were less likely to derogate a victim when they believed it was cruel or senseless to punish the victim. In another study by Simmons and Piliavin (1972), when the fact of unfair punishment for a victim was too obvious to deny, the observers would not feel against the victim.

Concludely, the essential factors that lead to the expression of aggression through observation are (1) aggressive responses (or punishment to a victim) displayed by a model, (2) the justification of the model's punitive behavior, (3) the similar situation as that in which the model behaves punitively. However as Bandura mentioned, the contiguity of sensory stimulation is necessary but not a sufficient condition for imitative learning. In addition to the essential associative process, learning by example depends upon four interrelated subprocesses, (1) strength of motivation to attend to the stimuli, (2) the model's response pattern must be represented in memory in symbolic form, (3) the observer must be able to utilize the all necessary component responses of the total behavior sequence, and (4) the presence of incentive-oriented sets that focus observing.

In this study, the independent variable is the justice of a model's punishment to a child. All other related factors which may influence the observer's imitative behavior either be controlled by keeping constant over the whole experimental groups and control group or be controlled by randomly assigned the subjects to the groups. For example, the scene that an adult model displaying fair or unfair punishment to a child is shown to the observing subjects through TV set. It has been found by Bandura, Grusec and Menlove (1966) that models presented in the TV Screen are so effective in holding attention of the observers that they learned the depicted behavior regardless of whether or not they were given extra incentives to do. The motor responses utilized here to express aggression is explicitly to be belong to the subjects' behavior repertoire. Whether the subject can remember the scene he has seen will be checked by a post-experiment questionnaire. It is predicted that those subjects who watch the film of justified punishment will show the greatest aggressive responses toward a child who bears similar behavior and in a similar situation as the one punished by the adult model, that those subjects who watch a neutral film show least aggressive re-

sponses, and that those subjects who watch the film of unjustified punishment will show aggressive responses in intermediate degree.

Method

Subjects

Twenty four male nursery and kindergarden American children of Gainesville, Florida. One aged eight, two aged feven, three aged six and the remaining eighteen children were all of five years old. They were randomly assigned to three groups with eight subjects in each group. All subjects were run by a male experimenter (E).

Apparatus

TV monitor and twenty plastic rings which were used to signate the number to punish.

Procedure

E ushers the child into a room where were a TV monitor and two hooks on a table which were opposite to each other, one on the left and the other on the right. There were different labels for each hook that were corresponding to the names of two boys on the TV screen and also corresponding to their left and right position. Twenty rings in a basket located between the two hooks. The subject was run one by one.

E instructed the subject to pay real close attention to a program showing on TV screen about two minutes. For the justice experimental group, the subjects would see a program in which a female adult ushered two male children into a room with assorted toys and books. Before she left the room, she warned the boys not to play with any of these toys but could read the books on the table. A little later, she came back to find one of the boys disobeyed her warning. She angrily scorned him and punished him by putting four rings on the disobeying boy's hook which meant that this boy would get four spanks after she having finished her work. At the end of this first film, E asked the subject some standardized questions which were designed to check whether the subject rememberred the scene showed on the TV, whether he understood the meaning of giving the rings and his judgment of fairness for the adult to punish the child who played the toys on the film. Then the subject was asked to look at the second

film, in which the same activities displayed by another female adult and another two boys as the first film showed except that the adult in the second film didn't come back after she gave warning and left. At the close of the second film, E instructed the observing subject to make decision to punish those two children on the second film by giving rings on their corresponding hooks.

For the subjects of unjustice experimental group, they were given the same treatment, except that the female adult on the film unfairly punished a child. The adult permitted the boys either to play the toys or to read the book before she left the room, but when she came back she scorned and punished the boy who played the toys. The female adult of the second film said the same words as the adult of the first film to the boys but didn't come back.

For the subjects of control group, they watched a TV program in which two boys either play toys or read books, no adult appears. The meaning of giving rings on either hook was explained by E and he asked them to make decision whether to punish the children on the TV and how many rings the subjects wanted to give.

Result

Check the subjects' answers to the questionnaire, it was shown that 92% of the Ss correctly described the scene shown on the film and understood that the numbers of rings on each boy's hook was the number of spanks that boy should be punished.

The response of each subject's aggression was scored as the number of rings given by him to the boys on the second film who behaved similarly as the boys on the first film. The response of the control group subjects' aggression was also scored as the number of rings they gave to the boys on the film. A point should be clarified here is that there were two boys on each film for both experimental groups, one of the boys on the second film behaved similarly to the one of the first film who played the toys and was either fairly or unfairly punished. Another boy was similar to the one who was not punished. The summation of rings given to both boys by the subject is designated as total aggression response. The number got by substracting the number of rings to the unpunished boy from the number of rings given to the punished boy is designated as imitative aggressive response.

Table 1

Means for the Numbers of Rings Used by 8 Subjects of Three Groups to Punish Two Boys on the film

Just		Unjust		Control	
A1	A2	B1	B2	C1	C2
3.00	.38	2.00	.50	.50	.38
3.38		2.50		.88	

The symbols used in Table 1 are as following: A1, B1 and C1 indicate the conditions in which the boys who played the toys and behaved similarly to the punished ones on the first film were punished by the subjects. A2, B2 and C2 indicate the conditions in which the boys who didn't play the toys and they were similar to the never punished boys on the first film were punished by the subjects. The numbers in the last line reflects the average total aggressive responses on three groups.

Table 2

Analysis of Variance of Total Aggressive responses of Three Groups

Source	D.F.	M.S.	F.
Groups	2	12.875	3.93*
Error	21	3.274	

*$p<.05$

Table 2 shows the result of analysis of variance of the total aggressive responses expressed by three groups. There is significant difference among these three groups, $F(2, 21)=3.93$, $p<.05$. Further test by means of least significant difference (LSD) showed that the average total aggressive responses of the just experimental group ($M=3.38$) is significantly greater than that of control group ($M=.88$) at $p<.01$, and the unjust experimental group ($M=2.50$) is greater than

the control group at $p<.05$, but the difference between the just and unjust experimental groups doesn't reach the conventional significant level. The difference between A1−A2 (M=2.62) and B1−B2 (M=1.05) is also nonsignificant ($p>.05$) Compare A1+B1 (M=5.00) with A2+B2 (M=.88), the difference is significant at $p<.05$. The difference of mean responses between A2 and B2 was almost negligible.

Discussion

According to social learning theory, observation of aggressive behavior displayed by other who get no aversive consequence is effective enough to elicit the same or similar class of behavior on the observers if they are capable of symbolizing the model's sequential behavior pattern and performing this behavior pattern with their existing response repertoire. The result of this experiment was in accordance with this hypothesis. The total aggressive responses for both experimental groups who witnessed a punitive adult aggressively punish a child were significantly higher than those of control group who witnessed no punitive adult. Taking the significant difference between A1+B1 vs A2+B2 and the negligible difference between A2 and B2 and their nearly zero response into consideration, it is clear that the observing children tended to punish the boy who behaved similarly to the one who was punished by the adult model, but they didn't incline to punish the boy who behaved similarly to the one who was not punished by the adult model. The adult not only provided the response pattern of punishment but also the cues associated with punishment.

The contiguity of sensory experiences acquired during exposure to a punitive adult model mediated through the process of symbolization which will be later retrieved and explicitly expressed.

If the judgment of justice of the model's aggression is another important factor for the expression of imitated aggression then there must be discernable difference between the just and unjust experimental groups either in terms of average total aggressive response or in terms of mean responses of A1 minus A2 and B1 minus B2 which indicate pure imitative aggresive responses. The result of this experiment didn't support this prediction and also didn't agree with former experiments about the effect of justice on imitation of aggression. The reason for the incompatibility may be hinted in the comparison of the present

experiment and that run by Berkowitz and Green. The subjects in this experiment are children aged from five to eight while those of Berkowitz and Green's were adults. As concerned with the problem of judgment, cognitive development is an important factor.

It is assumed that age is a general indicator of the level of cognitive development of the individual (Kohlberg 1969). Cognitive developmental approach to moral judgment shows the development of increasing sophisticated cognitive structures in the organism. The judgment of right or wrong about an event at different developmental levels of cognition is anchored on different basis. Young children at first evaluate acts in terms of their exact conformity with authority or contingence on their outcomes. For young child, a behavior leading to aversive sanction by adult is viewed as a prohibited behavior regardless of its intrinsic characteristics. Bandura and McDonald (1963) found the tendency to make moral judgments dependent only on outcomes gradually begins to decrease after about seven years old.

Scrutinizing the experimental procedure of the unjust experimental condition in this study, the female adult although permitted the boys (expressed in ordinary flat tone) to play the toys yet she scorned the boy who played the toys with louder sound and literally punished him with rings. In this situation the aversive consequence of playing the toys was as remarkable as that of just experimental group. The negative result of the manipulation of justice of punishment by the adult model might result from the failure of the most children to distinguish the "subtle" difference between these two experimental conditions.

In summary, this result supports the general conviction that violence show on the films tend to be imitated by the audience. Although it has been indicated that the audience may inhibit his aggressive tendency when the victims of violence are unjustly treated, yet it is difficult for young children to distinguish between just and unjust aggression displayed by a model on the film, as shown by the post-experiment inquiry, all the subject less than six years old could describe exactly how the adult female model on the film punished the boy who played the toys and not punished the boy who read the books but they couldn't indicate the difference between just and unjust punishment.

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