

Belief in a Just World and Reactions to Another's Lot: A Study of Participants in the National Draft Lottery¹

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Six-man groups of 19-year-old men listened to the live broadcast of the 1971 national draft lottery as they received either good or bad lots—i.e., either low- or high-priority lottery numbers. Overall, subjects reacted more favorably to losers (people who received high-priority numbers) than to winners. But this sympathetic pattern of reactions was absent among subjects who received high scores on a scale assessing their belief that the world is a just place where good people are rewarded and bad people are punished. Among these subjects, the tendency to justify the lots of others seemed to counteract the sympathetic pattern; they reacted at least as favorably to winners as to losers, and "resented" losers more than winners. Additional survey data lend support to the suggestion that the belief in a just world is a perceptual bias which helps to perpetuate social injustice.

There is abundant evidence, both anecdotal and systematic, that people have a strong desire to live in a just world—a world in which good people are rewarded and bad people are punished. In Heider's (1958) terms, justice is an *ought* force which we view as inherent in our environment. It is conceived as a harmonious fit between happiness and goodness. "When they coexist, we feel the situation is as it should be, that justice reigns. On the other hand, the coexistence of happiness and wickedness is discordant [Heider, 1958, p. 235]."

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In order to maintain the fit between happiness and goodness (and between punishment and wickedness), people will exert considerable effort to alleviate the suffering of another—but only when they believe that the sufferer does not in fact deserve his fate. Bryan and Davenport (1968) analyzed contributions to the *New York Times* "100 Neediest Cases" appeal. They found that victims of child abuse, who clearly were not responsible for their suffering, received the largest proportion of contributions. The fewest contributions were received by those needy persons with psychological illnesses or moral blemishes—cases in which the victim might be considered blameworthy and hence deserving to suffer.

When we are unable to help an innocent victim, however, our desire to live in a just world is threatened. In such situations people may restore cognitive balance by deciding that the victim is in fact blameworthy. "The relationship between goodness and happiness, between wickedness and punishment is so strong, that given one of these conditions, the other is frequently assumed. Misfortune, sickness, accident are often taken as signs of badness and guilt. If *o* [the other] is unfortunate, then he has committed a sin [Heider, 1958, p.235]."

This perceptual tendency can sometimes impart a sense of justice to even the most hideous atrocities. Many Germans living under the Nazi regime were able to be persuaded—or to persuade themselves—that those who were sent to the concentration camps were members of an impure race who must have deserved their fates (Hallie, 1971). Surveys conducted in the United States indicated that "far from evoking sympathy, the Nazi persecutions apparently evoked a rise in anti-Semitism [Selznick & Steinberg, 1969, p. 63]." More recently Ryan (1971) has focused attention on the tendency of middle-class Americans to "blame the victim" as a means of justifying conditions of poverty within their society.

Lerner and his associates have documented the tendency to blame the victim in a series of laboratory experiments (summarized in Lerner, 1970; 1971). In one study (Lerner & Simmons, 1966) subjects watched a fellow student react with apparent pain and suffering to a series of supposed electric shocks. In one experimental condition the subject had an opportunity to compensate the victim by voting to reassign her to a "reward" condition in which she would receive money rather than shocks. All but one subject availed themselves of this opportunity, and they were told that the victim would be reassigned. In another condition

the subject could not reward the victim, and she was informed that the victim would continue to suffer. Subjects who knew that the victim would be compensated rated her more favorably than subjects who knew that her suffering was to continue. The ratings provided in the latter condition indicated considerable rejection of the victim. An earlier study (Lerner, 1965) documented the parallel perceptual link between reward and virtue. Subjects who learned that a fellow student had been awarded a cash prize as a result of a random drawing were able to persuade themselves that he had earned the money.

In Lerner's view it is difficult for people to accept the arbitrariness which in fact characterizes the world. An arbitrary world is threatening because it implies that one cannot control his rewards and punishments by means of his own actions. Lerner concludes that "all of us need to believe that we live in a world in which we and others like us can get what we deserve—and deserve what we get [1971, p. 51]." As a result we tend to believe that even ostensibly random rewards and punishments must in fact reflect an underlying moral order.

An opportunity for a real world test of Lerner's analysis was provided by the national draft lottery established in 1969 for the purpose of assigning priorities to young men for induction into the armed forces. Particularly at a time when draftees were being sent to Vietnam, the lottery had the effect of assigning young men to either bad fates (high probability of induction) or good fates (low probability of induction). Since the drawing of birth dates was random, there was no rational reason to suppose that an individual's fate was related to his objective merit, goodness, or attractiveness. If people are threatened by the notion of such random outcomes, however, they may see "justice" where it does not exist. They may decide that the men who received bad numbers are in fact less deserving or admirable than the men who received good (or safe) numbers.

We anticipated, however, that not everyone would engage in this sort of cognitive realignment. Several of Lerner and Simmons's (1966) subjects disapproved of the experiment, writing comments such as "I thought there was no sense in the experiment and it was very cruel." These subjects, in contrast to those who did not reject the experiment, did not disparage the victim. "Apparently if the subjects were willing to condemn the situation they had no need to devalue the victim [Lerner, 1970, p. 211]."

An analogous relationship may be found outside the laborato-

ry. Some people may be particularly disposed to perceive the world as just, even if they must engage in cognitive distortion to maintain this perception. Other people may recognize more clearly that the world is often unjust. The first sort of person, with a strong belief in a just world, should be prone to evaluating people with good fates as being more deserving and admirable than people with bad fates. The person who believes that the world is arbitrary or unjust, on the other hand, will not engage in such distortion. He may even shift his evaluations in the opposite direction, sympathizing with (rather than rejecting) those with bad fates and resenting (rather than admiring) those with good fates.

In planning the present study a paper-and-pencil scale was developed to assess the degree of a person's belief in a just world. It was hypothesized that people with high scores on this Just World Scale, reflecting a belief that the world is a just place, would admire the winners of the lottery (those who received safe numbers) and disparage the losers. People with low scores on the Just World Scale were not expected to make this distinction. If anything, their reactions would take the opposite, the "compassionate" pattern—responding favorably to the losers and unfavorably to the winners.

All of the subjects in this study were 19-year-old men who were directly affected by the 1971 lottery. Each subject was confronted not only with the lots of others, but also with the highly salient fact of his own lot. It seemed likely that one's reaction to others would be affected by his own fate in the lottery. A person who himself received a bad number, for example, might be expected to be more sympathetic to a fellow victim of the lottery than would a person who emerged with a safe number. Similarly, a person who received a safe number might have warmer feelings toward a fellow winner than would a person who was himself a loser. In addition, it seemed likely that the subject's lot might affect his feelings toward himself (i.e., his self-esteem). The design of the study permitted us to explore these possibilities as well.

METHOD

Subjects

The subjects were 58 American men born in 1951 who were eligible for the draft and who would be directly affected by the 1971 lottery. The subjects were recruited by signs and tables

set up at Harvard, M.I.T., Boston University, and Northeastern (all of which were having summer sessions at the time of the lottery), by advertisements in the *Boston Globe* and college papers, and by roving recruiters in Harvard Square and outside a rock concert. Fifty of the 58 subjects were part-time or full-time students. Each subject was paid \$5 for his participation.

Procedure

The subjects reported by 9 A.M. on the morning of the lottery (July 1, 1970) to one of two project locations, at Harvard and Boston University. Each subject was assigned nonsystematically to one of ten groups, each meeting in a separate room. Care was taken not to assign to the same group any two subjects with the same birthdays or who were already acquainted with one another. There were eight six-man groups and two five-man groups.

As the subjects arrived in their assigned group rooms (at about 9:30) they were seated around a table in order of pre-assigned seat numbers. Their first names, seat numbers, and birthdays were displayed on place cards in front of each subject, clearly visible to all the other group members. Each group had an adult male leader. When his entire group was assembled, the leader briefly explained the lottery procedure, and then had the subjects individually fill out a Pre-Lottery Questionnaire which included the Just World Scale. Shortly before 10, when the lottery was scheduled to begin, the leader turned on a radio to a station that was providing live coverage of the entire drawing. The drawing began at 10:17 after a slight delay. During the proceedings the subjects were asked to stay in their seats but were allowed to talk to one another. Whenever one of the group members' birthdays was called, the leader recorded his lottery number on his place card. That subject immediately proceeded to complete a short form calling for his moods on 10 adjective scales and his agreement or disagreement with six statements about military service. These questions were inserted by another investigator as part of a separate study and will not be discussed in this report.

After the birthdays of all group members had been called and their lottery numbers displayed, the subjects filled out the Post-Lottery Questionnaire which contained the major dependent variables of the study. Finally, the subjects were asked to indicate their preferences among the other group members as a partner in a discussion which they were told would follow. After the subjects had ranked their fellow group members, the study was

terminated. The reason for the ranking (as a measure of affiliative preference) was explained, and any further questions were answered. The subjects were paid at the conclusion of the session. The sessions were tape-recorded, with the subjects' knowledge.

Selective Service officials had predicted that the drawing would take 1-1/2 hours, and we accordingly told our subjects that the study would run until noon. The lottery in fact took 3-1/2 hours, with the final numbers being called at about 1:45. The unexpected slowness of the proceedings led to the loss of 10 subjects. One entire six-man group was excluded from all analyses because four of its members left after their own birthdays had been called, but before the remaining two subjects' birthdays were called. Four other subjects left the session, two in one six-man group, and one each in two other six-man groups. Three of these subjects left before their own numbers were called, and one left afterward. Although the responses of these four subjects were not analyzed, their fellow group members' reactions to them are included. (Their lottery numbers were displayed even if they had already left the session.) The subject loss seemed attributable to previous appointments, and unrelated to the outcome of the lottery. No subjects left the session before noon, and only one left before 12:45. Thus the total number of subjects whose responses were analyzed was 48.

Lottery Procedure

The manipulated variables in the study were the subject's own lottery number and the numbers of the other members of his group. In the 1971 lottery two drums were used, one containing numbers from 1 to 365 and the other containing the dates from January 1 to December 31. Two capsules were drawn at a time, one from each drum, thereby linking a particular birthday with a particular priority number. Subjects had no way of knowing whether they would receive a relatively good or bad lot until their birthday was actually called. In addition, because there had been evidence that the 1970 lottery had not been truly random, special precautions were taken in the 1971 lottery to insure that randomness was achieved (Fienberg, 1971).

Pre-Lottery Questionnaire

The Pre-Lottery Questionnaire contained questions about the subject's attitudes toward the draft and the lottery, his notions about which numbers would be safe, his religious views, a 10-item self-esteem scale (Cobb, Brooks, Kasl, & Connelly, 1966), a 9-item

locus-of-control scale (adapted from Rotter, 1966), and the newly constructed Just World Scale. As presented on the questionnaire, the Just World Scale consisted of 19 statements (plus two filler items) to which the subject indicated his agreement or disagreement on a six-point scale. The items were selected from a larger initial pool on the basis of a factor analysis of the responses of 66 Boston University undergraduates. Three of the 19 items were later eliminated from the scale on the basis of a further factor analysis of the responses of the draft lottery subjects. Of the remaining 16 items, nine are worded in the positive direction, with agreement reflecting the belief or perception that the world is just. The other seven items are worded in the negative direction. Coefficient alpha for the scale, based on the responses of the 58 initial lottery subjects, was .79. The distribution of scores was skewed toward the low end of the scale, with a large majority of the subjects indicating more disagreement than agreement with statements that the world is just. There was nevertheless a wide range of scores on the scale, from total rejection to qualified acceptance of the "just world" ideology. The 16 items are presented in Table 1.

TABLE 1
JUST WORLD SCALE ITEMS

1. Basically, the world is a just place. (J)
2. The political candidate who sticks up for his principles rarely gets elected. (U)
3. I've found that a person rarely deserves the reputation he has. (U)
4. People who find money in the street have often done a good deed earlier that day. (J)
5. It is a common occurrence for a guilty person to get off free in American courts. (U)
6. Movies in which good triumphs over evil are unrealistic. (U)
7. Students almost always deserve the grades they receive in school. (J)
8. Crime doesn't pay. (J)
9. When parents punish their children, it is almost always for good reasons. (J)
10. Although there may be some exceptions, good people often lead lives of suffering. (U)
11. It is often impossible for a person to receive a fair trial in the USA. (U)
12. In almost any business or profession, people who do their job well rise to the top. (J)
13. Although evil men may hold political power for a while, in the general course of history good wins out. (J)
14. By and large, people deserve what they get. (J)
15. American parents tend to overlook the things most to be admired in their children. (U)
16. It is rare for an innocent man to be wrongly sent to jail. (J)

Note—Agreement with items followed by (J) is scored in the "just" direction. Agreement with items followed by (U) is scored in the "unjust" direction.

Post-Lottery Questionnaire

The major dependent variables assessed on the Post-Lottery Questionnaire were the subject's ratings of how much he liked, admired, felt comfortable with, felt sympathy toward, resented, and felt favorably toward each of the other members of his group. Subjects gave their ratings on 0-100 scales. They were instructed to avoid tied ratings, and the ratings were later converted to ranks for all analyses. The questionnaire also asked the subjects how they felt about their own lottery numbers and repeated the previously administered self-esteem measure.

Affiliative Preference

The subjects were told that there would be brief two-man discussions of the lottery, and that the pairings would be arranged in accordance with their own preferences. Each subject proceeded to rank the other members of his group in order of preference.

RESULTS

Distribution of Lots

At the time of the lottery a generally publicized rule of thumb was that numbers in the first third of the priority list (1-122) would almost certainly be called for the draft, those in the middle third (123-243) might or might not be called, and those in the highest third (244-365) were "safe," barring a major emergency. The subjects were somewhat more pessimistic. The modal prediction on the Pre-Lottery Questionnaire ($N = 58$) was that numbers through 150 would "definitely be called," those from 200 through 250 would "probably be called," and those from 300 on would "probably not be called." Unfortunately, the overall distribution of lots among our subjects was skewed toward the bad end of the list: 28 subjects received numbers between 1 and 122, 10 between 123 and 243, and 10 between 244 and 365. (This distribution differs significantly from the chance expectation of equal numbers in each third [$\chi^2 = 13.50, p < .01$]). In addition, the distribution of lottery numbers varied widely from one group to another. The median lottery number within each of the nine groups ranged from 17 to 234.

Reactions to One's Own Lot

Before the lottery began, the subjects almost unanimously desired to receive high (i.e., safe) lottery numbers. Seventy-one per cent of the subjects said they would feel "very bad" about

being drafted, 23% that they would feel "pretty bad," and only 6% that they would "not mind." (No subject said he would feel "good" about being drafted.) Moreover, 83% of the subjects predicted that the results of the lottery would "definitely" or "probably" have an effect on the next few years of their lives. Seven subjects (15%) reported that it would "probably not" have an effect and one subject (2%) that it would "definitely not," because of such factors as medical career plans or conscientious objection.

The subjects' reactions to their lots on the Post-Lottery Questionnaire were consistent with these feelings. There was a strong inverse relationship between subjects' lottery numbers and their estimates of the likelihood that their number would indeed be called during the year they were to be eligible for the draft ($r = -.82, p < .001$). There was a strong direct relationship between their numbers and how happy they felt about getting them ($r = .80, p < .001$).

The subjects' fates also affected their conceptions of themselves, as assessed by comparing their Pre-Lottery and Post-Lottery self-esteem scores. Self-esteem difference scores showed little relationship to the subjects' lottery numbers ($r = .14$), but a significant association with the rank of the goodness of the subject's lot in relation to those of his fellow group members ($r = .34, p < .05$).² As indicated in Table 2, subjects whose numbers put

TABLE 2
SELF-ESTEEM AS A FUNCTION OF LOTTERY RANK IN GROUP
(NUMBERS OF SUBJECTS)

Relative Rank	Decreased self-esteem	No change	Increased self-esteem
Bad	17	1	6
Good	7	3	14

them in the fortunate half of their group tended to experience increased self-esteem, while those whose numbers put them in the unfortunate half of their group tended to experience decreased self-esteem ($\chi^2 = 10.18, p < .01$).

The tendency for subjects to react to their fates by experiencing increased or decreased self-esteem was expected to be greatest

²The correlation across all subjects between absolute lottery number and "Lottery Rank in Group" was .70.

among those with high scores on the Just World Scale. This did not prove to be the case, however. In fact, the frequency distribution indicated that the tendency was more pronounced among subjects with low scores on the scale. A two-way analysis of variance of self-esteem change scores revealed that only the subject's fate (bad vs. good half of group) had a significant effect on self-esteem ($F = 7.96, df 1/44, p < .01$). Neither Just World level (above vs. below the overall median) nor its interaction with the subject's fate had a significant effect (in both cases $F < 1$).

Reactions to the Lots of Others

WIN Scores. For each dimension on which the subject ranked his fellow group members (liking, admiration, etc.), a "Winner is Nicer" (WIN) score was computed by correlating his rankings of his fellow group members with their lottery numbers. A rank of 5 indicated that the other person was most preferred by the rater; a rank of 1 indicated that he was least preferred. Thus if a subject tended to prefer fellow group members whose lottery numbers were high (the winners), his WIN score would be positive. If he tended to prefer fellow group members with low lottery numbers (the losers), his WIN score would be negative. A positive WIN reflects a tendency to perceive the group in a just way—to react more favorably to the winners than to the losers. A negative WIN reflects the compassionate tendency—to react more favorably to the losers than to the winners.

The overall distributions of WIN signs, presented in the right-hand section of Table 3, indicates that there was a moderate

TABLE 3
DISTRIBUTION OF WIN SIGNS AS A FUNCTION OF
RATER'S LOTTERY RANK IN GROUP

	Raters in Bad Half of Group		Raters in Good Half of Group		Overall	
	+	-	+	-	+	-
Liking	11	13	6	18	17	31
Admiration	13	10	9	15	22	25
Comfort	8	16	12	12	20	28
Sympathy	3	21	5	19	8	40
Favorability	9	15	10	14	19	29
Resentment (reversed)	9	14	8	15	17	29
Affiliative preference	17	7	6	18	23	25

Note—Positive (+) WIN score means that rater prefers fortunate to unfortunate targets (the "just" tendency). Negative (-) WIN score means that rater prefers unfortunate to fortunate targets (the "compassionate" tendency). WIN scores of zero are omitted from the table.

overall tendency to prefer losers to winners. This tendency was predictably greatest in the case of the sympathy dimension, where 40 of the 48 subjects had negative WIN scores ($\chi^2 = 20.03$, $p < .001$). A preponderance of WIN scores were negative also in the cases of liking ($\chi^2 = 3.52$, $p < .10$) and (lack of) resentment ($\chi^2 = 2.63$, $p < .15$).

Effects of One's Own Lot. Table 3 presents the distribution of positive and negative WIN scores for subjects in the fortunate and unfortunate halves of their groups. In only one case was the rater's own lot significantly related to the distribution of WIN signs. This was a thoroughly unexpected finding ($\chi^2 = 8.35$, $p < .01$) that subjects with good numbers preferred to affiliate with losers than with fellow winners (i.e., to have negative WIN scores), and subjects with bad numbers preferred to affiliate with winners than with fellow losers (i.e., to have positive WIN scores). Essentially the same pattern of results was obtained when raters were classified on the basis of absolute levels of their lottery numbers (i.e., 1-122, 123-243, 244-365), rather than on the basis of their within-group lottery rank.

Effects of One's Belief in a Just World. Table 4 presents the distribution of WIN signs as a function of the rater's score on the Just World Scale. For the purpose of this analysis, the distribution of Just World scores was divided as equally as possible into low, medium, and high subgroups (with Ns of 17, 14, and 17). On four of the dependent measures the predicted relationship

TABLE 4
DISTRIBUTION OF WIN SIGNS AS A FUNCTION OF
RATER'S JUST WORLD SCORE

	Rater's Just World Level						z Score ^a	p (one- tailed)
	LOW		MEDIUM		HIGH			
	+	-	+	-	+	-		
Liking	3	14	5	9	9	8	2.15	.02
Admiration	9	8	5	8	8	9	—	—
Comfort	5	12	4	10	11	6	1.98	.02
Sympathy	4	13	1	13	3	14	—	—
Favorability	4	13	6	8	9	8	1.75	.04
Resentment (reversed)	3	13	4	10	10	6	2.69	.004
Affiliative preference	7	10	6	8	10	7	—	—

Note.—Positive (+) WIN score means that rater prefers fortunate to unfortunate targets (the "just" tendency). Negative (-) WIN score means that rater prefers unfortunate to fortunate targets (the "compassionate" tendency). WIN scores of zero are omitted from the table.

^az scores are based on a test for a linear trend in proportions (Snedecor & Cochran, 1967, pp. 246-248).

between belief in a just world and reactions to others was obtained. Raters with high Just World scores were more likely than raters with low Just World scores to prefer winners to losers (i.e., to have positive WIN scores) with respect to liking, comfort, favorability, and (lack of) resentment. In each case raters with medium Just World scores showed an intermediate pattern of WIN signs, and in each case the overall linear trend of proportions was significant.

Inspection of the data indicated that the relationship between Just World scores and WIN signs was unaffected by the subject's own lot. The results presented in Table 4 held in more or less constant fashion for subjects in both the fortunate and unfortunate halves of their groups.

Correlates of One's Belief in a Just World

Just World scores were significantly related to several other measures obtained from the Pre-Lottery Questionnaire. The higher the subject's Just World score, the more strongly he tended to believe that the lottery is a fair way of selecting men for military service ($r = .53$, $p < .001$). Belief in a just world was also related directly to the degree of the subject's reported belief in God ($r = .32$, $p < .05$). Finally, Just World scores were inversely correlated with locus-of-control scores ($r = -.32$, $p < .05$), indicating that subjects with a strong belief in a just world tended to be oriented toward internal rather than external control of reinforcements.

DISCUSSION

Distribution of Lots

If the authors believed in a just world, they might well conclude that someone up there is out to get them and their subjects by meting out so unfortunate a set of fates (58% of the subjects in the worst third of the year). If we acknowledge that the world is often unjust, however, we can only ascribe this significantly skewed distribution to chance. In any case, it must be borne in mind that good numbers in the present study are good only in relation to those of one's fellow group members. Such good numbers were often bad indeed by absolute standards. Bad numbers, of course, were even worse.

Reactions to One's Own Lot

There was a clear overall tendency for the self-esteem of subjects who were less fortunate than most of their fellow group

members to fall and for the self-esteem of subjects who were more fortunate than most of their fellows to rise. Piaget (1948) reports that young children often believe that chance rewards and punishments are in fact just retribution for their good or bad deeds. "A great many children think that a fall or a cut constitute punishment because their parents have said to them, 'It serves you right,' or 'That will be punishment for you,' or 'God made it happen!' [Piaget, 1948, p. 260]." Our data might be interpreted as corroborating Piaget's further observation that many people do not fully outgrow this mode of thought. Even among adults the falls and cuts of arbitrary fate may be taken as the workings of a metaphysical justice.

Although we favor this interpretation, its validity is thrown into doubt by the fact that the tendency for self-esteem to shift as a result of one's fate was at least as great among subjects with low scores on the Just World Scale as among those with high scores. This result adds weight to the alternative and perhaps simpler explanation that the self-esteem shift represents a spillover of affect. People who receive good lots are happy and consequently feel good about things, themselves included. People who receive bad lots are unhappy and consequently feel bad about things, themselves included. The somewhat greater likelihood that subjects with low Just World scores will react in this way may reflect their greater joy upon "beating" a system which they consider to be unfair and arbitrary, or their greater dismay upon being victimized by such a system.

The two interpretations—the assumption of just deserts and the spillover of affect—are not necessarily incompatible. In any case, it is of note that clear shifts in self-esteem—upward as well as downward—were obtained despite the fact that the great majority of subjects received lots that were bad by absolute standards. The results attest to the importance of comparative appraisal in the determination of self-esteem. People who fared better in the lottery than most of their fellow group members were likely to feel self-satisfied, even though they had fared badly by absolute standards.

Reactions to the Lots of Others

The overall pattern of subjects' reactions to others (right-hand section of Table 3) runs counter to the hypothesized tendency to maintain one's belief in a just world by disparaging victims of fate. On the whole, subjects reacted in a "compassionate" manner, sympathizing with lottery losers more than winners, tending to like them more and to resent them less. The tendencies to

sympathize with losers more than with winners and to resent them less are not too surprising, and may in fact be implicit in the meanings of sympathy and resentment. The tendency to like losers more than winners is in more direct opposition to Lerner's findings. There are several factors in the present experimental situation which might account for the reversal of the previously reported tendency (Lerner, 1970) to justify the fates of others by means of attributions of deservingness.

First, the random nature of the lottery was strongly emphasized in the publicity given to it and in the way it was conducted (drawing numbers out of drums). As a result it may have been especially difficult for subjects to believe that deservingness had anything to do with the outcome.

Second, whereas the subjects in Lerner's studies only observed the fates of others, the evaluators in the present study were participants in the same giant roulette game as the people they evaluated. As chance would have it, moreover, a large proportion of the evaluators themselves received bad numbers. It might therefore be difficult for them to disparage losers of the lottery without at the same time disparaging themselves. In an altered replication of the Lerner and Simmons (1966) study, moreover, Aderman, Brehm, and Katz (1973) found that subjects reacted with compassion rather than rejection to a victim of misfortune when the experimental instructions facilitated empathy ("imagine yourself in that situation"). Such an empathic set may well have been created in the present study, when all subjects were in fact in the same stressful situation.

Third, unlike the subjects in Lerner's studies, the present subjects had the opportunity to interact with the people whom they were to evaluate over a period of several hours. In addition, they were able to take into account not only their fellow groups members' fates but also the ways in which they reacted to these fates. These reactions may have been of a sort which were more likely to elicit compassion than justification.

Fourth, the present subjects, unlike those in Lerner and Simmons's (1966) "continued suffering" condition, knew that many of their fellows who received bad numbers would still be able to avoid the draft by resorting to such tactics as conscientious objection, medical exemptions, or draft-exempt jobs. The struggle to obtain such "outs" might be a considerable hardship, but the bad number was not an inevitable decree of suffering. When the victim still has a fighting chance to escape punishment, there may be less cognitive pressure to reject him. The alternatives

of encouraging him or even making him into a hero may become at least as appealing.

Fifth, whereas the victim in the Lerner and Simmons (1966) study was probably seen by most subjects as being victimized for legitimate reasons (e.g., in the name of science), the draft lottery was widely regarded in the college community as being conducted in the service of an illegitimate and unjust cause, the Vietnam war. This may have increased the possibility that subjects would reject the lottery itself rather than its victims.

More generally, it is likely that on the whole our subjects had weaker tendencies to believe in a just world than the Kentucky undergraduates who participated in several of Lerner's studies. Both regional factors and the passage of several years could account for such a difference.

It is difficult to know which of the above factors might underlie the general pattern of compassionate responses in the present study, in contrast to the pattern of justification reported by Lerner. Each of the possible explanations might well be tested in studies specifically set up for that purpose. Regardless of which factors were most influential, independent evidence from the present study attests to the prevailing atmosphere of sympathy for victims of the lottery. The Post-Lottery Questionnaire included a question which asked subjects how they thought their own lottery numbers would affect other people's attitudes toward them. The worse a subject's number, the more favorably he believed it would cause other people to feel toward him ($r = -.54, p < .01$).

The existence of a general climate of sympathy may also help to explain the unexpected relationship obtained between the rater's own lot and his affiliative preference. We had expected losers to prefer to discuss the lottery with fellow losers, and winners with fellow winners. Our reasoning was that people with similar fates could be talked to with the least embarrassment or resentment, and that they would best be able to help one another evaluate their own reactions to a situation that remained highly uncertain (cf. Schachter, 1959). The obtained pattern of results (Table 3) ran directly counter to this expectation. A post hoc interpretation is that the losers wanted to affiliate with the winners in order to gain sympathy and support from them, and that the winners (who, it should be recalled, were winners only in a relative sense) wanted to affiliate with the losers in order to provide such sympathy and support. The possibility that the winners had such sympathetic inclinations is congruent with the finding of Notz, Shaw, and Cook (1971) that winners of the 1970

lottery were even more likely than losers to advocate total withdrawal of U.S. forces from Indochina.

Despite the generally compassionate pattern of responses, subjects' scores on the Just World Scale effectively distinguished between those who were more and less likely to engage in cognitive justification of their fellow group members' fates. The compassionate pattern was neutralized among subjects with high Just World scores. These subjects were as likely to like winners as losers, and they were actually *more likely to resent losers than winners*. To resent a victim of circumstance seems a peculiar reaction, but it may apparently be engendered among people who have a need to justify the events they observe in terms of an underlying moral order.

Those subjects who held the strongest belief that the world is just also tended to be the most likely to believe that the lottery is a fair way of selecting men for military service. Given the assumption that the lottery itself is "fair," it may follow (psychologically, if not logically) that the lottery rewards those who deserve to be rewarded and punishes those who deserve to be punished. Those subjects who did not believe that the world is just, on the other hand, tended to characterize the lottery as unfair. Like those of Lerner and Simmons's (1966) subjects who rejected the experiment they watched, these subjects did not labor under the assumption that the lottery was an instrument of justice. Instead they were free to follow their natural inclinations of compassion for the losers and, perhaps, resentment toward the winners.

It should be noted, finally, that the particular circumstances of this field experiment impose limitations on the generalizability of its results. Because of our subjects' predominantly bad luck in the lottery, for example, our analyses were essentially comparisons between reactions to people with moderately bad and extremely bad fates, rather than reactions to truly fortunate and unfortunate people. Nevertheless, the data strongly suggest that *relative* variations in people's fate, even within a restricted range of absolute goodness, are sufficient to activate processes of perceptual justification.

Correlates of the Belief in a Just World

Our results provide support for the hypotheses that people vary in the degree to which they believe in a just world and that this variation is related to their reactions to the lots of others. An important task for further research is to explore the antecedents and social consequences of the belief that the world is just.

To what extent is the belief grounded in childhood experiences, religious ideologies, and other influences? To what other personality traits or perceptual tendencies is it related? And what are its consequences for attitudes and behaviors toward victimized groups in society?

We have undertaken some preliminary research along these lines, in the context of an attempt to clarify the construct of "belief in a just world." Subsequent to the draft lottery study, a questionnaire was administered to 180 Boston University undergraduates (90 men and 90 women). The questionnaire included 10 F-scale items which focused specifically on authoritarian submission, a 9-item locus-of-control scale, and a variety of questions about religious beliefs, social activism, and attitudes toward socially victimized groups, as well as a pool of "Just World" items. Factor analysis of the responses to the Just World items was undertaken, leading to the creation of a revised 20-item version of the Just World Scale.

The revised version included 13 of the 16 items included in Table 1 (all except Items 4, 6, and 10) plus seven new items. Three of the new items were worded in the just direction: "People who get 'lucky breaks' have usually earned their good fortune," "Men who keep in shape have little chance of suffering a heart attack," and "People who meet with misfortune often have brought it on themselves." The four remaining new items were worded in the unjust direction: "Good deeds often go unnoticed and unrewarded," "Careful drivers are just as likely to get hurt in traffic accidents as careless ones," "In professional sports, many fouls and infractions never get called by the referee," and "Many people suffer through absolutely no fault of their own." Coefficient alpha for the revised version was .80 and its correlation with the version used in the lottery study was .93.

Scores on this revised scale were then correlated with other measures obtained from this sample. Belief in a just world was found to be strongly related to the respondent's religious ideology and behavior. Just World scores were significantly correlated with the belief in an active God—"a Being beyond ourselves who takes an active part in the affairs of man" ($r = .31, p < .001$), with reported frequency of church attendance ($r = .45, p < .001$), and with self-ratings of religiosity ($r = .42, p < .001$). Although the direction of the causal link is not certain, the results suggest that religious ideologies which stress the presence of an active God (which tends to be characteristic of the Western religions) help to instill the belief that the world is a just place.

An even stronger relationship was obtained between Just World scores and scores on the 10-item scale of authoritarianism ($r = .56, p < .001$). The magnitude of this correlation suggests that there may be a high degree of overlap between the constructs of belief in a just world and authoritarianism. The two constructs converge on the themes that strong and powerful people are good, and weak and powerless people are bad (cf. Sanford, 1971). Authoritarianism is related to intolerance for cognitive inconsistency (Steiner & Johnson, 1963) and to hostility to handicapped and underprivileged groups (e.g., Centers, 1963; Christie, 1954; Noonan, Barry, & Davis, 1970), tendencies which would also be expected to follow from the belief in a just world.

In light of these close conceptual links it is tempting to view the belief in a just world as an element of the more general authoritarian syndrome. We should be cautious about drawing such a conclusion, however. Sanford (1971) warns against mistaking traits like dogmatism, aggressiveness, and anti-intellectualism for authoritarianism. Although these traits are often found to coexist with the authoritarian syndrome, they are also found in the context of nonauthoritarian personality dispositions. Similarly, it is possible that people whose ideologies are egalitarian in most other respects share the perceptual tendency to link happiness and goodness, wickedness and punishment—that is, to believe in a just world.³

As in the initial draft study, high Just World scores were also associated with a tendency to score in the internal direction on the locus-of-control scale ($r = -.44, p < .001$). This association is congruent with Lerner's (1971) argument that the belief in a just world stems from people's desire to believe that they can control their own reinforcements. It would seem possible, however, for some people to believe that they can control their own reinforcements but that the world as a whole tends to be unjust; or, conversely, that the world is just but externally controlled (for example, by a just Deity). Further consideration of these

³Evidence for a conceptual distinction between the belief in a just world and authoritarianism comes from a recent factor analytic study (Lerner, 1973) which found that the Just World Scale and the F-Scale, although positively correlated with one another, loaded highly on separate factors. F-Scale scores were associated with a general ethnocentrism among Canadian student subjects, including negative attitudes toward both Americans and Indians. Just World Scale scores, in contrast, were associated with positive attitudes toward societal "winners" (the Americans) and negative attitudes toward "losers" (the Indians).

possibilities would be useful in specifying the links between locus of control and social activism (cf. Gurin, Gurin, Lao, & Beattie, 1969).

Regardless of the nature of its association with the authoritarian syndrome or with locus of control, the belief in a just world has important consequences for people's attitudes and behaviors toward socially victimized groups. Our questionnaire included three six-item scales which were constructed to reflect the respondents' tendencies to assume that the plights of blacks, of poor people, and of women are either "not so bad after all" or else that they are in fact deserved. Representative items from each of these three scales are: "The problems of blacks in the U.S.A. are to a large extent due to their unstable family structure," "Low-rent housing projects often become rundown because the tenants don't know how to keep a place in order," and "Men are temperamentally better suited than women to hold important executive positions." Scores on the Just World Scale were significantly related to the extent to which respondents justified the plight of blacks ($r = .21, p < .01$) and of women ($r = .31, p < .001$). Just World scores were not significantly related to the measure of the justification of the plight of the poor, however ($r = .12, ns$).

If a person believes that the victims of society deserve their fate (or, alternatively, that they are not really being victimized), he should feel less of a need to engage in activities which might help to alleviate their plight. This hypothesis was supported by our data. An index of political and social activism was constructed by summing the frequency with which respondents reported having engaged in such activities as demonstrating, picketing, and contributing money to a political or social cause during the previous year. The correlation between Just World scores and the activism index was $-.29 (p < .001)$, indicating that people who believe that the world is a just place were less likely to be activists. There was a similar inverse correlation between Just World scores and the respondents' global self-ratings of their degree of involvement in "political or social action groups or activities" ($r = -.20, p < .01$).

The relatively slight magnitude of these correlations clearly implies that the belief in a just world is not the only—or even the major—determinant of indifference toward the victims of society (cf. Ryan, 1971). Numerous other individual and cultural factors play important roles in shaping such reactions. Nevertheless, it appears that what is basically an irrational tendency to

perceive others as deserving their lots may contribute to the perpetuation of social injustice.

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