Distributive Justice Development and Social Class: A Replication

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Fifty-six children from kindergarten and third grade were given the Distributive Justice Scale, vocabulary, and sociometric peer ratings. Results showed that regardless of grade the lower-class children lagged behind the middle-class children in distributive justice development even when verbal ability was controlled. The finding replicated a previous study drawn from the same population. Both studies showed statistically equivalent scores. The peer ratings showed that in both kindergarten and third grade, lower class children were chosen most often for negative sociometric questions. The finding was similar to one drawn from a different population. Implications for social class distributive justice are discussed.

The cultural deficiency hypothesis is a popular explanation for lower-class lags in social cognitive development. The lag supposedly occurs because the lower class has fewer or qualitatively different social experiences such as role taking and peer interaction that are necessary for social cognitive equality with the middle class (Cole & Bruner, 1971; Kohlberg, 1969, 1971; Sararwathi & Verma, 1976; Simpson, 1974). Recently, Enright, Enright, Manheim, and Harris (1980) tested this hypothesis in schools that were integrated in social class, which should lessen the cultural deficiencies of the lower class and therefore lessen social cognitive differences between classes. Although equality was observed in verbal ability, the lag remained in distributive justice development, or the understanding of the fair allocation of goods, in both a southern and midwestern sample. In the latter, a lack of behavioral reciprocity between the social classes was observed via sociometric peer ratings. It was concluded that although social-class integration was alleviating possible verbal deficits, it was not effecting change in the social development area.

If one's social development is a necessary component for adequate adjustment in society, then those of the lower class who lag in this area may find it difficult to attain upward mobility. It would seem especially so if one lags and continues to lag in distributive justice development because the individual may not understand the distributive norms necessary for upward mobility. Damon (1975) has defined a sequence in distributive justice development into five stages as follows:

0-A: The child believes that whoever wants the most money or goods should have it.
0-B: The child bases distributive decisions on external characteristics. The tallest or oldest one, for example, should get more than the others.
1-A: The child believes everyone should receive the same amount regardless of other characteristics.
1-B: The child bases distributive decisions on behavioral reciprocity. In other words, the child believes that those who work harder or do more than the others should get more.
2-A: The child bases distributive decisions on psychological reciprocity. That is,
the child believes that those who are most in need should receive more than the others.

The purpose of this research was to replicate the distributive justice and verbal findings of the southern cross-sectional sample. Our expectation therefore, based on the previous finding, was that differences between social classes in distributive justice development, favoring the middle class, will occur upon school entrance (kindergarten) and will continue up to third grade. This should occur despite social-class integration and a control for verbal ability; this should occur despite both social classes showing a developmental increase in distributive justice. The original claim (Enright, Enright, Manheim, & Harris, 1980) was that social class differences exist even when cultural deficiencies/differences are reduced in the sense that children of different social classes are brought together in the same classroom. A lack of replication here will disconfirm that claim. A second purpose was to replicate the sociometric findings in a different milieu, since this analysis was done originally in the midwestern sample. Our expectation here was that the middle-class children are more often positively than negatively evaluated by their peers; the reverse should occur for the lower-class children. The original claim here was that social-class differences in distributive justice may be associated with nonreciprocal social interactions between lower- and middle-class children. If the sociometric data do not replicate, our claim that nonreciprocal peer interactions are associated with lower-class children's nonreciprocal cognitive structures will be disconfirmed.

Method
Fifty-six subjects participated (seven lower-class and seven middle-class males, and seven lower-class and seven middle-class females from both kindergarten and third grade). This sample, composed of all white children, was drawn 1 year later from the same school in southern Florida as the sample in Enright, Enright, Manheim, & Harris (1980). The new sample represented not a longitudinal but another cross-sectional design. Social class was measured with Hollingshead's (Note 1) four-factor index of social status, which takes into account father's and mother's occupation and educational level. The school has been integrated by social class and race since its opening in the 1960s.

Instruments and Procedure
The Distributive Justice Scale (DJS; Enright, Franklin & Manheim, 1980) is a standardized and objectively scored paired-comparisons test. Two dilemmas are presented, and after each one the child is presented with 10 pairs of pictures and statements. Each picture and its accompanying statement represents a stage of distributive justice development. For each pair of pictures, the child is asked which picture (stage) is more fair in ending the story. As an example of a dilemma, four children are in the same classroom and their teacher lets them make paintings, which they sell. The child tested must decide how to split up the nickels among the children who possess the following characteristics: Sue wants the nickels more than the others (Stage 0-A), Jim is the biggest (Stage 0-B), Mary made the most pictures (stage 1-B), and Billy is poor (stage 2-A). Each of the 10 pictures has Jim in the upper-left corner, Billy in the upper-right corner, Mary in the lower-left corner, and Sue in the lower-right corner. Each stage picture is distinguished by the number of nickels placed next to the child. For instance, for the 0-A picture, Sue has five nickels, and the rest have one. For 1-A, all have two nickels. Statements accompany each picture. For the 1-A example, the experimenter says, "In this picture, all children get the same number of nickels so there won't be any fights about who gets more."

The order of picture pairings was randomized, and within each pair the decision of which stage would be presented first was randomized to control for order effects. Besides the 10 pairings per dilemma, three pairs were repeated to check for consistency. The repeated pairs were presented in reverse order of their original pairings to control for primacy or recency effects. If the child did not pass four of the six repeats, his or her data were omitted from the sample. Total administration time was approximately 12–15 minutes per child.

The DJS is scored by selecting the child's preferred stage via the picture comparison for each dilemma. If a triangular relationship emerges (e.g., 2-A > 1-B; 1-B > 1-A; 1-A > 2-A), the lowest stage of the triangle constitutes the child's stage for that dilemma. The final score is obtained by converting the stages into numerical values (e.g., 0-A = 0.0, 0-B = 0.5, and so forth up to 2.0) and taking a mean of the two dilemmas. There is adequate construct validity for the DJS. In several studies to date, it has shown strong developmental age trends, a significant relationship with Piagetian reciprocity tasks, a minimal relationship with verbal ability, and a replication in an African culture. The internal consistency reliability is generally in the .60s and .70s (Enright, Franklin, & Manheim, 1980).

Stanford-Binet vocabulary (Terman & Merrill, 1973) served as a rough estimate of verbal ability. Vocabulary words are presented in increasing order of difficulty until the child misses six in a row. Interrater reliability for 10 randomly selected protocols scored blind to age and sex of child was 89%.

For the sociometric peer rating, Tuddenham's (1952) procedure was used, in which each child is asked seven questions regarding other children in the classroom (i.e., Who is the one everybody likes? Who is the one nobody likes? Which child is a poor sport or does not play fair?
Who is a good sport or plays fair? Which child is very fair and nice to everybody? Which child doesn't care much about making friends or being friendly? Who is your best friend in the class?). If more than one name was given per question, only the first choice was considered. Scoring was based on whether the child chose a middle- or lower-class child.

All children were individually administered the tasks by a white male graduate student.

Results

The internal consistency reliability of the DJS derived by a correlation of the two dilemmas corrected by the Spearman-Brown formula was .71. To test for grade, social class, and gender effects, a three-way analysis of variance (ANOVA) was run. A significant main effect was found for grade, \( F(1, 48) = 13.95, p < .001 \), and for social class, \( F(1, 48) = 6.41, p < .02 \). No gender or interaction effects occurred. The strength of the age and DJS relation via the Pearson product-moment correlation was .47 \( (p < .001) \). The strength of the social class and DJS relation via eta was .31 \( (p < .02) \).

Means for this study are in Table 1 and are labeled Time 2. For the purpose of comparison, the Time 1 means in Table 1 are from the previous year's study of the same population with different kindergarten and third-grade subjects.

Although the DJS and vocabulary correlated only .11 \( (p < .21) \) when age was partialed out (the zero-order \( r = .42, p < .001 \)), an analysis of covariance of grade and social class on distributive justice controlling for vocabulary was performed, in case the latter contributed to the DJS and social-class relation. The grade effect for distributive justice was again significant, \( F(1, 51) = 4.16, p < .05 \); social class was again significant, \( F(1, 51) = 6.22, p < .02 \); and no interactions were observed. The strength of the age and DJS relation remained significant \( (.27, p < .03) \) when vocabulary was partialed out; the DJS and social-class relation also remained significant when vocabulary was partialed out (.30, \( p < .02 \)).

The replication of the DJS was analyzed via a four-way ANOVA in a 2 (Time 1 and Time 2) × 2 (Kindergarten and Third Grade) × 2 (Lower Class and Middle Class) × 2 (Gender) design. The results showed no significant differences in the DJS scores of Time 1 and Time 2 for either the main effect of time or for the Time × Grade interaction. As expected, there was a significant main effect for grade, \( F(1, 96) = 38.18, p < .001 \), and for social class, \( F(1, 96) = 22.57, p < .001 \). No interactions were significant. These data suggest that the DJS findings of Time 1 are statistically equivalent to those of Time 2.

The grade, social class, and gender effects for vocabulary were next examined via a three-way ANOVA. The grade effect was significant, \( F(1, 48) = 60.45, p < .001 \) \( (r =

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<th>Means and Standard Deviations for Distributive Justice and Vocabulary at Time 1 and Time 2</th>
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<td>Lower class</td>
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<td>Middle class</td>
<td>5.79</td>
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Note. \( N = 56 \) for both samples. Time 2 represents the study reported here, whereas Time 1 is from the same school one year previously. The samples are independent. DJS = Distributive Justice Scale (Enright, Franklin, & Manheim, 1980).

a Range = .00-2.00.
.74, \( p < .001 \)). No other main effects or interactions reached significance. The partial correlation of vocabulary and age, controlling for the DJS, remained strong (.67, \( p < .001 \)).

The sociometric peer ratings were first examined via \( \chi^2 \) analyses, blocking on whether a middle- or lower-class child chose a middle- or lower-class child for each of the seven questions. Kindergarten and third-grade analyses were done separately. No significant findings emerged. Regardless of grade, then, the middle- and lower-class children generally agreed on who were the “good” children and who were the “bad.”

A descriptive analysis of the sociometric choices showed that in the entire kindergarten sample, middle-class children were chosen 50% of the time for the combined positive questions and only 23% of the time for the combined negative questions. In contrast, the entire kindergarten sample chose lower-class children 49% of the time for the positive and 77% of the time for the negative questions. To test whether the kindergartners chose the middle-class children less often for negative questions compared to positive, a Wilcoxon matched-pairs signed ranks test was run. Each child was given one score for the positive questions and one for the negative questions. For example, if the child chose three middle-class children for the four positive questions, he or she was given a .75. The child’s score for the negative questions was similar (number of middle-class choices divided by the total number of choices). The Wilcoxon procedure showed that the entire sample of kindergartners chose middle-class children significantly more often for the four positive questions than for the three negative (\( z = -3.61, p < .001 \)). The mean rank for the negative ranks (or the difference when negative questions received a lower score than positive questions) was 12.57. There were 22 such ranks. The mean for the positive ranks was 11.75. There were 2 positive ranks and 4 ties. A similar analysis showed that lower-class kindergartners were picked more often for negative than for positive questions (\( z = -3.61, p < .001 \)), with 22 positive ranks, 2 negative, and four ties.\(^1\)

The Wilcoxon finding for the third grade replicated the kindergarten finding. Middle-class children were chosen significantly more often for positive than for negative questions (\( z = -2.77 \)), with 20 negative ranks (\( M = 16.22 \)), 8 positive ranks (\( M = 10.19 \)), and no ties. Lower-class children were chosen significantly more often for negative than for positive questions (\( z = -2.77 \)), with 8 negative and 20 positive ranks. Both kindergarten and third-grade samples, then, cited middle-class children as possessing positive social traits more often than negative traits and lower-class children as possessing negative ones more often than positive.

Finally, the Pearson correlation between the DJS and the seven individual sociometric variables, collapsed across grade, revealed two significant results. DJS and “everybody likes” was significant (\( r = .28, p < .02 \)) as was DJS and “fair” (\( r = .25, p < .03 \)). To be sure these results were not confounded with age, this variable was partialed out. The significant relations still held for “everybody likes” (.33) and for “fair” (.24). These data show that distributive justice development is related to positive social traits.

Discussion

The distributive justice findings replicated and were statistically equivalent to previous findings. Therefore the results are more likely due to actual developmental differences rather than to a time of testing bias in either of the Time 1 or Time 2 samples. Lower-class children are statistically lower than their middle-class peers in distributive justice development, and that difference continues at least up to third grade despite efforts at social-class integration. In contrast, verbal abilities are similar across the social classes. Because this is not a longitudinal study, it is not possible to say that integration does or does not reduce social class differences in distributive justice in comparison.

\(^1\) The lower-class findings were directly opposite to the middle class because all children answered all questions. Therefore, if a child’s score was .75 and .33, respectively, for positive and negative with middle class, he or she would be .25 and .67 with lower class, reversing the middle-class finding. If some children refused to answer negative questions, the lower-class results may not have reached significance.
to segregated-classroom students. It is clear however that even if social-class integration produces fewer differences between the social classes than segregation, statistical differences nonetheless remain.

The sociometric findings from the Enright, Enright, Manheim, and Harris (1980) midwest study were replicated here with one exception. In the former sample, it was not until third grade that middle- and lower-class children agreed that lower-class individuals possessed more negative traits than middle-class children did. In the current study, however, this acknowledgment by the children of middle-class dominance was evident as early as kindergarten. It seems, then, that middle-class children receive more positive feedback relative to negative from peers, whereas the lower-class children receive more negative feedback, if the sociometric ratings can be generalized to the classroom. In theory, the nonreciprocal peer interactions may be related to the distributive justice differences since the higher stages (1-B, 2-A) involve reciprocal thought. Exposure to nonreciprocal behavior may help perpetuate nonreciprocal thought (Piaget, 1932). It could also be argued that the lower-class children get less positive than negative peer feedback because of deficits in social cognition. Either explanation however shows the lower class to lag in social cognition and peer nominations, and the current patterns between the social classes appear to be perpetuating the status quo.

The relation between social thinking and social interaction in theory is supported empirically by the relation of the DJS and positive sociometric traits. Being liked by others and being fair are positively related here to distributive justice development. In similar studies, distributive justice was positively related in kindergarten to being liked, being a good sport, being fair, and being others' best friend (Enright, Enright, Manheim, & Harris, 1980), as well as to being approached by others in a first-grade classroom who were trying to solve their social problems (Enright & Sutterfield, 1980). In other words, those who seem to behave reciprocally are more likely to have reciprocal distributive justice cognitions. Those who do not have the latter cognitions and are not exposed to reciprocal behavior may have difficulty in attaining these higher level cognitions.

One argument that might be raised however is that social class differences are presumptively built into the DJS, thereby guaranteeing the hypothesized results without the concomitant influence of the independent variable. In other words, the definition of the distributive justice construct, as indexed by the DJS, may require that distinctions be made among social classes. This is not the case, however. The development of the DJS was based on a social cognitive developmental progression identified by Damon (1975), a progression which makes no claim on social class differences. Items were subsequently chosen for the DJS to reflect only the developmental nature of the construct, quite irrespective of whether such items also distinguished among classes. Further, the scale was originally validated (see Enright, Franklin, & Manheim, 1980) using heterogeneous samples without analysis for social-class differences. Indeed, such an analysis would have been irrelevant: The observation of social class differences could not possibly speak to the construct's validation, because such differences are not postulated by either the definition of the construct or by the theoretical traditions from which it was generated. And although any social cognitive construct can be socioculturally biased in the sense that the observation of a developmental trend is culture-specific, that such a trend was observed in a nonwestern sample (Enright, Franklin, & Manheim, 1980) strengthens the conclusion that the developmental construct measured by the DJS can be generalized beyond American samples.

Another type of bias that deserves mention is reflected in the use of such terms as "deficiency," "lag," and "middle-class dominance" to characterize performance on the scale. Here it may be argued that the values of the test constructors are thereby pervasive in the interpretation of results. Although this may be true, and although the notion of "highest is best" may be a middle-class bias, it is also true that such performance is adap-
The lower class will always be seen as lagging when the criteria for successful adaptation are modeled on middle-class values.

With regard to interpretation of results, the cultural deficiency hypothesis as an explanation for lower-class lags is popular, but it may be too simplistic. It assumes that if lower-class children participate in a middle-class environment, then psychological differences between the social classes will be reduced (Kohlberg, 1969). The differences, however, were still significant here. A possible explanation is that schooling will not offset cultural deficiencies in the home. Given that a child spends half of his or her waking day in school, however, one might expect some change by third grade.

As a speculation, the cultural deficiency hypothesis may be too simplistic because if the segregated middle-class school environment can be labeled A and the segregated lower-class environment labeled C, it is presumed that exposure to A (reciprocity, role-taking, involvement in decision making) will increase cognitive development for the lower class. It is never considered that when middle and lower classes are brought together, Environment A ceases to exist and Environment B is the newly created environment. Environment B in this case is social dominance, in which middle-class children receive positive messages predominantly and lower-class children receive negative messages.

In the hope of exposing lower-class children to reciprocal understanding and behavior, educators may be unwittingly creating nonreciprocal interactions by not being aware of environmental transformations in response to integration. After all, the middle-class children see quite concretely that lower-class children are different. Almost all of the lower-class children in the midwestern and both southern samples were on a free lunch program, whereas the middle-class children were not. Such subtle behaviors as picking up a free lunch ticket may change a reciprocal environment into one in which the social classes view themselves differently. Instead of cultural similarity, then, social-class integration may create nonreciprocity and defer growth-producing experiences for the lower-class children.

Such an interpretation is consistent with the description of the function of schooling in a capitalist economy, as described by Bowles and Gintis (1976). Here "deficiencies" are not the result of inherent characteristics of a particular class, but rather represent the reproduction of inequality in the larger society. That is, rewards are differentially allocated so as to reproduce in schools the class relationships that already exist. Thus the function of schools according to this view is "to pass along differences in the social relations of production, to legitimize, reflect and transmit inequality . . . [and] to socialize students to inequality and the beliefs required to support it" (Cohen & Rosenberg, 1977, p. 113). Lower-class children are therefore deficient only to the extent that there is a poor match between the skills that they bring to the school and the expectations of the middle-class-oriented school structure and its meritocratic reward system.

The studies reported here suggest that social-class integration is not eliminating the social development gap between the classes. It is suggested therefore that future studies examine, via sociometric or behavioral analyses, the degree of nonreciprocity between peers that occurs in both classrooms that are segregated and those that are integrated with respect to social class. It may be that an increase of peer nonreciprocity occurs in the integrated classrooms, particularly directed toward the lower-class children. If this is found, educators cannot then presume similar cultural experiences for the social classes simply because they are in the same room. Ways in which the nonreciprocity de-

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2 It could be argued that the most effective test of the deficiency hypothesis is to ensure not only participation but also a solidarity/camaraderie between the classes. This however is going beyond the hypothesis, which states that participation in the middle-class environment will alleviate the role-taking and flexibility deficiencies necessary for growth (see Kohlberg, 1969, p. 401, for clarification of this point). If one waited until such solidarity occurred or induced it experimentally, one might miss the way in which the classes usually interact in an ecological context.
velops, then, must be found if integration is to be successful.

Reference Note


References


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