IDENTIFYING THE CORRECT CHILDREN FOR INCLUSION IN SCHOOL-BASED INTERVENTION PROGRAMS: ARE TEACHER PERCEPTIONS OF CHILDHOOD AGGRESSION INFLUENCED BY CHILD ETHNICITY?

A Senior Honors Thesis

By

KAREN MICHELLE O'BRIEN

Submitted to the Office of Honors Programs & Academic Scholarships
Texas A&M University
In partial fulfillment of the requirements of the
UNIVERSITY UNDERGRADUATE RESEARCH FELLOWS

April 2000

Group: Psychology I
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UNIVERSITY UNDERGRADUATE RESEARCH FELLOW

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April 2000

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ABSTRACT

Identifying the correct children for inclusion in school-based intervention programs: Are teacher perceptions of childhood aggression influenced by child ethnicity? (April 2000)

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In order to determine whether Euro-American teachers over-perceive aggression in African-American children, peer ratings of aggression were obtained via a modified version of the Revised Class Play (Masten, Morrison, & Pellegrini 1985) for 134 Euro-American, 178 African-American, and 101 Hispanic children in second and third grades who had been nominated by their teachers for inclusion in a school-based intervention program targeting aggression. Differences in peer ratings of aggression as a function of the rated child’s ethnicity were examined, as was whether or not these differences were moderated by ethnic composition of the classroom. Contrary to prediction, a significant mean effect was yielded for ethnicity \( F(2,266) = 3.587, p < .05 \) such that African-American children received higher peer ratings of aggression than did their other ethnicity peers. This was true regardless of whether the child’s peers shared his or her ethnicity status within the classroom. It was concluded that Euro-American teachers did not over-nominate African-American children given that peers of every ethnicity also viewed the teacher nominated African-American children as more aggressive than nominated children of different ethnic subgroups. The discussion highlights the need to explore alternative explanations for the over-representation of African-American children in aggressive samples as well as the need to consider school-based universal prevention programs.
DEDICATION

To my family and friends, whose laughter and support have helped me to persevere and remain dedicated when I otherwise might not have, and whose thoughts and feelings and experiences have inspired me and led me to greater understanding.

And To María Elena Doskey, who once said, “If you can write, you have conquered.”
ACKNOWLEDGMENTS

This research was funded by the Texas A&M University Office of Honors Programs and Academic Scholarships. Special thanks are also extended to Dr. Jan Hughes of the Department of Educational Psychology, who thoughtfully agreed to be a thesis advisor for a student who had no clear thesis in mind. Without her patient and optimistic guidance and support, this project would not have been possible. I would also like to thank Barbara Meehan, Claire Collie, Jennifer Froehlich, and Clarissa Escobar, whose knowledge and help proved invaluable to me throughout the course of my research. Finally, my thanks to all those associated with making the Prime Time project, and thus my project, possible.
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INTRODUCTION

Early identification of childhood aggression is of interest to both educators and researchers. Problematic levels of aggressive behavior in the early years consistently predict adult antisocial behavior and criminality. As such, it is important to identify children for whom participation in intervention programs would be advantageous. The purpose of this study is to determine if teachers, who hold the primary responsibility for nominating children to participate in intervention programs, are identifying the correct children for inclusion. Several studies have documented the tendency of Euro-American teachers to over-identify African-American children as aggressive (Eaves, 1975; Puig et al., 1999; Zimmerman, Khoury, Vega, Andres, & Warheit, 1995). It is not possible, however, to determine whether this tendency reflects actual differences in the levels of aggression among ethnic subgroups or whether there indeed exists an issue of cultural misperception; thus, the accuracy of teachers' judgements remains questionable. One way to determine the accuracy of teacher ratings is to compare them with ratings of known reliable informants — namely peers. If teachers and peers differ in their perceptions of aggression as a function of the rated child's ethnicity, such that teachers tend to perceive higher levels of aggression in African-American children than do their peers (their African-American peers in particular), then quite possibly teachers are incorrectly perceiving aggressive behavior through the biased lens of a different culture.

Of interest, consequently, is the degree to which teachers and peers agree in their perceptions of children who are highly aggressive. Though teachers and peers interact with and observe school children in the same context, peer evaluations of rejection (a correlate of aggression) are known to be more predictive of future adjustment difficulties than are teachers’
ratings (Cowen, Pederson, Babigian, Izzo, & Trost, 1973). As such, if teachers perceive children to be aggressive enough for participation in an intervention program, yet the children's peers do not perceive these same children as aggressive, then the accuracy of the teacher's perceptions of the children's levels of aggression must be called into question. Furthermore, because teachers' nominations and ratings of aggressive children are more often than not the only factors considered in referrals to intervention programs (given the difficulties and expenses related to obtaining peer sociometric ratings), children who are not also viewed by their peers as aggressive may be wrongly included in such programs.

Treatment effects for school-based intervention programs have resulted in varied losses and gains, providing researchers with evidence of reduced overall effectiveness (Beelmann, Pfingsten, & Losel, 1994). In part, researchers have attributed the small gains accruing from such programs to the possible iatrogenic effects associated with participation in school based intervention programs (Cavell & Hughes, in press; Dishion, Andrews, & Crosby, 1995). These harmful effects are thought to be a result of negative peer influence operating within groups of aggressive children (Arnold & Hughes, 1999). That is, aggregating aggressive children for participation in intervention programs increases these children's interactions with deviant peers. This increased interaction may influence a child to adopt antisocial values and behaviors that he or she might otherwise not have adopted. Additionally, those children involved in school-based intervention programs must suffer the stigmatizing label of aggressive.

It is therefore important to determine for whom such programs are beneficial. Moderately aggressive children are at a greater risk than highly aggressive children for being negatively influenced by aggressive peers (Vitaro, Tremblay, Kerr, Pagani, & Bukowski, 1997). Children nominated by teachers as aggressive but who are not also perceived as aggressive by their peers may be inappropriate candidates for an intervention program for aggressive children.
Given the potential iatrogenic effects of such programs, inclusion of these children may not be justified. The risks which these negative effects pose may outweigh the benefits of intervention.

Past studies reveal that teacher ratings of student behavior problems vary according to ethnicity of both teacher and student (Eaves 1975; Puig et al., 1999; Zimmerman et al., 1995). A 1975 study of fourth- and fifth grade boys demonstrated that Euro-American teachers tend to rate African-American children significantly higher on the Behavior Problem Checklist (Quay & Peterson, 1967) than do African-American teachers. The ratings of African-American teachers did not vary according to child ethnicity. A more recent study by Zimmerman et al. (1995) replicated these findings for a sample of young adolescent boys. African-American teachers rated African-American students as having significantly fewer behavior problems using the Teacher Report Form (TRF; Achenbach, 1991) than did Euro-American teachers rating African-American students. Additionally, the percentage of students to whom teachers attributed high levels of problem behavior but to whom parents did not differed significantly according to the rated child’s ethnicity, such that African-American students received higher scores from their teachers than from their parents as compared to Hispanic and Euro-American students. A similar study by Puig et al. (1999) concluded that ethnic similarities between teachers and students may affect teachers’ perceptions of students’ problem behavior. Jamaican teachers noted less problem behavior among their students than U.S. teachers did among theirs; an overwhelming majority of Jamaican teachers and students in the study had a shared ethnicity, while the U.S. African-American students involved in the study were most likely to be rated by Euro-American teachers.

Given this tendency for teacher/student ethnicity to interact and influence teacher perceptions of student problem behavior, it is important to investigate the accuracy of teachers’ ratings of children of different ethnicities. Again, inclusion of the wrong children in intervention
programs for aggression may result in more harm than good. Given that teacher and peer ratings of aggression demonstrate consistent, moderate agreement in non-select samples of children (Epkins, 1995; French & Waas, 1985), and given the well-documented reliability of peer ratings (Hughes, 1990), any disparity between the two calls into question the accuracy of the teachers’ perceptions of aggression. It is thus worthwhile to examine peer ratings of aggression of children nominated by their teachers as aggressive as a function of the rated child’s ethnicity. In considering these ratings, it is also important to consider whether the rated child is of the same ethnicity as the majority of classmates who provide the ratings. Young children consistently show preferences for children of both the same sex and the same race as themselves in terms of social comparison, friendships, and peer acceptance as measured by sociometric ratings (Graham & Cohen, 1997; Kupersmidt, De Rosier & Patterson, 1995; Meisel & Blumberg, 1990). Furthermore, these preferences have been shown to be influenced by the ethnic composition of the classroom (Kistner, Metzler, Gatlin, & Risi, 1994) such that children who are an ethnic minority within the classroom tend to receive significantly fewer positive nominations than those children who belong to the ethnic majority. More negative nominations were received by classroom ethnic minorities for girls but not for boys. Clearly, then, in using peer ratings as a way to test the accuracy of teacher ratings, it is also important to consider the ethnic composition of the classroom in which children are being rated.

A study by Hudley (1993) compared teacher and peer perceptions of aggression as a function of, among other factors, ethnicity of both teachers and students being rated. Whereas no significant differences were found as a function of teacher ethnicity, all teachers rated African-American boys as significantly more aggressive than their peers. Teacher and peer agreement did not systematically differ as a function of child ethnicity. However, the majority (74%) of the students in the study were African-American, and over one-half (62.5%) of the teachers were
also African-American. Effects of ethnic composition of classroom were not considered. Differences in sample characteristics are thought to account for results not consistent with those hypothesized in the present study; conflicting evidence suggests that the issue under scrutiny is not a closed one and is in need of further investigation.

This study will examine the relationship between child ethnicity and teacher identifications of aggressive children by asking whether, among a sample of teacher identified aggressive children, there are differences in levels of peer rated aggression. The central question asks whether any differences found might be a function of the rated child's ethnicity, and, if so, whether these differences interact with the ethnic composition of the classroom. Two principal ethnic groups are considered in this research: African-American and Euro-American. It is predicted, in light of the supporting literature, that peer ratings of aggression for children identified by Euro-American teachers as aggressive will differ based on ethnicity of the rated child, such that nominated African-American children will be seen as significantly less aggressive than nominated Euro-American or Hispanic children. Additionally, a statistically significant interaction between the nominated child's ethnicity and the ethnic composition of classroom in predicting peer ratings of aggression is expected. That is, nominated children in classrooms that are predominantly of the same ethnicity as themselves will receive lower peer ratings of aggression than will nominated children in classrooms that are predominantly of a different ethnicity.
METHOD

Participants

Data are drawn from a sample of 425 second and third grade children whose teachers have nominated them to participate in a school-based intervention program for aggressive children and for whom parental consent to participate has been obtained. The intervention program, known as Prime Time, involves mentoring, teacher and parent consultation, and skills training. For details regarding the Prime Time program, see Cavell & Hughes (in press). Though not all of the nominated subjects actually qualified for participation in the Prime Time program, all initial nominations were based on teacher observations of perceived aggressive behavior. The present study will thus consider both qualifying and non-qualifying children. Table 1 presents data on the demographics of the sample. Only those peers whose parents consented to their children’s participation in the sociometric assessment partook in the ratings. However, all children in the classroom were eligible to be rated.

Measures

Teacher nominations were obtained via the distribution of a nomination form requesting the names of three or four children described as follows: “These children may start fights, hold grudges, be mean to or exclude other children, tease or annoy other children, over-react to classmates’ provocations, resist your authority, or have difficulty conforming to class rules.”

Peer ratings were obtained via sociometric procedures. All classmates in the target child’s classroom for whom written parental permission was obtained completed a modified version of the Revised Class Play. The Revised Class Play has demonstrated both good internal consistency and discriminate validity (Masten, Morrison, & Pellegrini, 1985; Realmuto, August, Sieler, & Pessoa-Brandao, 1997).
Table 1.

Demographic Characteristics of Children by Condition

<table>
<thead>
<tr>
<th>Grade</th>
<th>Euro-American (N=134)</th>
<th>African-American (N=178)</th>
<th>Hispanic (N=101)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>2</td>
<td>69 (52)</td>
<td>101 (57)</td>
<td>44 (44)</td>
</tr>
<tr>
<td>3</td>
<td>65 (49)</td>
<td>77 (43)</td>
<td>57 (56)</td>
</tr>
<tr>
<td>Males</td>
<td>105 (78)</td>
<td>114 (64)</td>
<td>75 (74)</td>
</tr>
<tr>
<td>Females</td>
<td>29 (22)</td>
<td>64 (36)</td>
<td>26 (26)</td>
</tr>
<tr>
<td>Single Parent</td>
<td>42 (31)</td>
<td>83 (47)</td>
<td>21 (31)</td>
</tr>
</tbody>
</table>

Categorical Variables

<table>
<thead>
<tr>
<th>Continuous Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>M SD</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Mother's Level of Education (in years)</td>
</tr>
</tbody>
</table>

The Revised Class Play asks children to be directors of an imaginary class play and to nominate classmates who best fit behavioral descriptions. For the purposes of this study, two behavioral descriptions were developed to assess relational and overt aggression. Children nominated
classmates who fit a description of a relationally aggressive child and who fit a description of an overtly aggressive child. The description of a relationally aggressive child is based on descriptors found by Crick and Grotpeter (1995) to correlate with a relational aggressive factor: "These children get even by keeping someone out of their group, say they won't be friends if they don't get their way, ignore someone they are mad at, and tell rumors or mean lies about someone they are mad at." The description of an overtly aggressive child is based on descriptors found to correlate with overt aggression: "These children pick on kids, start fights, beat up others, and hit or push other kids a lot." Children could list as many classrooms for each item as they deemed appropriate. The number of nominations for relational and overt aggression were standardized within classrooms but not within gender. Due to the high correlation ($r = .77$) between relational aggression and overt aggression, the two standardized scores were averaged to obtain a mean of peer rated aggression.

**Design and Procedure**

All data (teacher nominations and peer ratings) were collected in the fall of the year no sooner than eight weeks into the school year. Sociometric questionnaires were administered by student research assistants. Children were instructed to keep their responses private. Both teachers and research assistants monitored the classroom to ensure compliance with the privacy request. After the questionnaires were completed, children were given a distraction opportunity in order to minimize possible discussion of responses.

Ethnic composition of each classroom was derived from rosters provided by the schools. The ethnicity recorded on the roster for each child was given by parents. Ethnicity data were not provided by some schools, and therefore ethnicity data for 42 out of 197 classrooms is missing. Because most nominated children in the sample came from classrooms in which there was no clear ethnic majority (43% of the classrooms were majority Euro-American, 10% majority
African-American, 12% majority Hispanic), Hispanic and African-American peers were grouped together as being of "minority ethnicity," and Euro-American peers were considered of "majority ethnicity," so that, for example, an African-American child's ethnicity matches that of both African-American and Hispanic children. More nominated children (65%) matched the majority ethnicity of their classroom than not.

Teacher ethnicity was obtained by consulting research assistants who either solicited teachers themselves or, in some cases, the elementary school. Ethnicity data is missing for 9 teachers. Of the 135 teachers included in the study, the majority (81.5%) are Euro-American, 7.4% are Hispanic, 2.2% are African-American, and 0.7% are Asian-American.

Data Analysis Plan

It is predicted that peer ratings of aggression among teacher nominated children will differ based on ethnicity of rated child. ANOVA will be used to test this hypothesis, with rated child's ethnicity as the independent variable and peer ratings of aggression as the dependent variable.

Additionally, a statistically significant interaction between the rated child's ethnicity and the ethnic composition of classroom in predicting peer ratings of aggression is expected. That is, nominated children in classrooms that are predominantly of the same ethnicity as themselves will receive lower peer ratings of aggression than will nominated children in classrooms that are predominantly of a different ethnicity. This hypothesis will be tested with a 2 (child ethnicity) X 2 (match/non-match) ANOVA with peer ratings of aggression as the dependent variable.

Only those nominated children whose teachers fall into the Euro-American category will be considered in the main analyses; because the number of Hispanic, African-American, and Asian-American teachers are small (no more than 10 for each group), tests for effects as a function of teacher ethnicity would lack statistical power.
RESULTS

A two-way analysis of variance was conducted using ethnicity (Euro-American, African-American or Hispanic) and “match” (nominated child’s ethnicity matched or did not match the ethnicity of the majority of classmates) as the independent variables and peer ratings of aggression as the dependent variable. Peer ratings of aggression were calculated as the average of the standardized scores for relational and overt aggression.

Hypothesis 1:

A significant main effect was yielded for ethnicity \[ F(2,266) = 3.59, \ p < .05 \]. Contrary to the hypothesis, nominated African-American children received peer ratings of aggression which were significantly higher \( M= .99, \ SD=1.06 \) than those received by their Euro-American \( M= .64, \ SD=1.09 \) and Hispanic \( M= .70, \ SD=1.06 \) nominated peers.

Hypothesis 2:

No significant interaction was yielded between ethnicity of rated child and ethnic composition of classroom \[ F(2, 266) = .489, \ p > .10 \]. That is, African-American nominated children were rated as significantly more aggressive than their Euro-American and Hispanic nominated peers, regardless of whether they were being rated by other minority peers or by Euro-American peers. Table 2 presents descriptive statistics for peer ratings of aggression separately for children who were in classrooms in which a majority of classmates were of the same ethnicity as themselves (matched) and children who were in classrooms in which a majority of classmates were of a different ethnicity (non-matched).
Table 2.

Means and Standard Deviations for Peer Ratings of Aggression by Matched and Non-Matched Classrooms

<table>
<thead>
<tr>
<th>Nominated Child’s Ethnicity</th>
<th>Matched with classroom majority</th>
<th>Non-matched with classroom majority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Euro-American</td>
<td>.66</td>
<td>1.17</td>
</tr>
<tr>
<td>African-American</td>
<td>.91</td>
<td>.98</td>
</tr>
<tr>
<td>Hispanic</td>
<td>.68</td>
<td>1.03</td>
</tr>
</tbody>
</table>
CONCLUSION

Contrary to prediction, peer ratings of aggression among a sample of teacher identified aggressive children were significantly higher for African-American nominated children than for Euro-American or Hispanic nominated children. Furthermore, these African-American nominated children received higher aggression scores than other nominated children from both Euro-American and other minority peers. These findings do not support the view that Euro-American teachers are over-identifying African-American children for inclusion in school-based intervention programs that target aggression. However, African-American children are nominated for inclusion to these programs in numbers disproportionate to their actual numbers in the greater elementary school population. Whereas African-American children constitute 24.5% of elementary school children in the Bryan Independent School District, they constitute 41.9% of the children nominated for participation in Prime Time. As such, it will be important to investigate alternative explanations for this phenomenon.

The socioeconomic status for the nominated children in this study as indexed by mother’s level of education in years was less than 12 for both the Hispanic (M=9.8, SD=3.0) and African-American subgroups (M=11.6, SD=1.7). It would seem, then, that lower mother education level is not predictive of higher levels of aggression, as Hispanic nominated children have a lower mean peer rating of aggression than African-American nominated children, yet their mothers have lower education attainment. However, it would be valuable to gather additional indices on the socioeconomic status of these nominated children and determine whether some interaction between socioeconomic status and ethnicity is present. In a sample of African-American children of a higher mean socioeconomic status, for example, are these
children still nominated in numbers disproportionate to their actual percentage in the population for participation in intervention programs targeting aggression?

Given that being perceived as aggressive does not coincide with lower levels of peer social acceptance, one cannot conclude that African-American children perceived as aggressive are less well liked by their same ethnicity peers (Stormshak et al., 1999). Hence, risk status in terms of peer rejection and its well-established future correlates (Loeber, 1990) may be lower for these children. However, given the risk of possible iatrogenic effects resulting from participation in school based selective intervention programs, future researchers and educators should be advised to study and consider the promising advantages of universal prevention programs. Such programs allow teachers to promote pro-social behavior to all members of a classroom rather than to just a select group, fostering an environment in which the latter receive support for discarding antisocial behavior (Kazdin, 1990, 1993). Additionally, developing greater social competence in all members of a class should lead to a superior classroom atmosphere that encourages improved peer relationships among all peers (Battistich, Solomon, Watson, Solomon, & Schaps, 1989; Elias et al., 1998). A study by the Conduct Problems Prevention Research Group (1999) revealed that integrating the two types of school-based programs (universal prevention and selective intervention) resulted in both improved peer relations in general and in reduced aggressive behavior among the select group. The stigma of being labeled aggressive as well as the decreased interaction with pro-social children that inevitably results from participation in selective intervention programs are both corrected by the addition of the universal prevention element. If African-American children are not over-nominated by their teachers for inclusion in school-based selective intervention programs targeting aggression and are actually for whatever reason displaying more aggressive behavior than are other ethnic subgroups, then perhaps the integration of universal prevention and selective intervention should
be seriously considered so as to minimize possible iatrogenic effects resulting from participation in selective intervention alone.
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PRESENTATIONS:

PROFESSIONAL SOCIETIES
American Psychological Association, Student Affiliate