Gifted Programs: Gender Differences in Referral and Enrollment

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Abstract
The purpose of this study was to examine girls’ and boys’ referral to and enrollment in gifted programs. Data on overall enrollment, referral, and referral outcome were obtained by gender and grade from five school boards offering gifted programs. A greater number of boys than girls were enrolled in gifted programs. When the referral process for the most recent year was examined, however, no gender differences were observed in referral or in decision to enroll. The variability in the results observed underlines the importance of longitudinal data in delineating more fully the occurrence and pattern of gender differences in referral to and enrollment in gifted programs.

The underrepresentation of gifted women in higher levels of educational training and occupational status may be attributable to many factors, including the opportunities which may be differentially provided to gifted girls and boys to develop their abilities. One such opportunity is referral to and enrollment in gifted programs. The likelihood of equal opportunity is not certain. A developmental shift may also occur among gifted children. Gifted programs started in elementary school have been found to enroll as many girls as boys (Callahan, 1980), yet adolescent gifted girls are less likely to accept an enrollment offer for a special accelerated program than are adolescent gifted boys (Fox, Benbow, & Perkins, 1983), perhaps because giftedness may be more problematic for adolescent girls than boys (Kelly & Colangelo, 1984). These gender differences in enrollment in gifted programs may result from self-selection out of programs because of these concerns; from differences in referrals by teachers, parents, or principals; or from differences in performance on standardized tests (Ebmeier & Schmulbach, 1989). The objectives of the present study were to examine gender differences in overall enrollment in gifted programs and to investigate whether the referrals and referral outcomes would be differentiated on the basis of student gender. It was hypothesized that a gender difference in enrollment in gifted programs favoring boys would be observed.

Method
Five school boards, located predominantly in urban/suburban areas, participated. In the year of data collection, the size of the gifted programs ranged from 127 to 437 students per board. The grade range in which gifted programs were offered varied by school board, ranging from Grade 4 to Grade 13. A global conception of giftedness was utilized by all the special programs studied. Therefore, the data cannot document possible gender differences in referral and enrollment for enrichment in specific areas, such as science, mathematics, or fine arts. Identification criteria differed slightly from board to board, but all included the use of the WISC-R or an equivalent (acceptable values on the WISC-R ranged from 130 to 140+).

Variables
Data were obtained for a 1-year period on the overall number of students enrolled in a gifted program, the number of students referred in that year, and their referral outcome. A new referral was defined as a student who had undergone a process of referral during that academic year, either in the fall or winter term. Three general referral outcomes were identified: (a) did not quality (i.e., did not qualify on the basis of subsequent group or individual testing), (b) qualified and enrolled, or (c) qualified but chose not to enroll.

Results
To assess the significance of gender differences in the total number of children enrolled in the gifted programs, an overall chi-square analysis was conducted. The chi-square was significant, \( \chi^2(1, N = 1,291) = 50.37, p<.001 \), with more boys than girls enrolled in the gifted programs. Since complete data existed for Grades 5 to 8 for four of the five school boards, a subsequent chi-square analysis was conducted to assess gender differences and similar results were obtained, \( \chi^2(1, N = 680) = 12.45, p<.001 \).

Putting the Research to Use
Identification criteria for special programs for gifted children have been the subject of considerable reflection and some criticism. Most contemporary authorities advocate replacement of traditional IQ cutoffs with multiple criteria that take into account the child's creativity, motivation, and interest. Some recent theoretical models suggest inclusion of youngsters whose giftedness is most evident in specific domains only. This research indicates the need for careful attention to unintended bias when identification procedures are implemented in schools. Although this research was devoted to gender differences, there could be other biases, based on physical appearance, ethnic or racial origin, and so forth. In order to help avoid such bias, school districts should carefully monitor referral patterns. In addition, teachers should be informed about the characteristics of gifted children so that they will be in a position to make referrals more knowledgeably, especially in the case of bright children from underserved populations.
To examine gender differences in the total numbers of girls and boys referred to a gifted program in the year of data collection, an overall chi-square analysis was conducted on the percentages of girls and boys referred in that academic year. The chi-square was not significant (49% male), $\chi^2(1, N = 428) = 0.34$, ns. The school boards varied, however, in the direction and extent of gender differences, with one school board tending to refer more boys than girls (60% male), $\chi^2(1, N = 87) = 3.32$, $p = .07$. Because the largest percentage of children were referred in the first year of entry into a gifted program at each school board, a subsequent chi-square analysis was conducted only on data from this first year of entry. The overall chi-square was similarly not significant, $\chi^2(1, N = 181) = 0.01$, ns.

The outcome of the referral process is presented for girls and boys in Table 1. A chi-square analysis was conducted on the percentages of girls and boys and three referral outcomes (i.e., did not qualify, qualified and enrolled, or qualified but did not enroll). The chi-square was not significant, $\chi^2(2, N = 428) = 3.05$, ns.

### Table 1
Frequency of Referred Male and Female Gifted Students by Referral Outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not qualify</td>
<td>89(46%)</td>
<td>104(54%)</td>
<td>193</td>
</tr>
<tr>
<td>Qualified and enrolled</td>
<td>103(53%)</td>
<td>92(47%)</td>
<td>195</td>
</tr>
<tr>
<td>Qualified and did not enroll</td>
<td>16(40%)</td>
<td>24(60%)</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>208(49%)</td>
<td>220(51%)</td>
<td>428</td>
</tr>
</tbody>
</table>

Discussion

The results of the present survey provide partial support for the hypothesis that more boys than girls tend to be enrolled in gifted programs. The results of the present study, however, extend our knowledge by indicating the variability in the occurrence and extent of this gender difference. When overall enrollment from the five school boards was considered, a gender difference favoring boys was observed.

Evidence of variability in the occurrence of a gender difference in enrollment favoring boys was provided by data on the numbers of boys and girls who were referred to a gifted program in the year in which data were collected. No overall gender difference was found; however, one school board tended to refer more boys than girls. In addition, no gender difference was found in decision to enroll.

The general picture conveyed by these data is one of variability. Although the gender differences tended to favor boys, there were a number of cases in which no gender difference was observed. Furthermore, when the proportions of boys and girls referred to a gifted program (based on the most recent year) are compared with the proportions presently enrolled in a gifted program (based on several years), the results are contradictory.

As indicated by the variability in the present data, it is important that referral and enrollment data be collected and monitored on an annual basis for possible gender and racial effects both at the local school district level and the provincial/state level. The longitudinal monitoring of gender and racial effects in referral and enrollment is necessary to assess whether specific subpopulations are systematically disadvantaged. It is important to ensure equal opportunity for all students.

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References


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Referral data were not available for one school board because their referral process occurred late in the academic year.