Research on Teacher Judgments and Their Effects

- From the first day of school, teachers make numerous evaluations of their students. Teachers’ judgments have been shown to differ based on student characteristics:
  - Girls are rated as better in reading and writing and boys as better in math and science (Meece, Glenken, & Burg, 2006).
  - Teachers’ judgments vary by student race (Parks & Kennedy, 2007).
  - Students with low socioeconomic status (SES) are judged as having less promising outcomes (Auwarter & Aruguete, 2008).
- Teacher-student relationships tend to become more negative over the course of the school year, undermining student motivation (Gehlbach, Brinkworth, & Harris, 2012).
- When teachers expect their students to grow intellectually, students experience more positive academic outcomes (Rosenenthal, 1998).

Purpose

The purpose of this study was to examine patterns in teachers’ ratings of student motivation and competence in both domains. Specifically, we asked:

1. Do teachers rate their students’ academic competence and motivation differently as a function of students’ gender, race, or SES?
2. How do teachers’ ratings change over the course of the school year?
3. How are teachers’ ratings related to students’ actual academic achievement?

Method

Participants

- Participants were mathematics and language arts teachers (N = 92) from four middle schools in the southeastern U.S.
- Their students (N = 2,486; 49% girls) were 53.7% White, 30.7% African American, 8.8% Hispanic, 2.5% Asian, and 0.4% other, with 0.5% unreported.
- Fifty-four percent of students qualified for free or reduced-priced lunch (FRELD), which was used as a proxy for SES.

Procedure and Measures

At three points (fall 2010, winter 2010, and spring 2011), teachers were asked to rate each student’s competence and motivation in math and reading, as follows.

- Math TR Motivation
- Math TR Competence
- Read TR Motivation
- Read TR Competence

Procedure: Please rate each student’s current level of math and reading competence and motivation on a 1 to 6 scale, with 1 being very low and 6 being very high.

Analyses

An independent samples t test was used to examine mean differences by gender and by SES. Analysis of variances (ANOVA) was used to examine mean differences by race. Pearson’s correlation was used to examine relationships between teacher ratings and student achievement.

Results

Table 1. Teacher Ratings by Student Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Math TR Motivation</th>
<th>Math TR Competence</th>
<th>Read TR Motivation</th>
<th>Read TR Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>4.35 (1.29)</td>
<td>4.25 (1.28)</td>
<td>4.36 (1.41)</td>
<td>3.66 (1.53)</td>
</tr>
<tr>
<td>Boys</td>
<td>4.42 (1.34)</td>
<td>3.84 (1.43)</td>
<td>4.74 (1.15)</td>
<td>4.40 (1.19)</td>
</tr>
<tr>
<td>t</td>
<td>1.89 &lt; .05**</td>
<td>10.12 &lt; .001**</td>
<td>6.96 &lt; .001**</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td></td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Teacher Ratings by Student Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Math TR Motivation</th>
<th>Math TR Competence</th>
<th>Read TR Motivation</th>
<th>Read TR Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>4.238</td>
<td>32.68</td>
<td>4.231</td>
<td>28.18</td>
</tr>
<tr>
<td>Girls</td>
<td>4.337</td>
<td>29.89</td>
<td>4.311</td>
<td>28.18</td>
</tr>
<tr>
<td>t</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
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<td>p</td>
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</tbody>
</table>

Table 3. Teacher Ratings by Student Lunch Status

<table>
<thead>
<tr>
<th>Lunch Status</th>
<th>Math TR Motivation</th>
<th>Math TR Competence</th>
<th>Read TR Motivation</th>
<th>Read TR Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Pay</td>
<td>4.71 (1.14)</td>
<td>3.94 (1.30)</td>
<td>4.93 (1.02)</td>
<td>4.53 (1.34)</td>
</tr>
<tr>
<td>Free/Reduced</td>
<td>4.62 (1.23)</td>
<td>3.69 (1.42)</td>
<td>4.26 (1.23)</td>
<td>3.56 (1.51)</td>
</tr>
<tr>
<td>t</td>
<td>15.06 &lt; .001**</td>
<td>16.82 &lt; .001**</td>
<td>14.07 &lt; .001**</td>
<td>16.22 &lt; .001**</td>
</tr>
<tr>
<td>p</td>
<td></td>
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</tr>
</tbody>
</table>

Key Findings

- Teachers rated girls higher than they did boys in reading and mathematics motivation.
- African American students received the lowest teacher ratings and Asian American students received the highest teacher ratings in all categories.
- Students classified as lower SES were rated significantly lower than were higher SES students in motivation and competence in both domains.
- Teacher ratings slightly decreased half way through the year, but increased to original levels by late spring.
- Teachers’ competence ratings significantly predicted report card grades.

Discussion and Implications

- High ratings for Asian American students could be accounted for by the lower number of students in this group (n = 62).
- Teachers may not know a student’s economic status but may nevertheless be implicitly taking social status into account when judging students’ competence and motivation. Further research should explore the link between teacher knowledge of SES, perceptions of student abilities, and educational outcomes.
- Negative perceptions by teachers could have a harmful effect on students’ motivation and achievement, which may perpetuate or widen the achievement gap between students in traditionally “at-risk” groups and those in mainstream.
- The scope for this research should be widened to see if our results are able to be generalized. A broader sampling could offer a better picture of differences in ratings by student subgroups.

References


Contact: contact.A.E.2@uky.edu


