DISCRIMINATION IN GRADING

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WEB APPENDIX

APPENDIX TABLE 1: CORRELATIONS BETWEEN ACTUAL CHARACTERISTICS AND FINAL TEST SCORES

| Test Type: | Teacher | Blind | Teacher | | | |
|---|---|---|---|---|---|---|
| | Total | Total | Total | Math | Hindi | Art |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Constant | -4.928 | -4.035 | -0.929 | -0.874 | -1.021 | -1.054 |
| | (0.437)*** | (3.156) | (0.163)*** | (0.171)*** | (0.191)*** | (0.321)*** |
| Kshatriya | -0.161 | -0.155 | -0.012 | 0.000 | -0.010 | -0.083 |
| | (0.032)*** | (0.208) | (0.016) | (0.017) | (0.018) | (0.036)** |
| Vaishya | -0.516 | -0.548 | -0.016 | -0.033 | 0.003 | -0.127 |
| | (0.036)*** | (0.250)** | (0.013) | (0.013)** | (0.016) | (0.032)*** |
| Shudra | -1.171 | -1.235 | -0.012 | -0.030 | 0.042 | -0.176 |
| | (0.052)*** | (0.348)*** | (0.031) | (0.034) | (0.041) | (0.050)*** |
| Unknown | -0.336 | -0.352 | -0.009 | -0.049 | 0.036 | -0.106 |
| | (0.046)*** | (0.305) | (0.019) | (0.017)*** | (0.022) | (0.039)*** |
| Female | 0.213 | 0.215 | -0.012 | 0.003 | -0.002 | 0.007 |
| | (0.033)*** | (0.231) | (0.012) | (0.012) | (0.014) | (0.024) |
| Age | 0.781 | 0.630 | 0.142 | 0.151 | 0.143 | 0.139 |
| | (0.083)*** | (0.604) | (0.031)*** | (0.032)*** | (0.035)*** | (0.063)** |
| Age^2 | -0.027 | -0.020 | -0.006 | -0.007 | -0.006 | -0.006 |
| | (0.004)*** | (0.028) | (0.001)*** | (0.001)*** | (0.002)*** | (0.003)** |
| Blind Test Score | | | 0.926 | 0.926 | 0.935 | 0.631 |
| | | | (0.008)*** | (0.008)*** | (0.010)*** | (0.013)*** |
| | | | | | | |
| Observations | 3000 | | 3000 | 3000 | 3000 | 3000 |
| R-squared | 0.34 | | 0.89 | 0.9 | 0.85 | 0.5 |

Notes:

1. The first two column contain results for the total teacher test score, while Column 2 contains results for the blind test score. Columns 3 - 6 present the results for the total teacher test score and teacher score by subject, controlling for the blind test score.

2. Child performance on each exam is measured using the score normalized to the overall exam score distribution.

3. Results that are statistically significant at the one, five, and ten percent levels are indicated by ***, **, and * respectively.

APPENDIX TABLE 2:  RANDOMIZATION CHECK WITH FULL SET OF CASTE VARIABLES, ACTUAL CHARACTERISTICS

| | Brahmin | Kshatriya | Vaishya | Shudra | Unknown | Female | Age |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Kshatriya | 0.041 | -0.004 | -0.039 | 0.024 | -0.023 | 0.038 | -0.199 |
| | (0.028) | (0.032) | (0.035) | (0.017) | (0.027) | (0.036) | (0.148) |
| Vaishya | 0.039 | -0.026 | -0.041 | 0.016 | 0.012 | 0.001 | -0.079 |
| | (0.021)* | (0.025) | (0.028) | (0.012) | (0.022) | (0.029) | (0.120) |
| Shudra | 0.024 | -0.027 | 0.009 | 0.007 | -0.013 | -0.001 | 0.010 |
| | (0.023) | (0.028) | (0.031) | (0.013) | (0.024) | (0.031) | (0.131) |
| Female | 0.020 | -0.010 | 0.006 | -0.009 | -0.007 | -0.021 | -0.026 |
| | (0.014) | (0.016) | (0.017) | (0.008) | (0.014) | (0.018) | (0.075) |
| Age | 0.063 | -0.034 | 0.053 | -0.032 | -0.050 | -0.101 | 0.055 |
| | (0.044) | (0.050) | (0.055) | (0.027) | (0.045) | (0.058)* | (0.239) |
| Age^2 | -0.003 | 0.002 | -0.002 | 0.001 | 0.002 | 0.004 | -0.003 |
| | (0.002) | (0.002) | (0.002) | (0.001) | (0.002) | (0.003)* | (0.011) |
| | | | | | | | |
| Observations | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| | | | | | | | |
| F-Stat | 1.56 | 0.48 | 1.4 | 1.04 | 0.94 | 1.08 | 0.64 |
| P-Value | 0.1544 | 0.8261 | 0.2119 | 0.3964 | 0.4653 | 0.3717 | 0.701 |

Notes:

1. This table contains regressions of the actual characteristics of the children on the characteristics randomly assigned to the coversheet of the exam copy that was graded by the teachers.

2. The F-statistic and p-value provide the results of a test of joint significance of the observed characteristics.

3. Results that are statistically significant at the one, five, and ten percent levels are indicated by ***, **, and * respectively.

APPENDIX TABLE 3: RANDOMIZATION CHECK WITH FULL SET OF CASTE VARIABLES, BLIND TEST SCORES

| | Total | Math | Hindi | Art |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Kshatriya | -0.099 | -0.092 | -0.097 | -0.058 |
| | (0.068) | (0.071) | (0.065) | (0.068) |
| Vaishya | -0.055 | -0.055 | -0.050 | -0.033 |
| | (0.052) | (0.054) | (0.049) | (0.053) |
| Shudra | -0.064 | -0.060 | -0.049 | -0.082 |
| | (0.057) | (0.060) | (0.054) | (0.059) |
| Female | 0.010 | 0.029 | -0.002 | -0.019 |
| | (0.034) | (0.036) | (0.032) | (0.034) |
| Age | -0.012 | 0.046 | -0.065 | -0.005 |
| | (0.107) | (0.113) | (0.100) | (0.109) |
| Age^2 | 0.001 | -0.002 | 0.003 | -0.000 |
| | (0.005) | (0.005) | (0.005) | (0.005) |
| | | | | |
| Observations | 3000 | 3000 | 3000 | 3000 |
| | | | | |
| F-Stat | 0.4 | 0.5 | 0.47 | 0.81 |
| P-Value | 0.8822 | 0.8118 | 0.8306 | 0.5628 |

Notes:

1. This table contains regressions of the blind test scores for each child on the characteristics randomly assigned to the coversheet of the exam copy that was graded by the teachers.

2. The F-statistic and p-value provide the results of a test of joint significance of the observed characteristics.

3. Results that are statistically significant at the one, five, and ten percent levels are indicated by ***, **, and * respectively.

| Assigned Characteristics | (1) | (2) | (3) | (4) |
| --- | --- | --- | --- | --- |
| Kshatriya | -0.117 | -0.103 | -0.105 | -0.027 |
| | (0.067)* | (0.053)* | (0.054)* | (0.020) |
| Vaishya | -0.070 | -0.064 | -0.063 | -0.020 |
| | (0.050) | (0.039) | (0.040) | (0.014) |
| Shudra | -0.096 | -0.105 | -0.105 | -0.037 |
| | (0.055)* | (0.044)** | (0.044)** | (0.016)** |
| | | | | |
| Actual Test Characteristics | | YES | YES | YES |
| Grader Fixed Effect | | | YES | YES |
| Blind Test Score | | | | YES |

Notes:

1. This table presents the regression of total normalized test scores on the randomly assigned characteristics. The sample includes the 3,000 graded exams (graded in sets of 25 by 120 teachers).

2. Results that are statistically significant at the one, five, and ten percent levels are indicated by ***, **, and * respectively.

APPENDIX TABLE 5: INTERACTION OF GENDER AND CASTE

| Assigned Characteristics | (1) | (2) | (3) | (4) |
| --- | --- | --- | --- | --- |
| Low Caste * Female | 0.036 | 0.029 | 0.029 | 0.011 |
| | (0.095) | (0.075) | (0.077) | (0.027) |
| Low Caste | -0.102 | -0.096 | -0.095 | -0.031 |
| | (0.068) | (0.051)* | (0.053)* | (0.018)* |
| Female | -0.011 | -0.012 | -0.013 | -0.002 |
| | (0.088) | (0.069) | (0.071) | (0.024) |
| Age | 0.001 | 0.003 | 0.003 | 0.001 |
| | (0.008) | (0.007) | (0.007) | (0.003) |
| | | | | |
| Actual Test Characteristics | | YES | YES | YES |
| Grader Fixed Effect | | | YES | YES |
| Blind Test Score | | | | YES |

Notes:

1. This table presents the regression of total normalized test scores on the randomly assigned characteristics.

2. The sample includes the 3,000 graded exams (graded in sets of 25 by 120 teachers).

3. Results that are statistically significant at the one, five, and ten percent levels are indicated by ***, **, and * respectively.