## On Line Appendix

Table A1: Balancing Tests for Writing BS' $D$

|  | All Students <br> (1) | Religious Students (2) |
| :---: | :---: | :---: |
| Gender (Boy = 1) | $\begin{gathered} -0.175^{* * *} \\ (0.049) \end{gathered}$ | $\begin{gathered} -0.256^{* * *} \\ (0.071) \end{gathered}$ |
| Number of siblings | $\begin{gathered} 1.119^{* * *} \\ (0.161) \end{gathered}$ | $\begin{aligned} & 0.422^{*} \\ & (0.235) \end{aligned}$ |
| Father's years of schooling | $\begin{aligned} & -0.854^{*} \\ & (0.502) \end{aligned}$ | $\begin{gathered} -2.065^{\star *} \\ (0.751) \end{gathered}$ |
| Mother's years of schooling | $\begin{gathered} -0.961^{* *} \\ (0.477) \end{gathered}$ | $\begin{aligned} & -1.206 \\ & (0.758) \end{aligned}$ |
| Ethnicity Asia/Africa | $\begin{aligned} & 0.062^{*} \\ & (0.036) \end{aligned}$ | $\begin{gathered} 0.031 \\ (0.053) \end{gathered}$ |
| Ethnicity <br> Europe/America | $\begin{gathered} 0.008 \\ (0.034) \end{gathered}$ | $\begin{aligned} & -0.099^{*} \\ & (0.058) \end{aligned}$ |
| Ethnicity Israel | $\begin{aligned} & -0.014 \\ & (0.049) \end{aligned}$ | $\begin{gathered} 0.097 \\ (0.073) \end{gathered}$ |
| Ethnicity Former Soviet Union | $\begin{gathered} -0.075^{* *} \\ (0.029) \end{gathered}$ | $\begin{aligned} & -0.038 \\ & (0.043) \end{aligned}$ |
| Ethnicity Ethiopia | $\begin{gathered} 0.018 \\ (0.018) \end{gathered}$ | $\begin{gathered} 0.010 \\ (0.026) \end{gathered}$ |
| Religiosity | $\begin{aligned} & 0.722^{* * *} \\ & (0.029) \end{aligned}$ |  |
| Gender separated school | $\begin{aligned} & 0.619^{* * *} \\ & (0.0390) \end{aligned}$ | $\begin{gathered} (0.056) \\ (0.0590) \end{gathered}$ |
| External Grade | $\begin{aligned} & 0.158^{*} \\ & (0.096) \end{aligned}$ | $\begin{gathered} 0.070 \\ (0.134) \end{gathered}$ |
| Internal Grade | $\begin{aligned} & 0.216^{*} \\ & (0.103) \end{aligned}$ | $\begin{gathered} 0.039 \\ (0.143) \end{gathered}$ |
| N | 443 | 219 |

Notes: The estimates in each column are each from separate regressions which includes questionnaire FE. The dependent variable in each regression is the characteristic of the student and the explanatory variable is a dummy for writing BS"D. The first column includes the sample of all students and the second column includes religious students only. Standard errors are presented in parentheses.

Table A2: Balancing Tests for the Assignments of Students' Tests to Examiners with Missing Values of Religious Status

|  | $(1)$ |
| :--- | :---: |
| Gender $($ Boy $=1)$ | 0.0050 |
| Number of siblings | $(0.0040)$ |
| Father's years of schooling | $-0.010^{*}$ |
|  | $(0.0050)$ |
| Mother's years of schooling | -0.0270 |
|  | $(0.0034)$ |
| Ethnicity Asia/Africa | -0.0110 |
| Ethnicity Europe/America | $(0.0310)$ |
| Ethnicity Israel | 0.0001 |
| Ethnicity Former Soviet Union | $(0.0010)$ |
| N Ethiopia | -0.0002 |
|  | $(0.0010)$ |

Notes: The dependent variable in each regression is the characteristic of the student and the explanatory variable is a dummy for missing value of religious examiner. Each regression controls for questionnaire and year fixed effects. Standard errors are corrected for examiners clustering and are presented in parentheses.

Table A3: Summary Statistics of Tests Scores, by Students' Religious Status

|  | All Students | Religious <br> Students | Secular <br> Students |
| :--- | :---: | :---: | :---: |
|  | $(1)$ | $(2)$ | $(3)$ |
| External Exam Grade |  |  |  |
|  | 70.378 | 70.050 | 70.470 |
| Internal Exam Grade | $(20.150)$ | $(20.622)$ | $(20.015)$ |
|  |  |  |  |
| Final Grade in the Exam (Average of the External | 70.210 | 81.870 | 79.740 |
| and Internal Exams Grades) | $(14.823)$ | $(14.690)$ | $(14.827)$ |
| Probability of Passing the Exam | $(16.030)$ | $(16.079)$ | $(16.011)$ |
|  | 0.892 | 0.890 | 0.892 |
| Probability of Passing the Exam (Students with | $(0.901)$ | $(0.313)$ | $(0.896)$ |
| High Parental Education) | 0.935 | 0.932 | 0.936 |
| Probability of Passing the Exam (Students with | $(0.246)$ | $(0.252)$ | $(0.245)$ |
| Low Parental Education) | 0.833 | 0.825 | 0.835 |
| Number of Observations | $(0.372)$ | $(0.379)$ | $(0.371)$ |

Notes: External exam grades are the mean of the two examiners' scores; Internal exam grades are tests examined by the teacher of the student in each subject; Final grades are the average of the external and internal exam grades; the probability of passing the exam is the probability of receiving a grade higher or equal to 55. Low parental education is equal one if both parents have 12 or less years of schooling. Standard deviations are reported in parentheses.

Table A4: Summary Statistics of Tests Examination

| Number of Questionnaires Examined by each Examiner | 2.230 |
| :--- | :---: |
| Number of Booklets Examined by each Examiner | $(1.383)$ |
| Number of Booklets per School Examined by each Examiner | 1650 |
|  | $(1443)$ |
| Number of Booklets Taken by Each Student | 12.310 |
|  | $(5.332)$ |
| Number of Total Booklets Examined by each Examiners | 4.885 |
| Number of Schools | $(2.778)$ |

Notes: Standard deviations are reported in parentheses.

Table A5: Summary Statistics of Number of Tests, by Religious Status and Gender of Examiners

|  | All Examiners |  |  | Male Examiners |  |  | Female Examiners |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All <br> Examiners <br> (1) | Secular Examiners <br> (2) | Religious Examiners (3) | All <br> Examiners <br> (4) | Secular Examiners (5) | Religious Examiners <br> (6) | All <br> Examiners <br> (7) | Secular Examiners <br> (8) | Religious Examiners |
| Number of <br> Booklets of Secular <br> Students <br> Number of <br> Booklets of <br> Religious Students | $3,234,045$ 899,121 | $1,876,601$ 511,944 | 927,710 273,918 | 496,996 130,800 | 261,299 65,596 | 140,996 40,436 | $2,710,385$ 761,315 | $1,615,302$ 446,348 | 786,714 233,482 |

Table A6: Summary Statistics of Examiners' Exposure to Different Religious Status Environmental Measures, by Religious Status and Gender of Examiners

|  |  | All <br> Examiners <br> (1) | Secular <br> Examiner (2) | Religious <br> Examiner (3) | Male Examiners <br> (4) | Secular <br> Male <br> Examiners <br> (5) | Religious Male <br> Examiners <br> (6) | Female Examiners <br> (7) | Secular <br> Female Examiners <br> (8) | Religious Female Examiners (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exposure <br> to <br> Neighbours with a <br> Different <br> Religious <br> Status | Mean | 0.189 | 0.136 | 0.296 | 0.230 | 0.154 | 0.363 | 0.183 | 0.133 | 0.284 |
|  | Std. <br> Deviation | (0.243) | (0.164) | (0.327) | (0.268) | (0.179) | (0.337) | (0.238) | (0.161) | (0.324) |
|  | Median | (0.080) | (0.080) | (0.120) | (0.120) | (0.090) | (0.340) | (0.080) | (0.080) | (0.090) |
|  | Percent of Within |  |  |  |  |  |  |  |  |  |
|  | Examiner <br> Variation | 0.075 | 0.103 | 0.019 | 0.103 | 0.114 | 0.084 | 0.077 | 0.103 | 0.024 |
| Exposure to Peers at School with a Different Religious Status | Mean | 0.185 | 0.152 | 0.253 | 0.219 | 0.165 | 0.316 | 0.180 | 0.150 | 0.242 |
|  | Std. | (0.236) | (0.148) | (0.341) | (0.268) | (0.18 | (0.353) | (0.230) | (0.141) | (0.338) |
|  | Median | (0.100) | (0.110) | (0.060) | (0.110) | (0.110) | (0.120) | (0.100) | (0.110) | (0.050) |
|  | Percent of Within |  |  |  |  |  |  |  |  |  |
|  | Examiner Variation | 0.175 | 0.181 | 0.163 | 0.155 | 0.187 | 0.097 | 0.181 | 0.180 | 0.181 |

[^0]Table A6: Summary Statistics of Examiners' Exposure to Different Religious Status Environmental Measures, by Religious Status and Gender of Examiners- Continued

|  |  | All <br> Examiners <br> (1) | Secular Examiner (2) | Religious Examiner (3) | (4) | Male Examiners <br> (4) | Secular Male Examiners (5) | Religious Male <br> Examiners <br> (6) | Female Examiners (7) | Secular Female Examiners (8) | Religious Female Examiners (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exposure <br> to Same <br> Subject <br> Peers at <br> School <br> with a <br> Different <br> Religious <br> Status | Mean | 0.120 | 0.096 | 0.167 |  | 0.139 | 0.115 | 0.182 | 0.116 | 0.094 | 0.164 |
|  | Std. |  |  |  |  |  |  |  |  |  |  |
|  | Deviation | (0.207) | (0.157) | (0.276) |  | (0.226) | (0.184) | (0.279) | (0.204) | 0.153 | (0.276) |
|  | Median | (0.000) | (0.000) | (0.000) |  | (0.000) | (0.000) | (0.000) | (0.000) | 0.000 | 0.000 |
|  | Percent of Within |  |  |  |  |  |  |  |  |  |  |
|  | Examiner |  |  |  |  |  |  |  |  |  |  |
|  | Variation | 0.257 | 0.301 | 0.166 |  | 0.240 | 0.242 | 0.237 | 0.260 | 0.310 | 0.152 |
| Exposure <br> to Same <br> Gender <br> Peers at <br> School <br> with a <br> Different <br> Religious <br> Status | Mean | 0.183 | 0.148 | 0.251 |  | 0.223 | 0.186 | 0.291 | 0.176 | 0.142 | 0.244 |
|  | Std. |  |  |  |  |  |  |  |  |  |  |
|  | Deviation | (0.237) | (0.150) | (0.339) |  | (0.259) | (0.199) | (0.331) | (0.232) | (0.141) | (0.341) |
|  | Median | (0.100) | (0.110) | (0.050) |  | (0.130) | (0.130) | (0.110) | (0.090) | 0.100 | 0.050 |
|  | Percent of Within |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 0.185 | 0.149 |
|  | Variation | 0.176 | 0.186 | 0.156 |  | 0.255 | 0.308 | 0.159 | 0.173 |  |  |



 gender).

Table A7: Estimated In-Group Biases of Examiners on Raw Test Scores, by Examiners' Gender

|  | All Examiners |  | Male Examiners |  | Female Examiners |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Questionnaires, Year and Student Fixed Effects <br> (4) | Year, Student and Examiners by Questionnaire Fixed Effects <br> (6) | Questionnaires, Year and Student Fixed Effects <br> (11) | Year, Student and Examiners by Questionnaire Fixed Effects <br> (13) | Questionnaires, <br> Year and Student Fixed Effects <br> (18) | Year, Student and Examiners by Questionnaire Fixed Effects <br> (20) |
| Religious Examiner | $\begin{aligned} & 0.204^{* *} \\ & (0.098) \end{aligned}$ |  | $\begin{aligned} & 0.4070 \\ & (0.256) \end{aligned}$ |  | $\begin{aligned} & 0.192^{*} \\ & (0.106) \end{aligned}$ |  |
| Religious Student x Religious Examiner | $\begin{aligned} & 0.235^{\star *} \\ & (0.115) \end{aligned}$ | $\begin{gathered} 0.168 \\ (0.115) \end{gathered}$ | $\begin{aligned} & 0.776^{\star *} \\ & (0.309) \end{aligned}$ | $\begin{aligned} & 0.680^{\star *} \\ & (0.309) \end{aligned}$ | $\begin{gathered} 0.187 \\ (0.124) \end{gathered}$ | $\begin{gathered} 0.106 \\ (0.122) \end{gathered}$ |
| Number of Observations | 3,590,116 | 3,590,116 | 508,324 | 508,324 | 3,081,792 | 3,081,792 |

Table A8: Sensitivity of the Results to Students' School Characteristics

|  | Gender Separation (Dummy=1 if Gender Separated School) <br> (1) | Questionnaire Separation <br> (2) |
| :---: | :---: | :---: |
| Religious Examiner | $\begin{aligned} & 0.011^{* *} \\ & (0.005) \end{aligned}$ | $\begin{gathered} 0.012 \\ (0.012) \end{gathered}$ |
| Religious Student x Religious Examiner | $\begin{gathered} 0.010 \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.012 \\ (0.080) \end{gathered}$ |
| Religious Examiner x Students' School Characteristics (Dummy for Gender Separated School/Questionnaire Separation) | $\begin{gathered} 0.000 \\ (0.010) \end{gathered}$ | $\begin{aligned} & -0.003 \\ & (0.028) \end{aligned}$ |
| Number of Observations | 3,547,764 | 3,566,827 |
| Notes: All columns present the results from separated regressions based on each regression include additionally the interaction between the dummy for dummy variable that equals one if the school is a gender separated religious and secular students take apart. Standard errors are corrected for examiners | specification (that include year, questionnaire an miners with a different characteristic of students' s tionnaire Separation is the percentage of question are presented in parentheses. | nt fixed effects), Gender Separati per school that re |

Table A9: Estimated In-Group Biases of Examiners on Test Scores, by Core Subject of Instruction

|  | Math Examiner | Literature Examiner | Social Studies Examiner | English Examiner |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Religious Student x Religious Examiner | $\begin{gathered} 0.011 \\ (0.007) \end{gathered}$ | $\begin{aligned} & 0.013^{*} \\ & (0.007) \end{aligned}$ | $\begin{gathered} 0.005 \\ (0.006) \end{gathered}$ | $\begin{gathered} 0.015^{* * *} \\ (0.006) \end{gathered}$ |
| Religious Student x Religious Examiner x Dummy for Subject of Instruction (math/literature/.social studies/English) | $\begin{aligned} & -0.003 \\ & (0.014) \end{aligned}$ | $\begin{aligned} & -0.007 \\ & (0.009) \end{aligned}$ | $\begin{gathered} 0.041^{* * *} \\ (0.013) \end{gathered}$ | $\begin{aligned} & -0.012 \\ & (0.014) \end{aligned}$ |
| Number of Observations | 3,590,116 | 3,590,116 | 3,590,116 | 3,590,116 |

Notes: All columns present the results from separated regressions based on the preferred specification (that include year, questionnaire and student fixed effects), where each regression include additionally the interaction with a dummy for the relevant subject of instruction (math/literature/social studies/English). Standard errors are corrected for examiners clustering and are presented in parentheses.

Table A10: Estimated In-Group Biases of Examiners on Test Scores, by Examiners' Characteristics

|  | Examiners' Subject of Instruction <br> (1) | Examiners' Age <br> (2) | Examiners' <br> Education <br> (3) |
| :---: | :---: | :---: | :---: |
| Religious Student x Religious Examiners | $\begin{gathered} 0.013 \\ (0.009) \end{gathered}$ | $\begin{aligned} & 0.019^{*} \\ & (0.008) \end{aligned}$ | $\begin{gathered} 0.001 \\ (0.010) \end{gathered}$ |
| Religious Student x Religious Examiners x Dummy for Science/ Older/ High Educated Examiners | $\begin{aligned} & -0.005 \\ & (0.012) \end{aligned}$ | $\begin{aligned} & -0.019^{*} \\ & (0.011) \end{aligned}$ | $\begin{gathered} 0.014 \\ (0.012) \end{gathered}$ |
| Number of Observations | 3,590,116 | 3,590,116 | 3,590,116 |
| Notes: All columns present the results from separated regressions base each regression include additionally the interaction with a different cha older than 51 years old, (the median of the distribution). Examiners' educ are corrected for examiners clustering and are presented in parentheses. | preferred specification (that ics of examiners. Examiner dummy variable that equal | year, questionnaire a dummy variable th e examiner is with a | fixed effects), ne if the exam hD. Standard |

Table A11: Estimated In-Group Biases of Examiners on Test Scores, by Type of Religious Examiners

|  | Type of Religiosity (Dummy for Ultra-Orthodox Jew) <br> (1) | Examiners' School is Located in Segregated Religious Areas (Dummy=1 if Segregated Religious Areas) (2) |
| :---: | :---: | :---: |
| Religious Student x Religious Examiner | $\begin{aligned} & 0.017^{*} \\ & (0.007) \end{aligned}$ | $\begin{gathered} 0.005 \\ (0.006) \end{gathered}$ |
| Religious Student x Religious Examiner x Dummy for Orthodox/Religious Examiners Teaching in Segregated Religious Areas | $\begin{gathered} -0.020^{* *} \\ (0.010) \end{gathered}$ | $0.038^{* *}$ $(0.016)$ |
| Number of Observations | 3,590,116 | 3,550,108 |
| Notes: All columns present the results from separated regressions based on the preferred specification (that include year, questionnaire and student fixed effects), where each regression include additionally the interaction with a dummy for Ultra-Orthodox/religious examiners teaching in segregated religious areas. Standard errors are corrected for examiners clustering and are presented in parentheses. |  |  |

Table A12: Estimated Effect of Exposure to a Different Religious Environment on In-Group Biases of Examiners, by Examiners' Gender

| All Examiners |  |  | Male Examiners |  |  | Female Examiners |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Examiners Fixed Effects <br> (1) | Examiners by <br> School/Zip Code Fixed Effects (2) | Examiners by Questionnaire and by School/ Zip Code Fixed Effects (3) | Examiners Fixed Effects <br> (4) | Examiners by School/Zip Code Fixed Effects (5) | Examiners by Questionnaire and by School/Zip Code Fixed Effects (6) | Examiners Fixed Effects | Examiners by <br> School/Zip Code Fixed Effects (8) | Examiners by Questionnaire and by School/Zip Code Fixed Effects (9) |

## A. Exposure to Neighbours with a Different Religious Orientation than that of the Examiner

| Religious Student x Religious | 0.016** | 0.016** | 0.016** | 0.079*** | $0.073^{* * *}$ | $0.073^{* * *}$ | 0.008 | 0.008 | 0.009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Examiners | (0.008) | (0.008) | (0.008) | (0.024) | (0.022) | (0.022) | (0.009) | (0.009) | (0.008) |
| Religious Student x Religious |  |  |  |  |  |  |  |  |  |
| Examiners x Proportion of | -0.042 | -0.043 | -0.033 | -0.173** | -0.153** | -0.153** | -0.012 | -0.007 | -0.007 |
| Religious Orientation | (0.029) | (0.028) | (0.028) | (0.068) | (0.067) | (0.067) | (0.032) | (0.030) | (0.030) |
| Observations | 3,505,201 | 3,505,201 | 3,505,201 | 497,811 | 497,811 | 497,811 | 3,007,390 | 3,007,390 | 3,007,390 |

## B. Exposure to Peers at School with a Different Religious Orientation than that of the Examiner

| Religious Student x Religious Examiners | $\begin{gathered} 0.009 \\ (0.008) \end{gathered}$ | $\begin{gathered} 0.007 \\ (0.008) \end{gathered}$ | $\begin{gathered} 0.008 \\ (0.008) \end{gathered}$ | $\begin{aligned} & 0.037^{*} \\ & (0.022) \end{aligned}$ | $\begin{gathered} 0.035 \\ (0.021) \end{gathered}$ | $\begin{gathered} 0.034 \\ (0.021) \end{gathered}$ | $\begin{gathered} 0.005 \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.004 \\ (0.008) \end{gathered}$ | $\begin{gathered} 0.005 \\ (0.009) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Religious Student x Religious |  |  |  |  |  |  |  |  |  |
| Examiners x Proportion of | -0.012 | 0.001 | 0.000 | -0.023 | -0.018 | -0.013 | -0.008 | -0.007 | 0.005 |
| Orientation | (0.031) | (0.028) | (0.029) | (0.062) | (0.061) | (0.060) | (0.036) | (0.032) | (0.033) |
| Observations | 3,590,116 | 3,590,116 | 3,590,116 | 508,324 | 508,324 | 508,324 | 3,081,792 | 3,081,792 | 3,081,792 |

Notes: See Table 13. The table presents the estimated effects of exposure to a different religious environment on the in-group biases of examiners based on continuous variables of exposure to different religious environments instead of discrete variables as an in Table 13. Standard errors are corrected for examiners clustering and are presented in parentheses.

Table A12: Estimated Effect of Exposure to a Different Religious Environment on In-Group Biases of Examiners, by Examiners' Gender - Continued

C. Exposure to Peers at School with a Different Religious Orientation than that of the Examiner but who Teach the Same Subject
$\left.\begin{array}{lcccccccccc}0.0007\end{array}\right)$
D. Exposure to Peers with a Different Religious Orientation than that of the Examiner but of the Same Gender at School

| Religious Student x Religious | $0.008^{\star}$ | $0.007^{\star}$ | $0.008^{\star}$ | $0.042^{\star}$ | $0.040^{\star}$ | $0.038^{\star}$ | 0.005 | 0.004 | 0.005 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Examiners | $(0.008)$ | $(0.008)$ | $(0.008)$ | $(0.022)$ | $(0.021)$ | $(0.021)$ | $(0.009)$ | $(0.008)$ | $(0.008)$ |
|  |  |  |  |  |  |  |  |  |  |
| Religious Student $x$ Religious <br> Examiners x Proportion of | -0.010 | 0.003 | 0.001 | -0.060 | -0.048 | -0.045 | -0.003 | -0.023 | -0.088 |

Same Gender Peers at School with a Different Religious

| Orientation | $(0.031)$ | $(0.028)$ | $(0.028)$ | $(0.064)$ | $(0.060)$ | $(0.061)$ | $(0.053)$ | $(0.044)$ | $(0.156)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Observations | $3,590,116$ | $3,590,116$ | $3,590,116$ | 508,324 | 508,324 | 508,324 | $3,081,792$ | $3,081,792$ | $3,081,792$ |

Notes: See Table 13. The table presents the estimated effects of exposure to a different religious environment on the in-group biases of examiners based on continuous variables of exposure to different religious environments instead of discrete variables as an in Table 13. Standard errors are corrected for examiners clustering and are presented in parentheses.


[^0]:    Notes: The proportion of neighbours with a different religious orientation is based on the proportion of religious students in the examiner's zip code in each year. The proportion of peers at school with a different religious orientation is based on the proportion of peer teachers at school in each year. Standard deviations and medians are reported in parentheses, percentages of within examiner variation are reported in italic (variation in the dummy variable for higher than the median exposure to different religious environment, by religious status and gender).

