Better Than Most: Teacher Self-Beliefs in Uganda

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Abstract: Do teachers have accurate beliefs about their effort and ability? We explore this question through a survey experiment in Public Private Partnership (PPP) schools in Uganda. Within the experiment teacher self-beliefs are contrasted with their beliefs about other teachers in the same school. We find that, on average, teachers tend to rate ability, effort, and job satisfaction more positively for themselves than for other teachers. We call this tendency high relative self-regard (HRS). We find no systematic evidence of HRS around perceptions of quality of student engagement and available support structures. HRS is systematically linked to two teacher attributes and one school attribute. First, tendency towards HRS is negatively correlated with teacher experience. Second, teachers who score lower on objective measures of effort are significantly more likely to exhibit HRS. Finally, tendency towards HRS is less pronounced in 'owner-managed' PPP schools; suggesting that when principle-agent problems are less severe, schools find ways to correct for inaccurate teacher self-beliefs. These results provide suggestive evidence of potential cognitive biases that help teachers rationalize sub-optimal effort in classrooms. This in turn points to the importance of providing objective feedback to teachers as one potential way to improve their performance.

Keywords: Education; Teacher Absenteeism; Teacher Performance

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1. Introduction

Teacher effort appears to be low in developing countries. This can be seen in high rates of teacher absenteeism (Bold et al 2016, Chaudhury et al 2006, Kremer et al 2005, Banerjee and Duflo 2006) and low rates of actual teaching, even when the teacher is in school (Bold et al 2016, Chaudhury et al 2006). Using data from unannounced visits in seven Sub-Saharan African countries, Bold et al (2017) find that students receive only about two hours and fifty minutes of teaching per day— this is just over half the scheduled time. This is largely because teachers, even when in school, are not teaching. Further, these rates are stable over time. For instance, rates of teacher absence in Uganda were 27 percent in 2002-03 and 30 percent in 2013 (Bold et al 2017).

One open question is: do teachers exerting low effort, believe that their effort is low? In this paper we provide suggestive evidence on this question using data from a randomized survey experiment in Ugandan secondary schools. We focus on a sample of 350 secondary school teachers in Uganda working in public private partnership (PPP) schools.¹ These teachers were given detailed self-administered questionnaires on beliefs about their performance and working conditions. To elicit potential self-belief biases, the framing of these perception questions was randomized across the sample. Teachers were randomly divided, into two groups. In one group, the respondent was asked to provide information about him/herself: we call this the "self-perception" group. In the other group, the respondent was asked to provide information about 'most other teachers in the school': we call this the "social-perception group".

This experiment was designed to reveal the extent of divergence between teachers self-beliefs and their beliefs about other teachers in their school. Systematic positive divergence on specific questions implies that on average, teachers see themselves more favorably than they see the other teachers in the same school. We call this tendency high-relative self-regard (HRS). We find evidence of HRS around perceptions of ability and effort and job-satisfaction. On the other hand, perceptions around support structures and quality of student engagement do not appear to be subject to HRS. We also find that teachers who are less experienced and who appear to exert less actual effort are more likely to exhibit HRS. In addition, incidence of HRS is lower in owner-managed schools.

These results align with broader behavioral literature. The tendency to consider oneself more favorably than peers - or 'above average' to peers - is widely documented (Kruger 1999, Alicke et al. 1995, Alicke, 1985). Epley and Dunning (2000) find that people generally think of themselves as more "charitable, cooperative, considerate, fair, kind, loyal and sincere than the typical person" (p. 861; see also Dunning, Heath, & Suls, 2004, for a review). A particularly influential study in this area has been Svenson (1981) wherein the vast majority of subjects rate their driving skills as 'above average'. These findings have been replicated numerous times in various countries and with respect to different outcomes. In one study, 37% of one firm's professional engineers placed themselves among the top 5% of performers at the firm (Zenger 1992). In a survey of high school seniors, 25% rated themselves in the top 1% in their ability to get along with others (College Board 1976-1977). When asking a sample of entrepreneurs about their chances of success, Cooper et al. (1988) found that 81% answered between 0 and 30%. However, when asked the odds of any business like theirs failing, only 39% of them answered between 0 and 30%.

¹ Private schools that receive per-capita funding for eligible low-income students from the government of Uganda

This phenomenon has been described variously as overconfidence (Della Vigna 2009), better-thanaverage or above-average effect (Alicke & Govorun, 2005², Williams & Gilovich, 2008), Lake Wobegon effect (Cannell 1987³), false uniqueness bias (Suls, Wan, & Sanders, 1988) and overplacement (Larrick, Burson, and Soll 2007, Moore and Healy 20084). Throughout this paper, we use the label *HRS* to define the notion most clearly captured by our study.

The use of HRS-type tendencies in rationalization of outcomes has also been documented in behavioral and psychological literature. Because individuals expect their behavior to produce success, they attribute outcomes to their actions when they succeed and to bad luck when they fail (Miller and Ross 1975, Feather and Simon 1971).

Teachers are likely to be particularly susceptible to HRS because estimation of own ability is particularly difficult in teaching (DellaVigna 2009).⁵ This can be due to several reasons. First, teaching is cumulative – what a student can learn in one grade depends on what he has learned in previous grades⁶. Second, teaching involves a noisy feedback process - it is difficult to measure a teacher's ability to teach⁷. Absent such measurement, schools must rely either on student or staff evaluations or both, none of which are free from problems. In addition, teaching is discretionary - if individuals making decisions have a feeling of control, they are more likely to incorrectly estimate their own performance: by definition, teaching requires individuals to have a feeling of control (World Bank 2004).

The finding that HRS is significantly lower in owner-managed schools is suggestive in terms of principle-agent theory. In private schools, where the owners of the school also act as head-teachers, incentives to maximize teacher effort are stronger and more direct.⁸ In such schools HRS is less likely. Our data cannot directly shed light on possible reasons why this difference exists, however that it exists appears to signal that with incentive alignment, it is possible for school managers to ameliorate the problem.

This paper makes two contributions. First, it illuminates possible mechanisms through which teachers might rationalize sub-optimally low levels of effort. This might happen via HRS in two ways: (i) HRS makes teachers over-estimate their actual effort or ability; and (ii) HRS makes it easier for teachers to blame other teachers' for low student learning. Second, it highlights the potential

² Alicke, M. D., & Govorun, O. (2005). The better-than-average effect. *The self in social judgment*, *1*, 85-106.

³ The term is a reference to Garrison Keillor's fictional Lake Woebegone – a town where all the "children are above average" (Keillor 2016).

⁴ Moore, D. A., & Healy, P. J. (2008). The trouble with overconfidence. *Psychological review*, *115*(2), 502.

⁵ Banerjee et al. [2007] note two features of public good provision in developing countries that makes it hard to quantify effort: (i) the process of project implementation is rarely quantifiable; (ii) public good quality is difficult to measure.

⁶ Because teaching is cumulative, overestimation could infact signal a rationalization of exculpation – wherein teachers exculpate themselves by 'blaming' other teachers for poor learning outcomes of students.

⁷ Some recent work argues for "value-added" measure of teacher quality (Chetty et al 2014). Such measures require substantial information on past and present student performance, as well as some sophistication in using these. Neither of these conditions can be taken as given for schools in a developing country framework. ⁸ For broader discussion see Dixit (1997, 2002)

importance of objective feedback⁹ provision to teachers – beyond student assessment information.¹⁰ Note that provision of such feedback, by itself, maybe insufficient to change teacher behavior.¹¹ However, these results suggest that it could form a useful component of broader efforts to realign teacher incentive and accountability structures. It can also improve the design of teacher incentives schemes. Specifically, it can help partially reduce multi-task moral-hazard problems in performance-based incentives for teachers (Baker 1992). In other words, provision of objective feedback on teacher effort can reduce the risk that teachers respond to performance-based incentives only through counter-productive ways like cheating or teaching to the test.

The rest of the paper is structured as follows. Section 2 discusses the setting, experimental design, and data. Section 3 examines summary statistics and presents a snapshot of self-perception data. Section 4 uses the experiment to establish the extent of HRS. Section 5 examines heterogeneity in HRS based on other teacher characteristics; Section 6 explores links between HRS and actual measures of effort. Heterogeneity in HRS based on selected school characteristics is presented in Section 7. Section 8 lays out limitation and caveats around this work and Section 9 concludes.

2. Setting, Data, and Experimental Design

Setting: In this paper, we ask - how do teachers view themselves relative to other teachers in the school? To answer this question we rely on a randomized survey experiment conducted within a group of schools within the Public Private Partnership program (PPP) in Uganda. Under the program, the government offers a per-student subsidy to participating private schools.¹²

Sample Selection and Data: The study targets all Junior Secondary 2 teachers (equivalent to Grade 8) – 350 teachers in total - in 30 secondary PPP schools. It was carried out during the 2012-2013 expansion of the PPP program to newer schools. Out of a list of 200 private schools which applied to the PPP program in 2012, 100 schools were randomly selected to receive the PPP program in 2013. Out of these 100 schools, we randomly selected 30 schools as the sample for this study.¹³ These

⁹ Subjective feedback may give rise to other biases and dysfunctional responses [Milgrom 1988, Milgrom and Roberts 1988]

¹⁰ There is some experimental evidence on the potential benefits of providing teachers with feedback about student performance (see Muralidharan and Sundaraman 2010, Piper and Korda 2006 etc.). However, there has been less discussion on the benefits of providing teachers with objective information about their actual effort and ability. This distinction is important because teachers might find it easier to distance themselves from the former than the latter. Coe (1998) who reviews the evidence on the effectiveness of feedback on performance in general and highlights the lack of evidence on the effectiveness of feedback systems in improving students' academic performance. Also, in the book, Visible Learning for Teachers (Hattie 2012), authors emphasize that the most powerful feedback is that given from the student to the teacher. This feedback allows teachers to see learning through the eyes of their students. It makes learning visible and facilitates the planning of next steps.

¹¹ Muralidharan and Sundaraman (2010) evaluate the impact of providing teachers in India with detailed diagnostic feedback on student performance. They found that the feedback reports were used more effectively by teachers when combined with performance-linked bonuses for teachers. However, without such incentives, feedback provision had no detectable impact on student learning.

¹² The PPP program in Uganda targets all registered and certified private schools charging 75,000 UGX per term or lower. Under the partnership, private schools apply to the Ministry of Education and Sports (MoES) to enter into a contractual arrangement for enrolling eligible low-income students in return for a per-student government subsidy of 47,000 UGX per term per student.

¹³ The sample draws from a broader study on the PPP program (Barrera et al 2016)

schools were visited in November 2014, approximately 22 months after these schools started participating in the PPP program. All our data comes from this unannounced field visit and includes information from - a self-administered teacher survey, information from teacher attendance records maintained by head-teacher, and teacher observation by enumerators.

Experimental Design: The study relies on a randomized survey experiment wherein detailed selfadministered questionnaires were fill by teachers. Teacher questionnaires contained 62 questions and took about 90 minutes in total. They contained four sections: (i) teacher characteristics, (ii) school characteristics, (iii) self-reported effort, and (iv) subjective assessment. The subjective assessment module contained questions related to perceptions about ability and effort, student engagement, support structures, and job-satisfaction.

To uncover potential self-perception biases, the framing of the subjective assessment module was randomized across the sample. Teachers within each school were randomly divided, into two groups – in the control group the respondent was asked to provide information about him/herself. We call this the "self-perception" group. In the treatment group, the respondent was asked to provide information about 'most other teachers in the school': we call this the "social-perception" group.

This study design yields the following: (i) average teacher perceptions about self and average teacher perceptions about other teachers in the school, (ii) average 'divergence' between teachers' self- and social-perceptions around each question in the subjective assessment module (25 questions in total). Positive divergence on a specific dimension implies that on average, teachers see themselves more favorably than the other teachers in the same school on that dimension. Systematic divergence indicates what we call High Relative Self-Regard (HRS) among teachers. Note that we do not observe HRS for any individual teacher, because any given teacher receives only one of the subjective assessment modules – self- or social-perceptions.¹⁴ However, we can observe HRS at the level of the school.

A simple regression analysis allows us to test for the strength of HRS. We define indicator variables corresponding to each self-assessment question and regress it on the social-perception treatment dummy, with the self-perception group serving as control, as well as relevant control variables:

$$Outcome_i = \alpha + \rho * TREATMENT_i + \delta X_i + \varepsilon_{ij}$$

Where *Outcome* is the indicator variable corresponding to each answer; *TREATMENT* is a dummy variable that equals 1 for a social-perception response and 0 for a self-perception response; and *X* is a vector of other control variables that could possibly influence the answer to each question. In this equation, *i* indexes teacher and *j* indexes school. Standard errors are clustered at the school level.

Our outcome variables are all binary dependent variables. Consequently, a linear probability model or a probit model will be appropriate to estimate the effect of the social-perception questions. As the choices amongst the answers follow a natural ordering, we can also consider results of ordered probit

¹⁴ Both social- and self- surveys were not administered to the same teacher to reduce social desirability bias in survey responses.

models.¹⁵ One drawback of these non-linear models, however, is that their estimation is through maximum likelihood which sometimes do not converge. Linear models are free of this problem, although it has its own problems – principally, its predictions can lie outside the (0,1) range. We are not, however, interested in predicting probabilities but in isolating coefficient estimates instead. For this reason, we use linear probability models.

Our main interest lies in estimating the coefficient ρ from Equation (1). If ρ is negative and statistically significant – implying that on average self-perceptions were likely to be systematically more favorable than perceptions about other teachers in the same school – we interpret this as indicative of HRS on that dimension.

We control for a set of possible confounding factors, including teacher gender, age, teacher type (part time or full time), education, experience, and work load (class size and number of subjects taught).

Balance: To assess whether the assignment of teachers into self- (control) and social-perception (treatment) groups was in fact random, we test for statistical differences in our key explanatory variables. Table 2 presents the balance tests, along with broader summary statistics. Overall, self-and social-perception groups appear balanced across key variables. Accordingly, the interpretation of ρ can be taken to be the effect of social-perception framing which allows us to establish the presence of HRS.

3. Snapshot of teachers and teaching

This study focuses on teachers for Junior Secondary 2 (Grade 8 equivalent) teaching in PPP schools. The average teacher in our sample is male (76 percent of the sample) with university education (55 percent) and about 30 years old. He has about four years of experience in their current school and six and a half years of overall teaching experience. On average, about 37 percent of interviewed teachers work part time, while the rest are permanent employees. Interviewed teachers teach a variety of subjects summarized in Figure 1.

Teachers report spending about 9.5 hours in work-related activities, including - preparing for class, teaching, doing administrative tasks, and marking homework. However, average teaching time a day was only 2 hours and 20 minutes. On average, teachers reach the school around 7:50am and leave around 5:15pm.

Class sizes are large. Nearly half the teachers reported teaching to classes with more than 60 students; out of this, almost 28 percent were teaching to classes of more than 80 students. However, on a typical day, approximately 20 percent of students are absent from class. In addition, some teachers teach more than one subject. Moonlighting is common. Nearly 65 percent of teachers teach outside of school and nearly 45 percent teach part-time or full-time in another school.

The average monthly teacher salary is 221,125.7 UGX (equivalent to 61 USD) monthly. Nearly 40 percent of interviewed teachers experienced no delays in receiving their base salary or allowance this school year. Private lessons every month provide an average 18 USD to the 45 percent of teachers

¹⁵ A logit or ordered logit model can also be used. In practice, probit and logit models tend to be quite similar.

who take weekly tutoring or work as full or part-time in any other school except their permanent job. Almost 85 percent teachers reported they did not receive any gift or contribution from the parents of the community.

Teachers self-reported measures of 'effort' are as follows. Most teachers (89 percent) claimed to have prepared a 'scheme of work' for the current term – those who did not claimed it was due to lack of time. Around 67 percent also claim to prepare weekly lesson plans. Nearly 82 percent of teachers claimed to have prepared a report card for each of their students at the end of the school year. Nearly 67 percent of teachers report being absent for at least 1 day in the preceding month. For those who were absent, primary reasons for absenteeism include sickness, personal engagement, and official teaching-related duties such as meeting or training.

Teachers self-reported measures of 'accountability are as follows. Around 61 percent of teachers report that their performance is evaluated based on student performance, another 26 percent by their attendance, and 6 percent based on students and parent feedback. The remaining 7 percent either don't know or claim they are not evaluated. Around 75 percent of teachers claim that head-teachers observe their class at least once a month. Only 10 percent claim that head-teachers never observe their class. However, only 58 percent report receiving regular feedback from Head Teachers on observed classes. Overall, almost 40 percent of teachers claim that there are no mechanisms to reward teachers for good performance. On the other hand, 26 percent claim that good performance is rewarded through bonuses and salary increases.

We also collect some basic indicators of inter-personal interactions within school. Nearly 95 percent of teachers report having a staff meeting at least once a term. On the other hand, only 34 percent report having a PTA or SMC meeting at least once a term. On average, teachers express positive regard of Head Teachers. Almost 88 percent teachers found their Head Teachers available and approachable to discuss any issues concerning teaching and learning.

4. Contrasting Teachers' Self- and Social-Perceptions

We use the randomized subjective assessment module to examine the divergence between average self-perceptions and average perceptions about other teachers. Out of the 25 subjective assessment questions, 24 questions are measured on a five-point Likert scale.¹⁶ These responses are recoded as binary variables – reflecting positive and negative responses. In each case, moving from zero to one indicates an increase in favorability of the response, where favorability implies a positive relationship to student learning. These binary variables are regressed on treatment (social-perception questionnaire=1; self-perception questionnaire = 0) using linear probability models to determine the extent to which perceptions diverge when directed at self vs. others.

Table 3 shows results from linear probability models for all 24 subjective assessment Likert scale questions (Appendix Table 1 provides details how these outcomes were coded). Standard errors are clustered at the school level. In Columns (1) and (2), outcome is coded as 1 if response is 'strongly agree' or 'agree'. Column (1) shows results without any controls, Column (2) includes key teacher-

¹⁶ In most cases, the Likert Scale is constructed as follows: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

level controls¹⁷. Columns (3) and (4) show results for stronger and weaker definitions of the outcome, respectively, with controls. The former shows results for outcomes coded as being equal to one only if the response is "strongly agree" and zero otherwise, while the latter shows results for outcomes coded equal to one for answers that could be "neutral", "agree" or "strongly agree".

As discussed above, we can split the subjective assessment questions into four domains - ability and effort, student engagement, support structures, and job satisfaction. Each domain has between 5-8 questions. For each domain, we also include a domain index. This index is a weighted average of the responses – where the weights are constructed from the first principal component of the relationship between all the responses in each particular module.

Overall, significantly more favorable self-perception or HRS emerges for 11 out of the 24 questions (46 percent). The point estimates when statistically significant indicate between a 9% to 20% reduction in the probability of a favorable response in relation to social-perception as opposed to self-perception. HRS is much more likely in some modules compared to others. While, HRS emerges in at least two questions per module, it is most frequently observed in the job satisfaction domain (divergence in 4 out of 6 questions) and the ability and effort domain (divergence in 4 out of 6 questions). Further, HRS is significant at the level of the domain index for these two domains. HRS is less frequently observed in the domains of student engagement (divergence in 2 out of 8 questions) and support structures (divergence in 2 out of 5 questions). In these two cases, no HRS is observed at the level of the domain index.

Within the ability and effort domain - teachers rate confidence in teaching, frequency of trying new teaching methods, and acceptability of absenteeism higher for self than others. In terms of job-satisfaction, teachers rate overall job-satisfaction, satisfaction with career prospects, and likelihood of continuing current job higher for self than others. HRS is also observed in some dimensions of available support structures - teachers more frequently rate student learning as a motivating force for self than for others and ability to get along with colleagues higher for self than others.

In contrast, no HRS is observed in terms of satisfaction with salary, workload, relationships with head-teachers and students. Further, there is one aspect of ability on which there is no observed HRS - teachers rate their ability to teach to 'problematic' students or maintain composure with disruptive students on par with the ability of other teachers.

5. Links between High Relative Self Regard and Teacher characteristics

We test whether HRS is systematically linked to other teacher characteristics. We find no systematic relationship between HRS and teacher gender, although this could partly be linked to the relatively low share of female teachers in our sample (24 percent). However - for both job-satisfaction and ability and effort - we find higher likelihood of HRS among less experienced teachers (Tables 4a and 4b). The only exception to this pattern is with respect to 'acceptability of absenteeism'. On this question, HRS emerges for more experienced teachers. In other words, more experienced teachers

¹⁷ Controls include: teacher gender, age, teacher type (part time or full time), education, experience, and work load (class size and number of subjects taught)

are significantly more likely to report acceptability of absenteeism for themselves but not for other teachers.

6. Is High Relative Self-Regard Justified?

How do self- and social-perceptions relate to actual effort? Is HRS higher among teachers who appear to work harder? We explore these links by examining the correlation between subjective assessments and self-reported indicators of effort. Self-reported indicators of effort include the following questions:

- Teacher prepared scheme of work for current term
- Teacher prepared lesson plan for current week
- Number of days last week the teacher marked assigned homework
- Number of days last week the teacher took attendance
- Teacher prepared report card for students at the end of last school year
- Number of days last month the teacher was absent

Using these questions an effort index is created and interacted with social-perception questionnaire treatment in the specification outlined in Section 2. Results are presented in Tables 5. We find an inverse relationship between HRS and effort in both the job-satisfaction and ability and effort domains. In other words, likelihood of HRS is higher among teachers who actually exert less effort.

Another proxy of effort is whether at the time of the enumerators unannounced visit – a teacher was found to be in class teaching. Interacting this variable with social-perception questionnaires treatment, we find a negative correlation between likelihood of teacher teaching and HRS (Tables 6).¹⁸

Two important caveats are as follows: (i) reported analysis is correlational. No causal mechanisms are established in this analysis; and (ii) measures of actual effort are self-reported and as such might be over-stated.

7. Links between High Relative Self Regard and School characteristics

We examine whether HRS varies systematically based on the ownership and organizational structure of the PPP school. Specifically, we are interested in examining whether schools where managers have stronger incentives to maximize teacher effort are less prone to HRS. To do this, we interact a dummy for 'head-teacher owns at least part of the school' and, more weakly, 'Board of Governors¹⁹ member owns at least part of the school' with treatment (teacher receives social-perception questionnaire). Results are shown in Tables 7a and b. We find that HRS is much less likely in schools where head-

¹⁸ Another way to look at this would be to examine the relationship between HRS and class-size. Working under the assumption that teachers with larger class sizes have to, by definition, exert more effort, we examine the relationship between the two. Once again, there is an inverse relationship. Teachers with smaller class sizes are significantly more likely to exhibit HRS on both job-satisfaction and ability and effort.

¹⁹ In PPP schools in Uganda, Board of Governors are analogous to School Management Committees.

teacher owns at least part of the school. Systematically lower rates of HRS are also in schools where members of Board of Governors own at least part of the school, but the relationship is less strong.

8. Limitations and Caveats

There are two possible limitations/threats to the identification of HRS as we have demonstrated it here. Both relate to concerns about whether we are actually measuring HRS. We discuss these in turn:

Social Desirability bias: Interpreting perceptions about self- and other teacher poses some difficulties. One concern is that differences between the two could simply reflect 'social-desirability biases'. Evidence suggests that this type of response bias is common wherein survey respondents answer questions in a manner that will be viewed favorably by others (Fisher 1993, Zerbe and Paulhus 1987)

There are two reasons why results from this survey experiment are more likely to reflect HRS than social-desirability bias. First, surveys are totally self-administered and anonymized. Teachers are given a paper survey to fill out by independent field-enumerators, no school administrators are in the room when teachers fill out the survey, and within the survey there are no teacher identification questions. Further messages of anonymity are emphasized by the enumerators in their directions and as footers in each page on the survey.

Secondly, the teacher responses themselves do not reflect any consistent/clear pattern around social-desirability.

Observation bias: There is also the possibility that the pattern of responses observed in socialperception surveys reflect, not HRS, but simply teachers' inability to gauge what other teachers know and do. This concern is addressed through the use of a five-point Likert scale that allows us to create a finer-grained scale. Specifically, the response scale includes an option for 'Neutral' and also distinguishes between 'Agree and Strongly Agree'. For each specification in Table 4, we show regression results both including and excluding 'Neutral' in the coding of a favorable response and also only including 'Strongly Agree' in the coding of a favorable response.

9. Conclusion

We examine self-beliefs on effort and ability in a sample of secondary school teachers in PPP schools in Uganda. We find that teachers tend to hold more favorable opinions of themselves than of other teachers in the same school - in terms of ability, effort, and job-satisfaction. We call this tendency High Relative Self-Regard (HRS) and find that it correlates negatively with objective indicators of effort.

These findings appear indicative of possible cognitive biases that might help teachers rationalize suboptimal effort in classrooms. If teachers view themselves as exerting more effort and exhibiting stronger work-ethic than their colleagues then this allows them to more readily exculpate themselves from low learning levels in classrooms.

We also find that systematic HRS is less likely in those PPP schools where head-teachers own at least part of the school. This provides suggestive evidence that where school managers have stronger

incentives to maximize teacher effort, upward biases in teacher self-beliefs are less visible. Our results do not speak to possible reasons for these differences. However, one potential implication is around the importance of providing objective feedback to teachers about their efforts and ability.²⁰

²⁰ Note that provision of feedback alone might be insufficient to change teacher behavior, but could be one useful component of broader realignments in teacher incentive and accountability structures.

References

- Alicke, M. D., Klotz, M. L., Breitenbecher, D. L., Yurak, T. J., & Vredenburg, D. S. (1995). Personal contact, individuation, and the better-than-average effect. *Journal of Personality and Social Psychology*, 68(5), 804.
- Alicke, M. D., & Govorun, O. (2005). The better-than-average effect. *The Self in Social Judgment*, *1*, 85-106.
- Banerjee, A., & Duflo, E. (2006). Addressing absence. *The Journal of Economic Perspectives*, *20*(1), 117-132.
- Barrera-Osorio, F., Galbert, D., Gaspard, P., Habyarimana, J. P., & Sabarwal, S. (2016). Impact of public-private partnerships on private school performance: Evidence from a randomized controlled trial in Uganda.
- Bold, T., Filmer, D., Martin, G., Molina, E., Rockmore, C., Stacy, B., Svensson, J. & Wane, W. (2017). What Do Teachers Know and Do? Does It Matter?.
- Cannell, J. J. (1988). Nationally normed elementary achievement testing in America's public schools: How all 50 states are above the national average. *Educational Measurement: Issues and Practice*, 7(2), 5-9.
- Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., & Rogers, F. H. (2006). Missing in action: teacher and health worker absence in developing countries. *The Journal of Economic Perspectives*, *20*(1), 91-116.
- Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. *The American Economic Review*, *104*(9), 2633-2679.
- Cooper, A. C., Woo, C. Y., & Dunkelberg, W. C. (1988). Entrepreneurs' perceived chances for success. *Journal of Business Venturing*, *3*(2), 97-108.
- DellaVigna, S. (2009). Psychology and economics: Evidence from the field. *Journal of Economic Literature*, *47*(2), 315-372.
- Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed self-assessment implications for health, education, and the workplace. *Psychological Science in the Public Interest*, *5*(3), 69-106.
- Epley, N., & Dunning, D. (2000). Feeling" holier than thou": are self-serving assessments produced by errors in self-or social prediction?. *Journal of Personality and Social Psychology*, 79(6), 861.
- Feather, N. T., & Simon, J. G. (1971). Attribution of responsibility and valence of outcome in relation to initial confidence and success and failure of self and other. *Journal of Personality and Social Psychology*, 18(2), 173.

- Kremer, M., Chaudhury, N., Rogers, F. H., Muralidharan, K., & Hammer, J. (2005). Teacher absence in India: A snapshot. *Journal of the European Economic Association*, *3*(2-3), 658-667.
- Kruger, J. (1999). Lake Wobegon be gone! The" below-average effect" and the egocentric nature of comparative ability judgments. *Journal of Personality and Social Psychology*, 77(2), 221.
- Larrick, R. P., Burson, K. A., & Soll, J. B. (2007). Social comparison and confidence: When thinking you're better than average predicts overconfidence (and when it does not). *Organizational Behavior and Human Decision Processes*, *102*(1), 76-94.
- Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction. *Psychological Bulletin*, *82*(2), 213-225.
- Moore, D. A., & Healy, P. J. (2008). The trouble with overconfidence. *Psychological Review*, *115*(2), 502.
- Suls, J., Wan, C. K., & Sanders, G. S. (1988). False Consensus and False Uniqueness in Estimating the Prevalence of Health-Protective Behaviors. *Journal of Applied Social Psychology*, 18(1), 66-79.
- Svenson, O. (1981). Are we all less risky and more skillful than our fellow drivers?. *Acta Psychologica*, *47*(2), 143-148.
- Williams, E. F., & Gilovich, T. (2008). Do people really believe they are above average?. *Journal of Experimental Social Psychology*, *44*(4), 1121-1128.
- World Bank, World development report 2004: Making services work for poor people. Washington: World Bank, 2003.
- Zenger, T. R. (1992). Why do employers only reward extreme performance? Examining the relationships among performance, pay, and turnover. *Administrative Science Quarterly*, 198-219.

Tables

		Overall	Self-Perception	Social-	p-value of
		Mean	Mean	Perception	Difference
	Observations		(Column 3)	Mean	(Column 3 -
				(Column 4)	Column 4)
		(Column			
	(Column 1)	2)			
Gender (% Male)	350	76%	75%	76%	0.76
Part-Time					
Teacher	350	37%	37%	37%	0.98
Untrained					
Teacher	350	7%	7%	7%	0.93
Without					
University					
Degree	350	8%	9%	7%	0.63
With University					
Degree	350	55%	51%	59%	0.11
Class size > 60					
students	350	49%	52%	47%	0.29
Age	350	30.55	30.38	30.72	0.63
Number of					
Subjects taught	350	1.67	1.70	1.63	0.34

Table 1: Summary Statistics and Balance Tests

			Standard			
	Observations	Mean	Deviation	Median	Minimum	Maximum
Number of Days last Week	250	1 00	1 0 2	2	0	5
Homework assigned	330	1.99	1.02	2	0	5
Number of Days last Week						
Homework marked	350	1.82	1.05	2	0	6
Number of Dave last Week						
Attendance taken	3/10	2 67	1 83	3	0	7
Attendance taken	545	2.07	1.05	5	0	,
Report Card prepared at end						
of last school year (1 = Yes, 0						
= No)	350	0.82	0.39	1	0	1
Number of days Abcent last						
Number of days Absent last	350	2 87	3 03	2	0	30
month	550	2.07	5.55	2	0	50
Number of students Absent						
yesterday	350	12.29	17.87	6	0	110

Table 2: Self-Rep	ported	Indicators	of E	ffort

	Agree/Strongly Agree No Controls	Agree/Strongly Agree Including Control	Strongly Agree Including Control	Including Neutral Including Control
	(1)	(2)	(3)	(4)
Satisfied with current job	-0.115**	-0.11**	-0.11***	-0.15***
5	(0.049)	(0.05)	(0.04)	(0.04)
Happy with Career Prospects	-0.228***	-0.22***	-0.12***	-0.13***
1	(0.037)	(0.04)	(0.04)	(0.03)
Satisfied with current Salary	-0.041	-0.04	0.01	0.00
	(0.034)	(0.04)	(0.01)	(0.05)
Satisfied with current Benefits	-0.105**	-0.10**	-0.01	-0.08*
	(0.041)	(0.04)	(0.01)	(0.05)
Like greater job security	0.013	0.01	0.06	0.02*
	(0.023)	(0.02)	(0.05)	(0.01)
Would not change current job given the opportunity	-0.156***	-0.16***	-0.05**	-0.12*
	(0.043)	(0.04)	(0.02)	(0.06)
Domain 1 Index	-0.609***	-0.60***	-0.44**	-0.45**
	(0.121)	(0.12)	(0.16)	(0.17)
Controls	No	Yes	Yes	Yes

Table 3a: HRS on Job-Satisfaction

* *p*<0.1; ** *p*<0.05; *** *p*<0.01

Note: Controls include teacher gender, whether part or full time, whether trained, level of education, size of class, age and number of subjects taught.

⁺ Total number of observations equals 350, except where super-scripted by (a) in which case it equals 349.

	Agree/Strongly Agree No Controls	Agree/Strongly Agree Including Control	Strongly Agree Including Control	Including Neutral Including Control
	(1)	(2)	(3)	(4)
Able to teach all topics to even the most problematic students	-0.049	-0.04	-0.09**	-0.01
	(0.041)	(0.04)	(0.04)	(0.03)
Confident in teaching all topics in subject	-0.073***	-0.07***	-0.18***	-0.01
1 0	(0.020)	(0.02)	(0.06)	(0.01)
Changes teaching method at least once a month	-0.102**	-0.09*	-0.11*	-0.01
	(0.046)	(0.05)	(0.06)	(0.05)
Maintain composure when student becomes disruptive	-0.087	-0.09*	0.05	-0.06
	(0.052)	(0.05)	(0.05)	(0.04)
Believes absence from school acceptable	-0.169***	-0.17***	-0.03*	-0.24***
	(0.049)	(0.05)	(0.02)	(0.05)
Student's learning achievement motivates teacher	-0.070*	-0.07**	-0.02	-0.03
	(0.034)	(0.04)	(0.05)	(0.02)
Domain 2 Index	-0.387*** (0.139)	-0.38** (0.14)	-0.43*** (0.14)	-0.13 (0.16)
Controls	No	Yes	Yes	Yes

Table 3b: HRS on Ability and Effort

	Agree/Strongly Agree No Controls	Agree/Strongly Agree Including Control	Strongly Agree Including Control	Including Neutral Including Control
	(1)	(2)	(3)	(4)
Allowed to work independently	-0.106**	-0.10**	-0.06**	-0.07
1 5	(0.045)	(0.04)	(0.03)	(0.05)
Held accountable by Head Teacher	-0.014	-0.02	0.01	0.03
	(0.058)	(0.06)	(0.05)	(0.03)
Like more feedback from Head Teacher	-0.031	-0.03	-0.10**	-0.00
	(0.029)	(0.03)	(0.04)	(0.01)
Relationship with Head Teacher	0.013	0.02	-0.05	-0.01
	(0.017)	(0.02)	(0.05)	(0.01)
Relationship with colleagues	-0.028*	-0.03*	-0.08	0.00
C	(0.014)	(0.01)	(0.06)	(0.00)
Respect the Head Teacher	-0.010	-0.01	-0.03	0.00
	(0.017)	(0.02)	(0.05)	(0.01)
Workload is manageable	-0.013	-0.01	-0.04	0.01
C	(0.041)	(0.04)	(0.06)	(0.03)
Working hours are too long	-0.053	-0.04	-0.01	-0.04
c	(0.058)	(0.06)	(0.02)	(0.06)
Domain 3 Index	-0.140 (0.113)	-0.12 (0.12)	-0.29* (0.16)	-0.03 (0.14)
Control	No	Yes	Yes	Yes

Table 3c: HRS on Support Structures

	Agree/Strongly Agree No Controls (1)	Agree/Strongly Agree Including Control (2)	Strongly Agree Including Control (3)	Including Neutral Including Control (4)
Teachers have a good relationship with	0.030	0.03	0.00	0.01
students	(0.022)	(0.02)	(0.06)	(0.01)
Teachers can do more if parents take interest in children	0.007	0.01	-0.11**	0.00
	(0.023)	(0.02)	(0.05)	(0.02)
Cannot discipline students if they are not disciplined at home	0.120***	0.11***	0.05**	0.14***
	(0.031)	(0.03)	(0.02)	(0.03)
Teachers would like more involvement in setting learning goals	-0.025	-0.02	0.06	-0.02
	(0.029)	(0.03)	(0.05)	(0.01)
Hardest challenge for me is to motivate students	0.032**	0.025*	N/A ²¹	N/A
	(0.015)	(0.013)		
Domain 4 Index	0.030 (0.101)	0.05 (0.10)	-0.15 (0.12)	0.13 (0.13)
Controls	No	Yes	Yes	Yes

Table 3d: HRS on Student Engagement

* *p*<0.1; ** *p*<0.05; *** *p*<0.01

²¹ Question not posed on a Likert scale

Job Satisfaction (by Total years teaching)		Agree/Strongly Agree Including Control (1)
Satisfied with current job	Treatment	-0.16** (0.06)
	Treatment*Years teaching interaction term	0.01
		(0.01)
	Total years teaching	-0.01
Hanny with Cargor Prospects	Treatment	-0 30***
happy with Career Trospects	Treatment	(0.08)
	Treatment*Years teaching interaction	0.01
	term	(0.01)
	Total years teaching	-0.00
	Four yours touching	(0.01)
Satisfied with current Salary	Treatment	-0.06
0		(0.08)
	Treatment*Years teaching interaction term	0.00
		(0.01)
	Total years teaching	-0.01
		(0.01)
Satisfied with current Benefits	Treatment	-0.20***
		(0.06)
	Treatment*Years teaching interaction	0.02*
	term	(0.01)
	Total years teaching	-0.01
	rour yours touoning	(0.01)
Like greater job security	Treatment	0.07
		(0.04)
	Treatment*Years teaching interaction term	-0.01
		(0.01)
	Total years teaching	0.00
		(0.00)
Would not change current job given the opportunity	Treatment	-0.24***
		(0.07)
	Treatment*Years teaching interaction term	0.01*
		(0.01)
	Total years teaching	-0.02*
~	_	(0.01)
Domain 1 Index	Treatment	-0.96***
	Treatment*Vears teaching interaction	(0.23)
	term	0.00**
	willi	(0.03)
	Total years teaching	-0.04
		(0.03)

Table 4a: HRS on Job Satisfaction by Teacher Experience

Ability/Effort (by Total years teaching)		Agree/Strongly Agree Including Control (1)
Able to teach all topics to even the most problematic students	Treatment	-0.14**
-		(0.07)
	Treatment*Years teaching interaction term	0.02*
		(0.01)
	Total years teaching	-0.01
		(0.01)
Confident in teaching all topics in subject	Treatment	-0.10***
		(0.03)
	interaction term	0.00
		(0.00)
	rotar years teaching	-0.01***
Changes tagehing method at least anea a month	Treatment	(0.00) 0.11*
Changes teaching method at least once a month	Treatment	-0.11
	Treatment*Vears teaching	0.00
	interaction term	(0.01)
	Total years teaching	-0.01
	Total years teaching	(0.01)
Maintain composure when student becomes disruptive	Treatment	-0.09
L		(0.09)
	Treatment*Years teaching interaction term	-0.00
		(0.01)
	Total years teaching	-0.01
		(0.01)
Believes absence from school acceptable	Treatment	-0.06
		(0.06)
	Treatment*Years teaching	-0.02**
	interaction term	
		(0.01)
	Total years teaching	0.02*
	Ture stars and	(0.01)
Student's learning achievement motivates teacher	Ireatment	-0.15**
		(0.06)
	Treatment*Years teaching	0.01
	meracuon term	(0.01)
	Total years teaching	-0.00
	Total yours touching	(0.01)
Domain 2 Index	Treatment	-0.73***
2 vinum 2 Inuta		(0.22)
	Treatment*Years teaching interaction term	0.05**
		(0.02)
	Total years teaching	-0.05*
		(0.02)

Table 4b: HRS on Ability/Effort by Teacher Experience

Ability/Effort (by Self-reported effort index)		Agree/Strongly Agree Including Control (1)
Able to teach all topics to even the most problematic students	Treatment	-0.04
-		(0.04)
	Treatment*Teacher self-reported effort interaction term	0.03
		(0.07)
	Self-reported effort index	0.07
		(0.05)
Confident in teaching all topics in subject	Treatment	-0.0/***
	Treatment*Teacher self-reported effort	0.06**
	interaction term	0.00
		(0.03)
	Self-reported effort index	0.01
		(0.01)
Changes teaching method at least once a month	Treatment	-0.09*
		(0.05)
	Treatment*Teacher self-reported effort interaction term	0.00
		(0.11)
	Self-reported effort index	0.20***
		(0.06)
Maintain composure when student becomes disruptive	Ireatment	-0.09*
	Tractmont*Tasshar salf reported affort	(0.05)
	interaction term	0.05
		(0.12)
	Self-reported effort index	-0.12
Roliovos absonço from school accontable	Treatment	0.17***
beneves absence if our school acceptable	freatment	(0.05)
	Treatment*Teacher self-reported effort	-0.13**
		(0.06)
	Self-reported effort index	0.08
	-	(0.05)
Student's learning achievement motivates teacher	Treatment	-0.07*
		(0.04)
	Treatment*Teacher self-reported effort interaction term	0.10
		(0.09)
	Self-reported effort index	0.01 (0.04)
Domain 2 Index	Treatment	-0.37**
		(0.14)
	Treatment*Teacher self-reported effort interaction term	0.39
		(0.30)
	Self-reported effort index	0.21 (0.15)

Table 5: HRS on Ability/Effort by Self-Reported Measures of Effort

Ability/Effort (by Teacher in class teaching at time of visit)		Agree/Strongly Agree Including Control (1)
Able to teach all topics to even the most problematic students	Treatment	-0.09*
		(0.04)
	Treatment*Teacher in class teaching during visit interaction term	0.17
	Teacher in class teaching at time of visit	(0.10) -0.04 (0.09)
Confident in teaching all topics in subject	Treatment	-0.07*** (0.03)
	Treatment*Teacher in class teaching during visit interaction term	-0.00
	Teacher in class teaching at time of visit	(0.04) 0.01 (0.01)
Changes teaching method at least once a month	Treatment	-0.10
		(0.06)
	Treatment*Teacher in class teaching during visit interaction term	0.02
		(0.16)
	Teacher in class teaching at time of visit	0.07
Maintain composure when student	Treatment	(0.10) -0.14**
becomes uisi upuve		(0.06)
	Treatment*Teacher in class teaching during visit interaction term	0.17
		(0.14)
	Teacher in class teaching at time of visit	-0.10 (0.10)
Believes absence from school acceptable	Treatment	-0.18*** (0.06)
	Treatment*Teacher in class teaching during visit interaction term	0.04
		(0.12)
	Teacher in class teaching at time of visit	-0.04 (0.09)
Student's learning achievement motivates teacher	Treatment	-0.08**
	Treatment*Teacher in class teaching during	(0.04) 0.03
	visit interaction term	(0,00)
	Teacher in class teaching at time of visit	-0.07
Domain 2 Index	Treatment	-0.47** (0.17)
	Treatment*Teacher in class teaching during visit interaction term	0.32
	Teacher in class teaching at time of visit	(0.40) -0.07
		(0.25)

Table 6: HRS on Ability/Effort by Teacher in Class Teaching at Time of Visit

Ability/Effort (by Head-teacher owns at least part of the school)		Agree/Strongly Agree Including Control (1)
Able to teach all topics to even the most	Treatment	-0.07
problematic students		(0.07)
		(0.07)
	interaction term	0.04
		(0.13)
	Head-teacher owns at least part of the school	-0.05
	Transforment	(0.09)
subject	Treatment	-0.08***
		(0.03)
	interaction term	0.01
		(0.06)
	Head-teacher owns at least part of the school	-0.00
	Transformer	(0.01)
Changes teaching method at least once a month	Ireatment	-0.21***
		(0.07)
	Treatment*Head teacher owns part of school	0.30**
	interaction term	
		(0.13)
	Head-teacher owns at least part of the school	-0.23**
		(0.11)
Maintain composure when student becomes disruptive	Treatment	-0.08
		(0.07)
	Treatment*Head teacher owns part of school interaction term	-0.29**
		(0.12)
	Head-teacher owns at least part of the school	0.10
		(0.12)
Believes absence from school acceptable	Treatment	-0.18**
		(0.07)
	Treatment*Head teacher owns part of school interaction term	0.01
		(0.24)
	Head-teacher owns at least part of the school	0.08
~	-	(0.14)
Student's learning achievement	Treatment	-0.12*
monvates teacher		(0.06)
	Treatment*Head teacher owns part of school	0.16
	interaction term	(0.11)
	Head-teacher owns at least part of the school	-0.14
	read toucher earlies at least part of the school	(0.10)
Domain 2 Index	Treatment	-0.59**
		(0.24)
	Treatment*Head teacher owns part of school interaction term	0.44
		(0.35)
	Head-teacher owns at least part of the school	-0.46
	····· I	(0.35)

Table 7a: HRS on Ability/Effort by Head Teacher Owns at Least Part of the School

Ability/Effort (by Board of Governors (BOG) own at least part of the school)		Agree/Strongly Agree Including Control (1)
Able to teach all topics to even the most problematic students	Treatment	-0.11
-		(0.07)
	Treatment*BOG owns part of school interaction term	0.19
		(0.12)
	BOG own at least part of the school	-0.19
Confident in teaching all tening in subject	Trastmant	(0.11)
Confident in teaching all topics in subject	Treatment	-0.08^{+}
	Treatment*BOG owns part of school	0.01
	interaction term	(0.06)
	BOG own at least part of the school	-0.00
	boo own at least part of the school	(0.01)
Changes teaching method at least once a month	Treatment	-0.19**
month		(0.08)
	Treatment*BOG owns part of school interaction term	0.10
		(0.11)
	BOG own at least part of the school	-0.08
		(0.11)
Maintain composure when student becomes disruptive	Treatment	-0.11
-		(0.07)
	Treatment*BOG owns part of school interaction term	-0.09
		(0.18)
	BOG own at least part of the school	-0.03 (0.12)
Believes absence from school acceptable	Treatment	-0.26*** (0.07)
	Treatment*BOG owns part of school interaction term	0.33***
		(0.10)
	BOG own at least part of the school	-0.08
Student's learning achievement motivates	Treatment	(0.08) -0.08
teacher		
		(0.07)
	interaction term	-0.05
		(0.08)
	BOG own at least part of the school	-0.02
Domain 2 Index	Treatment	(0.07)
Domain 2 muex	11541116111	-0.52^{+}
	Treatment*BOG owns part of school interaction term	0.01
		(0.32)
	BOG own at least part of the school	-0.29
		(0.25)

Table 7b: HRS on Ability/Effort by Board of Governors Owns at Least Part of the School

Questions									
Panel A: Teaching Practice/Student									=1 if answer
Interaction	Observations	Category ⁺		A		is			
a. Ability				II	III	IV	V	VI	
Able to teach all topics, to even the most problematic students	350	A	2%	9%	13%	51%	25%		Agree or Strongly Agree
Confidence in teaching all topics in my subject	350	С	1%	3%	50%	46%			Very Confident
Maintain composure when student becomes disruptive	349	В	13%	10%	23%	24%	30%		Most of the time/Always
<i>b. Effort</i> Acceptability of Absence from School	350	В	0%	37%	35%	25%	3%		Most of the time/Always
Frequency of new ways of teaching	349	F	7%	5%	26%	23%	40%		At least Monthly
Allowed to work independently	350	A	5%	23%	13%	47%	12%		Agree or Strongly Agree
Cannot discipline students if they are not disciplined at home	349	A	35%	40%	8%	12%	6%		Agree or Strongly Agree
Can do more if parents take interest	349	A	0%	2%	4%	38%	56%		Strongly Agree
Like more feedback from Head Teacher	349	A	0%	1%	9%	57%	33%		Strongly Agree

Appendix Table 1: Summary Statistics and Coding of Teacher Motivation Question

Good relationship with how many Students	349	E	0%	5%	53%	42%		All Students
Like more Involvement in setting students' learning goals	350	A	1%	2%	8%	54%	35%	Agree or Strongly Agree
Workload is manageable	350	A	1%	7%	6%	61%	25%	Agree or Strongly Agree
Working hours are too long	349	G	2%	43%	55%			No
Panel B: Work Environment								
Student learning is motivating	349	A	0%	5%	11%	56%	28%	Agree or Strongly Agree
Satisfied with current job	350	A	8%	19%	23%	39%	12%	Agree or Strongly Agree
Happy with Career Prospects	350	A	3%	11%	21%	50%	15%	Agree or Strongly Agree
Satisfied with current Salary	350	A	22%	32%	27%	17%	1%	Agree or Strongly Agree
Satisfied with current Benefits	350	A	15%	35%	27%	21%	1%	Agree or Strongly Agree
Like greater job security	349	A	1%	0%	4%	38%	57%	Strongly Agree
Change current job given the opportunity	350	А	5%	17%	23%	35%	21%	Agree or Strongly Agree

Relationship with colleagues	349	D	0%	3%	52%	45%			Very Good
Relationship with Head Teacher Respect the Head	350	D	0%	5%	52%	43%			Very Good
Teacher	349	В	0%	0%	3%	21%	76%		Always
Held accountable by Head Teacher	350	В	2%	8%	34%	24%	32%		Most of the time/Always
Hardest challenge to motivate students	349	Н	48%	19%	5%	10%	11%	6%	Do not know

Notes:

⁺Category A has the following possible answers: Strongly Disagree (answer type I), Disagree (answer type II), Neutral (answer type III), Agree (answer type IV), and Strongly Agree (answer type V).

⁺Category B has the following possible answers: Never (answer type I), Rarely (answer type II), Sometimes (answer type III), Most of the time (answer type IV) and Always (answer type V).

⁺Category C has the following possible answers: Not Confident at All (answer type I), Not Confident Enough (answer type II), Confident (answer type III), Very Confident (answer type IV).

[†]Category D has the following possible answers: Bad (answer type I), Fair (answer type II), Good (answer type IV).

⁺Category E has the following possible answers: No Students (answer type I), Some Students (answer type II), Most Students (answer type III), All Students (answer type IV).

[†]Category F has the following possible answers: Not regularly (answer type I), Annually (answer type II), Termly (answer type III), Monthly (answer type IV), Weekly (answer type V).

⁺Category G has the following possible answers: Yes, extremely long (answer type I), Yes a bit long (answer type II) and No (answer type III).

⁺Category H has the following possible answers: Attend school regularly (answer type I), Remain in the classroom and maintain discipline (answer type II), Complete classwork (answer type III), Complete homework (answer type IV), Other (answer type V) and Do Not Know (answer type VI).