

The Effects of Social Identity on Aspirations and Learning Outcomes: A Field Experiment in Rural India

Priya Mukherjee[‡]

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Abstract

I conduct a field experiment in nineteen schools in Rajasthan to investigate whether the norms associated with one's social identity affect one's aspirations, beliefs, and eventual outcomes. Utilizing a "priming" methodology used in social psychology, and more recently in economics, I exploit environmental cues within the subjects' existing environment to "prime" either caste or gender identity through priming questionnaires, thereby introducing exogenous variation in the salience of one's social identity. Randomly assigning whether a subject's caste or gender (or neither) is primed, I first elicit long-run aspirations of adolescents (parents) for their (their child's) future income, educational attainment and occupation. I find that girls have aspirations and beliefs that are biased downwards when gender is primed, while parents of high caste adolescents have higher aspirations and beliefs about income as well as educational attainment when caste is primed. Next, I set up a learning camp at school over ten weeks for these adolescents, in order to test whether identity affects learning outcomes. I elicit subjects' aspirations and beliefs for each of the tests conducted at the learning camp, and record attendance and actual test scores over the ten weeks. Again, I find that girls' aspirations and beliefs are significantly lower when gender is primed, and that learning outcomes are also worse, but only for upper castes girls. Priming caste makes males (but not females) from upper castes have higher aspirations and beliefs, while females from upper castes have worse learning outcomes.

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*Department of Economics. College of William and Mary. Email: pmukherjee@wm.edu

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1 Introduction

Individuals in a society almost always belong to one or more social group, and form a sense of “social identity” - a sense of belonging to the social world¹. Starting with the work of Akerlof and Kranton (2000)², economists have started to study, both theoretically and empirically, the effects of one’s identity³ on economic preferences and behavior. Another, relatively newer strand of literature explores the role of beliefs and aspirations about one’s future economic outcomes and well-being (Mullainathan, 2004; Ray, 2006). While studies in the other social sciences, and social psychology in particular, have hypothesized that one’s identity may play a crucial role in the formation of one’s beliefs, aspirations (about one’s future outcomes) and eventual outcomes⁴, economists have only recently begun to explore this idea (Beaman et al., 2012).

Economic disparities between social groups have been documented for decades. While such disparities may partly be explained by discrimination in the labor market (Bertrand and Mullainathan, 2004), there is limited evidence on whether identity has a more direct, psychological effect on economic outcomes. This study presents the first direct tests of whether social identity affects aspirations, beliefs and eventual outcomes. I focus on two specific forms of social identity, namely, caste and gender. I conduct a field experiment with approximately one thousand adolescents across nineteen schools in a rural district in India to test whether caste and gender identity affect aspirations and beliefs that these adolescents have for their future (long run) economic outcomes, as well as aspirations and beliefs that parents have for their adolescent children. In order to look at the effect of identity on real outcomes, I focus in particular, on learning outcomes, as measured by test scores. I create and run a learning camp in

¹Tajfel and Turner (1979) define social identity as the portion of an individual’s self-concept derived from perceived membership in a relevant social group.

²While work related to social identity in the economics literature began with Becker’s “economics of discrimination” (Becker, 1957), this literature did not start to consider its potential, direct effects on preferences and behavior until only about fifteen years ago.

³In economics, the terms “identity” and “social identity” have been used interchangeably, and I will do so as well in this paper. These two terms do however, have distinct meanings in social psychology; for a discussion, see Jasso (2002).

⁴For examples of this work, see Oyserman (2008), Oyserman and Destin (2010).

partnership with a non-governmental organization (NGO) to provide Math classes at school for a period of approximately ten weeks for these children. I elicit (short run) aspirations and beliefs about scores on multiple tests conducted at the learning camp over the ten weeks, record the eventual test scores, and study the effect of identity on these.

Benjamin et al. (2010) point out that while testing any causal effects that a specific social identity might have on behavior is problematic, social psychology gives us a way to introduce exogenous variation in the salience in one's identity. This methodology introduces "primes" to make a particular social category of an individual temporarily salient, thereby moving the individual's preferences or behavior closer to his or her group's social norm⁵. I use this priming methodology and exploit environmental cues within the subjects' everyday environment to "prime" either caste (*jati*⁶), or gender identity through "priming questionnaires". The region is particularly rich in visual cues in one's environment, which highlight differences across genders as well as *jatis*. These cues include differences in types of traditional attire and jewelry between castes as well as genders, spatial segregation in how castes locate themselves within a village, segregation in seating arrangements between the genders as well as castes at village meetings, differences in occupations between castes and genders, and so on. These features of the everyday socio-economic life in the village play a key role in the re-enforcement and persistence of caste- and gender-based social norms (Unnithan-Kumar, 1997). The priming questionnaires used in this study consisted of questions that made subjects' caste or gender identity salient by asking (and thereby reminding) them about such features of their environment.

The field experiment was conducted in two stages. The first stage of the experiment tested whether caste or gender identity affect a subjects' long run aspirations and beliefs related to income, occupation and educational attainment. The study sample for this stage was divided into three broad groups based on whether a subject's identity was primed before being asked

⁵Experimental work in the identity economics literature typically uses some form of this methodology.

⁶The word *jati* is often used interchangeably with caste in the region, though the latter often also refers to a broader social construct called *varna*, which is made up of multiple *jatis*. It is well documented that caste affiliation in everyday life, and in socio-economic networks takes the form of *jati*, rather than the broader concept of *varna* (Kothari, 2004).

about their aspirations or beliefs. The first and second groups consisted of subjects for whom gender and caste were primed, respectively. The third group consisted of subjects who were asked a set of “neutral” questions, that is, questions entirely unrelated to caste or gender. This group served as the control group for the first two (primed) groups. Each of these groups was further divided into two groups: the first consisted of adolescent subjects, and the second group consisted of parent-adolescent pairs, where the parent was the primary respondent to both the priming and aspirations and beliefs questions. The aim of this final subdivision was to study whether parents are more responsive to the salience of either gender or caste identity than children.

The second stage of experiment was designed to specifically study the effect of social identity on aspirations and beliefs about short run learning outcomes (test scores), as well as effects on actual intermediate and final learning outcomes, namely, attendance and test scores. The treatment and control groups in this stage were identical to those in the first stage, except for one main difference: this part of the experiment had a seventh group⁷ that served as a “pure control” group. The subjects in this group consisted of adolescents who were not asked questions related to beliefs or aspirations about test scores, allowing me to use this group to account for any differences in learning outcomes that may be attributable to the mere act of thinking about one’s beliefs and aspirations⁸ about test scores.

My first set of findings is related to gender. The results from the first stage of the experiment show that adolescent females have lower aspirations and beliefs (for future income) when gender is primed, while we do not see a similar effect in the treated groups that have parental involvement (that is, the group which consisted of parent-adolescent pairs). In the second stage, I again find that females have lower aspirations and beliefs on test scores. These effects

⁷The neutral group with adolescent subjects in the first stage was twice the size of the other groups precisely because it would be split in two in the second stage. Half the group was asked “neutral” questions as in the first stage, while the other half was treated as the pure control. Note that the randomization split the sample into the seven treatment and control groups corresponding to this second stage, and two of the groups were combined into one “neutral” group in the first stage to serve as a control for the primed groups with adolescent subjects.

⁸Thinking about and stating aspirations is similar to setting goals. Therefore in some sense, the comparison of the non-primed (neutral) group and this pure control group is similar to testing the effect of setting goals on learning outcomes.

are stronger among females belonging to high castes. In addition, test scores for gender-primed high caste girls fall by 12.9 percent relative to the control group. In line with the results found in stage I, parental involvement does not lead to detectable differences between primed and unprimed groups, except for males: high caste males are 10 percent more likely to attend school when gender is primed, while test scores of low caste males fall by 7.1 percent.

My second set of findings is related to caste. First, I find that high caste parents have greater aspirations and beliefs for their child's long run outcomes (income and educational attainment) when caste is primed. For instance, high caste parents aspire for 0.82 additional years of schooling when their caste is primed. In the second stage of the experiment, while I don't find effects on stated aspirations and beliefs about test scores for this parent-adolescent group, I find that high caste males in this group end up exerting more effort: they are about 13 percent more likely to attend school. High caste adolescent males (without parental involvement) have higher aspirations and beliefs on test scores, whereas high caste girls have significantly lower attendance at school as well as lower test scores when their caste is primed. In contrast, low caste girls exert more effort when their caste is primed and are 10.6 percent more likely to attend school.

The findings on the effects for high caste females are consistent with anthropological studies (in addition to anecdotal evidence) that high caste females are less empowered within the family than low caste females in this region. More recent work in economics also supports this claim. For example, in an evaluation of an entrepreneurship training program in India, Field et al. (2010) find that the number of restrictions faced by women is significantly higher for higher caste women than women belonging to low caste groups.

The results on low status males and females are consistent with findings from Munshi and Rosenzweig (2006), who show that boys belonging to lower castes or jatis are more likely to remain within established jati networks, attend local language schools, and work in traditional occupations, while girls are increasingly attending English-language schools (the returns from which increased significantly over the period under study).

My study contributes to three emerging literatures in economics. First, it contributes to the literature on identity economics that studies how people's conceptions of themselves, and of what they are supposed to do given prevailing social norms, affects their economic lives. Akerlof and Kranton (2000) was the first paper to explore this possibility by proposing a utility function that incorporates identity as a motivator for behavior, and incorporates it as an argument in the utility function. The model demonstrates how identity can affect individual interactions, and shows implications for gender discrimination in the workplace, the economics of poverty and social exclusion, and the division of labor in the household. Other theoretical work in this literature (for example, Benabou and Tirole, 2011) has similarly modeled individuals having disutility from deviating from their relevant social group's norm. On the empirical side, studies that have used the priming methodology to study the effect of identity on behavior have reached the following broad conclusion: when an individual's social identity is made salient, she will behave differently from someone with the same identity in a treatment group, where identity was not made salient. For instance, in an experiment conducted in rural villages in northern India, Hoff and Pandey (2006)⁹ find that a boy belonging to a low caste performs worse on a test when his caste is publicly announced prior to the test, whereas a boy from the same caste and taking the same test will perform better when his caste is not made public.

The second emerging body of literature in economics that is most relevant to this study is that which explores the determinants of aspirations, and the role that aspirations might play on eventual outcomes (for example, Bernard et al., 2011; Beaman et al., 2012; Genicot and Ray, 2012). In line with the work in the goals literature in social psychology (Heath et al., 1999) and more recent work in economics on expectations (Koszegi and Rabin, 2006), Genicot and Ray (2012)¹⁰ model aspirations as reference points. In their model, one's initial wealth level

⁹Note that this and related experiments on caste in India have focus entirely on boys. However, gender also plays a crucial role in how caste identity manifests itself. To my knowledge, my study is the first to offer evidence on the gender-specific effects of caste identity.

¹⁰Relatedly, in the anthropology literature, Appadurai (2004) posits that one's social identity may play a significant role in shaping one's beliefs about one's own potential, life goals and eventual economic outcomes. He introduces the notion of the "capacity" to aspire, and argues that prevailing social norms may make certain groups of disadvantaged individuals less likely to "aspire" for future well-being, thereby leading to underinvestment and lower effort today, leading to poorer economic outcomes in future.

shapes one's aspirations for future economic outcomes, which in turn affect the incentives to invest or exert effort today. This in turn, affects wealth in the next period. Thus aspirations and income distributions evolve jointly, and it is conceivable that at very low wealth and aspiration levels, individuals may get stuck in an aspirations-based poverty trap. My study links this idea to the recent work in identity economics by testing how one's social identity, instead of one's wealth, moves one's aspirations and beliefs away from what these would have been without identity considerations. A shortcoming of my study is that I do not disentangle the effect of priming social identity and that of aspirations themselves, on outcomes. Hence this remains an area for future research.

Finally, this study contributes to the literature on how beliefs about one's own or one's child characteristics affects schooling decisions and investments in education (Jensen, 2010; Nguyen, 2008). This growing body of work explores the extent to which individuals have incorrect perceptions about the returns to education, and how interventions (for instance, through the provision of information) might de-bias these beliefs in order to increase investments and improve learning outcomes. There has been no work, to my knowledge, that investigates the determinants of downward biased beliefs and poor outcomes in education. By focusing on the specific case of social identity in my experiment, I am able to test the causal role of identity in determining both adolescents' and parents' beliefs (and aspirations) about future (long run), and learning (short run) outcomes.

The results in this study are relevant for policy. In India, one's caste (*jati*) as well as gender remain the most salient forms of social identity¹¹. Persistent inequality in economic well-being and human capital accumulation between the genders and castes remains to this day (Dreze and Sen, 2004; Deshpande, 2011), and the only policy tools that has been employed to try to address this problem is that of affirmative action. While affirmative action policies have indeed been shown to improve outcomes along certain dimensions (Chattopadhyay and Duflo, 2004), my findings suggest that affirmative action policies may not be enough. Consistent with this

¹¹This is true not only in rural areas that are typically less developed, but also true among economically well off communities in urban areas. For example, Banerjee et al (2009) show that marriages are still mostly endogamous (that is, individuals marry within their own caste) even among educated urban households.

idea, the World Development Report (2015) draws attention to the idea of how, *even in the presence of access to economic opportunities*, the salience of one’s social identity may lead to individuals having biased beliefs about their ability to improve their economic well-being, thereby affecting effort and eventual outcomes. Possible interventions to motivate subjects (with biased beliefs) might be through interactions with role models¹², or via the provision of information to de-bias beliefs, and so on.

The remainder of the paper is organized as follows: Section 2 discusses the rationale for priming social identity. Section 3 describes the design and experimental procedures. Section 4 reports the experimental results on the effects of priming gender, and Section 5 discusses the effects of priming caste or the *jati*. Section 6 provides a discussion of the results and Section 7 concludes.

2 Priming Identity

In this section, I first describe the rationale for picking the questions that were used to prime caste and gender identity in this experiment. I then summarize a conceptual framework introduced in Benjamin et al. (2010) that demonstrates how “priming” creates exogenous variation in the salience of identity, and resultant changes in behavior.

2.1 Choice of priming questions

Questions for priming gender or group identity were formulated by utilizing information from the subjects’ environments. This was done for two reasons. First, the region is particularly rich in visual cues in the environment, which highlight differences across genders as well as *jatis*. These play a key role in the re-enforcement and persistence of jati- and gender-based social norms in everyday life (Unnithan-Kumar, 1997). Second, introducing artificially strong priming methods in order to be able to see significant effects on outcomes (even if these do in

¹²For instance, Jensen (2010) shows that villages randomly assigned to greater economic opportunities for girls and where girls were exposed to “role models”, were more likely to have greater female school enrollment.

fact exist in the environment), has poorer external validity.

Heterogeneity in attire was the first feature exploited to formulate both gender and group identity priming questions. For instance, men belonging to different social groups wear different colored turbans, and women belonging to different social groups wear different types of blouses and skirts. There also exists heterogeneity in the types of jewelry worn across the genders both across and within social groups. The second major feature that seems to reinforce group identity is the considerable segregation in the way that social groups locate themselves within a village¹³. There are other features that are used to differentiate different castes. For example, throughout India, and particularly in rural areas, *jatis* are typically endogamous, and in Rajasthan, there exist distinct features in everyday life that set these groups apart: what types of clothing and jewelry are worn, which part of the village each caste lives, where individuals belonging to these groups seat themselves at village meetings, what types of occupations individuals belonging to specific castes take up etc. See Illustrations 2 and 3 onwards for illustrations of differences in clothing worn between *jatis* both within and across genders.

2.2 What does priming achieve?

It is useful to think about priming effects, decisions and norms in the context of a simple model proposed in Benjamin et al. (2010). I briefly discuss this model below in the context of this experiment.

Suppose x is decision variable. In our context, this is the survey respondent's (i) aspiration (for a particular outcome), (ii) belief (about a particular outcomes), or (iii) effort (measured by attendance)¹⁴.

¹³For instance, both children and adults from a particular *jati*, who live in one area of the village, do not typically venture into an area that is demarcated for a different *jati*. Similar norms exists through most of rural India.

¹⁴When the subjects are parent-child pairs, with the primary respondent being a parent, attendance at school reflects effort indirectly induced by parental influence on the child, along with any direct effect that the priming may have had on the child. In this case, x would roughly measure a "joint" effort by the parent and child as a result of the prime.

Let us denote a category by C . The strength of affiliation towards a category is denoted by $s > 0$ and let x_0 be the choice that an individual would make if identity did not play any role in behavior and decision-making. Let x_C be the choice that social norms would dictate for a particular category C . If an individual places a weight $w(s)$ (where, $w(s) \in [0, 1]$, $w(0) = 0$ and $w' > 0$), he will maximize his utility:

$$U = -(1 - w(s))(x - x_0)^2 - w(s)(x - x_C)^2 \quad (1)$$

Benjamin et al. (2010) assumes that there is a steady state value \bar{s} of the strength of affiliation to the category C , and it reasonable to do so in our context as well.

The solution to maximizing (1) is then: $x^* = (1 - w(s))x_0 + w(s)x_C$. A category *prime* is modeled as a small, temporary change away from the steady state \bar{s} , so that priming would then move x^* closer to the norm x_C .

Note that it is theoretically ambiguous whether individuals that have very strong affiliation to a the category (that is, high s) would also be more sensitive to priming. This is because the shape of the $w(s)$ function is unknown¹⁵. One possibility is that the function is concave such that at high levels of s , individuals are saturated and priming has little effect.

Gender norms may be different depending on the community that one belongs to, and this is true in particular, among the *jatis* in Rajasthan, where the study was conducted. Women belonging to low status groups are more likely to leave the house for work, work alongside men for the family's livelihood and generally enjoy a much higher status within the household than women in upper caste groups (Unnithan-Kumar, 1997). On the other hand, women belonging to higher status households less likely to participate in the labor market, and gender norms tend to be more regressive among these higher caste/status groups (Das, 2005; Ray, 2012).

It is worthwhile to note here that in both experimental work, as well as in non-experimental studies in the identity economics literature, there are broadly two interpretations given for the empirical findings that demonstrate changes in behavior when one's identity has been

¹⁵For example, if $x_0 < x_C$, $\frac{d^2 x^*}{ds^2} > 0$ if and only if $w''(s) > 0$, where $\frac{d^2 x^*}{ds^2} = (x_C - x_0)w''(s)$

made salient. The first is that individuals conform to norms associated with a social category when that category is made salient (Jianakoplos and Bernasek, 1998), consistent with the mechanism described above. Second, it may be that individuals belonging to disadvantaged groups conform to negative stereotypes, that is, they may become nervous or anxious when reminded of their identity, causing them to perform poorly on tests or other cognitive tasks immediately after their identity has been primed (Afridi et al., 2010; Shih et al., 1999; Steele and Aronson, 1995). While it is difficult to disentangle which of the two is really operating, the results I will find here (particularly on attendance and test scores) are less likely to be driven by stereotype threat. This is because subjects were primed a significant amount of time prior to when they actually took the test.

The treatments assigned to each group, the protocols followed for each stage of the experiment, and the outcomes of interest are described in the next section.

3 Experimental Design

The experiment was conducted between Fall 2013 and Summer 2014, with about one thousand adolescents (and their parents for a subset) in nineteen villages in Rajasthan, where social segregation and discrimination based on both caste and gender is very common (Deshpande, 2011; World Bank, 2001; Unnithan-Kumar, 1997). The field experiment was conducted in two stages: in the first stage, I looked at the effects of priming social identity on subjects' long run aspirations and beliefs related to future income, occupation and educational attainment. In the second stage, I focused on how priming social identity affects aspirations and beliefs about short run learning outcomes (test scores), as well as effects on actual intermediate and final learning outcomes, namely, attendance and test scores. Below, I discuss the experimental setting and details of the design and protocols.

3.1 Study Context and Sample

The experiment was conducted across nineteen villages in a district called Pali in the north

western state of Rajasthan in India. For logistical reasons, the villages for the study were chosen according to (i) proximity to the Pali district capital, and (ii) whether the partner NGO, Educate Girls, had a volunteer teacher in that village. All villages were within a 100 kilometer radius of the Pali district capital and within a 200 kilometers of each other. One co-educational school that contained grades 6 to 8 was chosen from each of these villages and the final sample for the study consisted of approximately 1000 children. Children were then randomly assigned to the control and treatment groups.

The study sample consisted of all adolescents enrolled in a study school in grades 6 through 8, totaling to approximately one thousand. They were randomly assigned to seven equal-sized groups: Groups 1 and 3 consisted of adolescents for whom gender and caste was primed, respectively. Groups 2 and 4 consisted of adolescent-parent pairs, for whom gender and caste was primed, respectively. Group 5 consisted of adolescents that were asked neutral questions, and Group 6 consisted of adolescent-parent pairs that were asked neutral questions. Group 7 consisted of adolescents who were asked neither neutral or priming questions, nor questions related to aspirations or beliefs.

The sample for the first stage of the experiment was divided into *six* groups: this was done by combining adolescent subjects in groups 5 and 7 into one group listed above, which served as the control for groups 1 and 3. Both stages of the experiment are described in the next two subsections.

3.2 Experiment - Stage I

The goal of the first stage of the experiment was twofold: first, I test whether caste or gender identity affects aspirations and beliefs about one's own future economic outcomes (income, educational attainment and occupation). The second aim was to test the effect of these two forms of identity on parents' aspirations for, and beliefs about, their children's future economic outcomes.

1) Gender Primed Groups

Gender was primed in *Groups 1 and 2*. Subjects in Group 1 consisted of adolescents in grades

6 through 8 in the study schools, whereas subjects in Group 2 consisted of adolescent-parent pairs, where the primary respondent for the aspirations and beliefs questionnaires was the parent. That is, for the implementation of the questionnaires in Group 2: (i) both parent and child were present together, (ii) the questions were addressed to the parent making the latter the primary respondent¹⁶, and (iii) the questions were about the aspirations or beliefs that the parent had *for* her child. Surveys for subjects in Group 1 were (i) conducted at school, (ii) the child was the only respondent, and (iii) the questions were about the child's own aspirations and beliefs.

Subjects were asked eight questions that were intended to prime the adolescent's gender identity. A sub-sample of questions that were used to prime gender is provided below:

a) Would you say that both girls and boys should study in school together, or should class be held separately?

b) Are there both male and female teachers in your school?

c) Can you describe the differences in the kinds of clothes that men and women wear on special occasions such as weddings?

d) Would you prefer to be taught by a male teacher or a female teacher?

The questions were identical, but framed slightly differently when the primary respondent was the parent (Group 2). In that case, questions 2 and 4 from above were framed as follows: (2') Are there both male and female teachers in your child's school? and (4') Would you prefer to be taught by a male teacher or a female teacher?

2) Jati Primed Groups

Caste, or *jati* was primed for subjects in *Groups 3 (adolescents) and 4 (adolescent-parent pairs)*. Apart from the questions used to prime identity, the implementation procedures for subjects in Groups 3 and 4 were identical to that of the gender primed groups 1 and 2, respectively.

Subjects were asked eight questions that were intended to prime the adolescent's caste identity.

¹⁶However, parents could consult their child while answering any of the questions.

A sub-sample of questions that were used to prime a subject's social group is provided below:

- a) *What is the traditional dress worn by the people of your caste¹⁷ ?*
- b) *Are there any differences in dress code for people from different castes? For example, I have heard that people from different regions and jatis wear different colored turbans.*
- c) *Do families belonging to different castes live in your village?*
- d) *Which community (samaaj/jati) do people from your community marry into?*

3) Neutral Groups

Group 5, which consisted of adolescents, served as the control group for Groups 1 and 3. Before they were asked questions about their beliefs and aspirations, these subjects were asked a set of “neutral” questions that did not prime identity. Similarly, *Group 6* serves as the control group for Groups 2 and 4, that is, subjects in Group 6 consisted of adolescent-parent pairs, who were asked “neutral” questions before being asked questions about aspirations or beliefs.

A sub-sample of questions that were used to ask subject neutral questions is provided below:

- a) *Do you wear a uniform to school?*
- b) *Do a lot of tourists visit this area?*
- c) *Does this region get a lot of rain?*
- d) *Can a lot of peacocks be seen around here?*

3.3 Outcomes of Interest in Stage I

The goal of the first stage of the experiment was to look at the effects of priming social identity on long run (life) outcomes. Subjects were asked about their life aspirations and beliefs: namely, (i) how much monthly income they would aspire to earn in future (or what aspiration a parent has for the child), (ii) what level of education they would aspire to complete (or what

¹⁷Other than the word *jati*, a word that is used locally to refer to ones caste is *samaaj*.

aspiration of educational attainment the parent has for the child) and (iii) what type of occupation they would aspire to be in (or what aspiration the parent has for the child's occupation). Subjects were also asked about corresponding beliefs for each of these hypothetical outcomes, giving us a total of six outcomes in the Stage I.

Measurements

(i) Monthly income was measured in Indian Rupees. In the analysis, I use the logarithm of the stated aspiration or belief for income.

(ii) Educational attainment is measured in terms of years of schooling.

(iii) For occupational choice, responses were coded into "high" and "low" skill. Therefore the outcome variable takes value 1 if the response corresponds to a high skilled occupation, and zero otherwise.

As an illustration of how these questions were actually framed, I provide the questions related to educational attainment below:

Elicitation of aspirations and beliefs about educational attainment *to adolescents*; case where *aspiration is elicited before belief*.

[Aspiration] What is your aspiration for the level of education you will attain - that is, what level of education do you aspire to complete?

[Belief] You just told me that you aspire to complete level of education. What do you believe will happen - that is, what level of education do you believe you will be able to complete?

Elicitation of aspirations and beliefs about educational attainment *to parent-adolescent pair (parent is primary respondent, but child is present)*; case where *belief is elicited before aspiration*.

[Belief] What do you believe will happen - that is, what level of education do you believe *[Child's name]* will be able to complete?

[Aspiration] You just told me that you believe that *[Child's name]* will be able to complete

..... level of education. What is your aspiration for [Child's name]'s educational attainment - that is, what is your aspiration for the level of education you would like [Child's Name] to complete?

The order of the aspirations and beliefs questions was randomly assigned across subjects within each group. As it turns out, the order in which aspirations and beliefs are asked significantly affects the stated aspirations but not beliefs. This is discussed in Sections 4 and 5 along with the main results. In addition, each of the questionnaires either 1) primed gender, or 2) primed caste, or 3) asked neutral questions, and randomly varied in whether the respondent was an adolescent, or a parent-adolescent pair. These questions were asked in the first part of the long run survey, just before subjects were asked for beliefs and aspirations.

3.4 Experiment - Stage II

While one may be able to elicit aspirations and beliefs about an individual's long run future outcomes, observing actual realizations of these outcomes is a challenge. In order to look at how gender and caste identity affect actual realizations of outcomes in addition to the corresponding aspirations and beliefs, I focused on the specific case of learning outcomes. To do so, I created and implemented a learning camp at each of the nineteen study schools with the support of two NGO's: Pratham (for the creation of the learning content and testing tools), and Educate Girls (for the actual implementation). The goal of the second stage of the experiment was to test whether caste or gender identity affects : (i) aspirations and beliefs about test scores, (ii) effort, measured by attendance and (iii) learning outcomes, measured by test scores. As in the first stage, the second stage tests these effects separately for adolescents and parent-adolescent pairs in order to look at differences in outcomes when a parent is involved. The sample for the second stage of the experiment was divided into *seven* groups as listed in Subsection 3.1, and can be broadly grouped as follows:

1) Gender Primed Groups

Gender was primed in subjects belonging to two treatment groups: *Groups 1 and 2*. The composition of both of these groups was identical to that in Stage I. Other than the timing of how the short run questionnaires were implemented (explained in more detail below), the protocol in both groups was also identical to that in Stage I. That is, for Group 2, which consisted of parent-adolescent pairs: (i) both parent and child were present together, (ii) the questions were addressed to the parent making the latter the primary respondent, but parents could consult their child while answering any of the questions., and (iii) the questions were about the aspirations or beliefs that the parent had *for* her child. Similarly, surveys for subjects in Group 1 were (i) conducted at school, (ii) the child was the only respondent, and (iii) the questions were about the child's own aspirations and beliefs.

2) Jati Primed Groups

Caste, or *jati*, was primed in subjects belonging to two treatment groups: *Groups 3 and 4*. The composition of both of these groups was identical to that in Stage I. Other than the questions used to prime identity, the implementation procedure for subjects in Group 3 was identical to that implemented for the gender primed group with adolescent subjects (Group 1). Similarly, the implementation procedure for subjects in the caste primed group with parent-adolescent pairs (Group 4) was identical to that for the gender primed parent-adolescent pairs (Group 2).

3) Neutral Groups

The composition of *Groups 5 and 6* was identical to that of Stage I, and served as the control group for Groups 1 and 3. Analogous to the implementation in Stage I, subjects were asked a set of "neutral" questions that did not prime identity.

The questions that were used to prime identity in Stage II were similar to those used in Stage I.

4) Pure Control

Group 7 consisted of adolescent subjects were not asked about aspirations or beliefs pertaining

to test scores. This group was created in order to isolate any potential effects that being asked about aspirations or beliefs might itself have on outcomes. Group 7, therefore, constitutes a “pure” control. The subjects in Group 7 were treated exactly as the subjects in Group 5 when the long run (or life) questionnaire was conducted, that is, they were asked “neutral” questions, followed by questions about long-run life goals and beliefs. Once the learning camp classes actually began, they were simply told their test scores, but were not asked any additional “neutral” or priming questions, and not asked for their aspirations and beliefs on test scores. In this sense, Group 7 constitutes a “pure” control group.

Even though we would expect that on average subjects would weakly improve on test scores as a result of having attended the free learning camp, it is important to note that steps were taken in order to counteract any potential negative effects of being “primed”. In addition to subjects being debriefed in detail at the end of the experiment, remedial classes were set up for any students that appeared to not have improved their performance as much as students in the relevant control group¹⁸.

3.5 Outcomes of Interest in Stage II

A test worth 15 points on each topic was conducted at school by the research team approximately every ten to twelve days (after the learning camp teacher had finished teaching the relevant topic). Subjects in groups 1 through 6 were primed (where applicable), and asked questions on what score the subject would aspire towards, or strive for, and what score the subject believed he/she would receive on the next test.

¹⁸The volunteer teachers were trained to be especially encouraging during these remedial sessions, and students received stickers and stars for effort.

Outcomes 1 and 2: Aspirations and Beliefs

Questions related to subjects' test score aspirations and beliefs were asked a few days prior to the actual test was conducted at school. The examples below illustrate how these questions were framed:

Elicitation of aspirations and beliefs about test score to adolescents; case where aspiration is elicited before belief.

[Aspiration] What is your aspiration for the test score out of 15 points that will be held as part of the learning camp at school?

[Belief] You just told me that you aspire to obtain .../15 points on the next test. What do you believe will happen - that is, what score out of 15 do you believe you will be able to obtain on the next test?

Elicitation of aspirations and beliefs about test score to parent-adolescent pair (parent is primary respondent, but child is present); case where belief is elicited before aspiration.

[Belief] What do you believe will happen - that is, what test score out of 15 do you believe [Child's name] will be able to obtain on the next test that will be held as part of the learning camp at school?

[Aspiration] You just told me that you believe that [Child's name] will be able to obtain .../15 points on the next test. What is your aspiration for [Child's name]'s next test score - that is, what is your aspiration for the score out of 15 you would like [Child's Name] to obtain?

The order of the aspirations and beliefs questions was randomly assigned across subjects within each group., and each of the questionnaires either 1) primed gender, or 2) primed caste, or 3) asked neutral questions, and randomly varied in whether the respondent was an adolescent, or a parent-adolescent pair. These questions were asked in the first part of the short run survey, just before subjects were asked for beliefs and aspirations.

Outcome 3: Learning Outcome

I use test scores on tests that were conducted by the research team at school after each topic was taught, as the learning outcome. Each of the tests was worth 15 points¹⁹. Tests were graded by graders hired by the research team as soon as a round of tests had been completed. Subjects (only adolescent, or parent-adolescent pair, depending on the random assignment) were told their test scores soon after.

Outcome 4: Effort

Classes were held at school, but in all nineteen schools, the timing as well as the days on which a learning camp class would actually be held, was not common knowledge for the students, and hence uncertain. The actual days and timing were informally determined by the school headmaster, volunteer teacher and the research team on a weekly basis. The students were not told beforehand²⁰. I therefore use attendance data at school as a measure of effort. Data on attendance was collected from administrative records at each school.

3.6 Timing

An exhaustive list of all students in grades 6 through 8 from school rosters was collected in Fall 2013, followed soon after by a household survey. Subjects were not told about the longer study at this time. Stage I of the experiment was implemented in the second half of January 2014²¹, and the learning camp classes also began around this time (in the week of January

¹⁹The two tests taken at the start and end of the learning camp were worth 24 points each - these have been appropriately scaled for the analysis.

²⁰The research team tracked these classes by conducting random spot checks to ensure that the requisite amount of time had been spent on each topic before a test was actually conducted for that topic.

²¹There was a gap of about a month between the household surveys and the start of intervention due to local elections and school examinations that were being held at the time.

13). The content of the learning camp was divided into multiple topics, and was designed to ensure that each topic would be taught over approximately ten to twelve days. Students were then tested by the research team at school on each topic at the end of each of these ten-day periods. Before each test was conducted, the research team administered a survey asking the adolescents (or parent-adolescent pairs) about their goals and expectations for the upcoming test. After each topic was taught by the volunteer teacher, the survey team administered a short test (with five questions worth three points each) on each topic. Tests were graded immediately afterwards²², and each subject was told his or her grade on the previous test before being asked about aspirations and beliefs about the next test. There were a seven test conducted during the learning camp, and each of the four short run outcomes described above (namely, test score aspiration, test score belief, attendance and test score) was therefore recorded seven times through the duration of the learning camp. At the end of the learning camp, follow up surveys were conducted to collect information on friendship networks for the study sample, as well as information on parental involvement in learning activities at home.

Table 1 provides p-values for an F-test of joint significance on baseline covariates²³.

Figure 1 illustrates the timing of the procedures, and Figure 2 shows a schematic of how the sample was split into Groups 1 through 7. The evolution of aspirations, beliefs and actual test scores over each of the seven periods during the learning camp is illustrated in Figure 3. As expected, aspirations are, on average, higher than beliefs, but both are significantly higher than test scores. As discussed in the Appendix, it is also the case that parents report being more optimistic than children. The table below provides a summary of the treatment and control groups for the study.

²²All tests were graded by graders hired and trained by the research team.

²³Since I will investigate effects for each of the four social groups: high caste males, high caste females, low caste males, and low caste females, I also report test balance within each of these groups in the Appendix.

No.	Group
1	Gender is primed for child only
2	Gender is primed for child-parent pairs
3	Social group (or <i>jati</i>) is primed for child only
4	Social group (or <i>jati</i>) is primed for child-parent pairs
5	Neutral questionnaire for child only
6	Neutral questionnaire for child-parent pairs
7	No goals or priming*

Notes: Subjects were asked about their short run (test-score related) as well as long run aspirations and beliefs in groups 1 through 6.

*Children in Group 7 were not asked about aspirations or beliefs related to test scores during the learning camp, but were asked for long run aspirations and beliefs. They were asked “neutral” questions when they were asked the long-run questions (that is, group 7 was treated identical to group 5 with respect to the long run aspirations and beliefs questionnaires)

4 Results - Gender

Gender differences have been found in competitiveness (Gneezy et al., 2003; Croson and Gneezy, 2009; Buser et al., 2014), time time and risk preferences (Benjamin et al., 2010), and investment decisions (Jianakoplos and Burnasek, 1998). The order of the aspirations and beliefs questions was randomly assigned across subjects within each group., and each of the questionnaires either 1) primed gender, or 2) primed caste, or 3) asked neutral questions, and randomly varied in whether the respondent was an adolescent, or a parent-adolescent pair. Similarly, parents’ aspirations for children may also be driven by prevailing gender norms, and parental influence prove to be a critical driving force in shaping a child’s own expectations and goals, as well outcomes (Buchman and Dalton, 2002). This could occur through two broad

channels. First, parents may divert resources towards or away from a particular child based on the child's gender. Second, a parent's encouraging (or discouraging) attitude towards the child that results from the salience of the child's gender identity, may affect a child's motivation and eventual outcomes.

In the subsections below, I summarize the results of priming gender identity on the outcomes for Stages I and II for both adolescents (Group 1) and parent-adolescent pairs (Group 2).

4.1 Stage I Results

The empirical specification estimated for each of the Stage I outcomes is as follows:

$$y_{sgi} = \beta_0 + \beta_1 T_{sgi}^G + X'_{sgi} \gamma + \eta_g + \nu_s + \epsilon_{sgi} \quad (2)$$

where y_{sgi} is one of the Stage I outcomes for adolescent i in grade g in school (village) s , T_{sgi}^G is a dummy for treatment assignment and takes value 1 if the adolescent was assigned to one of Groups 1 or 2, where gender was primed, and X_{sgi} is a vector of individual level controls. η_g and ν_s are grade and school fixed effects, and ϵ_{sgi} is an individual specific error term. The effect of priming is given by β_1 , and we would like to test is whether priming identity affects males and females (separately).

Note that p-value adjustment were made to address potential concerns related to the number of outcomes (equal to three) being looked within two categories: (i) aspirations and (ii) beliefs. In the tables, I report p-values as well as the corresponding False Discovery Rate (FDR) q-values based on Benjamini and Hochberg (1995)²⁴.

When looking at the effect of priming gender, I first look at effects on (1) male subjects and (2) female subjects. Recognizing the possibility that gender norms may be caste-specific, I investigate heterogeneous effects of priming gender by caste category. When doing this, I look at effects on (1) high caste males, (2) low caste males, (3) high caste females, and (4) low caste females. Table 3 reports results on the Stage I outcomes for male and female

²⁴See Anderson (2008) for a discussion of the FDR and other available procedures for making appropriate p-value adjustments.

adolescent subjects, so the sample consists of subjects belonging to Group 1 (gender primed adolescents) and the relevant control group, which consists of subjects belonging to Groups 5 and 7. Similarly, Table 4 reports the corresponding results for subjects in Group 2, which comprised of parent-adolescent pairs. The corresponding results for parent-adolescent pairs are given in Table 4.

My results from the first stage of the experiment show that adolescent females have lower aspirations and beliefs (for future income - 55 percent and 71 percent lower aspirations and beliefs respectively) when gender is primed, while I do not see a similar effect in the treated groups that have parental involvement (that is, for Group 2). Of these, the result on aspiration does not survive the FDR correction as the q-value moves from 0.062 to 0.186. In the parent adolescent group, parents believe their sons are 7.3 percent more likely to pursue a high skilled occupation²⁵.

4.2 Stage II Results

The empirical specification estimated for each of the Stage II outcomes is as follows:

$$y_{sgit} = \beta_0 + \beta_1 T_{sgit}^G + X'_{sgit} \gamma + \eta_g + \nu_s + \sigma_t + \epsilon_{sgit} \quad (3)$$

where y_{sgit} is one of the Stage I outcomes for adolescent i in grade g in school (village) sin period t , T_{sgit}^G is a dummy for treatment assignment and takes value 1 if the adolescent was assigned to one of Groups 1 or 2, where gender was primed, and X_{sgit} is a vector of individual level controls. η_g , ν_s and σ_t are grade, school and period fixed effects, respectively, and ϵ_{sgit} is an individual and time specific error term. Note that all Stage II results control for the subject's initial test score. The effect of priming is given by β_1 , and we would like to test is whether priming identity affects males and females (separately). Note that all errors were clustered at the individual level. Results for the adolescent treatment group (Group 1) are reported in Table

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The FDR q-value for this result is 0.126.

7, and for the parent-adolescent pair treatment group (Group 2) are reported in Table 8.

Since gender norms are typically different across castes, and in particular, are perceived to be more strongly enforced among most upper caste groups in the region where the study was conducted, I also run the above specification separately for high and low caste groups, and these results are reported in Table 7.1 (adolescents) and Table 8.1 (parents-adolescent pairs).

In the second stage, I again find that females have lower aspirations and beliefs on test scores. These effects are stronger among females belonging to high castes. In addition, test scores for gender-primed high caste girls fall by 12.9 percent relative to the control group. In line with the results found in stage I, parental involvement does not lead to detectable differences between primed and unprimed groups, except for males: high caste males are 10 percent more likely to attend school when gender is primed, while test scores of low caste males fall by 7.1 percent.

5 Results - Caste (*Jati*)

Non-experimental (Kothari, 2004; Deshpande, 2011) work demonstrate the extent to which the socio-economic disparities persist between high and low status communities or castes. There are a couple of experimental studies on effects of caste identity on *boys*, which show that when the caste or *jati* of a low status boy is publicly announced, he is likely to perform poorly on a cognitive test (Hoff and Pandey, 2006; 2013). As was the case for gender, there are no studies, to my knowledge on the effects of social identity on goals, beliefs and eventual outcomes.

In the two subsections below, I summarize the results of priming *jati* identity on long-run aspirations and beliefs, as well short-run aspirations, beliefs, attendance and test scores.

5.1 Stage I Results

The empirical specification estimated for each of the Stage I outcomes is as follows:

$$y_{sgi} = \beta_0 + \beta_1 T_{sgi}^C + X'_{sgi} \gamma + \eta_g + \nu_s + \epsilon_{sgi} \quad (4)$$

where y_{sgi} is one of the Stage I outcomes for adolescent i in grade g in school (village) s , T_{sgi}^C is a dummy for treatment assignment and takes value 1 if the adolescent was assigned to one of Groups 3 or 4, where caste was primed, and X_{sgi} is a vector of individual level controls. η_g and ν_s are grade and school fixed effects, and ϵ_{sgi} is an individual specific error term. The effect of priming is given by β_1 , and we would like to test is whether priming identity affects high caste and low caste subjects (separately).

For the results here, I make the same p-value adjustments as described for the gender primed treatment in section 4.

The results for caste or *jati* priming effects in Stage I are shown in Tables 5 and 6. High caste parents have greater aspirations and beliefs for their child's long run outcomes. In particular, both their aspirations and beliefs for their child's future income are roughly doubled when their caste is primed. Both results survive the FDR p-value adjustment, with q-values equal to 0.006. Similarly high caste parents aspire for 0.82 additional years of schooling for their child when their caste is primed. The FDR q-value for this effect is 0.054, and hence still significant. In contrast, priming caste does not have detectable effects on children.

5.2 Stage II Results

The empirical specification estimated for each of the Stage II outcomes is as follows:

$$y_{sgit} = \beta_0 + \beta_1 T_{sgi}^C + X'_{sgi} \gamma + \eta_g + \nu_s + \sigma_t + \epsilon_{sgit} \quad (5)$$

where y_{sgit} is one of the Stage I outcomes for adolescent i in grade g in school (village) s in period t , T_{sgi}^C is a dummy for treatment assignment and takes value 1 if the adolescent was assigned to one of Groups 3 or 4, where caste was primed, and X_{sgi} is a vector of individual level controls. η_g , ν_s and σ_t are grade, school and period fixed effects, respectively, and ϵ_{sgit} is an individual and time specific error term. The effect of priming is given by β_1 , and we would like to test is whether priming identity affects high caste and low caste subjects (separately). Note that all errors were clustered at the individual level. Results for the adolescent treatment group (Group 1) are reported in Table 9, and for the parent-adolescent pair treatment group

(Group 2) are reported in Table 10.

Similar to the disaggregated effects explored in Section 5 for gender, it is important to acknowledge that caste norms are typically different depending on one's gender. I therefore also run the above specification separately for males and females, and these results are reported in Table 9.1 (adolescents) and Table 10.1 (parents-adolescent pairs).

I find that high caste males in Group 4, where a parent is involved, end up exerting more effort when caste identity is primed: they are about 13 percent more likely to attend school. High caste males in Group 3 (that is, without parental involvement) have higher aspirations and beliefs on test scores. High caste girls have 7.7 % lower attendance at school, as well as test scores that are 14.5 percent lower than the control group, when their caste is primed. In contrast, low caste girls exert more effort when their caste is primed and are 10.6 percent more likely to attend school.

Note that thinking about aspirations or goals (or even about the next test) might affect attendance and test scores - these results are reported in the Appendix. The Appendix also reports the effects of parental influence on aspirations, beliefs, effort (attendance) and test scores.

6 Discussion

Section 4 demonstrates that gender norms have significant effects on aspirations and beliefs of subjects. In particular, negative outcomes are more likely when the gender of female subjects is primed, while we do not see effects in the treatment group with parental involvement. This does not imply that gender identity does not influence the aspirations that parents have for their children since it is possible that parents are, in fact "saturated", in that a prime is not able to move them any further towards a preference that conforms to the gender norm.

In Section 5, we saw that caste or *jati* norms also have a similar effect with parental involvement. In particular, these effects have strong and negative effects on learning outcomes of female children. While there exists sufficient anecdotal evidence on the regressive gender

norms that persist among high castes in north and west India (in addition to patterns have been observed in social anthropology, for example, see Unnithan-Kumar, 1997)²⁶, the evidence here is the first of its kind, to my knowledge. In addition, the experimental studies in the literature on the economic effects of identity, which explore the role of caste identity on behavior has exclusively looked at effects on males, and the potentially very different effects on females has not been explored before.

The results on low status subjects are consistent with a related finding in Munshi and Rosenzweig (2006), who find that boys belonging to lower status groups or *jatis* are more likely to remain within established *jati* networks, attend local language schools, and to continue to be engaged in traditional occupations. This occurs even though the returns to alternatives are much higher. In sharp contrast, they find that girls belonging to these same low status social groups, who traditionally had lower labor market participation and were less likely to benefit from remaining in the network, were making significant progress by increasingly attending English schools (the returns to which increased significantly over the period under study). The additional insight from the findings in Sections 5 and 6 is that these effects are in effect in the treatment groups where subjects comprised of parent-adolescent pairs.

7 Conclusion

This paper investigates whether the norms associated with one's social identity affect one's aspirations, beliefs, and eventual outcomes. I use a "priming" methodology from social psychology, and used more recently in economics, to exploit environmental cues within the subjects' everyday environment to "prime" either caste (*jati*), or gender identity, thereby introducing exogenous variation in the salience of one's social identity. I then elicit long run (life) aspirations and beliefs of subjects that consist of adolescents between the ages of 11 and 14, as parent-adolescent pairs in order to see the potential effects of parental influence. In order to

²⁶This appears to be true anecdotally as well, demonstrated in Illustrations 2 and 3. Subjects in the photographs were not asked to pose in any particular manner, but women from high status groups consistently covered their faces when the photographs were being taken. They were also less likely to consent to (i) have their photograph taken and (ii) have their photograph taken with their spouse, relative to having it taken with other women.

look at real outcomes, I set up a learning camp, which was held for a little under three months and use that to elicit short run aspirations, beliefs (about test scores), along with attendance and eventual test scores.

I find that aspirations and beliefs are lower, or biased downwards, and that test scores are lower when either caste or gender is made salient to females among a high status castes. In particular, regressive norms associated with being female have large and negative effects, primarily among the high status groups or *jatis*. High status boys, on the other hand exert greater effort when they are paired with a parent and either their social group or gender is primed. The results on low status males and females are consistent with findings in related work in the literature on the higher likelihood that boys belonging to lower status castes are less likely to move out of established *jati* networks, invest in human capital that may have high returns in future, and move into occupations outside of the group norm. Girls belonging to low castes, however, are starting to make significant progress by increasingly attending English schools (the returns to which increased significantly over the period under study). I find evidence in my experiment that the negative effects on low caste males are detectable primarily when parents are involved in the decision-making process, indicating that this inertia in males breaking away from the group's social norms is likely encouraged by the current older generation, that is, parents.

My study demonstrates that limiting norms associated one's identity do indeed affect individuals' beliefs about what they may be able to, or will aspire to achieve²⁷. A question that this study does not answer is what the causal effect of aspirations might be on actual outcomes. While much has been theorized and alluded to on the effects of aspirations on eventual outcomes (Appadurai, 2006; Beaman et al., 2012; Genicot and Ray, 2012), this remains a fruitful area for future research.

²⁷This idea is also related to Sen's "capabilities" approach to studying economic development, which says that a fundamental requirement for economic well-being is to have the capability to formulate and pursue one's goals.

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Illustration 1a: This photograph was taken during a village meeting at a nearby non-study village. Village meetings are typically well attended by all *jatis*, and the prevailing social norms dictate seating arrangements. For example, in the photograph shown above, “low” status *jatis* sit on the floor, and not on the rug with the high status *jatis*. They are also less likely to speak up and actively participate in decision making processes. Women (not shown here) sit on one side of the room, away from the men, and do not usually speak up at such meetings.



Illustration 1b: A school management committee meeting at a nearby non-study school. Committee members are made up of both men and women. Women are required to be present at such meetings, but through most of Rajasthan, women sit separately (as shown) and typically do not participate in the proceedings.



Illustration 2 (above) shows members belonging to a higher status *jati* (*the Rajputs*). **Illustration 3** (below) shows members belonging to a lower status *jati* (*the Devasis*)



Figure 1: Timing of the Experimental Procedures

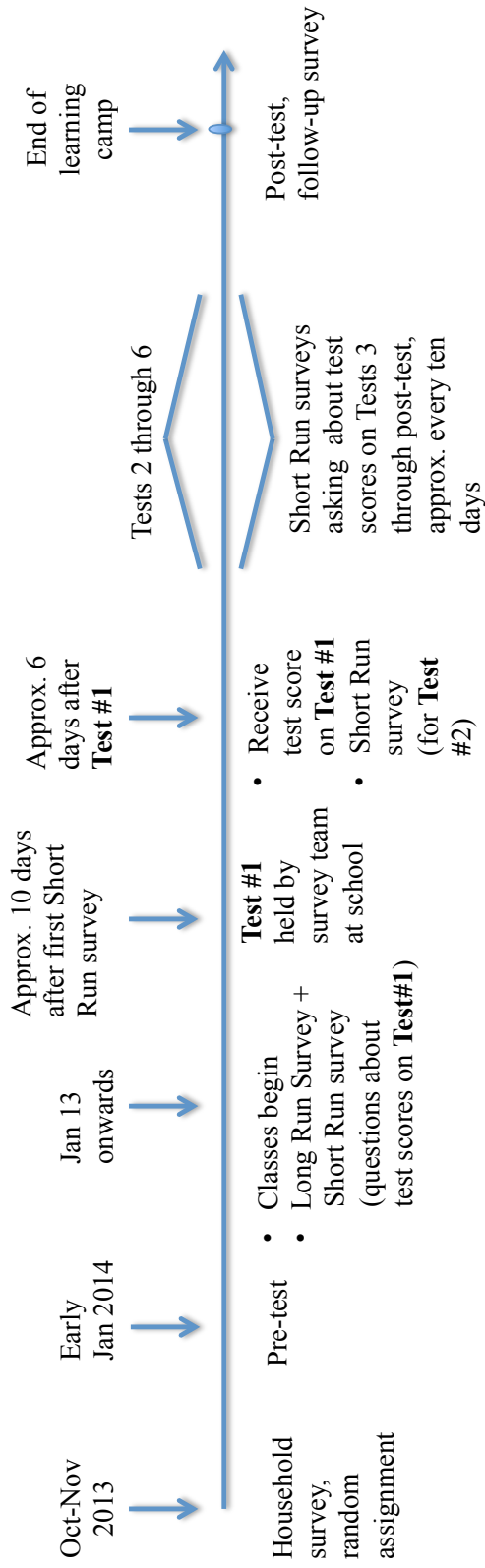
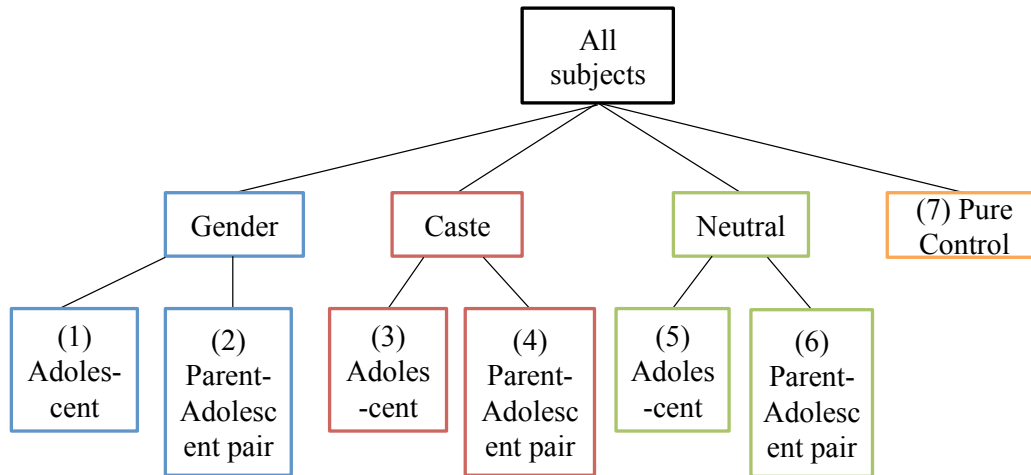


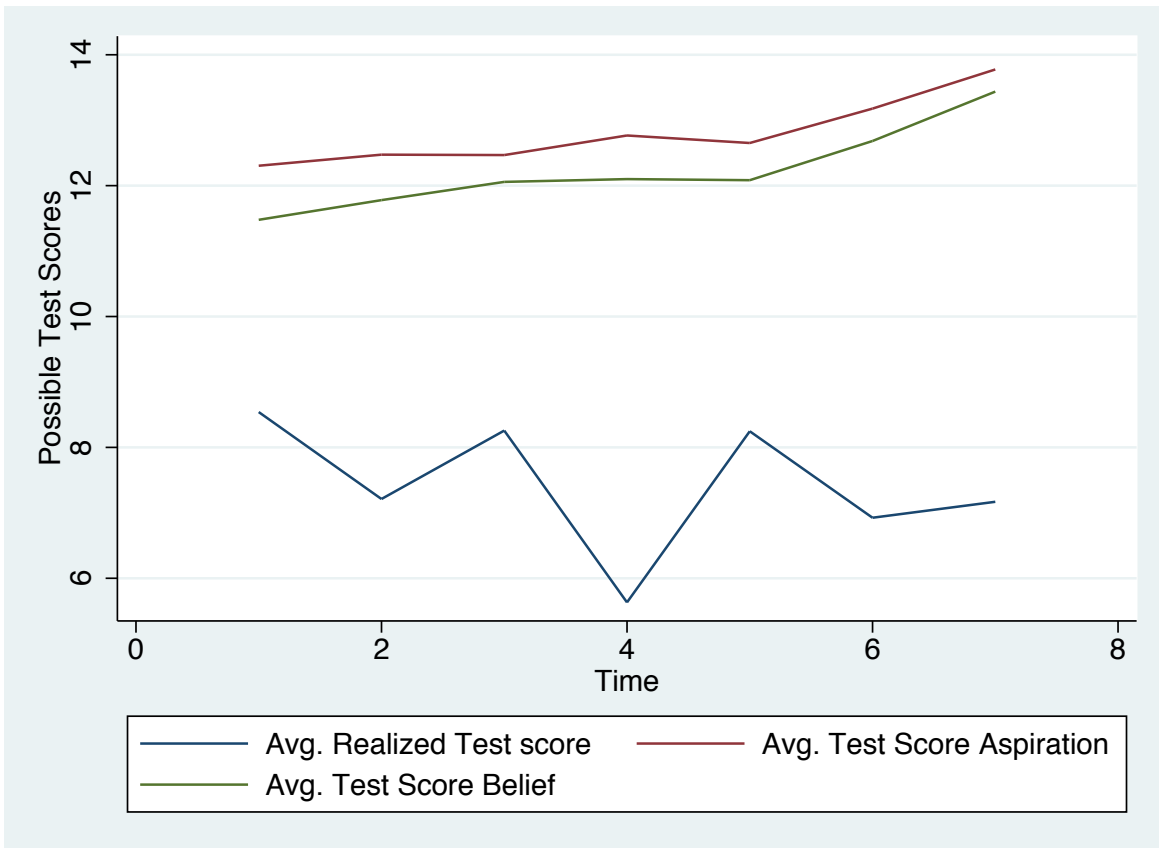
Figure 2: Design



The sample consisted of all adolescents enrolled in grades 6 through 8 in each of the schools selected for the study, totaling to approximately one thousand. Subjects were randomly assigned to seven equal-sized groups:

- Group 1: Gender primed group with adolescent subjects
- Group 2: Gender primed group with adolescent-parent pairs
- Group 3: Caste primed group with adolescent subjects
- Group 4: Caste primed group with adolescent-parent pairs
- Group 5: Neutral group with adolescent subjects
- Group 6: Neutral group with adolescent-parent pairs, and
- Group 7: Pure control group with adolescent subjects, who participated in the learning camp and took tests, but were not asked questions about their beliefs or aspirations during the camp.

Figure 3: The evolution of aspirations, beliefs and test scores over time



This figure shows how subject's aspirations and beliefs about test scores, as well as actual test scores evolve over time. Note that at any given time period t , the aspiration and belief shown in the figure correspond to elicited aspirations and beliefs for test score in period t elicited in the previous period $t - 1$.

Table 1: Balance Check across all Treatment Arms

Explanatory Variables (child and child's household characteristics)	Dependent Variable: Assigned to						
	Gender Prime		Caste Prime		Neutral		Pure Control (Child) (7)
	Child (1)	Joint (2)	Child (3)	Joint (4)	Child (5)	Joint (6)	
<i>Household Characteristics</i>							
First principal component of assets	0.00667 (0.00674)	-0.00266 (0.00696)	0.000811 (0.00670)	0.00522 (0.00684)	0.00264 (0.00701)	-0.00341 (0.00685)	-0.00927 (0.00684)
Proportion of household members engaged in agriculture	-0.0286 (0.0609)	0.0117 (0.0629)	-0.0347 (0.0605)	0.0146 (0.0617)	0.0832 (0.0633)	-0.000274 (0.0618)	-0.0459 (0.0618)
Proportion of household members that are salaried employees	-0.0741 (0.128)	-0.0195 (0.132)	-0.198 (0.127)	0.169 (0.130)	-0.00169 (0.133)	0.0983 (0.130)	0.0260 (0.130)
Proportion of household members engaged in contract/wage labor	0.0196 (0.0687)	0.0595 (0.0710)	-0.00350 (0.0683)	-0.0868 (0.0697)	0.0246 (0.0714)	0.0559 (0.0698)	-0.0692 (0.0697)
Proportion of household members self employed in non-agriculture	-0.215 (0.155)	0.0529 (0.160)	-0.0342 (0.154)	0.122 (0.157)	0.0727 (0.161)	-0.0148 (0.157)	0.0165 (0.157)
Proportion of household members engaged in herding	0.0451 (0.245)	0.164 (0.254)	-0.539 (0.344)	0.152 (0.249)	0.219 (0.255)	-0.0762 (0.249)	0.0351 (0.249)
Total number of household members	0.00648* (0.00381)	0.00687* (0.00393)	0.00103 (0.00378)	-0.00169 (0.00386)	0.00413 (0.00396)	-0.00657* (0.00387)	0.00351 (0.00386)
Whether household belongs to low caste	-0.0158 (0.0239)	0.0191 (0.0247)	-0.0199 (0.0238)	-0.0193 (0.0243)	0.0111 (0.0249)	-0.0132 (0.0243)	0.0381 (0.0243)
<i>Measures of educational attainment in the household</i>							
Maximum years of school among adult males in the household	-0.0120 (0.0253)	0.0163 (0.0262)	0.0168 (0.0252)	-0.0153 (0.0257)	-0.00260 (0.0264)	-0.00337 (0.0257)	0.000184 (0.0257)
Maximum years of school among adult females in the household	-0.00731 (0.00505)	0.00246 (0.00522)	0.00127 (0.00502)	-0.00127 (0.00513)	0.000 (0.00526)	0.00839 (0.00513)	-0.00357 (0.00513)
Whether max. years of schooling for males > max. years of schooling for females (among adults in the household)	0.00648* (0.00381)	0.00687* (0.00393)	0.00103 (0.00378)	-0.00169 (0.00386)	0.00413 (0.00396)	-0.00657* (0.00387)	0.00351 (0.00386)
<i>Child's characteristics</i>							
Standardized pre-test score	-0.0158 (0.0123)	0.00749 (0.0127)	0.00791 (0.0122)	-0.0144 (0.0125)	0.0105 (0.0128)	-0.0112 (0.0125)	0.0156 (0.0125)
Child in 7 th grade	0.00902 (0.0283)	-0.0145 (0.0293)	-0.00690 (0.0281)	0.00320 (0.0287)	-0.00812 (0.0295)	0.00427 (0.0288)	0.0131 (0.0287)
Child in 8 th grade	-0.0115 (0.0291)	-0.0159 (0.0301)	0.0107 (0.0289)	0.0105 (0.0295)	0.00584 (0.0303)	0.00559 (0.0295)	-0.00520 (0.0295)
Child's gender (dummy =1 if male)	-0.0120 (0.0253)	0.0163 (0.0262)	0.0168 (0.0252)	-0.0153 (0.0257)	-0.00260 (0.0264)	-0.00337 (0.0257)	0.000184 (0.0257)
Joint significance (p-value)	0.6392	0.9690	0.7078	0.7777	0.9885	0.9113	0.8503
Observations	898	898	898	898	898	898	898
R-squared	0.014	0.007	0.013	0.012	0.006	0.009	0.011

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1
Notes: Each column in this table is a regression of whether a subject has been assigned to a treatment group on a vector of 15 household and child characteristics. The odd columns consist of arms that comprised of adolescent subjects only. The even columns consist of arms that comprised of parent-adolescent pairs. Columns under "Gender prime" indicate whether gender was primed, and those under "Caste primed" indicate whether caste was primed. In "Neutral" groups, subjects were asked questions unrelated to social identity. Subjects in the "Pure Control" group were treated the same as the Neutral-child group (column (5)) when the long run survey was conducted. During the learning camp, however, subjects in the Pure Control were not asked any questions about aspirations or beliefs, and were not primed or asked any neutral questions. There is some attrition as pre-test scores were not available for all subjects. Not including pre-test scores increases the sample size, but does not change the qualitative results of the balance check.

Table 2: Differences in Household Characteristics between High and Low Status Households

Household Characteristic	(1) High Status	(2) Low Status	(3) Difference
No. of household members/hh	9.213 (0.174)	9.01 (0.153)	0.203 (0.232)
No. of Children/hh	3.161 (0.0694)	3.027 (0.0647)	0.134 (0.095)
No. of Adults/hh	6.046 (0.115)	5.972 (0.097)	0.0738 (0.149)
No. of Adult Males/hh - Cannot Read	0.633 (0.038)	0.739 (0.033)	-0.105** (0.051)
No. of Adult Males/hh - Cannot Write	0.636 (0.039)	0.736 (0.034)	-0.101* (0.051)
No. of Adult Females/hh - Cannot Read	1.249 (0.037)	1.373 (0.04)	-0.124** (0.056)
No. of Adult Females/hh - Cannot Write	1.262 (0.038)	1.377 (0.04)	-0.115** (0.057)
No. of Males <18 Out of School/hh	0.081 (0.015)	0.127 (0.016)	-0.047** (0.022)
No if females <18 Out of School/hh	0.286 (0.027)	0.29 (0.027)	-0.006 (0.039)
No. of Adults/hh engaged in Herding Animals	0.054 (0.017)	0.135 (0.022)	-0.081*** (0.028)
No of Adults/hh engaged in contractual labor	0.691 (0.048)	0.975 (0.049)	-0.284*** (0.07)

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1 (shown for Column (3) only)

Notes: This table summarizes the means for household characteristics for “high” and “low” status households in Columns (1) and (2) respectively. Column (3) tests the difference in means between the two groups. Note that “/hh” is short-hand for “per household”.

Table 3: Effect of Priming Gender on Adolescents (Group 1), Stage I

Outcome	Females				Males					
	Effect	C.M.	p-value	FDR q-value	n	Effect	C.M.	p-value	FDR q-value	n
Log(Income) - Aspiration	-0.555 (0.295)	8.865	0.062*	0.186	176	0.071 (0.148)	9.479	0.632	0.801	215
Log(Income) - Belief	-0.714 (0.315)	8.636	0.025**	0.075*	171	0.172 (0.175)	9.250	0.325	0.543	215
Years of Education - Aspiration	0.146 (0.412)	16.487	0.724	0.724	183	0.101 (0.224)	15.668	0.650	0.801	226
Years of Education - Belief	0.672 (0.431)	16.848	0.121	0.178	187	0.139 (0.255)	15.784	0.587	0.587	225
Dummy for High Skilled Occupation - Aspiration	0.057 (0.051)	0.083	0.263	0.395	188	0.011 (0.045)	0.107	0.801	0.801	228
Dummy for High Skilled Occupation - Belief	0.058 (0.043)	0.053	0.178	0.178	188	0.036 (0.039)	0.069	0.362	0.543	228

Notes: Parentheses contain robust standard errors. CM refers to control mean, where the control group comprises of adolescents, who were asked neutral questions. Sample size varies due to non- response from the respondent on some variables. The p values are based on the standard t-test test. The FDR q values are computed based on Benjamini and Hochberg (1995).

Table 4: Effect of Priming Gender on Parent-Adolescent Pairs (Group 2), Stage I

Outcome	Females				Males					
	Effect	C.M.	p-value	FDR q-value	n	Effect	C.M.	p-value	FDR q-value	n
Log(Income) - Aspiration	0.305 (0.596)	8.449	0.611	0.789	105	-0.157 (0.243)	9.191	0.949	0.949	138
Log(Income) - Belief	0.313 (0.733)	7.713	0.671	1	100	-0.058 (0.246)	9.118	0.325	0.488	135
Years of Education - Aspiration	0.129 (0.481)	15.943	0.789	0.789	109	-0.270 (0.261)	15.716	0.304	0.456	125
Years of Education - Belief	0.599 (0.464)	16.147	0.201	1	119	0.081 (0.263)	15.597	0.758	0.758	143
Dummy for High Skilled Occupation - Aspiration	0.022 (0.039)	0.054	0.578	0.789	121	0.059 (0.044)	0.064	0.187	0.456	152
Dummy for High Skilled Occupation - Belief	0.020 (0.030)	0.023	0.496	1	121	0.073 (0.035)	0.025	0.042**	0.126	152

Notes: Parentheses contain robust standard errors. CM refers to control mean, where the control group comprises of parent-adolescent pairs, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p-values are based on the standard t-test test. The FDR q values are computed based on Benjamini and Hochberg (1995).

Table 5: Effect of Priming Caste on Adolescents (Group 3), Stage I

Outcome	High Caste				Low Caste					
	Effect	C.M.	p-value	FDR q-value	n	Effect	C.M.	p-value	FDR q-value	n
Log(Income) - Aspiration	0.033 (0.262)	9.170	0.899	0.899	181	0.281 (0.163)	9.241	0.087*	0.261	195
Log(Income) - Belief	-0.036 (0.269)	8.996	0.891	0.997	175	0.032 (0.238)	8.983	0.892	0.936	194
Years of Education - Aspiration	0.074 (0.326)	16.089	0.821	0.899	190	-0.057 (0.224)	15.980	0.650	0.65	217
Years of Education - Belief	-0.043 (0.326)	16.169	0.893	0.997	191	-0.221 (0.322)	16.329	0.493	0.936	217
Dummy for High Skilled Occupation - Aspiration	-0.045 (0.041)	0.077	0.283	0.849	194	-0.035 (0.048)	0.111	0.460	0.65	228
Dummy for High Skilled Occupation - Belief	-0.000 (0.040)	0.062	0.997	0.997	194	-0.003 (0.038)	0.061	0.936	0.936	218

Notes: Parentheses contain robust standard errors. CM refers to control mean, where the control group comprises of adolescents, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test. The FDR q values are computed based on Benjamini and Hochberg (1995).

Table 6: Effect of Priming Caste on Parent-Adolescent Pairs (Group 4), Stage I

Outcome	High Caste				Low Caste					
	Effect	C.M.	p-value	FDR q-value	n	Effect	C.M.	p-value	FDR q-value	n
Log(Income) - Aspiration	0.934 (0.298)	8.697	0.002***	0.006***	122	0.375 (0.363)	9.005	0.304	0.79	115
Log(Income) - Belief	1.129 (0.356)	8.265	0.002***	0.006***	121	0.473 (0.377)	8.700	0.214	0.28	115
Years of Education - Aspiration	0.821 (0.385)	15.767	0.036**	0.054*	117	0.106 (0.398)	15.877	0.790	0.79	125
Years of Education - Belief	0.646 (0.395)	15.938	0.106	0.136	134	0.511 (0.397)	15.777	0.202	0.28	125
Dummy for High Skilled Occupation - Aspiration	0.065 (0.048)	0.054	0.183	0.183	149	0.013 (0.040)	0.056	0.746	0.79	132
Dummy for High Skilled Occupation - Belief	0.057 (0.038)	0.027	0.136	0.136	149	0.032 (0.030)	0.014	0.280	0.28	132

Notes: Parentheses contain robust standard errors. CM refers to control mean, where the control group comprises of parent-adolescent pairs, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test. The FDR q values are computed based on Benjamini and Hochberg (1995).

Table 7: Effect of Priming Gender on Adolescents (Group 1), Stage II

Outcome	Females			Males				
	Effect	C.M.	p-value	n	Effect	C.M.	p-value	n
Test Score - Aspiration	-0.457 (0.214)	12.582	0.035**	845	0.080 (0.215)	12.714	0.710	1037
Test Score - Belief	-0.453 (0.223)	11.917	0.045**	845	0.020 (0.221)	12.205	0.927	1039
Attendance	0.195 (0.187)	6.993	0.299	860	0.030 (0.185)	7.178	0.870	1068
Realized Test score	-0.144 (0.182)	7.155	0.429	855	-0.106 (0.184)	7.93	0.565	1056

Notes: This table reports the effect of priming gender in Stage II of the experiment and estimates equation (3). Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control comprises of adolescents, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table 7.1: Effect of Priming Gender on Adolescents (Group 1), Stage II
Effects disaggregated by Caste Status

		Panel A: High Caste				Panel B: Low Caste			
		Female		Male		Female		Male	
Outcome	Effect Size	C.M.	p-value	n	Effect Size	C.M.	p-value	n	Effect Size
Test Score - Aspiration	-1.002 (0.247)	12.704	0.004***	382	-0.179 (0.342)	12.472	0.604	415	0.220 (0.275)
Test Score - Belief	-0.610 (0.382)	11.881	0.116	382	-0.266 (0.333)	12.335	0.427	416	0.058 (0.299)
Attendance	0.180 (0.160)	7.748	0.399	385	0.248 (0.196)	7.443	0.212	419	-0.079 (0.287)
Realized Test score	-0.978 (0.233)	7.573	0.000***	385	-0.465 (0.291)	8.103	0.115	417	0.052 (0.246)
Test Score - Aspiration	-0.038 (0.377)	12.471	0.919	463	0.220 (0.275)	12.700	0.424	622	0.220 (0.275)
Test Score - Belief	-0.421 (0.394)	11.949	0.290	463	0.058 (0.299)	12.137	0.844	623	0.058 (0.299)
Attendance	-0.061 (0.271)	6.367	0.822	475	-0.079 (0.287)	7.037	0.784	649	-0.079 (0.287)
Realized Test score	0.297 (0.370)	6.788	0.424	470	0.052 (0.246)	7.852	0.830	639	0.052 (0.246)

Notes: This table reports the effect of priming gender in Stage II of the experiment and estimates equation (3), separately for low and high caste subjects within Group 1. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control mean consists of adolescents, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table 8: Effect of Priming Gender on Parent-Adolescent Pairs (Group 2), Stage II

Outcome	Females				Males			
	Effect	C.M.	p-value	n	Effect	C.M.	p-value	n
Test Score - Aspiration	-0.005 (0.238)	12.772	0.983	816	-0.235 (0.181)	13.140	0.196	1054
Test Score - Belief	-0.171 (0.265)	12.246	0.518	816	-0.349 (0.190)	12.571	0.069*	1053
Attendance	-0.051 (0.212)	6.957	0.808	823	0.321 (0.210)	6.875	0.129	1082
Realized Test score	-0.131 (0.217)	7.071	0.545	819	-0.967 (0.208)	7.564	0.643	1071

Notes: This table reports the effect of priming gender in Stage II of the experiment and estimates equation (3). Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control group comprises of parent-adolescent pairs, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table 8.1: Effect of Priming Gender on Parent-Adolescent Pairs (Group 2), Stage II
Effects disaggregated by Caste Status

Panel A: High Caste									
Outcome	Female				Male				
	Effect Size	C.M.	p-value	n	Effect Size	C.M.	p-value	n	
Test Score - Aspiration	-0.232 (0.274)	12.742	0.401	380	-0.305 (0.358)	13.230	0.397	422	
Test Score - Belief	-0.209 (0.320)	12.217	0.516	380	-0.316 (0.397)	12.589	0.428	421	
Attendance	-0.568 (0.351)	6.983	0.112	384	0.661 (0.374)	6.339	0.082*	438	
Realized Test score	-0.067 (0.266)	7.096	0.801	383	0.041 (0.332)	7.024	0.902	434	

Panel B: Low Caste									
Outcome	Female				Male				
	Effect Size	C.M.	p-value	n	Effect Size	C.M.	p-value	n	
Tes Score - Aspiration	-0.174 (0.375)	12.802	0.644	436	-0.126 (0.232)	13.082	0.589	632	
Test Score - Belief	-0.381 (0.475)	12.276	0.426	436	-0.331 (0.266)	12.559	0.216	632	
Attendance	0.198 (0.296)	6.930	0.505	439	0.028 (0.334)	7.248	0.933	644	
Realized Test score	-0.208 (0.343)	7.045	0.546	436	-0.565 (0.329)	7.927	0.089*	637	

Notes: This table reports the effect of priming gender in Stage II of the experiment and estimates equation (3), separately for low and high caste subjects. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control group comprises of parent-adolescent pairs, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table 9: Effect of Priming Caste on Adolescents (Group 3), Stage II

Outcome	High Caste			Low Caste				
	Effect	C.M.	p-value	n	Effect	C.M.	p-value	n
Test Score - Aspiration	0.267 (0.247)	12.722	0.282	804	0.179 (0.204)	12.613	0.380	1057
Test Score - Belief	0.378 (0.559)	12.101	0.163	805	0.122 (0.212)	12.065	0.565	1056
Attendance	-0.027 (0.160)	6.993	0.299	812	0.371 (0.185)	6.771	0.037**	1082
Realized Test score	-0.122 (0.229)	7.831	0.594	807	-0.014 (0.199)	7.441	0.948	1070

Notes: This table reports the effect of priming caste in Stage II of the experiment and estimates equation (5). Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control group comprises of adolescents, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

**Table 9.1: Effect of Priming Caste on Adolescents (Group 3), Stage II
Effects disaggregated by Gender**

Panel A: High Caste								
Outcome	Female			Male				
	Effect Size	C.M.	p-value	n	Effect Size	C.M.	p-value	n
Test Score - Aspiration	-0.282 (0.391)	12.704	0.474	378	0.659 (0.344)	12.742	0.061*	426
Test Score - Belief	-0.076 (0.366)	11.881	0.835	379	0.709 (0.389)	12.335	0.073*	426
Attendance	-0.528 (0.351)	7.748	0.025**	385	0.203 (0.209)	7.443	0.337	427
Realized Test score	-1.104 (0.314)	7.573	0.001***	381	0.161 (0.308)	8.103	0.602	426
Panel B: Low Caste								
Outcome	Female			Male				
	Effect Size	C.M.	p-value	n	Effect Size	C.M.	p-value	n
Tes Score - Aspiration	0.284 (0.333)	12.471	0.397	436	0.360 (0.264)	12.700	0.177	633
Test Score - Belief	0.194 (0.331)	11.949	0.560	424	0.365 (0.284)	12.137	0.202	632
Attendance	0.718 (0.275)	6.367	0.012**	439	0.213 (0.236)	7.037	0.368	643
Realized Test score	0.277 (0.327)	6.788	0.401	432	-0.100 (0.268)	7.852	0.708	638

Notes: This table reports the effect of priming caste in Stage II of the experiment and estimates equation (5), separately for males and females within Group 3. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control group comprises of adolescents, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table 10: Effect of Priming Caste on Parent-Adolescent Pairs (Group 4), Stage II

Outcome	High Caste			Low Caste				
	Effect	C.M.	p-value	n	Effect	C.M.	p-value	n
Test Score - Aspiration	-0.208 (0.182)	12.974	0.257	855	0.023 (0.193)	12.967	0.196	1014
Test Score - Belief	-0.116 (0.207)	12.394	0.576	855	0.106 (0.204)	12.443	0.604	1013
Attendance	0.253 (0.241)	6.670	0.296	878	0.074 (0.201)	7.115	0.711	1024
Realized Test score	0.001 (0.200)	7.061	0.996	868	0.144 (0.208)	7.562	0.490	1018

Notes: This table reports the effect of priming caste in Stage II of the experiment and estimates equation (5). Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control group comprises of parent-adolescent pairs, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

**Table 10.1: Effect of Priming Caste on Parent-Adolescent Pairs (Group 4), Stage II
Effects disaggregated by Gender**

Outcome	Panel A: High Caste				Panel B: Low Caste			
	Female		Male		Female		Male	
	Effect Size	C.M.	p-value	n	Effect Size	C.M.	p-value	n
Test Score - Aspiration	-0.174 (0.253)	12.742	0.495	474	-0.114 (0.300)	13.230	0.705	381
Test Score - Belief	-0.012 (0.239)	12.217	0.957	474	-0.095 (0.336)	12.589	0.778	381
Attendance	-0.465 (0.294)	6.983	0.119	482	0.813 (0.312)	6.339	0.012**	396
Realized Test score	-0.123 (0.180)	7.096	0.497	479	0.100 (0.311)	7.024	0.749	389
Tes Score - Aspiration	0.411 (0.231)	12.802	0.081*	396	-0.325 (0.225)	13.082	0.151	632
Test Score - Belief	0.491 (0.253)	12.276	0.058*	395	-0.331 (0.252)	12.559	0.192	618
Attendance	0.078 (0.214)	6.930	0.716	397	0.080 (0.274)	7.248	0.770	630
Realized Test score	0.509 (0.358)	7.045	0.161	394	-0.239 (0.234)	7.927	0.327	624

Notes: This table reports the effect of priming caste in Stage II of the experiment and estimates equation (5), separately for males and females within Group 4. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean, where the control group comprises of parent-adolescent pairs, who were asked neutral questions. Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

8 Appendix

8.1 Classification of Castes

India has hundreds of *Jatis*, many of which are only found in specific regions of the country. There were over 70 *jatis* across all of the nineteen villages in my sample. While the identity of *jatis* at the very highest or very lowest levels of the social hierarchy are typically common knowledge, no objective measures of social status for *all* of these groups exists. To create an ordering of the social groups into “high” and “low” categories in each of the study villages, surveys were conducted within each hamlet of each village to identify these communities that have greatest “voice” and decision-making power in the village²⁸. I assign scores for “voice” and decision-making power as follows:

$$Voice_{i,j} = \frac{\sum_{k=1}^{H_j} I_V(k, i)}{H_j}$$

where $Voice_{i,j}$ corresponds to the measure of “voice” for social group i in village j . H_j is the number of hamlets in village j , and $I_V(k, i)$ is an indicator function that takes value 1 if the hamlet k respondent names social group i as one of the groups that speaks up the most at village meetings.

Similarly, a score for decision-making power was assigned as follows:

$$Decision_{i,j} = \frac{\sum_{k=1}^{H_j} I_D(k, i)}{H_j}$$

where $Decision_{i,j}$ corresponds to the measure of decision-making power for social group i in village j . H_j is the number of hamlets in village j , and $I_D(k, i)$ is an indicator function that takes value 1 if the hamlet k respondent names social group i as one of the groups that is most influential when it comes to making decisions for the village as a whole.

²⁸Illustration 1(a) demonstrates the “divide” between high and low status *jatis* at a village meeting. While all groups attend village meetings, low status men sit slightly apart and tend to speak up less.

In the analysis, a subject's *jati* is assigned a "high status" is neither of the above two measures takes value 0. This classification splits the sample roughly into two halves, and allows us to look at priming effects on 4 demographic groups, namely, (i) high status girls, (ii) high status boys, (iii) low status girls, and (iv) low status boys.

Note that results are indeed robust to using the more continuous measures of voice and decision-making power defined above. In addition, even though this is a relatively rough measure of power or status of the *jatis*, the classification of *jatis* matches well with more subjective ranking of *jatis* considered as high and low. This latter subjective ranking was provided independently by a J-PAL research associate and members of the survey team.

To further check how the classification matches up with differences in household characteristics ones would expect to see between high and low categories. Table 2 above (not in Appendix) summarizes household characteristics for "high" and "low" status groups. We see that that low status groups are more likely to have illiterate adult males as well as females. These households also have more out-of-school males under the age of 18. In addition, these households have on average, a greater number of adults engaged in animal herding and contractual labor, both of which are considered the most menial occupations in the region and throughout most of the country.

Table A.1: Balance Check across all Treatment Arms by Social Group
Low Caste Females

Explanatory Variables (child and child's household characteristics)	Dependent Variable: Assigned to						
	Gender Prime		Caste Prime		Neutral		Pure Control (Child)
	Child	Joint	Child	Joint	Child	Joint	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<i>Household Characteristics</i>							
First principal component of assets	0.0140 (0.0156)	0.00957 (0.0151)	-0.00238 (0.0141)	-0.00405 (0.0141)	0.0135 (0.0151)	-0.0197 (0.0144)	-0.0110 (0.0161)
Proportion of household members engaged in agriculture	-0.0935 (0.145)	0.0470 (0.141)	-0.0570 (0.131)	0.0810 (0.132)	0.148 (0.141)	-0.0876 (0.134)	-0.0375 (0.150)
Proportion of household members that are salaried employees	-0.495 (0.422)	-0.125 (0.409)	-0.258 (0.382)	1.031*** (0.383)	-0.307 (0.409)	-0.271 (0.389)	0.425 (0.436)
Proportion of household members engaged in contract/wage labor	-0.0580 (0.157)	0.317** (0.152)	-0.147 (0.142)	0.0373 (0.142)	0.0831 (0.152)	-0.158 (0.144)	-0.0754 (0.162)
Proportion of household members self employed in non-agriculture	-0.442 (0.337)	0.380 (0.326)	-0.333 (0.304)	-0.344 (0.305)	-0.147 (0.326)	0.505 (0.310)	0.381 (0.347)
Proportion of household members engaged in herding	-0.0560 (0.497)	-0.279 (0.481)	-0.617 (0.450)	0.124 (0.451)	0.272 (0.482)	-0.144 (0.458)	0.699 (0.513)
Total number of household members	0.00380 (0.00852)	-0.00698 (0.00824)	0.00336 (0.00770)	0.00148 (0.00772)	-0.00341 (0.00825)	-0.00705 (0.00784)	0.00881 (0.00879)
<i>Measures of educational attainment in the household</i>							
Maximum years of school among adult males in the household	0.00591 (0.0124)	0.00576 (0.0120)	-0.00578 (0.0112)	-0.0131 (0.0113)	-0.0136 (0.0121)	0.0275** (0.0115)	-0.00669 (0.0128)
Maximum years of school among adult females in the household	0.00275 (0.0148)	-0.0124 (0.0143)	0.00501 (0.0133)	-0.0120 (0.0134)	0.0175 (0.0143)	0.00437 (0.0136)	-0.00523 (0.0152)
Whether max. years of schooling for males > max. years of schooling for females (among adults in the household)	-0.113 (0.0956)	-0.0254 (0.0925)	0.0467 (0.0864)	0.00998 (0.0867)	0.111 (0.0926)	-0.114 (0.0880)	0.0849 (0.0987)
<i>Child's characteristics</i>							
Standardized pre-test score	-0.00296 (0.0302)	0.0364 (0.0292)	-0.0174 (0.0273)	-0.00930 (0.0274)	-0.0257 (0.0293)	-0.0159 (0.0278)	0.0349 (0.0312)
Child in 7 th grade	0.0129 (0.0672)	0.0212 (0.0651)	0.00789 (0.0608)	-0.0475 (0.0610)	-0.00860 (0.0651)	-0.0156 (0.0619)	0.0298 (0.0694)
Child in 8 th grade	-0.0159 (0.0684)	-0.0165 (0.0662)	0.0822 (0.0618)	0.00762 (0.0620)	0.0314 (0.0663)	-0.0620 (0.0629)	-0.0268 (0.0706)
Joint significance (p-value)	0.9230	0.4326	0.8464	0.4259	0.8829	0.3586	0.7302
Observations	188	188	188	188	188	188	188
R-squared	0.036	0.071	0.043	0.071	0.040	0.076	0.052

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Notes: Each column in this table is a regression of whether a subject has been assigned to a treatment group on a vector of 13 household and child characteristics. The odd columns consist of arms that comprised of adolescent subjects only. The even columns consist of arms that comprised of parent-adolescent pairs. Columns under "Gender prime" indicate whether gender was primed, and those under "Caste primed" indicate whether caste was primed. In "Neutral" groups, subjects were asked questions unrelated to social identity. Subjects in the "Pure Control" group were treated the same as the Neutral-child group (column 5) when the long run survey was conducted. During the learning camp, however, subjects in the Pure Control were not asked any questions about aspirations or beliefs, and were not primed or asked any neutral questions. There is some attrition due to non-availability of the pre-test score. Without including this variable, the sample increases to 201, and the balance check results remain qualitatively unaffected.

Table A.2: Balance Check across all Treatment Arms by Social Group
Low Caste Males

Explanatory Variables (child and child's household characteristics)	Dependent Variable: Assigned to						
	Gender Prime		Caste Prime		Neutral		Pure Control (Child)
	Child (1)	Joint (2)	Child (3)	Joint (4)	Child (5)	Joint (6)	
<i>Household Characteristics</i>							
First principal component of assets	0.0118 (0.0128)	-0.0280* (0.0146)	0.0141 (0.0130)	0.00907 (0.0133)	0.0186 (0.0145)	0.00505 (0.0136)	-0.0305** (0.0141)
Proportion of household members engaged in agriculture	-0.0525 (0.117)	0.0942 (0.133)	-0.0101 (0.118)	-0.0187 (0.121)	-0.0336 (0.132)	0.166 (0.124)	-0.146 (0.128)
Proportion of household members that are salaried employees	-0.155 (0.209)	-0.0996 (0.238)	-0.242 (0.212)	0.239 (0.217)	-0.0459 (0.236)	0.423* (0.221)	-0.119 (0.229)
Proportion of household members engaged in contract/wage labor	0.0262 (0.116)	0.0397 (0.132)	0.00262 (0.118)	-0.0669 (0.121)	0.0126 (0.131)	0.0890 (0.123)	-0.103 (0.127)
Proportion of household members self employed in non-agriculture	-0.189 (0.253)	-0.0573 (0.288)	0.142 (0.257)	0.497* (0.263)	-0.439 (0.286)	-0.00333 (0.268)	0.0496 (0.277)
Proportion of household members engaged in herding	0.304 (0.401)	0.187 (0.457)	-0.353 (0.407)	0.387 (0.417)	0.0265 (0.453)	0.0942 (0.425)	-0.645 (0.440)
Total number of household members	0.00426 (0.00720)	-0.00338 (0.00820)	0.00180 (0.00730)	-0.00211 (0.00749)	0.00317 (0.00814)	0.00129 (0.00763)	-0.00502 (0.00789)
<i>Measures of educational attainment in the household</i>							
Maximum years of school among adult males in the household	-0.00649 (0.0108)	0.00228 (0.0124)	0.000272 (0.0110)	-0.0111 (0.0113)	-0.00217 (0.0123)	-0.00137 (0.0115)	0.0186 (0.0119)
Maximum years of school among adult females in the household	0.00520 (0.00863)	0.000489 (0.00984)	0.00211 (0.00876)	0.000922 (0.00898)	-0.00485 (0.00976)	0.00322 (0.00916)	-0.00709 (0.00947)
Whether max. years of schooling for males > max. years of schooling for females (among adults in the household)	0.0878 (0.0731)	-0.0472 (0.0834)	0.0460 (0.0742)	-0.00371 (0.0761)	-0.0541 (0.0827)	0.0766 (0.0775)	-0.105 (0.0802)
<i>Child's characteristics</i>							
Standardized pre-test score	-0.0185 (0.0238)	0.00468 (0.0271)	0.00609 (0.0241)	-0.0183 (0.0247)	0.0126 (0.0269)	0.00421 (0.0252)	0.00915 (0.0261)
Child in 7 th grade	-0.0281 (0.0502)	-0.0112 (0.0572)	0.0247 (0.0510)	0.00644 (0.0522)	-0.0225 (0.0568)	-0.0303 (0.0532)	0.0610 (0.0551)
Child in 8 th grade	0.0189 (0.0534)	0.00191 (0.0609)	-0.0199 (0.0542)	-0.0197 (0.0555)	-0.0198 (0.0604)	0.0388 (0.0566)	-0.000194 (0.0586)
Joint significance (p-value)	0.8964	0.9352	0.9471	0.5344	0.9542	0.8576	0.5389
Observations	273	273	273	273	273	273	273
R-squared	0.027	0.023	0.022	0.044	0.022	0.029	0.044

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1
Notes: Each column in this table is a regression of whether a subject has been assigned to a treatment group on a vector of 13 household and child characteristics. The odd columns consist of arms that comprised of adolescent subjects only. The even columns consist of arms that comprised of parent-adolescent pairs. Columns under "Gender prime" indicate whether gender was primed, and those under "Caste primed" indicate whether caste was primed. In "Neutral" groups, subjects were asked questions unrelated to social identity. Subjects in the "Pure Control" group were treated the same as the Neutral-child group (column (5)) when the long run survey was conducted. During the learning camp, however, subjects in the Pure Control were not asked any questions about aspirations or beliefs, and were not primed or asked any neutral questions.

Table A.3: Balance Check across all Treatment Arms by Social Group
High Caste Males

Explanatory Variables (child and child's household characteristics)	Dependent Variable: Assigned to						
	Gender Prime		Caste Prime		Neutral		Pure Control (Child)
	Child	Joint	Child	Joint	Child	Joint	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<i>Household Characteristics</i>							
First principal component of assets	-0.0119 (0.0135)	0.0138 (0.0136)	0.000112 (0.0145)	0.0111 (0.0131)	-0.0115 (0.0134)	-0.00161 (0.0135)	0.000 (0.0128)
Proportion of household members engaged in agriculture	-0.0929 (0.125)	0.00111 (0.126)	0.00894 (0.134)	-0.152 (0.121)	0.151 (0.124)	0.0213 (0.125)	0.0629 (0.118)
Proportion of household members that are salaried employees	-0.246 (0.304)	-0.208 (0.305)	-0.163 (0.326)	-0.312 (0.294)	0.150 (0.300)	0.544* (0.302)	0.235 (0.287)
Proportion of household members engaged in contract/wage labor	-0.0498 (0.142)	-0.110 (0.143)	-0.104 (0.152)	-0.189 (0.138)	0.00849 (0.141)	0.349** (0.142)	0.0960 (0.134)
Proportion of household members self employed in non-agriculture	-0.295 (0.296)	-0.142 (0.297)	0.0684 (0.317)	-0.0858 (0.287)	0.712** (0.292)	-0.121 (0.294)	-0.136 (0.279)
Proportion of household members engaged in herding	0.121 (0.547)	0.811 (0.548)	-0.684 (0.586)	-0.538 (0.530)	0.502 (0.540)	0.217 (0.544)	-0.429 (0.516)
Total number of household members	0.0123 (0.00812)	-0.0109 (0.00814)	0.00192 (0.00870)	0.000303 (0.00786)	0.000267 (0.00802)	-0.0103 (0.00808)	0.00707 (0.00766)
<i>Measures of educational attainment in the household</i>							
Maximum years of school among adult males in the household	-0.000982 (0.00959)	-0.00165 (0.00961)	0.00515 (0.0103)	-0.00226 (0.00929)	0.0118 (0.00948)	0.00263 (0.00955)	-0.0147 (0.00905)
Maximum years of school among adult females in the household	-0.0124 (0.00925)	0.0198** (0.00927)	0.00383 (0.00991)	-0.00564 (0.00896)	-0.0147 (0.00914)	0.00528 (0.00921)	0.00389 (0.00873)
Whether max. years of schooling for males > max. years of schooling for females (among adults in the household)	0.0320 (0.0820)	0.0901 (0.0822)	0.0383 (0.0878)	-0.0561 (0.0794)	-0.0637 (0.0810)	-0.0270 (0.0816)	-0.0137 (0.0774)
<i>Child's characteristics</i>							
Standardized pre-test score	-0.0277 (0.0250)	0.00529 (0.0250)	0.00333 (0.0267)	-0.0124 (0.0242)	0.0344 (0.0247)	-0.0362 (0.0248)	0.0333 (0.0236)
Child in 7 th grade	0.0119 (0.0621)	-0.00136 (0.0623)	0.0327 (0.0666)	0.0311 (0.0602)	-0.0256 (0.0614)	0.0807 (0.0618)	-0.0640 (0.0586)
Child in 8 th grade	-0.0183 (0.0623)	-0.0401 (0.0624)	0.0643 (0.0668)	0.0735 (0.0604)	-0.0106 (0.0616)	0.000458 (0.0620)	-0.0692 (0.0588)
Joint significance (p-value)	0.5965	0.6719	0.9003	0.8959	0.2293	0.1301	0.5365
Observations	223	223	223	223	223	223	223
R-squared	0.051	0.047	0.032	0.033	0.074	0.084	0.054

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1
Notes: Each column in this table is a regression of whether a subject has been assigned to a treatment group on a vector of 13 household and child characteristics. The odd columns consist of arms that comprised of adolescent subjects only. The even columns consist of arms that comprised of parent-adolescent pairs. Columns under "Gender prime" indicate whether gender was primed, and those under "Caste prime" indicate whether caste was primed. In "Neutral" groups, subjects were asked questions unrelated to social identity. Subjects in the "Pure Control" group were treated the same as the Neutral-child group (column (5)) when the long run survey was conducted. During the learning camp, however, subjects in the Pure Control were not asked any questions about aspirations or beliefs, and were not primed or asked any neutral questions.

Table A.4: Balance Check across all Treatment Arms by Social Group
High Caste Females

Explanatory Variables (child and child's household characteristics)	Dependent Variable: Assigned to									
	Gender Prime		Caste Prime		Neutral		Pure Control (Child)			
	Child	Joint	Child	Joint	Child	Joint	Child	Joint		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<i>Household Characteristics</i>										
First principal component of assets	0.0253 (0.0153)	-0.00622 (0.0151)	-0.00829 (0.0148)	-0.00283 (0.0169)	-0.00731 (0.0158)	0.00863 (0.0157)	-0.00925 (0.0144)			
Proportion of household members engaged in agriculture	0.110 (0.116)	-0.107 (0.114)	-0.0867 (0.112)	0.0832 (0.128)	0.0736 (0.120)	-0.0458 (0.119)	-0.0274 (0.110)			
Proportion of household members that are salaried employees	0.227 (0.224)	0.209 (0.221)	-0.106 (0.217)	0.146 (0.247)	0.0709 (0.232)	-0.401* (0.230)	-0.147 (0.212)			
Proportion of household members engaged in contract/wage labor	0.141 (0.166)	-0.0666 (0.163)	0.297* (0.160)	-0.209 (0.182)	0.0210 (0.171)	-0.0318 (0.170)	-0.152 (0.156)			
Proportion of household members self employed in non-agriculture	0.224 (0.548)	0.241 (0.540)	-0.316 (0.529)	0.0222 (0.604)	0.221 (0.567)	-0.664 (0.563)	0.271 (0.518)			
Proportion of household members engaged in herding	-0.504 (0.637)	0.00858 (0.627)	-0.632 (0.615)	0.688 (0.702)	0.236 (0.659)	-0.807 (0.654)	1.011* (0.602)			
Total number of household members	0.00397 (0.00887)	-0.00750 (0.00873)	-0.00682 (0.00856)	0.000119 (0.00978)	0.0200** (0.00917)	-0.0129 (0.00910)	0.00311 (0.00838)			
<i>Measures of educational attainment in the household</i>										
Maximum years of school among adult males in the household	-0.0195* (0.0106)	0.00567 (0.0105)	0.00881 (0.0103)	0.0134 (0.0117)	-0.0129 (0.0110)	0.0142 (0.0109)	-0.00974 (0.0100)			
Maximum years of school among adult females in the household	0.0101 (0.0129)	0.00177 (0.0127)	0.00191 (0.0125)	-0.00175 (0.0142)	0.00294 (0.0134)	-0.0118 (0.0133)	-0.00317 (0.0122)			
Whether max. years of schooling for males > max. years of schooling for females (among adults in the household)	0.0757 (0.0829)	0.00355 (0.0816)	-0.0935 (0.0800)	0.0156 (0.0914)	0.0700 (0.0857)	-0.0762 (0.0851)	0.00495 (0.0783)			
<i>Child's characteristics</i>										
Standardized pre-test score	-0.0204 (0.0245)	0.000511 (0.0241)	0.0105 (0.0237)	-0.0181 (0.0270)	0.0320 (0.0254)	-0.000557 (0.0252)	-0.00287 (0.0232)			
Child in 7 th grade	-0.000754 (0.0614)	-0.0350 (0.0604)	-0.00589 (0.0592)	0.0429 (0.0676)	-0.0301 (0.0635)	-0.00302 (0.0630)	0.0318 (0.0580)			
Child in 8 th grade	-0.0408 (0.0618)	-0.0385 (0.0608)	-0.0444 (0.0597)	0.0116 (0.0682)	-0.0133 (0.0639)	0.0593 (0.0635)	0.0661 (0.0584)			
Joint significance (p-value)	0.8964	0.9352	0.9471	0.5344	0.9542	0.8576	0.5389			
Observations	214	214	214	214	214	214	214			
R-squared	0.051	0.026	0.062	0.048	0.038	0.052	0.043			

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1
Notes: Each column in this table is a regression of whether a subject has been assigned to a treatment group on a vector of 13 household and child characteristics. The odd columns consist of arms that comprised of adolescent subjects only. The even columns consist of arms that comprised of parent-adolescent pairs. Columns under "Gender prime" indicate whether gender was primed, and those under "Caste primed" indicate whether caste was primed. In "Neutral" groups, subjects were asked questions unrelated to social identity. Subjects in the "Pure Control" group were treated the same as the Neutral-child group (column (5)) when the long run survey was conducted. During the learning camp, however, subjects in the Pure Control were not asked any questions about aspirations or beliefs, and were not primed or asked any neutral questions.

8.2 Parental Influence among neutral groups

I check whether parental involvement affects outcomes for adolescents. To do this, I compare outcomes between Groups 5 and 6, that is, the neutral adolescent-only group and the neutral parent-adolescent pair group. I find that parents set higher aspirations and have more optimistic beliefs about outcomes for their male, but not female children. This optimism, does not, however, translate into improved test scores. These results are reported in Tables A.5 and A.6.

8.3 Effect of thinking about goals (or “goal setting”)

The very act of being asked to think about aspirations on test schools may have had effects on attendance and test scores. Group 7 was created to account for this. I find no detectable effects to support the hypothesis that thinking about goals and beliefs about learning outcomes affects actual outcomes (at least in this context). This is reported in Table A.7.

Table A.5: Effect of Parental Involvement, Stage II

Outcome	Effect	C.M.	p-value	n
Test Score - Aspiration	0.418 (0.147)	12.811	0.005***	1896
Test Score - Belief	0.422 (0.152)	12.248	0.006***	1896
Attendance	0.041 (0.151)	7.004	0.785	1926
Realized Test score	-0.034 (0.141)	7.467	0.809	1910

Notes: This table reports the effect of parental involvement in Stage II of the experiment by comparing outcomes between Groups 5 and 6. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean (the control here being Group 5, consisting of adolescents who were asked neutral questions). Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table A.6: Effect of Parental Involvement by Gender, Stage II

Outcome	Females			Males				
	Effect	C.M.	p-value	n	Effect	C.M.	p-value	n
Test Score - Aspiration	0.023 (0.221)	12.582	0.915	839	0.739 (0.180)	12.714	0.000***	1057
Test Score - Belief	0.004 (0.211)	11.917	0.983	839	0.715 (0.199)	12.205	0.000***	1057
Attendance	0.117 (0.204)	6.993	0.568	851	0.028 (0.201)	7.178	0.888	1068
Realized Test score	-0.113 (0.193)	7.155	0.557	845	0.082 (0.179)	7.939	0.647	1065

Notes: This table reports the effect of parental involvement in Stage II of the experiment by comparing outcomes between Groups 5 and 6, separately for males and females. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean (the control here being Group 5, consisting of adolescents who were asked neutral questions). Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

Table A.7: Effect of Stating Aspirations and Beliefs, Stage II

Outcome	Effect	C.M.	p-value	n
Attendance	-0.116 (0.146)	7.227	0.428	1960
Realized Test score	0.078 (0.145)	7.508	0.591	1948

Notes: This table reports the effect of thinking about and stating beliefs and aspirations about test scores in Stage II of the experiment, by comparing outcomes between Groups 5 and 7. Parentheses contain robust standard errors (clustered at the individual level). CM refers to control mean (the control here being Group 7, consisting of adolescents who were not asked any questions about tests). Sample size varies due to non-response from the respondent on some variables. The p values are based on the standard t-test test.

8.4 Timing of Surveys

After household surveys were completed in Fall 2013, pre-tests were conducted in the first half of January, and surveys asking subjects about their long run aspirations and beliefs (corresponding Stage I of the experiment) were conducted in the second half of January. Subjects were also asked about beliefs and aspirations on the test score on the first test (let us call this Test #1).

Classes for the learning camps began in the week of January 13. Subsequently, each short-run survey (that is, the survey on aspirations and beliefs corresponding to Stage II) was conducted according to when a particular topic was completed at each school. Each test and survey was conducted, and tests were graded by the research team. The test dates and corresponding survey dates therefore varied across schools, and overall followed the schedule below:

- Test for Topic # 1 held between January 22 and February 2; tests then graded
- Subjects told their score on previous test, and short run survey about Test # 2 conducted: January 27 to February 10
- Test for Topic # 2 held between February 1 and February 10; tests then graded
- Subjects told their score on previous test, and short run survey about Test # 3 conducted: 4th to 18th February
- Test for Topic # 3 held between February 11 and February 21; tests then graded
- Subjects told their score on previous test, and short run survey about Test # 4 conducted: February 15 - February 27
- Test for Topic # 4 held between February 21 and March 5; tests then graded
- Subjects told their score on previous test, and short run survey about Test # 5 conducted: February 26 to March 15
- Test for Topic # 5 held between March 5 to March 20; tests then graded
- Subjects told their score on previous test, and short run survey about Test # 6 conducted: March 9 to March 31

- Test for Topic # 6 held between March 14 to April 4; tests then graded
- Subjects told their score on previous test, and short run survey about Test # 7 conducted: March 25 to April 9
- Classes end and Test # 7 held

This was followed by a round of follow up surveys where data on friendship and familial networks was collected. Subjects were then debriefed and additional (one-on-one) remedial classes were held for any student, who did not perform as well as subjects in the control group, who were not primed.

Illustration 4 below (taken during a pilot) illustrates the protocol followed for conducting surveys in the adolescent-only groups, which were conducted at school. The student (right) is in one of groups 1, 3, 5 or 7, hence the surveyor (left) has made sure that (i) the survey is being done at school and (ii) the survey is done individually without disturbances or other people in the immediate vicinity.

