

We Don't Talk About Boys: An Experiment on Masculinity Norms in Brazil

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(preliminary version, please do not circulate)

Abstract

How do adolescents form their views about what is expected of their gender? This paper provides causal evidence that the lack of communication drives incorrect inferences about what their peers think regarding gender norms about *men*. I conduct a field experiment that encourages communication about *masculinity norms* among peers with 2,249 Brazilian teenagers in 22 schools. I show that a majority of male and female adolescents overestimate the share of classmates who hold traditional views of masculinity with respect to emotional vulnerability and the use of violence. I then randomly assign adolescents to a structured discussion group to learn peers' opinions about these masculinity beliefs, or to a control discussion. The masculinity discussion groups reduce misperceptions about classmates' beliefs by at least 50% in the short run. The effects are similar whether students self-selected into speaking, or were randomly selected. In the medium run, effects persist, indicating that there is no persuasion between students once the discussion is over. My findings suggest that adolescents update their beliefs about social norms by *learning* their peers' opinions.

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1 Introduction

Social scientists have shown that people care about adhering to social norms in many settings (e.g., [Sherif 1936](#); [Postlewaite 2011](#); [Bicchieri et al. 2014](#)). Sometimes these norms are misperceived: the perceptions of beliefs of others differ systematically from others’ actual beliefs ([O’Gorman 1975](#); [Kuran 1991](#); [Prentice and Miller 1993](#); [Bursztyn et al. 2020](#)). Misperceived norms have important consequences for economic outcomes in a variety of settings, such as discouraging female labor force participation and vaccination takeup (see [Bursztyn and Yang 2022](#) for a review). It remains an open question why misperceptions exist in equilibrium and do not unravel on their own. On the one hand, misperceptions might persist because people simply do not discuss their views about certain issues, especially stigmatized ones. On the other hand, people might discuss their views about an issue, but the information conveyed is not reflective of average beliefs, either because individuals misrepresent their own beliefs or because those individuals who share their beliefs are not representative of the average. This suggests that a lack of communication or biased communication may lead to the persistence of misperceived norms in equilibrium.

In this paper, I examine whether encouraging communication about a stigmatized topic leads to rapid and persistent changes in misperceived norms. I further test whether the type of communicator matters: if people self-select into speaking, their views might misrepresent the average views, leading to biased inferences about the opinions of others. In addition, in public settings, people might adjust their narratives to conform to their perceptions of what is socially acceptable. I test the latter by comparing subjects’ private with their public opinions.

I ran a field experiment in partnership with the Secretariat of Education of the city of Rio de Janeiro with 2,249 12-14-year-olds to investigate the role of communication in shaping misperceptions about masculinity norms. I focus on this age range since adolescence is an important stage for the formation of beliefs associated with men’s roles, when puberty intensifies expectations related to gender as boys are transitioning from boyhood to manhood ([Kimmel et al., 2004](#); [Way, 2011](#); [Lundgren et al., 2013](#); [Kågesten et al., 2016](#)). Additionally, the school environment reinforces gender norms through a range of rules and social expectations, such as organizing social practices and activities by gender, usually posing the superiority of boys ([Thorne, 1993](#); [Bhana and Mayeza,](#)

2016; Rosen and Nofziger, 2019). I selected 22 schools across the city, which allows me to exploit variation with respect to socioeconomic backgrounds and exposure to violence, factors that also shape beliefs and norms about masculinity.

Drawing on the sociology literature on masculinity, I study norms in two broad domains identified as central to the experience of boys entering manhood (see Schrock and Schwalbe 2009 for a review). First, the domain of *emotional control*, which requires boys to project a facade of toughness and strength, even when dealing with vulnerable emotions (Oransky and Fisher, 2009; Addis et al., 2016; Ragonese et al., 2019). Second, the domain of *acting violently*, which prescribes that boys respond with violence (Kimmel et al. 2004; Porter 2016; Ragonese et al. 2019).

I test (i) whether communication about masculinity norms shapes misperceptions about these norms, (ii) the role of different types of communicators, and (iii) the effects on beliefs and behaviors, employing a two-level randomization. First, I randomly assign students ($N = 2,249$) within a class into two groups, stratified by sex. Second, I randomly assign each half of the classroom to one of two treatments and a control group: *Masculinity Vocal* (Treatment 1), *Masculinity Representative* (Treatment 2), or *Recycling* (Control). In the *Masculinity Vocal* treatment, I ask students to voluntarily share their opinions about masculinity, mimicking the natural dynamics of the school environment. In the *Masculinity Representative* treatment, I randomly select students to speak up, following a pre-determined order. This division allows an investigation of two potential underlying mechanisms. First, that the opinions of the *Vocal* students are more likely to be known than that of the *Representative* ones, since they are the ones who talk the most.¹ Second, that people may anchor their views to the first speaker’s views. These two channels could perpetuate misperceptions if people infer certain norms based on a selected group.

In the masculinity discussion sessions, a mediator asks students whether they agree or not with the statements *men who cry are weak* and *men should use violence to get respect if necessary*, and to provide explanations of their opinions. These statements link directly to the *emotional control* and *acting violently* domains of masculinity, respectively. In each session, a maximum of 6 teenagers² were allowed (*Masculinity Vocal*) or invited (*Masculinity Representative*) to share

¹I use a peer-reported measure of vocality, in which I show that the most vocal students in the discussion are indeed the most vocal students in their class.

²On average, there were 13 students within each discussion session. I set the limit of 6 speakers so I could

their opinions. Participants could not interrupt when another person was speaking or speak again after they had already spoken. In addition, the mediators did not express their personal views on the statements, so I encourage communication within peers only. To account for the effects of meeting participation unrelated to masculinity, control group participants attended a discussion session on recycling practices – a gender-neutral topic.³ In the control sessions, teenagers who voluntarily raised their hands could speak (i.e., there was no self-selection). Both treatment and control discussions happened once for an average of 15 minutes. I surveyed students immediately after the discussions (short-run) and three weeks after (medium-run).⁴

First, I document that teenagers have large misperceptions with respect to boys' and girls' beliefs about masculinity. I elicit misperceptions with respect to four different beliefs: the share of (i) *female* classroom peers that agree with the statement about *crying*, (ii) *male* classroom peers that agree with the statement about *crying*, (iii) *female* classroom peers that agree with the statement about *violence*, and (iv) *male* classroom peers that agree with the statement about *violence*.⁵ I define misperceptions as the difference, in percentage points, between one's guess about the fraction of relevant school classroom peers who agreed with the statement at baseline and the actual fraction of relevant peers who reported agreeing with the statement at baseline.⁶ On average, adolescents in the control group overestimate the percentage of boys who agree with the statement about crying by 23 p.p., and by 12 p.p. for the statement about violence, meaning that, on average, teenagers have less masculine views than their peers think. Misperceptions are similar with respect to girls' beliefs.

Second, I show that the masculinity discussion sessions narrow misperceptions by at least 50%

have a cleaner comparison between the *Vocal* and *Representative* treatments. Allowing for a different number of speakers within each treatment would add an additional confounding: the number of opinions a participant heard.

³Participants of the recycling discussions did not change their view about masculinity, comparing before and after the discussion ($p = 0.7$)

⁴I sent the medium-run survey to teenagers' WhatsApp, and 57% of them responded to it, conditional on having provided their WhatsApp number at baseline. Due to funding limitations, I could not return to the schools to survey students in the medium run. In addition, my partner did not allow me to distribute any sort of incentives for the surveys and participation in the study.

⁵In my setting, students within a given classroom attend all classes and activities together, which intensifies the formation of within-classroom norms. This highlights the importance of within-classroom comparison, for which we could expect fewer information constraints than if I had selected people who do not interact much.

⁶I elicited the beliefs about others after treatment only to mitigate concerns about anchoring when eliciting beliefs in multiple rounds, and to attenuate experimenters' demand bias, following the recommendation by [Bursztyn and Yang \(2022\)](#).

in the short-run. Effects are similar for boys and girls. In addition, I show that the *Vocal* and *Representative* treatments produce statistically indistinguishable effects on short-run misperceptions. The lack of difference suggests that the students who self-select into speaking are fairly representative. I show this by reporting that students who talk in the *Vocal* and *Representative* groups differ only in a vocality score, and are similar with respect to other characteristics such as popularity, masculinity beliefs, and how admirable they are. At baseline there is actually a negative correlation between masculinity and vocality. In addition, using handwritten notes on paper taken during the discussions, I show that students' narratives are similar across the two types of masculinity discussions.

Third, I find that the masculinity discussions lead to persistent changes in misperceptions in the medium run. Persistence suggests that there is no spillover: while adolescents who participate in the masculinity discussions update their views about their classmates' views on masculinity, they do not persuade their peers who were in the recycling discussions about what they learned, even if they communicated about it. This result sheds some light on the way norms are formed: in a social environment such as schools, encouraging communication among a random part of a social network (i.e., half a classroom) about a stigmatized topic is not sufficient to change perceived norms more broadly.⁷ It seems to be important that adolescents learn new information first-hand.

Fourth, students' private views about masculinity might change after learning about their peers' views, as adolescents have more malleable preferences than adults ([Kohlberg 1976](#); [Markus and Nurius 1986](#)). To test this, I elicit teenagers' first-order beliefs about men's roles associated with crying and being violent in both endlines. I find that treated boys' beliefs about crying become about 50% less masculine compared to control boys, both in the short and longer run. Girls' beliefs are not affected, but they were considerably less masculine compared to boys in the first place. In addition, control girls' first-order beliefs change significantly between the first and second endlines, potentially suggesting that girls communicate more than boys once the discussions are over.

⁷Nevertheless, there is evidence that randomly selecting some students to participate in multiple hours of anti-conflict training (i.e., encouraging top-down communication) changes perceived social norms against conflicts at the school level ([Paluck et al. 2016](#)).

Finally, in the medium run, the masculinity discussions do not impact boys' self- and peer-reported behaviors related to emotional vulnerability and involvement in violence. Therefore, while my intervention effectively shifted perceived norms and beliefs about masculinity, it did not reflect behavioral change. Nevertheless, I provide evidence that misperceived masculinity norms correlate strongly with traditionally masculine behaviors among those participating in the control discussions.

My findings are consistent with the explanation that adolescents update their beliefs about social norms by *learning* their peers' opinions, potentially for the first time. Further, I show evidence that the type of communicator does not matter. I discuss several other mechanisms. First, I show evidence against *political correctness*: only 1.7% and 8.7% of first-speakers in the *Representative* group provide less masculine views in public compared to what they responded in private regarding their beliefs about crying and violence, respectively. Therefore, there is no evidence that the information shared in the discussions is misrepresentative or uninformative.⁸ Second, I provide suggestive evidence that, for boys, self-expression matters, at least in the short-run: boys randomized to speak up have smaller misperceptions about their peers' beliefs, compared to boys who did not speak. Nevertheless, such effects vanish in the middle-run. Third, the persistence of effects indicates that those in the masculinity discussions could not persuade those in the recycling discussions about what they learned, even if communication took place. Finally, social desirability bias does not explain differential treatment effects on misperceptions and beliefs about masculinity. I also attenuate experimenter demand bias by allowing students to self-administer the questionnaires.

This paper makes several important contributions. First, while a large body of work in economics uses simple information provision – a quantitative treatment – to correct misperceived norms (see [Bursztyн and Yang 2022](#) for a review), they do not discuss where misperceptions come from.⁹ My main contribution is to provide causal evidence on the role of communication – a qualitative treatment – as a source of misperceptions. I further disentangle whether the types

⁸[Braghieri \(2021\)](#) show that social image concerns around politically correct topics may lead to less informative public discussions.

⁹[Bursztyн et al. \(2020\)](#) provide suggestive evidence of the lack of communication as a source of misperceptions, but their design does not allow for causally testing this hypothesis.

of communicators matter. In addition, I document misperceived norms in a high-stakes environment, which (i) constitute an important part of adolescents' social network (Paluck and Shepherd 2012) and (ii) during a crucial stage in which the human brain is developing and forming beliefs (Steinberg 2014). No work to date has exploited the formation of misperceived norms in such contexts.

Second, while a whole field in economics has studied norms about women's roles (e.g., Alesina et al. 2013; Dhar et al. 2022; Dean and Jayachandran 2019; Bursztyn et al. 2020), only Baranov et al. (2022) have addressed the roots and consequences of masculinity combining historical with survey data. Other papers have worked with boys and men to directly address aggressive behaviors (Blattman et al. 2017; Heller et al. 2017; Shah et al. 2023), but none of these measure its ties with different notions of masculinity. To the best of my knowledge, this work is the first randomized controlled trial in the economics literature to directly elicit norms and beliefs associated with men's roles.

Finally, I contribute to a vast literature on masculinity in other disciplines. In the early 80s, gender scholars (Carrigan et al. 1985; Thompson Jr and Pleck 1986; Connell 1987) have developed a whole body of theory and research called *the critical studies of men and masculinity*. They introduced the notion of male sex roles – prescribed social norms of what men should feel and do –, which differ from female sex roles. Since that time, a myriad of work has studied the relationship between masculinity and health outcomes (e.g., Mahalik and Rochlen 2006; Wong et al. 2017), aggressive behavior (e.g., Bosson et al. 2009; Reidy et al. 2009; Cheryan et al. 2015), occupational choice (e.g., Cross and Bagilhole 2002). However, most of the evidence so far is correlational or comes from small-scale studies in the lab. In low-income countries, public health scholars have also documented positive results of interventions that engage men in discussions about masculinity to improve women's sexual health and prevent gender-based violence (e.g., Hossain et al. 2014, Gibbs et al. 2020, Pérez-Martínez et al. 2023). Different from existing work, this paper does not aim to sensitize participants about the potential consequences of masculinity. Instead, I encourage boys and girls to share their own views and experiences with respect to masculinity – a stigmatized issue – in a large-scale field experiment.

2 Context: Masculinity Norms and Their Correlates in Brazil

This research took place in Rio de Janeiro, the second-largest urban region in Brazil (IBGE 2022). Rio’s neighborhoods provide vast heterogeneity in socioeconomic backgrounds and violence levels within the city (IBGE 2022), allowing me to examine their relationships with masculinity (misperceived) norms. To exploit such variation, I selected 22 schools across the city (see Figure A1 for the school’s geographical distribution). 3 schools are located within *favelas*, which are regions dominated by drug gangs. In these regions, being a drug trafficker may signal power and status: traffickers show their guns, motorcycles, wives, girlfriends, and money (Barker and Heilman 2018). Such a position of power reinforces norms of masculinity: men are the providers and use violence to get respect.

Boys from schools in favelas¹⁰ are 30% more masculine than those from schools outside of favelas ($p < 0.001$), measured by the *Meanings of Adolescent Masculinity Scale* (Oransky and Fisher 2009). In addition, their misperceptions with respect to other boys’ beliefs about the support for violence among men is 10p.p. larger ($p = 0.05$). Boys’ misperceptions with respect to girls’ beliefs and girls’ misperceptions are not different depending on whether they go to a school in a favela or not.

Masculinity (misperceived) norms correlate with traditionally masculine behaviors. First, it relates to suppressed emotion-sharing behaviors. A 1s.d. increase in the masculinity score makes boys 10% less likely to have had a deep conversation with a friend ($p=0.020$), and 5% less likely to talk about their personal problems ($p<0.001$). This relationship is twice as strong if a boy studies in a favela. Boys’ misperceptions about other boys’ beliefs about crying also suggestively correlate with these behaviors: boys with average misperceptions are 6% less likely to have had a deep talk with a friend ($p=0.128$) and 3% less likely to talk about their personal problems ($p=0.175$).

Second, it also correlates to violent behaviors. A 1s.d. increase in the masculinity score makes boys 2% more likely to commit physical violence, using a peer-reported measure ($p<0.139$). In addition, average boys’ misperceptions about other boys’ support for violence relate to 1% larger

¹⁰The public school system in Rio assigns students to schools that are closest to their home address. Hence, it is very likely that all students in a favela school also reside in that same favela. Nevertheless, students from schools outside of favelas could also reside in favelas.

involvement in violence ($p < 0.059$). These correlations suggest that not only masculinity norms matter for behaviors expected of a man as has been documented by the psychology literature, but also that the *perceptions* boys have about other boys' beliefs may impact their own behaviors.

3 Experimental Design

3.1 Sample and Recruitment

Schools Selection. My universe is the 607 public middle-schools under the jurisdiction of the municipal Secretariat of Education of the city of Rio de Janeiro. I first used two criteria to pre-select participating schools, based on administrative data from the 2021 Brazilian School Census. First, there should be no more than 35 students per class, since 35 was the number of tablets I purchased for students to self-administer the questionnaires. Second, having more than 100 students, so that I could meet the minimum number of observations. These filters narrow down the list of eligible schools to 125.¹¹ I then coordinated with the Secretariat to select 22 schools to allow for heterogeneity with respect to socioeconomic environment and violence levels across the city. Table A4 shows that, even though my sample was not randomly selected, it is fairly representative with respect to a series of school characteristics, with the exception that the schools in my sample have a 3p.p. ($p = 0.04$) lower share of white students compared to the universe of schools.

Students Selection. The target-sample are 7th to 9th graders (i.e. 12-14 years old). Within each class, the study (baseline-treatment-endline) takes 50-60 minutes. Due to time constraints, no more than 5 classes from the same school could participate. To accommodate this, in schools with over 5 7th-9th grades, I prioritize upper year students. My sample thus consists of 2,249 students (1,154 girls and 1,095 boys), being 60% 9th graders, 32% 8th graders, and 8% 7th graders.¹²

Consent Process. I visited the selected schools to discuss the study purposes, schedule the study

¹¹Five schools had to be replaced after contacting the Regional Schools Coordination Office because they were not middle schools, even though the Census said otherwise.

¹²To avoid contamination across classes, the field team would only visit a school once.

day, obtain the list of students from participating classes, and hand the parental consent and assent forms to principals. Principals were instructed to deliver the consent forms to students at least one week prior to the scheduled study day, and we sent reminders to guarantee this timeline was being followed. Parental consent form was obtained in a passive way: only parents who did not allow their children’s participation in the study would sign the form. Neither consent forms or communication to students about this research mentioned it encompasses the study of gender norms in any way, since the word *gender* carries a strong stigma in Brazil.

Timeline of the Study Day. The day of the study is organized as follows. Upon arrival at the school, the field team visits one classroom at a time and reads aloud the names of those who should go to their assigned room, which indicates treatment assignment. When in their assigned room, students self-administer the baseline survey in tablets, which happens before any information about the treatment is given. When everybody has completed the baseline survey, the discussion session starts. Once the discussion is over, students answer the endline survey.

3.2 Treatment Assignment

Treatment Assignment. I employ a twofold randomization to determine treatment assignment. Within school, classes were randomly split into three groups. In one-third of the classes, I assigned half of the students to either a Masculinity Vocal (Treatment 1) or a Recycling (Control) discussion session. In another third of classes, I allocated half of the students to a Masculinity Representative (Treatment 2) or a Recycling (Control) discussion). Finally, the last third of classes was a fully treated class, in which I split half of the students into a Masculinity Vocal (Treatment 1) or a Masculinity Representative (Treatment 2) discussion. I performed the randomization before visiting the schools, upon receiving the list with students’ names, and stratified it by sex, within class.¹³ Figure 1 summarizes the research design and the timeline of the study.

¹³Participating students represent about 75% of the universe of students. This difference is mainly due to students’ being absent on the day of the study rather than parents or students not consenting to their participation.

Masculinity Discussion (Treatment). The treatment consists of a focus group-like discussion session about masculinity. During the discussion, participants were asked to share whether they agree or not with the statements *Men Who Cry Are Weak* and *Men Should Use Violence to Get Respect If Necessary*. They were further asked to explain why they think so and provide examples. The sessions were led by male mediators from the NGO *Luta pela Paz* (Fight for Peace), who are experienced in conducting this type of activity with youth. The mediators did not express their personal opinions: their only role was to guide the discussion. In addition, to put some order in the discussion, we alternated a boy and a girl speaking, and a maximum of six students per discussion can talk.¹⁴ On average, the discussions were 15 minutes long, with 13 people in each session.

The masculinity discussions were further split into two types: **Vocal (Treatment 1)** and **Representative (Treatment 2)**. In the Vocal group, subjects were asked to voluntarily speak during their session, which mimics the natural dynamics of the school environment. In the second, called Representative group, subjects were drawn ex-ante and called to speak following a random order. This division allows an investigation of a potential underlying mechanism: that the opinions of the vocal students are more likely to be known than that of the representative students, since they are the ones who talk the most. See Figure A2 for a roadmap, and Figure A3 for a picture of the discussions.

An observer took notes during these discussions. They indicated: 1) whether a student said they agreed or not with each statement, 2) whether they have shared a personal example, 3) keywords and quotes, and 4) group dynamics (e.g. if there were laughter and jokes). Figure A4 shows the form observers had to fill out. Figure A5 presents some quotes from the discussions, split by boys and girls, and by treatment group. In Session 2.3, I categorize these quotes.

Recycling (Control). The control group attended a discussion session about recycling practices, mediated by a male member of the environmental education NGO *Mangue & Tal*. Only the participants who voluntarily raised their hands would speak up (i.e. there is no *Representative*

¹⁴A maximum number of students was defined because my goal was to differentiate between the *Vocal* and *Representative* students. If everybody had the chance to speak, then I would not expect any differences between the two treatments (i.e. they would be, on average, the same, as they were randomly selected).

arm). The topic of recycling is not expected to affect perceptions about the school’s current gender norms. Mediators were instructed to not make any comments related to gender in any way.

3.3 Data Collection and Outcomes

Baseline Data Collection. All 2,249 students who personally assented to participate in the study and whose parents consented with their participation self-administered the 10-minute-long baseline survey on individual tablets using Qualtrics offline. All baseline data collection happened prior to the revelation of the treatment assignment.

The baseline survey is split as follows. First, students answer demographics, indicate who they live with, and provide their WhatsApp contact information. Second, they answer questions related to friendship (e.g. what they usually talk to their friends about), importance given to being popular at school, and how influenceable they believe to be by their boys’ and girls’ friends at school. Third, they answer network questions, in which they select the names of their school-classroom peers who: they have spent the most time with over the last week (*Popularity Score*), are the most talkative in class (*Vocality Score*) and are the ones they most admire (*Admiration Score*).¹⁵ Fourth, they indicate their beliefs – a binary choice on whether they agree or not – about the two masculinity statements *Men Who Cry Are Weak* and *Men Should Use Violence to Get Respect If Necessary*. Finally, four questions from the *Meanings of Adolescent Masculinity Scale* (Oransky and Fisher 2009) and from the *Marlowe-Crowne Social Desirability Scale* (Reynolds 1982) were administered. Figure A6 presents the full baseline survey.

Table A1 summarizes baseline characteristics of the sample and provides the p-value of an F-test of joint significance to test for covariates balance between the study arms, within sex. Among boys, 4 characteristics (out of 27) were not balanced: percent white ($p = 0.09$), percent black ($p = 0.05$), degree of self-reported influenced by girls ($p = 0.07$) and social network score ($p = 0.10$). Among girls, 3 characteristics were not balanced: percent white ($p = 0.06$), whether talk to friends about boys ($p = 0.06$), and whether talk to friends about what society expects from a

¹⁵Students were instructed to raise their hands and let the field team know whether they did not have any student to select. Only seven students declared not to admire another student, and one student said they did not spend time with anybody else.

man ($p = 0.07$).

Endline Data Collection. I conducted a first endline survey immediately after the discussion ended, again self-administered in tablets using Qualtrics offline. All the 2,249 students who filled out the baseline survey also filled out the first endline. Table A7 displays all the questions from the first endline.

I then employed a second endline survey, distributed to students via WhatsApp three weeks after our visit to the school (see Table A8 for the complete set of questions of endline 2).¹⁶ The attrition rate was 42% for the second endline, and attrition is not correlated with baseline characteristics differentially by treatment status for most characteristics (see Table A2). Similarly to the baseline survey imbalance, only four characteristics among boys were not balanced across groups (age, living with mother, talking to friends about boys, and importance given to popularity), and three characteristics among girls (percent white, talking to friends about boys, talking to friends about girls). As per the request of the Secretariat, neither of the surveys nor outcomes were incentivized in any way, which reflects the high attrition rates for the second endline.

Short-Run Outcomes (Primary). I pre-registered two primary outcomes for the short-run endline. First, I measure misperceptions with respect to the two beliefs about masculinity they discussed (*Men Who Cry Are Weak* and *Men Should Use Violence to Get Respect if Necessary*). Misperceptions are defined as the difference, in percentage points, between students' prediction of the percentage of boys and girls, separately, in their school classroom they think to agree with each of the statements (i.e., their second-order beliefs) and the actual percentage of boys and girls who agree with each statement at baseline (i.e., the average baseline first order beliefs within classroom). I follow Bursztyn and Yang (2022) recommendation and only elicit the second-order beliefs at endline to avoid priming and consistency effects.

Second, I estimate social image concerns with respect to masculine behaviors using a survey experiment, following the design by Bursztyn and Jensen (2015). Participants answer self-reports on the last time they cried, the last time they initiated a physical fight, and a proxy of antisocial

¹⁶80% of boys and 87% of girls provided their WhatsApp information.

behavior, measured by a Joy of Destruction Game ([Abbink and Sadrieh, 2009](#)). The latter is a behavioral measure for antisocial behavior, in which participants can choose to remove money from a stranger, without punishment or benefits. Before answering these questions, they are randomized to either have their answers (i) private, indicated by the statement *Your answers will **not** be discussed with the other people in this room* or (ii) public, indicated by the statement *Your answers **might** be discussed with the other people in this room*.

Longer-Run Outcomes (Primary). For the second endline, I also pre-registered two primary outcomes, where the first are misperceptions, as measured at the first endline. In addition to misperceptions, I ask a series of peer reports on aggressive behaviors, conflict resolution manners, emotion-sharing, and respect toward girls. Within classroom, I randomized up to three boys who participated in one session and three boys who participated in the other session and asked their peers to indicate, for each of them, whether over the last three weeks they have (1) used inappropriate language, (2) committed any form of physical aggression, (3) helped to resolve conflicts in a non-violent way, (4) showed to be a sensitive person, and (5) been respectful towards girls. This analysis is in progress.

Secondary Outcomes. I present three sets of pre-registered secondary outcomes. First, I estimate short- and longer-run effects on first-order masculinity beliefs about crying and violence. These were binary choices on whether participants agreed or not with each statement. Adolescents have more malleable preferences and are also more influenceable by their peers' opinions than adults ([Kohlberg, 1976](#); [Markus and Nurius, 1986](#); [Steinberg, 2014](#)), so it is possible they change their private views about masculinity after learning what their peers think. This deviates from my pre-registered hypothesis, in which I conjectured the discussion treatments would not affect first-order beliefs. However, by studying a population of adolescents, this paper differs from [Bursztyn et al. \(2020\)](#), which does not find effects on first-order beliefs, and is more aligned with [Dhar et al. \(2022\)](#)' findings.

Second, I elicit a series of hypothetical behaviors and overall school norms presented through three vignettes at the first endline. The vignettes capture the two domains of masculinity I study in this paper: emotional toughness and violent behavior. First, I describe a situation in which

a boy is afraid of showing their feelings to their other male friends for fearing social sanctions. Second, I show a boy who reacts with violence (e.g. a punch) after their friend refused to lend him a pen. Finally, I depict a girl making a decision on whether to date or not a sensitive boy. The order of the vignettes was randomized. For each vignette, I ask students whether they agree or disagree with three dimensions: (i) self-reported behaviors: whether they would act masculine, (ii) normative behaviors: whether they think the masculine behavior was right, and (iii) school norms: whether their school peers would support acting masculine.

Third, I ask about behaviors associated with the masculinity dimensions of being violent and acting tough three weeks after treatment. Students start by answering binary self-reports on whether they (i) were involved in a physical fight involving slaps, punches, and kicks, (ii) have cried in front of a friend, and (iii) have had a deep conversation with a friend about their personal problems or insecurity, all over the last three weeks after treatment. Since self-reported measures can suffer from reporting bias, I also elicit five peer-reported behaviors associated with masculinity. Each endline two respondent provided peer assessment on the behaviors of six boys, three randomly selected from each half of the classroom (i.e. three from *Vocal*, *Representative* or *Control*). The binary peer reports were whether the peer (i) used inappropriate language to refer or communicate to another student, (ii) committed any form of physical violence against another student at school, such as slaps, punches, and kicks, (iii) helped solve a conflict in a non-violent way, (iv) showed to be a sensitive person, and (v) was respectful towards girls at school, all over the last three weeks after treatment. Since attrition at the second endline survey was high, the peer reports also have the advantage of increased sample size as reported students do not necessarily need to answer the survey.

4 Results

4.1 Primary Outcomes.

Misperceived Social Norms. I start by documenting large misperceptions about social norms related to masculinity, for both boys and girls in the control group (Figure 2). 11% of boys and

5% of girls agree with the statement *Men Who Cry Are Weak*, while 17% of boys and 5% of girls agree with the statement *Men Should Use Violence to Get Respect if Necessary*. On average, boys guess that 32% of other boys and 33% of girls agree with *Men Who Cry Are Weak*, with 64% of boys overestimating boys' and 81% overestimating girls' beliefs (Panel a - Upper Plots). Boys' guesses about others' agreement with *Men Should Use Violence to Get Respect if Necessary* are more accurate, but still indicate a 13 p.p. and 11 p.p. misperception about boys' and girls' beliefs, respectively (Panel a - Lower Plots).

Girls' misperceptions have similar patterns (Panel b). Comparing Panels (a) and (b), I reach three conclusions. First, misperceived norms about masculinity exist. Second, both boys and girls have equally large incorrect views about their peers' beliefs about masculinity. Third, these incorrect views are both with respect to boys' and to girls' beliefs. This reinforces the importance of including both sexes in discussions about masculinity, as I do in the discussion treatments.

It is striking to find such large misperceptions in an environment in which people are interacting every day, assuming that by interacting they also get to know their peers' beliefs and behaviors. As a benchmark, [Bursztyn et al. \(2020\)](#) find that 72% of participants strictly underestimate the support for women working outside of the household, with an average wedge of 24 p.p. In their case, 51% of participants declare to know another participant in the room, and they provide evidence that those with more friends have lower misperceptions. While I document that average misperceptions about violence are lower than the benchmark (11 p.p.), average misperceptions about crying are similar to the benchmark (25 p.p.). There are two potential explanations for this. First, the statement about crying is about who somebody is as a person (i.e. their identity as a man), whereas the one about violence is a normative statement (i.e. how they believe a man should behave). Second, crying itself is less present compared to violence in social interactions for boys, especially for my sample, which is composed mostly of students who live in favelas and are thus exposed to armed conflict on a frequent basis.

Treatment Effects - Misperceptions (Short-Run). Discussion groups reduce short-run misperceptions by over 50% ($p < 0.001$, Figure 3) in most cases. I cannot reject that boys' and

girls' misperceptions with respect to girls' beliefs about violence change ($p = 0.22$ and $p \geq 0.53$, respectively). The results for boys and girls are fairly similar (comparing Panels a and b).

The *Vocal* and *Representative* treatments have similar effects. One possible explanation is that vocal students have similar masculinity beliefs to randomly selected students. I test this in Table 2: speakers in the *Vocal* and *Representative* groups are similar in baseline characteristics, except with respect to a vocality score. To measure vocality, I ask peers to select the top 5 most talkative people in their class. The vocality score is the count of how many times a person was reported, excluding themselves. Column 1 shows that boys and girls who speak in the *Vocal* group are reported by their peers to be about 20% more vocal compared to those who speak in the *Representative* group. Columns (2)-(5) provide evidence that speakers in both treatment groups are not different in other important domains, such as popularity, admiration by peers, masculinity, and social desirability. Only girls who speak in the *Vocal* group are marginally more likely to provide socially desirable answers (6%) than those in the *Representative* group.

An alternative explanation is that the narratives presented in the two types of discussion are similar, following a growing literature in economics on the power of narratives (e.g. Shiller 2017; Andre et al. 2021). To test this, observers and I manually coded the discussion session, categorizing them into topics, as recommended by Ferrario and Stantcheva (2022). Table 1 presents all the categories used and provides some sample quotes. For example, in the statement about crying, most students justified their opinions by using arguments such as *crying is human*, which I categorize as *Everybody Has Feelings*. In the statement about violence, participants mostly supported their views by saying that there are *Other Ways to Get Respect*, such as conversation. A significant number of students were also supportive of violence as a defence tool, which I categorize as *Honor/Fight back*. Figure 4 displays the distribution of topics mentioned to justify their views, separately by statement (Crying - Panel a; Violence, Panel b), treatment group and sex of the respondent. The justifications provided by speakers in the *Vocal* and *Representative* discussions are fairly similar, within and across sex, indicating another channel through which the treatments produce similar effects.

Taken together, my findings so far have two implications. First, encouraging communication

does change students' views about their peers' beliefs about masculinity. With misperceived social norms, communication could not be effective if (i) only people willing to speak are those that are more masculine, or (ii) the non-masculine speakers misrepresent their views, given that they expect others to be masculine. I show that (i) is not a plausible explanation, as the vocal speakers are not more masculine than the representative ones. I also provide evidence to refute (ii): only 8% of the boys lie about their opinions in public, compared to what they answered at baseline. Second, a policy that allows people to select into a discussion about masculinity may be just as effective as getting a representative sample to discuss it. This adds to [Bursztyn et al. \(2020\)](#) findings: in their setting, people received representative quantitative data about others' views. In this paper, I show not only that the data can be in the form of open-ended communication, but also that it does not need to be representative.

Treatment Effects - Misperceptions (Longer-Run). In the longer-run, treatment effects could persist if (i) treated students retain the information learned, and (ii) control students do not learn the new information acquired by their treated peers. If (i) happens, it means that my treatment was truthfully absorbed by students, even after they go back to their day-to-day interactions. If (ii) happens, information does not spill over: a one-time discussion session is not enough to encourage outside-of-the-classroom communication among peers about a stigmatized topic such as masculinity.

Figure 5 shows treatment effects persist after 3 weeks: the *Vocal* and *Representative* treatments reduce misperceptions by over 50% in most cases. In the longer run, treated students have lower misperceptions than in the short-run, by comparing the *Vocal* and *Representative* bars with the red diamonds, which represent short-run misperceptions. Control boys (Panel a) do not seem to have absorbed the new information from the treated, as the red diamonds and the control group bars overlap. For control girls (Panel b), misperceptions were reduced compared to their short-run levels.

Social Image Concerns. Table 3 (Panel A - row *Public* $\times$ *Treated*) shows that the discussion treatments fully offset boys' social image concerns. Treated boys' behaviors with respect to crying

(Column 1), being violent (Column 2) and removing money from a stranger (Column 3) are about 0.1 s.d. more similar than control boys' behaviors depending on whether their answers might be shared with their peers or not. Even though estimates are imprecise, these are sizable effects considering that overall social image concerns are of similar magnitude, comparing rows *Public* with *Public* $\times$ *Treated*. Table A5 presents regressions with coefficients for each treatment.

Panel B presents regression coefficients for less masculine boys, defined as scoring zero on the Masculinity Adolescent Scale. Effects on social image concerns might be particularly strong for this population: they may think their peers have different beliefs about them. I find a large and significant effect on my behavioral measure (Column 3): treated boys' choices on whether to remove money from a stranger are 0.33 s.d. more similar in the public and private conditions, compared to control boys. Point estimates are also large (0.29 s.d.) with respect to self-reports on violent behavior.

These are suggestive evidence that changing boys' perceptions about what their peers think toward more progressive masculine views loosen prevailing masculinity norms. This has consequences for boys themselves as well as for others: in public, boys who participated in a discussion about masculinity become more likely to admit they have cried, less likely to admit they have been violent, and to perform antisocial behavior.

4.2 Secondary Outcomes.

First-Order Beliefs. In the short-run, treated boys and girls become about 50% less likely to agree with the statement about crying, compared to the control mean (Table 4 - Panel A Columns 1 and 2). There are no significant effects on the beliefs about violence (Panel A Columns 3 and 4). Effects are similar across the *Vocal* and *Representative* treatments. In the longer-run, boys' beliefs with respect to both statements become about 50% more progressive for those in the *Representative* group, whereas I do not find significant effects for boys in the *Vocal* group (Table 4 - Panel B Columns 1 and 3). Estimates for girls are, statistically and in magnitude, close to zero (Table 4 - Panel B, Columns 2 and 4). However, control girls' beliefs change considerably between the first and the second endlines, whereas control boys' beliefs remain similar (Table 4 - Control

Mean of Dep. Var. rows in Panels A and B).

Vignettes. I find that my treatments strongly impact the three dimensions I measured through vignettes (self-reported behaviors, normative behaviors, and school norms), for boys and girls (Table 5). For simplicity, I pool both treatments, but the results are similar across them (see Table A6). My outcomes of interest are an index within each dimension across the three vignettes, standardized by the control mean and standard deviation. First, boys and girls self-report they would act less masculine by about 0.2 s.d after the masculinity discussion. Second, boys are 0.21 s.d. and girls are 0.13 s.d. less likely to say the masculine behavior was right. Third, students think their school peers are less likely to support masculine behavior by 0.13 s.d. (for boys) and 0.33 s.d. (for girls). Taken together, this indicates that the masculinity discussion sessions go beyond changing students' own (self-reported) behaviors, normative views and perceptions about their school social norms.

Behavioral Outcomes. Three weeks after the intervention, the discussion treatments have no effects on boys' self- and peer-reported behaviors. Table 6 shows that the treatment has point estimates close to zero on self-reported involvement in violence (Column 1), crying in front of a friend (Column 2) and having a deep conversation (Column 3). To account for potential response biases common in self-reported measures (e.g. social desirability, experimenter demand effects), Table 7 (Panel A) presents treatment effects on behavioral outcomes using peer reports. Corroborating the findings on self-reported behaviors, I find no evidence that the discussion treatments impacted peer-reported measures of negative masculine behaviors (Panel A - Columns 1 to 3). In addition, the masculinity discussions did not improve boys' positive masculine behaviors (Panel A - Columns 4 to 7). If anything, treated boys became 4% less respectful toward girls (Panel A - Column 6) compared to control boys ($p = 0.08$).

Some reporters were also treated, which could bias the reporting. For example, the masculinity sessions could increase the salience through which reporters notice these behaviors, thus driving estimates downward. To account for this, Table 7 (Panel B) presents treatment effects on peer-

reported behaviors considering reporters in the control group only. Besides being statistically non-significant, point estimates are small, corroborating the absence of effects on behavior.

The lack of effects on behavioral outcomes could be due to different reasons. First, compared to changes in beliefs and attitudes, behavioral changes take more time to take place. Second, most of these behaviors could be considered rare events, so a larger time span would be needed to increase power. Finally, different from [Bursztyn et al. \(2020\)](#), these are behaviors that involve some degree of social interaction and are more subject to others' approval, so impacts in attitudes would transform into behavioral changes only after subjects are certain they will not suffer social sanctions from their peers.

4.3 Mechanisms.

Political Correctness. One issue that arises in my setting is that the discussions could be uninformative: teenagers could publicly express less masculine views in the discussions than those they have in private to conform with the (perceived) norms. Table 9 presents the percentages of the intersections between participants' public and private opinions for the first speaker in the *Representative* discussion. *Politically correctness* would be captured by reporting a masculine view (i.e., agreeing with a masculine statement) in private, but sharing a non-masculine view in public (i.e., disagreeing with a masculine statement), which happens 1.8% and 8.7% of the time for statements about crying and violence, respectively. This finding then suggests that I did not encourage biased discussions, preventing teenagers from learning uninformative views.¹⁷

Social Desirability. Empirically, social desirability bias could play a role if the treatment effects were driven by people with high baseline scores of social desirability. The short- and longer-run effects of the discussion treatments on misperceptions are not driven by social desirability bias (Table 8). . However, the evidence in Table 8 shows that the interaction terms between a high social desirability score and each treatment arm are small in magnitude and not statistically significant. The only exception is in Panel C, where the coefficient on the interaction between

¹⁷See [Braghieri \(2021\)](#) for evidence on the role of political correctness in providing misrepresentative views in public among college students in the US.

High Social Desirability Score and *Vocal* is significant; however the sign of the coefficient indicates misperceptions actually increased for those who score high on social desirability, suggesting it is not these students who drive the average reduction in misperceptions observed in the study.

5 Conclusion

This paper shows that lack of communication is an important driver for the persistence of misperceived social norms. In a high-stakes context, encouraging adolescents to discuss their views about masculinity significantly changes what they think their peers think. I further show that the type of communicator does not matter: vocal students are similar to representative ones in all domains, with the exception of a vocality score. The narratives in both treatments are also similar, providing another channel through which the different masculinity discussion treatments produce similar effects. Students' private views also change after they update their perceptions about what their peers think (i.e. there is a feedback loop between second- and first-order beliefs). I also provide suggestive evidence that the discussion treatments reduce boys' social image concerns about masculinity.

Finally, my findings support that the masculinity discussion sessions impacted attitudes measured through vignettes, with students becoming less supportive of masculine acts. However, these changes are not reflected in boys' self- and peer-reported changes in masculine behaviors, such as involvement in violence and emotional toughness, measured three weeks after treatment. I argue effects on behaviors could take longer, especially considering these are public behaviors, which are more subject to social sanctions.

My findings have an important policy implication: encouraging adolescents to have a short discussion about a stigmatized issue such as masculinity has the power to change perceptions about existing social norms. Compared to long-run programs which have also been effective in changing adolescents' gender attitudes (e.g. as in [Dhar et al. 2022](#)), the approach presented in this paper is cheaper and could be easily scalable as a policy tool. Future work could also understand why adolescents do not talk about masculinity to start with. In addition, research on interventions targeting behavioral changes is encouraged.

Figure 1: Experimental Design

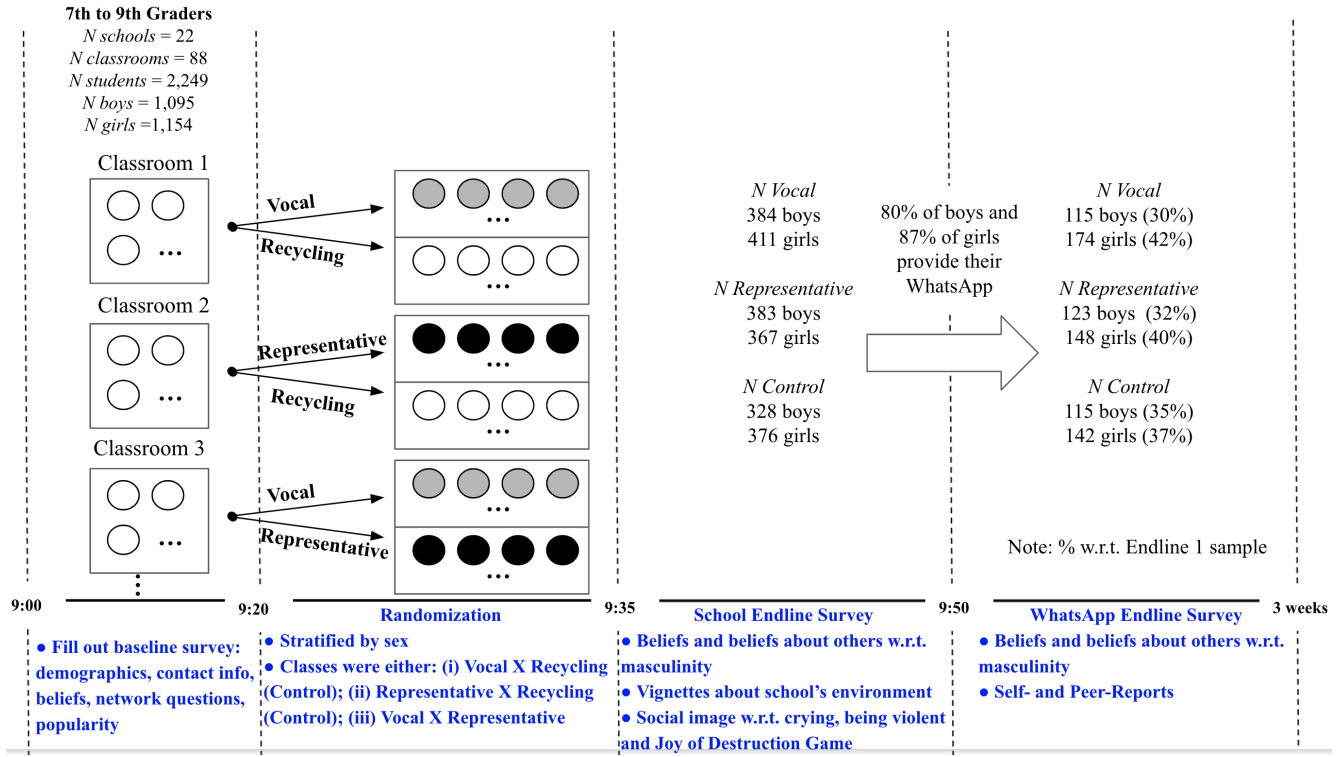
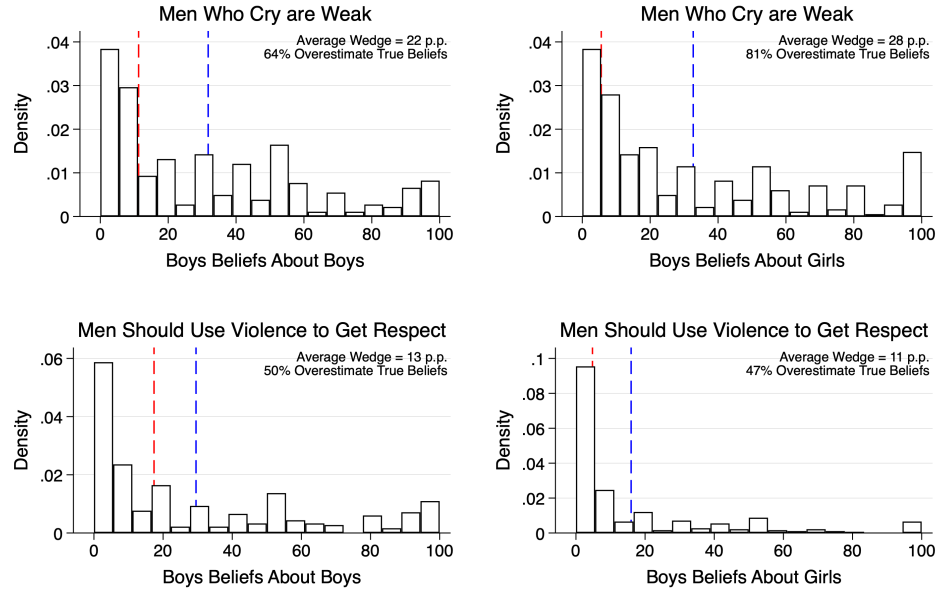
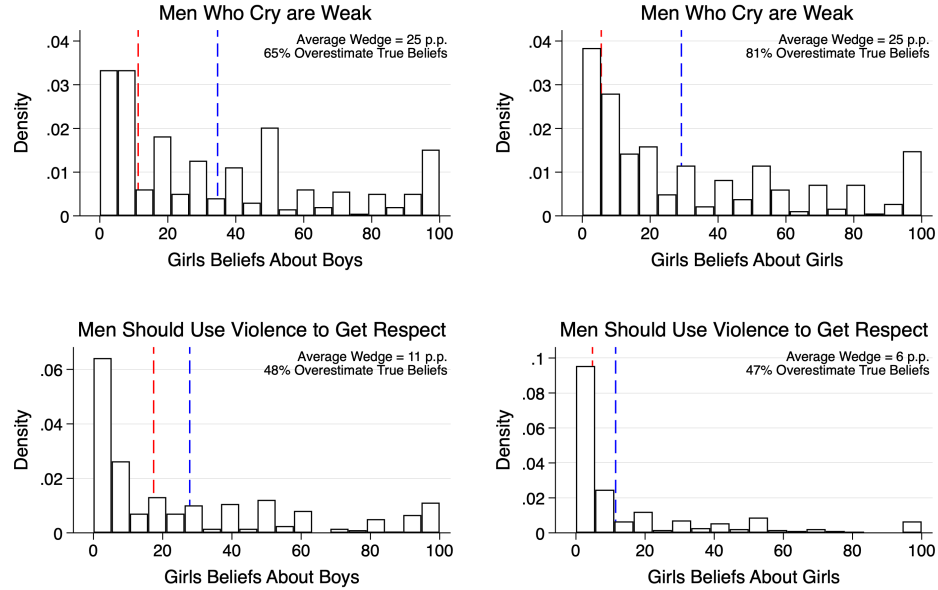


Figure 2: Distribution of Second Order Beliefs About Masculinity



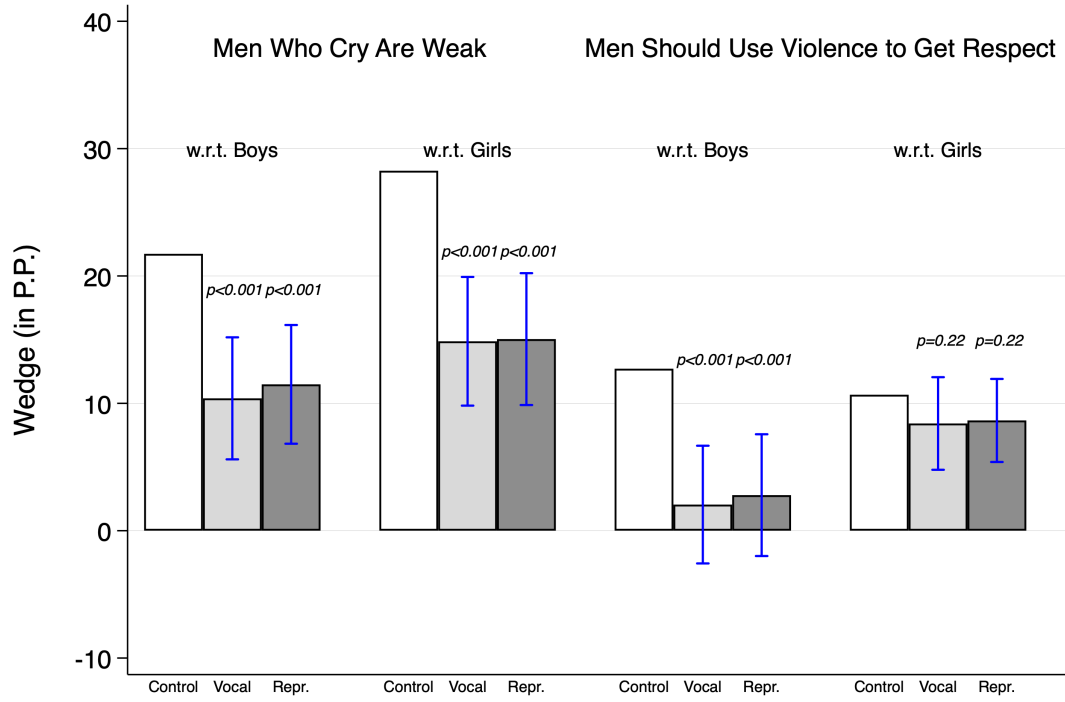
(a) Boys



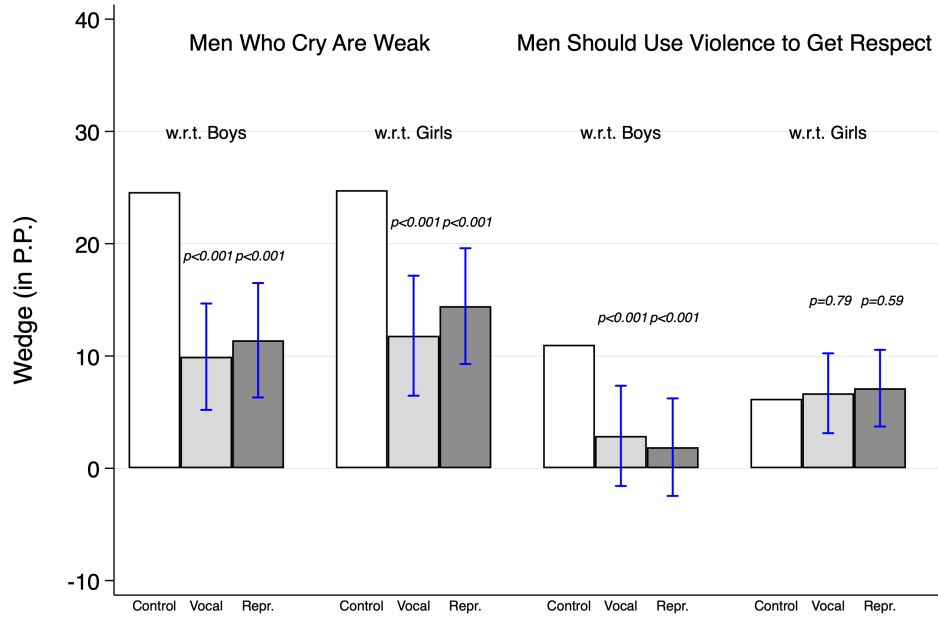
(b) Girls

Note: This figure plots the distribution of boys' and girls' endline guesses about the share of their male and female classmates they think agree with the statements *Men Who Cry are Weak* and *Men Should Use Violence to Get Respect if Necessary* (i.e. their second order beliefs). The sample consists of 376 girls and 328 boys from the control group, as the second-order beliefs are not elicited at baseline. **Red** dashed line plots average first order beliefs. **Blue** dashed line plots average second order beliefs

Figure 3: Discussion Treatments Reduce Misperceptions Immediately After Treatment



(a) Boys



(b) Girls

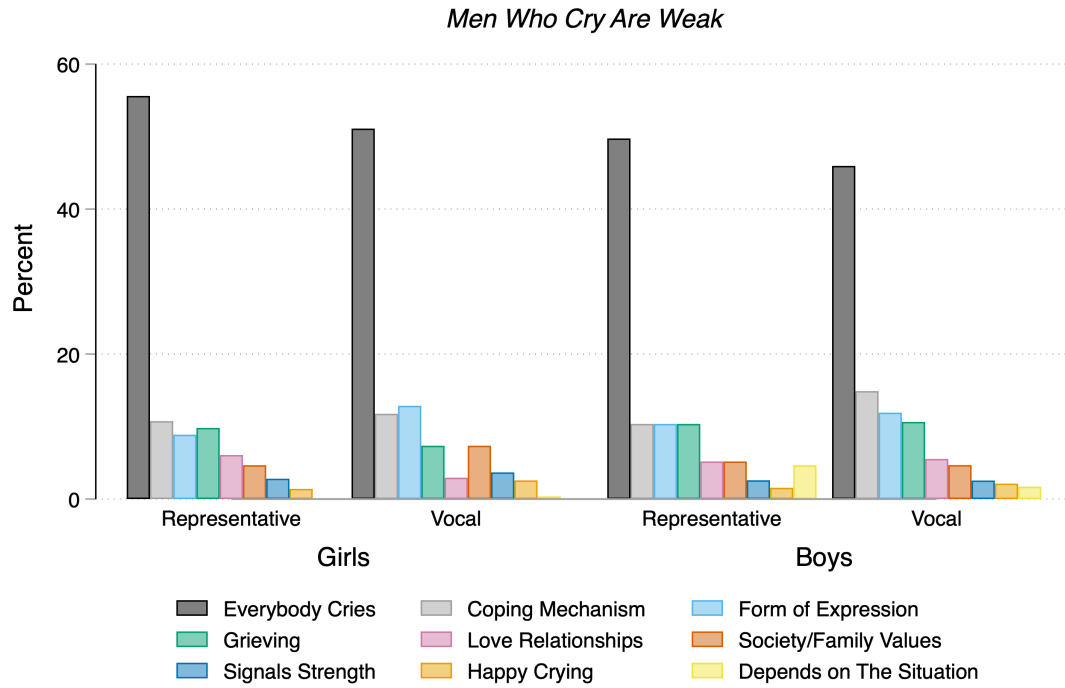
Note: This figure shows the effects of the *Vocal* and *Representative* discussion treatments. The wedge is calculated as the average difference, in percentage points, between (*participants' guesses about the percentage of their male or female peers agreeing with each statement*) and (*the true percentage of participants agreeing with each statement at baseline*). 95% confidence intervals plotted, from a regression of misperceptions on treatment status dummies, including school fixed effects. Standard errors are clustered at the classroom level.

Table 1: Categories and Examples Shared in the Masculinity Discussions

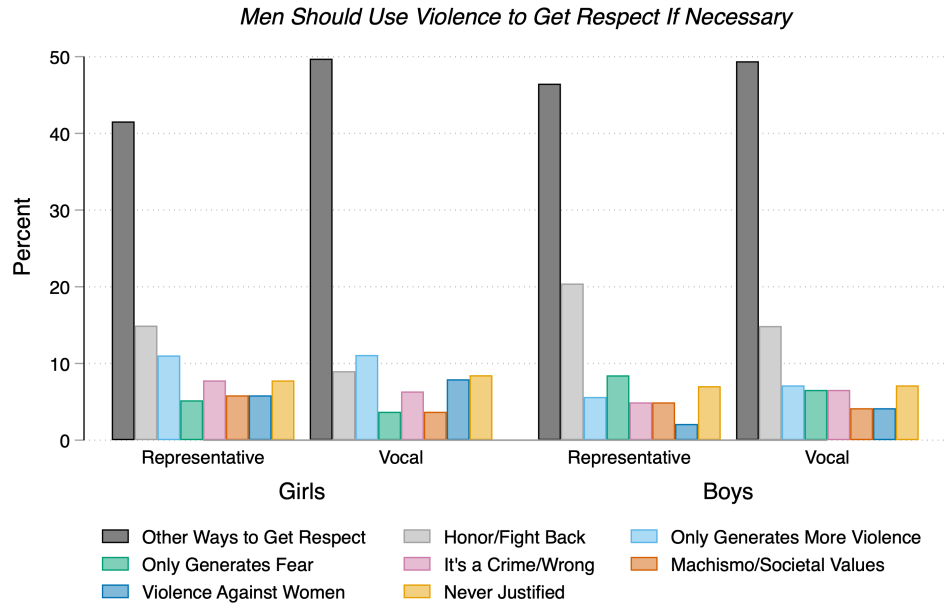
Men Who Cry Are Weak			Men Should Use Violence to Get Respect If Necessary		
Category	Quote	Frequency	Category	Quote	Frequency
Coping Mechanism	When you're having a bad day, out of disappointment, you cry because you feel like it	110	Other Ways to Get Respect	You have to treat others as you would like to be treated, you don't have to use bad words or physical violence to be respected	307
Relative/Depends	I think men don't always need to cry. Ex: if they took a weak slap, they don't need to cry	14	Generates fear	If you use violence you will not be respected you will be feared	38
Everybody Has Feelings	Man has the right to cry, crying is human	462	Generates more violence	Men shouldn't use violence, violence brings even more violence, if you want to be respected you have to treat them with respect.	58
Form of Expression	It's a body's feeling, men cry when something happens to the familiar or they get hurt, crying takes the pain out	102	Honour/fight back	Most of the time you don't have to use violence, you can use violence to defend yourself or when someone is offending you	94
Grieving	When you lose someone in your family, when you lose a childhood friend	86	Crime/Wrong/Bad	It's wrong. My dad never beat me and I respects him for that.	42
Happy Crying	Crying when you win a competition	18	Never Justified/Doesn't Take You Anywhere	Because that way you won't get anywhere, we need education to get somewhere	50
Love Relationships	I saw my brother crying after a breakup	44	Society/Machismo	If women can't beat others, men can't either	30
Societal/Family Values	Boys are raised told by their parents not to cry	51	Violence Against Women	I saw my brother having a jealousy crisis with his girlfriend and beat her. I felt distressed.	34
Strength	Showing feelings is a sign of strength, the person who holds on to himself cannot cry and express himself	27			

Note: This table presents the categories into which participants' quotes for the *men who cry are weak* and *men should use violence to get respect if necessary* were manually coded, with examples and frequencies. For the statement about crying there are nine categories: *Everybody Cries*, *Coping Mechanism*, *Form of Expression*, *Grieving*, *Love Relationships*, *Society/Family Values*, *Signals Strength*, *Happy Crying* and *Depends on the Situation*. For the statement about violence, there are eight categories: *Other Ways to Get Respect*, *Honor/Fight Back*, *Only Generates More Violence*, *Only Generates Fear*, *It's a Crime/Wrong*, *Machismo/Social Values*, *Violence Against Women*, and *Never Justified*.

Figure 4: Main Topics Discussed During the Masculinity Sessions



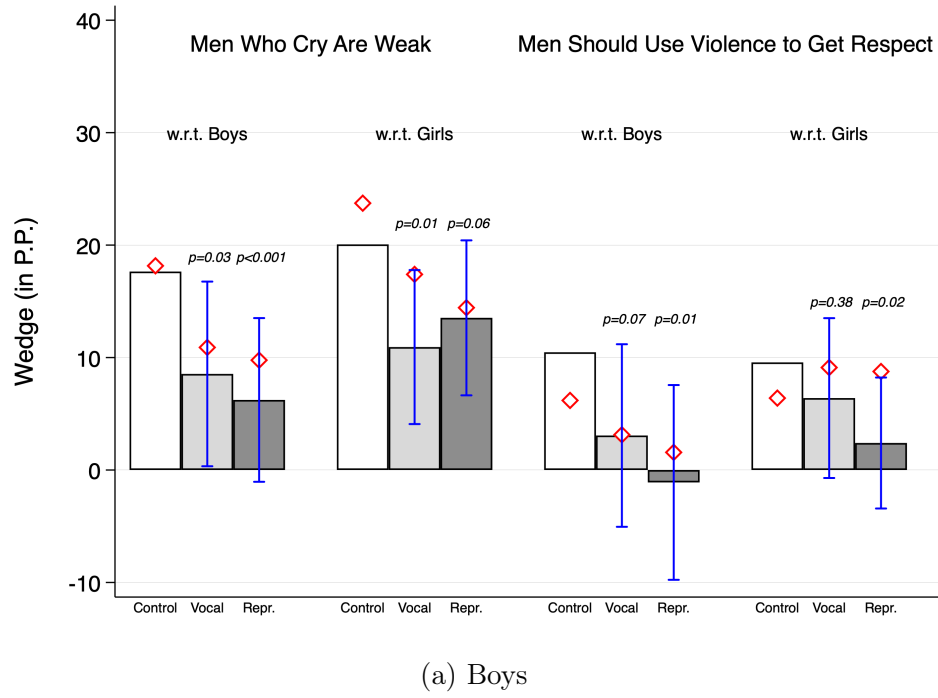
(a) Men Who Cry Are Weak



(b) Men Should Use Violence to Get Respect If Necessary

Note: This figure plots the distribution of topics discussed in the masculinity sessions, separated by boys and girls and by discussion type (i.e. *Vocal* and *Representative*). The bars represent the percentage of times a topic was mentioned. Note that the categories were not mutually exclusive, so the sum within each group is above 100%.

Figure 5: Treatment Effects on Misperceptions Persist 3-Weeks After



Note: This figure plots the treatment effects for the *Vocal* and *Representative* groups for the sample who responded to the second endline, distributed via WhatsApp 3 weeks after treatment. The wedge is calculated as the average difference, in percentage points, between (*participants' guesses about the percentage of their male or female peers agreeing with each statement*) and (*the true percentage of participants agreeing with each statement at baseline*). 95% confidence intervals plotted, from a regression of misperceptions on treatment status dummies, including school fixed effects. Standard errors are clustered at the classroom level. Red diamonds plot Endline 1 means for the WhatsApp sample.

Table 2: Vocal Speakers Only Differ From Representative Ones in a Vocality Score

	(1)	(2)	(3)	(4)	(5)
Dep. Var.	Vocality	Popularity	Admiration	Masculinity	Social Desirability
Panel A - Boys					
Vocal	0.950*	-0.0133	-0.0230	-0.0873	-0.0276
	(0.495)	(0.160)	(0.185)	(0.114)	(0.0989)
Observations	329	329	329	329	329
School Fixed Effects	Yes	Yes	Yes	Yes	Yes
Representative Mean	3.947	2.018	1.515	1.148	2.846
Panel B - Girls					
Vocal	1.267**	0.0893	0.374	0.0310	-0.186*
	(0.523)	(0.154)	(0.348)	(0.0748)	(0.111)
Observations	332	332	332	332	332
School Fixed Effects	Yes	Yes	Yes	Yes	Yes
Representative Mean	4.358	2.012	2.394	0.461	2.915

*** p<0.01, ** p<0.05, * p<0.1

Note: This table presents regressions of each dependent variable on an indicator if a person spoke in the *Vocal* group, where the omitted category is a person who spoke in the *Representative* group. *Vocality*, *Network*, and *Admiration* are the count of how many times a participant was selected by their friends as being, respectively: among the top 5 most talkative people in the class, among the people someone spent the most time with in the last week, among the people someone admires the most. *Masculinity* is a score from 0 to 4 from a Masculinity Scale, with a larger number for self-reports of more traditionally masculine beliefs. Desirability is a score from 0 to 4 from the Social Desirability Scale, with a larger number meaning that the person gives more socially desirable answers. Standard errors are clustered at the classroom level.

Table 3: Discussion Groups Reduce Boys' Social Image Concerns Toward Less Masculine behaviors in Public (Pooled)

	(1)	(2)	(3)
	Last Cried	Last Violent	Joy of Destruction
Panel A: All Boys			
Public	0.134	0.0704	0.0845
	(0.134)	(0.107)	(0.123)
Treated	0.0121	0.0223	0.0644
	(0.103)	(0.0945)	(0.0950)
Public $\times$ Treated	-0.156	-0.0866	-0.119
	(0.152)	(0.133)	(0.141)
Observations	1,095	1,095	1,095
School Fixed Effects	Yes	Yes	Yes
Control-Private Mean of Dep.Var.	2.071	1.832	0.449
Panel B: Less Masculine Boys (Based on Masculinity Score)			
Public	0.104	0.253	0.145
	(0.209)	(0.174)	(0.142)
Treated	0.132	0.0606	0.281*
	(0.160)	(0.138)	(0.158)
Public $\times$ Treated	-0.0649	-0.290	-0.335*
	(0.263)	(0.211)	(0.197)
Observations	330	330	330
School Fixed Effects	Yes	Yes	Yes
Control-Private Mean of Dep.Var.	1.885	1.445	0.383

*** p<0.01, ** p<0.05, * p<0.1

Note: This table presents regressions of each dependent variable – standardized by the control group mean and standard deviation – on an indicator for whether participants' answers were *public* in the survey experiment, were treated (on either of the discussion groups), and an interaction term between them. *Last Cried (Violent)* are scores from 0 to 5, in which larger values mean they have cried further away in time (been violent more recently). *Joy of Destruction* is a score from 0 to 5, in which 0 means participants will not remove any money from the winner, and 5 means they will remove all the money. The *Public $\times$ Treated* row gives my coefficient of interest, in which a negative value indicates treated participants have lower social image concerns than control participants. Standard errors are clustered at the classroom level.

Table 4: Discussion Groups Make Boys' First-Order Beliefs Less Masculine Immediately and 3-Weeks After

	(1)	(2)	(3)	(4)
	Men Who Cry are Weak		Men Should Use Violence to Get Respect	
	Boys	Girls	Boys	Girls
Panel A: School Endline - Immediately After Treatment				
Vocal	-0.0381**	-0.0289***	-0.0144	-0.0209
	(0.0167)	(0.00955)	(0.0283)	(0.0175)
Representative	-0.0476***	-0.0210*	-0.0358	0.0122
	(0.0158)	(0.0114)	(0.0328)	(0.0197)
Observations	1,095	1,154	1,095	1,154
School Fixed Effects	Yes	Yes	Yes	Yes
Control Mean of Dep. Var.	0.0945	0.0426	0.198	0.0638
P-Value Treatment Comparison	0.517	0.284	0.484	0.123
Panel B: WhatsApp Endline - 3 Weeks After Treatment				
Vocal	-0.0112	-0.000792	-0.0266	0.0314
	(0.0247)	(0.0109)	(0.0567)	(0.0210)
Representative	-0.0444*	0.00752	-0.107**	0.00335
	(0.0252)	(0.0135)	(0.0462)	(0.0206)
Observations	375	529	375	529
School Fixed Effects	Yes	Yes	Yes	Yes
Control Mean of Dep. Var.	0.0769	0.0123	0.188	0.0429
P-Value Treatment Comparison	0.111	0.499	0.0954	0.223

*** p<0.01, ** p<0.05, * p<0.1

Note: This table presents regressions of an indicator for whether participants' agreed with the statements *Men Who Cry Are Weak* (Columns 1 and 2) and *Men Should Use Violence to Get Respect If Necessary* (Column 3 and 4) at endline 1 (Panel A) and endline 2 (Panel B) on treatment status dummies. Regressions include school fixed effects and baseline values of the dependent variables. Standard errors are clustered at the classroom level.

Table 5: Discussion Group Make Students' Hypothetical behaviors Less Masculine (Pooled)

	(1)	(2)	(3)	(4)	(5)	(6)
	Would Act Masculine		It's Right to Act Masculine		Peers Would Support Acting Masculine	
	Boys	Girls	Boys	Girls	Boys	Girls
Treated	-0.242***	-0.223***	-0.213***	-0.128**	-0.135*	-0.330***
	(0.0604)	(0.0532)	(0.0766)	(0.0513)	(0.0707)	(0.0683)
Observations	1,095	1,154	1,095	1,154	1,095	1,154

*** p<0.01, ** p<0.05, * p<0.1

Note: At the first endline, students were presented with three vignettes. The first one describes a situation in which a boy is afraid of showing their feelings to their other male friends for fearing social sanctions. The second one shows a boy who reacts with violence (e.g. a punch) after their friend refused to lend him a pen. Finally, the last one depicts a girl making a decision on whether to date or not a sensitive boy. For each vignette, I ask students whether they agree or disagree with three dimensions: (i) self-reported behaviors: whether they would act masculine, (ii) normative behaviors: whether they think the masculine behavior was right, and (iii) school norms: whether their school peers would support acting masculine. This table presents regressions of an index, standardized by the control mean and standard deviation, within each of these three dimensions. Negative coefficients mean treated students become less supportive of masculine behaviors.

Table 6: Discussion Group Has No Effects on Boys' Self-Reported behaviors

	(1)	(2)	(3)
Dep. Var.	=1 if Involved in Physical Fight	=1 if Cried In Front of a Friend	=1 if Had a Deep Talk
Treated	0.00766	0.00680	0.00104
	(0.0345)	(0.0477)	(0.0589)
Observations	337	336	334
Control Mean Dep. Var.	0.0874	0.147	0.343

Note: Outcomes are a dummy variable indicating whether over the last 3 weeks the student: was involved in a physical fight, including e.g. slaps, kicks, and punches (Column 1); cried in from of a friend (Column 2); had a deep conversation with a friend about their personal life or insecurities (Column 3). All regressions include school fixed effects. Standard errors clustered at the school-classroom level.

Table 7: Discussion Group Has No Effects on Boys' Peer-Reported behaviors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Negative Behaviors			Positive Behaviors			
Dep. Var. (Share):	Inappropriate Language	Violence	Negative Average	Non-Conflict Resolution	Sensitive	Respectful to Girls	Positive Average
Panel A: All Reporters							
Treated	-0.0386 (0.0243)	0.0291 (0.0178)	-0.00475 (0.0174)	0.00492 (0.0186)	0.0129 (0.0163)	-0.0319* (0.0173)	-0.00467 (0.0119)
Observations	1,049	1,049	1,049	1,049	1,049	1,049	1,049
Control Mean Dep. Var.	0.502	0.175	0.339	0.327	0.236	0.738	0.434
Panel B: Control Reporters							
Treated	0.00461 (0.0295)	0.0268 (0.0229)	0.0157 (0.0223)	-0.0201 (0.0234)	-0.0350 (0.0237)	-0.0300 (0.0216)	-0.0283* (0.0160)
Observations	578	578	578	578	578	578	578
Control Mean Dep. Var.	0.542	0.191	0.367	0.316	0.259	0.737	0.437

Note: Each outcome corresponds to the share (*# of reported behaviors / # of times a student could have been reported*) a student was reported on each behavior over the last 3 weeks: used inappropriate language to communicate to other students, such as cursing and profanity (Column 1); committed any form of physical aggression against another student, such as slaps, punches or kicks (Column 2); helped resolve a conflict in a non-violent way (Column 4); demonstrated to be a sensitive person (Column 5); was respectful towards girls (Column 6). Column 3 and Column 7 are, respectively, the average share across negative behaviors and positive behaviors. All regressions include school fixed effects. Standard errors clustered at the school-classroom level.

Table 8: Social Desirability Does Not Drive Differential Effects on Misperceptions Across Treatment Groups

	(1)	(2)	(3)	(4)
	Men Who Cry are Weak		Men Should Use Violence to Get Respect	
	Boys	Girls	Boys	Girls
Panel A: School Endline - Immediately After Treatment (Sample of Boys)				
Vocal	-11.46** (5.140)	-12.25** (5.970)	-10.42* (5.926)	-3.638 (4.557)
Representative	-3.015 (6.677)	-8.391 (7.179)	-0.844 (7.971)	2.166 (5.137)
High Social Desirability Score	-3.856 (2.858)	-2.999 (2.962)	-6.606** (3.286)	-5.247** (2.386)
High Social Desirability Score X Vocal	0.103 (1.671)	-0.354 (1.967)	-0.0677 (1.847)	0.532 (1.441)
High Social Desirability Score X Representative	-2.424 (2.126)	-1.608 (2.249)	-3.050 (2.388)	-1.404 (1.611)
Observations	1,087	1,087	1,087	1,087
Control Mean	22.01	27.96	13.13	10.17
Panel B: School Endline - Immediately After Treatment (Sample of Girls)				
Vocal	-7.955* (4.663)	-8.410* (4.857)	-4.240 (5.265)	5.641 (4.786)
Representative	-9.711 (6.413)	-3.962 (6.365)	-8.183 (5.950)	4.776 (5.425)
High Social Desirability Score	-0.312 (2.514)	0.372 (2.352)	-2.611 (2.363)	-0.853 (1.776)
High Social Desirability Score X Vocal	-2.426 (1.631)	-1.673 (1.720)	-1.393 (1.606)	-1.869 (1.516)
High Social Desirability Score X Representative	-1.314 (2.144)	-2.319 (2.102)	-0.402 (1.947)	-1.360 (1.761)
Observations	1,162	1,162	1,162	1,162
Control Mean	25.08	24.31	11.46	5.761
Panel C: WhatsApp Endline - 3 Weeks After Treatment (Sample of Boys)				
Vocal	-9.171 (10.80)	-0.737 (9.104)	-23.79*** (9.009)	-8.199 (7.061)
Representative	-7.924 (11.45)	5.484 (11.84)	-27.82** (13.07)	-9.211 (8.285)
High Social Desirability Score	-9.043* (4.653)	3.751 (4.649)	-15.11** (5.755)	-3.468 (4.579)
High Social Desirability Score X Vocal	-0.149 (3.028)	-2.821 (2.563)	5.619* (2.836)	1.905 (2.287)
High Social Desirability Score X Representative	-1.310 (3.307)	-4.616 (3.660)	4.984 (3.848)	0.419 (2.438)
Observations	354	354	342	342
Control Mean	17.98	20.44	11.35	9.064
Panel D: WhatsApp Endline - 3 Weeks After Treatment (Sample of Boys)				
Vocal	-1.047 (6.885)	-2.763 (6.998)	-1.071 (7.413)	-1.156 (4.763)
Representative	-25.31*** (8.055)	-16.42** (6.699)	-9.590 (7.923)	-4.137 (5.172)
High Social Desirability Score	0.0747 (3.562)	-0.718 (3.054)	0.825 (4.063)	0.100 (2.464)
High Social Desirability Score X Vocal	-3.216 (2.280)	-0.153 (2.505)	-2.566 (2.425)	-0.333 (1.550)
High Social Desirability Score X Repr	2.820 (2.554)	3.064 (2.247)	-0.611 (2.799)	0.187 (1.631)
Observations	504	504	490	490
School Fixed Effects	Yes	Yes	Yes	Yes
Control Mean	20.77	12.87	8.463	3.608

*** p<0.01, ** p<0.05, * p<0.1

Note: Social desirability (SD) score is a baseline measure of the student's propensity to give socially desirable answers. High SD score refers to having a score that is equal to or above median for the sample. The outcome variables are the misperceptions, in percentage points, of boys' beliefs about boys and girls for the statement that *Men Who Cry Are Weak* (Columns 1 and 2) and *Men Should Use Violence to Get Respect If Necessary* (Column 3 and 4) at endline 1 (Panel A) and endline 2 (Panel C). Panels B and D report the same regressions for girls. Standard errors are clustered at the classroom level.

Table 9: Preference Falsification: Comparing Private with Public Views Among First Speaker in the *Representative* Group)

	(1)	(2)	(3)
	<i>Public Opinions (Discussion)</i>		
	Does not Agree	Agrees	Depends
<i>Private Opinions (Baseline)</i>			
Panel A: Men Who Cry are Weak (N = 57 Boys)			
Does not Agree	91.2%	0%	5.2%
Agrees	1.8%	0%	1.5%
Panel B: Men Should Use Violence to Get Respect if Necessary (N = 57 Boys)			
Does not Agree	82.4%	3.5%	3.5%
Agrees	8.7%	1.7%	0%

Note: Each cell of this table presents the percentage of first speakers in the *Representative* masculinity discussions that gave an answer in private (row) and in public (columns). Note that, in private, the choices were binary, and participants could only choose whether they agreed or disagreed with each statement, whereas in public participants could say their level of agreement depends on some factors. By construction, all first speakers were boys. In red, I highlight the share that gave politically correct answers in public.

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Appendix

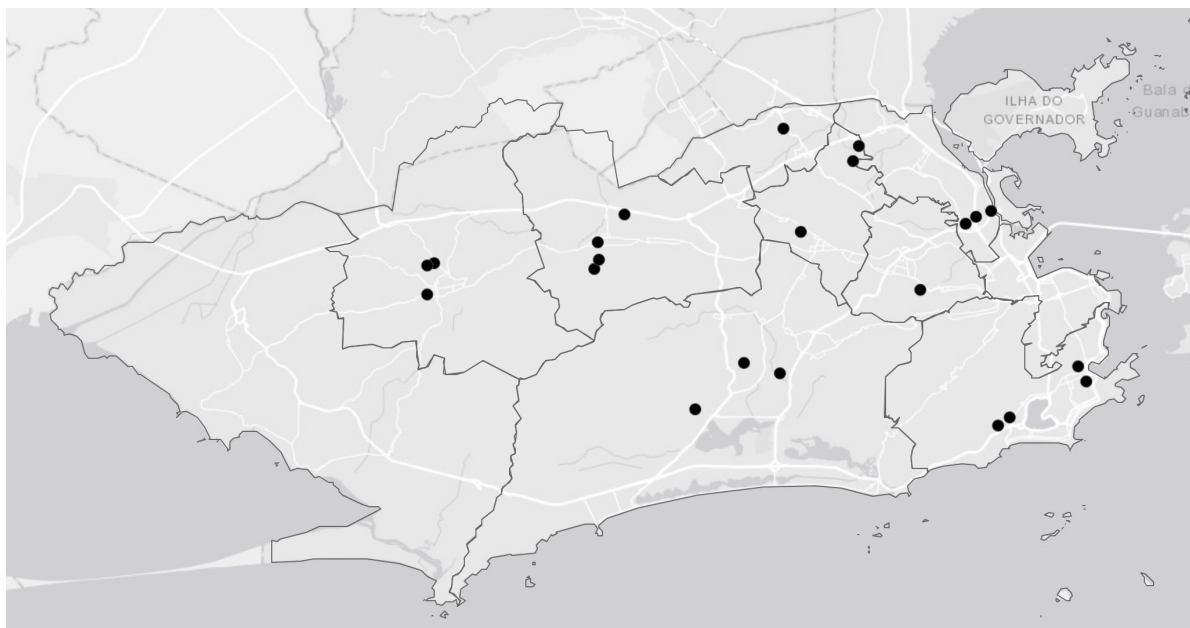


Figure A1: Selected Schools

Masculinity Discussion Roadmap – *Vocal* [Representative]

Hi everyone, good morning/afternoon! First, thank you for taking the time to complete this survey. We are now going to start a conversation where I want to hear your views about some of the questions asked at the end of the survey. I want to remind you this is a safe space, in which you can express your opinions without being judged by me or your peers. I ask that the peers be respectful and do not interrupt whoever is speaking.

To put some order in the discussion, *people who want to speak should raise their hands* [I will call out some students to speak up].

Calls the first boy who raises his hand [Calls first boy in the randomized student list]

Do you agree that "*Men Who Cry Are Weak*"? Can you explain or give an example of why you believe this?

Do you agree that "*Men Should Use Violence to Get Respect If Necessary*"? Can you explain or give an example of why you believe this?

And so on...

Important notes

- The idea is NOT for everyone to talk. Only a few people will voice their opinion, but we don't need to communicate this to them.
- As the group will have around 10-15 people, we will invite a maximum of 6 people to participate in the discussion, alternating 1 boy and 1 girl.
- The idea of the discussion is to be a focus group, so the mediator (or anyone else in the room) should be judgmental. We want to know what THEY think, and why!

Figure A2: Roadmap of Discussions



Figure A3: Discussion Session Setting

SCHOOL: _____ CLASSROOM: _____ MEDIATOR: _____ TIME (IN MINUTES): _____							
STUDENT NUMBER (IDENTIFIER)	STATEMENT	AGREED?	KEY-WORDS		QUOTES	PERSONAL EXAMPLES	OTHER NOTES
	Men who cry are weak	YES NO UNCERTAIN	Family environment Use of alcohol or drugs Psychological problems Emotional imbalance	Everybody has feelings When is mad When is cheated on			
	Men should use violence to get respect if necessary	YES NO UNCERTAIN	Family environment Use of alcohol or drugs Psychological problems Emotional imbalance	Everybody has feelings When is mad When is cheated on			
	Men who cry are weak	YES NO UNCERTAIN	Family environment Use of alcohol or drugs Psychological problems Emotional imbalance	Everybody has feelings When is mad When is cheated on			
	Men should use violence to get respect if necessary	YES NO UNCERTAIN	Family environment Use of alcohol or drugs Psychological problems Emotional imbalance	Everybody has feelings When is mad When is cheated on			
	Men who cry are weak	YES NO UNCERTAIN	Family environment Use of alcohol or drugs Psychological problems Emotional imbalance	Everybody has feelings When is mad When is cheated on			
	Men should use violence to get respect if necessary	YES NO UNCERTAIN	Family environment Use of alcohol or drugs Psychological problems Emotional imbalance	Everybody has feelings When is mad When is cheated on			
GENERAL NOTES:					GROUP BEHAVIOR: Dominant boys Dominant girls Shy group Conversation took time to happen		
					Engaged group Wanted to debate Much laughter/jokes		

Figure A4: Observers Form

Men Who Cry are Weak		
	Vocal	Representative
Boys	"Crying is natural, everyone is human, people think men are effeminate because they cry" "You think it's bad to cry in front of others. You think if you have a problem and want to cry, you have to get away from others to cry" "Depends on the occasion, men who cry alone think more about who is around them, men who cry in front of someone cry because they trust that person" "If someone cries has a cause, crying is not weakness, men are judged for crying without knowing the reason, man is judged for crying" "It's a necessity if you're in pain, in a delicate situation you're going to break down and cry or you're going to talk to someone" "Liking someone and that someone likes someone else." "Crying is essential, crying relieves pain, after crying we feel lighter" "I cry when I get hit" "Crying in front of people would make them worried."	"Someone who cries can have character and be strong, crying is not weakness, man can also act according to the facts" "When you show feelings, you show yourself to be a strong person, cry for some bigger reason, when you lose a relative, when a friend gets in a car accident" "Men have feelings and can cry just like a woman, he cries out of disappointment and jealousy" "(crying) does not interfere with dignity" "When you lose a family member, when you lose a childhood friend" "Still being a man; nothing changes" "Depends on why he's crying" "Man has feelings too"
Girls	"Boys are raised listening from their parents they should not cry" "Every person has their right to have their feeling and their moment, personal reasons, when they win something they cry with happiness, when someone comes to fight they cry with anger, when someone says a word that hurts they cry with sadness" "Showing feelings is a sign of strength, the person who clings to himself cannot cry and express himself" "It makes no sense not to cry for being a man, many men don't cry for fear of what others will think" "Crying regardless of gender and color is part of us, anyone can feel, everyone has the right to feel what they want" "Weakness is feeling strong all the time, courage to cry and feel the feelings" "Everyone unloads by crying, everyone was born crying, everyone will have a heartbreak, cry for love"	"The view that a man is weak for crying is imposed by older family members, it's a pretty stupid view" "There are things in life that can make you feel bad, insecurity, something inside the household" "Crying is not synonymous with weakness, crying is synonymous with showing your feelings, you don't have to keep your feelings" "Men don't have to be strong all the time, if he likes someone he'll feel it, cry for losing important people, man doesn't need to be strong for everything" "the boy crying is not something different from the woman, everyone has their reason, everyone has problems, boys call others who cry a sucker instead of helping, they make fun of before knowing/asking what is happening" "Crying is natural and it doesn't matter if you are a man, we live in a society that influences this type of thinking, since ancient times you see that man cries, in the biblical there are passages that men cry, as in Job and David " "Man is not always going to be a soldier, soldier is presented as a typical strong man, everyone feels sadness, cries when he loses someone"
Men Should Use Violence to Get Respect if Necessary		
	Vocal	Representative
Boys	"It depends on the situation, you should never use violence for nothing, if the woman screamed and hit you, you don't have to fight back, it's never good to hit a woman, it's never good to hit anyone" "Fear is different from respect, respect is a two-way relationship, violence in the case that the girl wore clothes that her husband didn't leave and she ended up being stabbed" "In Russia they are not respecting each other, it is not right to use violence to be respected, war is an example that nobody is respecting each other in practice, respect is politeness, it does not resolve to fight back" "It is not always necessary, but sometimes it is necessary, better to resolve it with words and conversation" "To be respected, you have to respect others, there's no way you can want something that you don't practice, respect is built and not imposed" "Respect is not something violent, respect is earned, to have respect you don't need verbal or physical violence, violence when a man wants to control a woman's clothes and beats her to have respect" "Violence outside the proper place is wrong, using violence just to protect yourself or someone else"	"If you don't accept or don't like what the other does, just leave" "Sometimes to defend yourself it's right, to use violence only as a defense" "You can be respected when you respect others" "Once in a while you have to use violence, if someone attacks you have to fight back" "It depends on the moment, if the man is teased he will react, return in the same coin or worse" "No one should use violence, it doesn't solve anything, it has to be solved with dialogue" "(instead of violence) Offering support, help, dominance nature" "Violence breeds more violence. Dialogue is important." "Jesus taught that we should love and respect others" "Violence only makes things worse, it generates a lack of respect, in the fight nothing is solved"
Girls	"Violence is not the key to solving things, dispute between men generates more violence" "Respect comes from home from mom and dad" "They wouldn't want others to be violent with them" "In case of defense, he can hit. But also thinks it's important to try to talk" "Nothing is resolved in aggression, aggression only makes things worse, conversation is always the best option, when there is a fight between husband and wife, the man ends up in the police station and the woman is beaten, aggression against the woman" "Respect must be earned not forced, respect is earned through attitudes, legal speech, dialogue and conversation, no violence" "People think that a man has to have authority and that he uses violence for that, but that's not it" "Violence is not something certain, it can end up having a more serious accident, everything has to be resolved in maturity and in conversation" "Violence is wrong, violence is stupid, it's wrong for a man to attack a person for no reason, he has to be calm and respect people and their opinion, everyone has their opinion" "Violence has nothing to do with respect; among men they earn respect"	"You have to treat the other as you would like to be treated, you don't have to use profanity or physical violence to be respected" "When you use violence, you act like a child, it's wrong to be violent, you have to sit down and talk" "Sometimes yes, if you are in danger or need to fight back to defend yourself" "It's machismo to react against women, you don't need violence, you have to act with respect and kindness" "Basically talking solves everything, aggression only makes things worse, violence brings worse things to people and others" "No way if you use violence, you can solve it through arguments, hitting someone is something out of control, you have to use home education to be respected" "Respect to be respected; respect for others who think differently" "Violence does not generate respect, it generates fear, which is a false respect" "inversion of values - generates fear and not respect" "(violence is) Valid in some situations"

Figure A5: Discussion Session Quotes

Student Identification
Before starting, select your school, classroom and name: (drill down with options) What is your school's name? [Select from list] What is your classroom's identifier? [Select from list] What is your name? [Select from list]
Demographics and Socioeconomics
How old are you? [][]
What is your sex assigned at birth? Male Female
What is your race or color? White Black Brown Yellow Indigenous
What is your religion? Catholic Evangelist Spiritism Umbanda Candomblé Judaism No religion Other (Specify):
Who do you live with? Please check all that apply. Mother Father Step father Step mother Sister Brother Grandmother Grandfather Uncle Aunt Cousins I live by myself Other. Specify:
Do you have your own WhatsApp number? That is, a WhatsApp that is used by you for most of the time? Yes No
Could you inform your Whatsapp number to be contacted by the research team in the future? () Yes, this is my Whatsapp number (11 digits without spaces or symbols) [text entry with format requirement] () I do not wish to inform my contact
Please type again your number for confirmation
You said you do not have your own WhatsApp number. Is there any other mobile phone number or phone number through which we could reach out to you in the future?
Friendships and Popularity

Figure A6: Baseline Survey

What do you usually talk to your friends about? Select all the options that apply. Girls Boys Sports Video game Things you saw on Instagram/TikTok/Facebook or other social media Jokes Your personal life About things or situations that made me sad School-related matters Other. Specify:
Do you usually talk about your feelings or personal problems with your friend? Yes No
Do you usually talk to your friends about what society expects of a man? Yes No
How much do you feel a need in your life for support from other guys? Very much Somewhat Not really Not at all
Would you like more emotional support in your male friendship(s)? Yes No
How much do you feel a need in your life for support from other girls? Very much Somewhat Not really Not at all
Would you like more emotional support in your female friendship(s)? Yes No
How important do you think it is to be popular at your school? Very important Important Moderately important Sometimes important Not important
Please rate the extent to which your views are influenced by: Boys from your school Girls from your school Very influenced Somewhat influenced A little influenced No influence
Select below the 5 people from your classroom who participate the most in class, expressing their opinions.
Select below at least two classmates with whom you spent the most time with this past week, both inside and outside of the school.
Select below which students from your school classroom you admire the most.
First-Order Beliefs
Select below whether you agree or disagree with each of the statements: Agree Disagree
In my opinion, boys who cry are weak.
In my opinion, men should use violence to get respect if necessary

Baseline Survey (Continued)

You have just answered if you agree or not with the statement "In my opinion, boys who cry are weak". Please, indicate below your level of certainty about the answer you gave on the previous page. Very certain A little certain Neutral A little uncertain Very uncertain
Adolescent Masculinity Scale Please rate to which extent you agree with each of the following statements: Strongly disagree Disagree Neutral Agree Strongly agree
No matter what happens, a guy should seem strong to others.
Guys should try to appear manly in almost all situations.
It is weird for a guy to talk about his feelings with other guys.
It is hard to respect a guy who shows his feelings.
Social Desirability Scale To each statement below, indicate if you believe they are true or not. No matter to whom I am speaking, I am always a good listener. I am always willing to admit I have made a mistake There were times I envied other people's good luck. Sometimes I think that when something unfortunate happens to someone, they just got what they deserved

First and Second-Order Beliefs
In the previous survey, you were asked whether you agree with two statements. All the other people in your school classroom were also asked to indicate whether they agreed or not with these statements. Now you will be asked to predict what share of the boys and girls in your classroom agreed with this same statement when answering their survey. Just a reminder that 0% means nobody agreed with the statement and 100% means everyone agreed.
What share of boys in your school classroom do you think agreed with the statement? {Looped statement}
What share of girls in your school classroom do you think agreed with the statement? {Looped statement}
{Looped statement In my opinion, boys who cry are weak. In my opinion, men should use violence to get respect if necessary}
Now, please indicate again whether you agree or disagree with each of the statements.
{Looped statement In my opinion, boys who cry are weak. In my opinion, men should use violence to get respect if necessary} In my opinion, men should solve their personal issues by themselves, without asking someone else's help.
Vignettes
in the following pages, you will read three short stories of hypothetical situations that happened in a school near yours. We will then ask you a couple of questions about them.
Agression
João is a boy your age from a neighboring school.
One day at school, João asked Diego to lend him a pencil, but Diego did not do it.
João got angry and punched Diego.
Please answer to whether you agree with the following statements based on João's story. There are no 'right' or 'wrong' answers. Answer according to what you believe. Agree Disagree"
I would act the same way as João
I think João did the right thing
People in your school would "condemn"/"judge" João's behavior
Emotional Toughness/Independency
Pedro is a boy your age from a neighboring school.
He is a very sensitive person. He has two (male) best friends with whom he wishes he could open up about his struggles and sometimes cry in front of them when he is sad.
However, he prefers to hold his tears since his friends might judge him or make fun of him.
Please answer to whether you agree with the following statements based on Pedro's story. There are no 'right' or 'wrong' answers. Answer according to what you believe. Agree Disagree
I would act the same way as Pedro and would not cry in front of my friends.
I think Pedro did the right thing by not crying in front of his friends.
In my school, Pedro's friends would bully him if he shared his feelings with them
Dating
Carlos is a boy your age from a neighboring school.
He is a very sensitive person and sometimes he cries when bullied. Carlos likes Julia, a classmate.
However, Julia sees him as weak and would not be involved romantically with Carlos.

Figure A7: Endline Survey 1 - Immediately After Treatment

Please answer to whether you agree with the following statements based on Carlos's story. There are no 'right' or 'wrong' answers. Answer according to what you believe. Agree Disagree
I would act the same way as Julia.
I think Julia did the right thing by not being involved with Carlos because he cries.
In my school, people would stand by Julia's decision of not being involved with Carlos because he cries.
Support group
Would you like to join a support group for boys/girls in your school? You would be able to talk about your personal problems and listen to your schoolmates' issues, without judgments.
Social Image
Please answer the questions below in silence. Your answers may be discussed [will not be discussed] with the other people who are in this room.
When was the last time you cried because you were sad or upset? Less than a week ago Between 1 week and 1 month ago Between 1 month and 3 months Between 3 months and 12 months More than 12 months ago Never
When was the last time you initiated a physical fight? I never initiated a physical fight Less than a week ago Between 1 week and 1 month ago Between 1 month and 3 months Between 3 months and 12 months More than 12 months ago
Joy of Destruction
In another questionnaire we are applying to people your age from your city, participants play a game and receive 5 reais if they win. You will be paired with a participant that won and will be able to reduce the amount he/she earned. You will neither win nor lose anything by reducing his/her 5 reais prize. Select from the options below how much you would like that the other participant win. Your choice will be implemented and they will receive the amount you chose. I want the winner to receive the 5 reais he won. I.e. I do not want to remove any amount from him. I want the winner to receive 4 reais he won. I.e. I want to remove 1 real from him. I want the winner to receive 3 reais he won. I.e. I want to remove 2 reais from him. I want the winner to receive 2 reais he won. I.e. I want to remove 3 reais from him. I want the winner to receive 1 real he won. I.e. I want to remove 4 reais from him. I want the winner to receive 0 real. I.e. I want to remove the full prize from him.

First- and Second-Order Beliefs
Prior to a discussion session in your classroom, you were asked whether you agree with two statements. Now you will be asked to predict what share of the boys and girls in your classroom agreed with this same statement when answering their survey. Just a reminder that 0% means nobody agreed with the statement and 100% means everyone agreed.
What share of boys in your school classroom do you think agreed with the statement? {Looped statement}
What share of girls in your school classroom do you think agreed with the statement? {Looped statement}
{Looped statement In my opinion, boys who cry are weak. In my opinion, men should use violence to get respect if necessary}
Now, please indicate again whether you agree or disagree with each of the statements.
{Looped statement In my opinion, boys who cry are weak. In my opinion, men should use violence to get respect if necessary} In my opinion, men should solve their personal issues by themselves, without asking someone else's help.
Self Report
The next questions are about your behaviour on the last three weeks. Your answers are classified and will not be shared unmasked.
During the last three weeks, have you participated in physical violent conflicts, including punches, kicks or slaps? Yes No
During the last three weeks, have you cried in front of a friend? Yes No
During the last three weeks, have you had any deep conversations with a friend about personal matters and insecurities? Yes No
Peer reports
On the following pages, names from a few classmates will be presented to you. You must answer questions about these people's behaviors. Your answers are classified and will be used solely for this research's purpose.
Indicate if, during the last three weeks, your classmate {Looped for 6 randomly selected male peers - 3 from each half of the classroom}: Used inappropriate language to refer or adress other colleagues, including curse words and offenses Committed physical aggression against another colleague, including punches, kicks or slaps Helped in solving conflicts non-violently Showed sensibility Was respectful with girl classmates () yes () no {for each sentence}
Instagram post
Now, we would like for you to post the image below on your instagram story or feed. Then, you must submit a screenshot to confirm your publication. You must NOT mention your participation in this survey. From your mobile, you are able to save the image by pressing it and selecting Save Image option. {Image} () I want to post this image on my Instagram and will upload a screenshot to confirm. () I do not want to post this image on my Instagram. () I do not own an Instagram account.

Figure A8: Endline Survey 2 - 3 Weeks After Treatment

Please upload a screenshot of your Instagram to attest you posted the image on your story or feed.

To upload the image, select "Drop files or click here for upload".

{Box for upload}

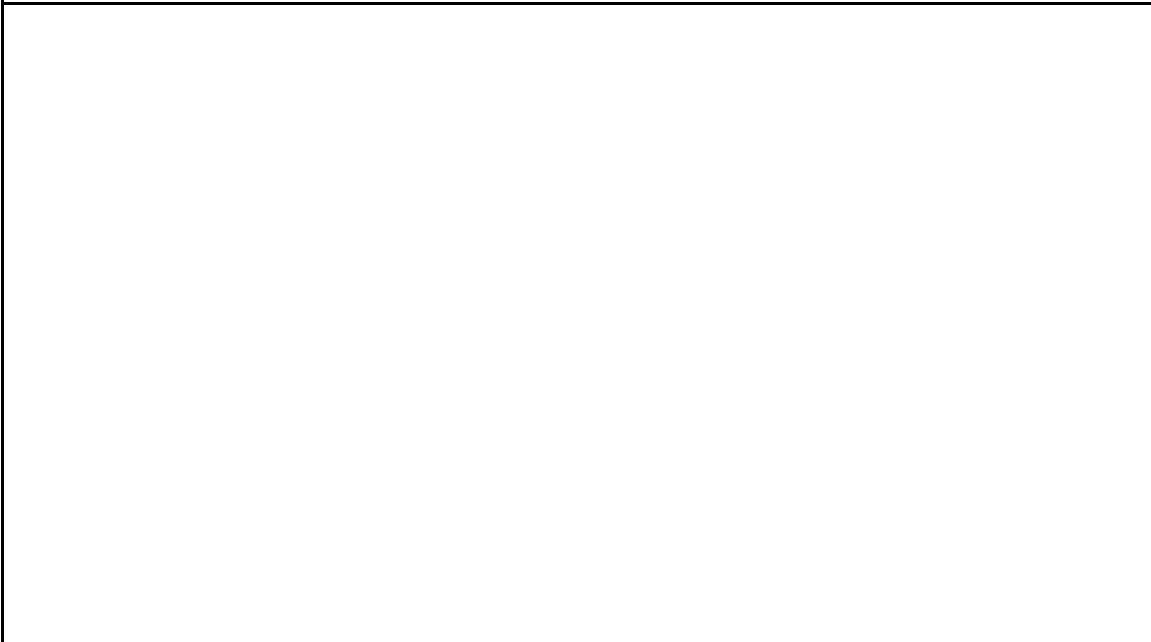


Figure A9: Endline Survey 2 - 3 Weeks After Treatment (Continued)

Table A1: Baseline Characteristics - By Sex And Treatment Status

	<i>Boys</i>				<i>Girls</i>			
	Vocal	Repr.	Control	P-Value	Vocal	Repr.	Control	P-Value
	(N = 384)	(N = 383)	(N = 328)	-	(N = 411)	(N = 367)	(N = 376)	-
Age	13.94 (0.97)	13.93 (0.99)	13.99 (0.86)	0.58	13.90 (0.87)	13.82 (0.85)	13.91 (0.88)	0.26
White	0.27 (0.45)	0.29 (0.45)	0.35 (0.48)	0.09★	0.37 (0.48)	0.29 (0.46)	0.31 (0.46)	0.06★
Black	0.68 (0.47)	0.65 (0.48)	0.59 (0.49)	0.05★★	0.59 (0.49)	0.64 (0.48)	0.64 (0.48)	0.30
Evangelical	0.43 (0.50)	0.38 (0.49)	0.42 (0.49)	0.44	0.37 (0.48)	0.39 (0.49)	0.34 (0.47)	0.25
Catholic	0.20 (0.40)	0.21 (0.41)	0.20 (0.40)	0.91	0.17 (0.37)	0.17 (0.38)	0.17 (0.38)	0.97
Lives W/ Mother	0.82 (0.39)	0.86 (0.34)	0.84 (0.37)	0.20	0.86 (0.35)	0.88 (0.33)	0.85 (0.36)	0.50
Lives W/ Father	0.46 (0.50)	0.48 (0.50)	0.43 (0.50)	0.36	0.42 (0.49)	0.45 (0.50)	0.41 (0.49)	0.44
Lives W/ Step Father	0.14 (0.34)	0.14 (0.35)	0.16 (0.37)	0.66	0.13 (0.34)	0.15 (0.36)	0.15 (0.35)	0.81
Talks to Friends About Boys	0.08 (0.28)	0.08 (0.26)	0.11 (0.31)	0.28	0.47 (0.50)	0.55 (0.50)	0.52 (0.50)	0.06★
Talks to Friends About Girls	0.50 (0.50)	0.48 (0.50)	0.51 (0.50)	0.66	0.31 (0.46)	0.29 (0.46)	0.36 (0.48)	0.11
Talks to Friends About Personal Life	0.36 (0.48)	0.35 (0.48)	0.36 (0.48)	0.95	0.65 (0.48)	0.66 (0.47)	0.64 (0.48)	0.78
Talks to Friends About Situations That Made You Sad	0.16 (0.37)	0.17 (0.38)	0.15 (0.36)	0.77	0.45 (0.50)	0.49 (0.50)	0.44 (0.50)	0.27
Talks to Friends About Feelings or Personal Problems	0.44 (0.50)	0.42 (0.49)	0.38 (0.49)	0.23	0.65 (0.48)	0.67 (0.47)	0.66 (0.47)	0.84
Talks to Friends About What Society Expects from a Man	0.23 (0.42)	0.26 (0.44)	0.23 (0.42)	0.65	0.50 (0.50)	0.44 (0.50)	0.52 (0.50)	0.07★
Would Like More Emotional Support from Male Friends	0.42 (0.49)	0.46 (0.50)	0.40 (0.49)	0.18	-	-	-	-
Would Like More Emotional Support from Female Friends	-	-	-	-	0.75 (0.43)	0.79 (0.41)	0.76 (0.43)	0.32

Baseline Characteristics - By Sex And Treatment Status (Continued)

	<i>Boys</i>				<i>Girls</i>			
	Vocal	Repr.	Control	P-Value	Vocal	Repr.	Control	P-Value
Importance Given To Popularity, 0-4	1.05 (1.25)	1.23 (1.33)	1.10 (1.28)	0.14	0.63 (1.00)	0.70 (1.02)	0.80 (1.11)	0.12
Influenced by School Girls, 0-3	0.99 (0.93)	1.09 (0.94)	0.93 (0.90)	0.07★	0.54 (0.86)	0.61 (0.90)	0.65 (0.91)	0.21
Influenced by School Boys, 0-3	1.05 (0.97)	0.99 (0.97)	0.94 (0.98)	0.32	0.92 (0.96)	0.98 (0.98)	1.04 (0.97)	0.26
Agrees With Men Who Cry Are Weak	0.10 (0.30)	0.09 (0.29)	0.11 (0.32)	0.68	0.03 (0.18)	0.04 (0.20)	0.06 (0.23)	0.30
Agrees With Men Should Use Violence to Get Respect	0.18 (0.38)	0.15 (0.36)	0.17 (0.38)	0.63	0.07 (0.25)	0.04 (0.20)	0.05 (0.21)	0.32
Vocality Score	4.18 (4.48)	4.01 (4.24)	3.68 (4.15)	0.30	4.23 (4.36)	4.60 (4.78)	4.38 (4.45)	0.51
Social Network Score	2.09 (1.55)	1.89 (1.48)	2.09 (1.56)	0.10★	2.07 (1.43)	2.13 (1.48)	2.15 (1.52)	0.75
Admiration Score	1.55 (1.78)	1.45 (1.73)	1.46 (1.79)	0.70	2.34 (2.62)	2.35 (2.67)	2.48 (2.52)	0.69
Social Desirability Score, 0-4	2.84 (0.93)	2.82 (1.00)	2.77 (0.97)	0.69	2.85 (0.98)	2.83 (0.92)	2.80 (0.98)	0.75
Masculinity Score, 0-4	1.14 (0.95)	1.21 (1.08)	1.17 (1.07)	0.66	0.52 (0.82)	0.55 (0.83)	0.55 (0.88)	0.85
Gave WhatsApp	0.82 (0.38)	0.76 (0.43)	0.82 (0.39)	0.12	0.87 (0.34)	0.89 (0.32)	0.86 (0.34)	0.67

This table presents baseline characteristics (mean and standard deviation in parenthesis), by sex, treatment groups and control group. Within sex, it presents the p-value of a joint F-test for comparison across treatment arms.

Table A2: WhatsApp Sample Characteristics - By Sex and Treatment Status

	<i>Boys</i>				<i>Girls</i>			
	Vocal	Repr.	Control	P-Value	Vocal	Repr.	Control	P-Value
	(N = 126)	(N = 132)	(N = 117)	-	(N = 193)	(N = 132)	(N = 117)	-
Age	13.77 (0.84)	14.07 (0.99)	14.07 (0.87)	0.01***	13.90 (0.84)	13.87 (0.80)	14.00 (0.90)	0.32
White	0.28 (0.45)	0.31 (0.46)	0.37 (0.48)	0.34	0.40 (0.49)	0.29 (0.46)	0.37 (0.48)	0.07*
Black	0.68 (0.47)	0.63 (0.48)	0.56 (0.50)	0.16	0.55 (0.50)	0.63 (0.48)	0.60 (0.49)	0.32
Evangelical	0.45 (0.50)	0.38 (0.49)	0.44 (0.50)	0.44	0.35 (0.48)	0.40 (0.49)	0.31 (0.46)	0.16
Catholic	0.21 (0.41)	0.27 (0.45)	0.24 (0.43)	0.56	0.20 (0.40)	0.19 (0.39)	0.21 (0.41)	0.80
Lives W/ Mother	0.83 (0.38)	0.89 (0.32)	0.79 (0.41)	0.10*	0.88 (0.33)	0.88 (0.33)	0.87 (0.34)	0.93
Lives W/ Father	0.42 (0.50)	0.52 (0.50)	0.47 (0.50)	0.28	0.44 (0.50)	0.49 (0.50)	0.42 (0.50)	0.45
Lives W/ Step Father	0.13 (0.34)	0.16 (0.37)	0.18 (0.39)	0.53	0.14 (0.35)	0.12 (0.33)	0.13 (0.34)	0.91
Talks to Friends About Boys	0.06 (0.24)	0.12 (0.33)	0.14 (0.35)	0.08*	0.46 (0.50)	0.56 (0.50)	0.56 (0.50)	0.08*
Talks to Friends About Girls	0.42 (0.49)	0.49 (0.50)	0.48 (0.50)	0.43	0.31 (0.46)	0.27 (0.44)	0.38 (0.49)	0.08*
Talks to Friends About Personal Life	0.43 (0.50)	0.43 (0.50)	0.45 (0.50)	0.92	0.70 (0.46)	0.71 (0.46)	0.70 (0.46)	0.97
Talks to Friends About Situations That Made You Sad	0.16 (0.37)	0.21 (0.41)	0.15 (0.36)	0.41	0.52 (0.50)	0.51 (0.50)	0.45 (0.50)	0.34
Talks to Friends About Feelings or Personal Problems	0.42 (0.49)	0.44 (0.50)	0.36 (0.48)	0.44	0.62 (0.49)	0.65 (0.48)	0.71 (0.46)	0.26
Talks to Friends About What Society Expects from a Man	0.20 (0.40)	0.29 (0.45)	0.24 (0.43)	0.32	0.51 (0.50)	0.47 (0.50)	0.55 (0.50)	0.37
Would Like More Emotional Support from Male Friends	0.39 (0.49)	0.41 (0.49)	0.41 (0.49)	0.89	-	-	-	-
Would Like More Emotional Support from Female Friends	-	-	-	-	0.76 (0.43)	0.78 (0.41)	0.80 (0.40)	0.59

Table A3: WhatsApp Sample Characteristics - By Sex and Treatment Status (Continued)

	<i>Boys</i>				<i>Girls</i>			
	Vocal	Repr.	Control	P-Value	Vocal	Repr.	Control	P-Value
Importance Given To Popularity, 0-4	0.95 (1.15)	1.16 (1.27)	0.79 (1.03)	0.04**	0.60 (0.98)	0.72 (0.99)	0.86 (1.15)	0.08*
Influenced by School Girls, 0-3	0.86 (0.83)	1.02 (0.87)	0.84 (0.79)	0.16	0.49 (0.83)	0.58 (0.81)	0.58 (0.84)	0.48
Influenced by School Boys, 0-3	1.00 (0.92)	1.02 (0.92)	0.89 (0.93)	0.51	0.91 (0.93)	0.99 (0.95)	1.01 (0.94)	0.62
Agrees With Men Who Cry Are Weak	0.07 (0.25)	0.04 (0.20)	0.09 (0.28)	0.30	0.02 (0.13)	0.03 (0.17)	0.03 (0.17)	0.61
Agrees With Men Should Use Violence to Get Respect	0.14 (0.35)	0.11 (0.32)	0.11 (0.32)	0.67	0.03 (0.18)	0.02 (0.12)	0.04 (0.20)	0.24
Vocality Score	5.08 (5.23)	4.85 (4.48)	5.30 (5.16)	0.77	4.61 (4.60)	4.95 (4.98)	5.17 (4.85)	0.55
Social Network Score	2.38 (1.63)	2.11 (1.33)	2.17 (1.67)	0.34	2.25 (1.44)	2.19 (1.43)	2.33 (1.60)	0.69
Admiration Score	1.90 (2.29)	1.73 (1.82)	1.74 (2.22)	0.77	2.60 (2.77)	2.59 (2.72)	2.90 (2.75)	0.49
Social Desirability Score, 0-4	2.89 (0.88)	2.87 (1.06)	2.91 (0.94)	0.95	2.88 (0.91)	2.80 (0.99)	2.80 (0.92)	0.62
Masculinity Score, 0-4	1.11 (0.92)	1.05 (1.06)	1.09 (1.08)	0.89	0.42 (0.71)	0.51 (0.77)	0.47 (0.80)	0.45

This table presents baseline characteristics (mean and standard deviation in parenthesis), by sex, treatment groups and control group for the sample who answered the second endline survey, distributed online via WhatsApp. Within sex, it presents the p-value of a joint F-test for comparison across treatment arms.

Table A4: Characteristics of Universe of Schools and Study Schools

	All Schools (N = 607)	Study Schools (N = 22)	P-Value
White	0.32 (0.08)	0.35 (0.10)	0.04**
Black	0.55 (0.09)	0.55 (0.09)	0.89
Boys	0.51 (0.03)	0.51 (0.03)	0.40
Students per Class	32.94 (4.21)	33.24 (3.23)	0.73
Students per Teacher	31.40 (41.72)	49.13 (46.15)	0.14
Internet for School Activities	0.52 (0.50)	0.65 (0.49)	0.23
Lunchroom	0.99 (0.12)	0.96 (0.21)	0.28
Sport Court	0.83 (0.38)	0.83 (0.39)	0.99
Green Area	0.43 (0.50)	0.39 (0.50)	0.74
Number of Classrooms in Use	14.06 (5.41)	13.17 (4.73)	0.44
Student Union	0.83 (0.37)	0.87 (0.34)	0.64
Accessible Facilities	0.59 (0.49)	0.48 (0.51)	0.27

Source: 2021 Brazilian School Census

Table A5: Discussion Groups Reduce Boys' Social Image Concerns Toward Less Masculine behaviours in Public (By Treatment)

	(1)	(2)	(3)
	Last Cried	Last Violent	Joy of Destruction
Panel A: All Boys			
Public	0.129	0.0707	0.0830
	(0.129)	(0.108)	(0.121)
Vocal	0.0696	-0.0358	0.0716
	(0.116)	(0.104)	(0.116)
Representative	-0.0454	0.0796	0.0545
	(0.110)	(0.116)	(0.107)
Public $\times$ Representative	-0.0757	-0.141	-0.0174
	(0.158)	(0.148)	(0.156)
Public $\times$ Vocal	-0.225	-0.0313	-0.213
	(0.171)	(0.161)	(0.166)
Observations	1,095	1,095	1,095
School Fixed Effects	Yes	Yes	Yes
P-Value Treatment Comparison (Interaction Terms)	0.333	0.485	0.232
Panel B: Less Masculine Boys (Based on Masculinity Score)			
Public	0.101	0.250	0.140
	(0.201)	(0.174)	(0.140)
Vocal	0.202	-0.0857	0.302*
	(0.160)	(0.175)	(0.179)
Representative	0.0585	0.194	0.251
	(0.197)	(0.173)	(0.200)
Public $\times$ Representative	0.0639	-0.477*	-0.190
	(0.308)	(0.249)	(0.281)
Public $\times$ Vocal	-0.185	-0.102	-0.450**
	(0.277)	(0.268)	(0.205)
Observations	330	330	330
School Fixed Effects	Yes	Yes	Yes
P-Value Treatment Comparison (Interaction Terms)	0.402	0.212	0.390

*** p<0.01, ** p<0.05, * p<0.1

Note: This table presents regressions of each dependent variable – standardized by the control group mean and standard deviation – on an indicator for whether participants' answers were *public* in the survey experiment, were treated in the *Vocal* or *Representative* treatments, and an interaction term between them. *Last Cried* (*Violent*) are scores from 0 to 5, in which larger values mean they have cried further away in time (been violent more recently). *Joy of Destruction* is a score from 0 to 5, in which 0 means participants will not remove any money from the winner, and 5 means they will remove all the money. The p-value tests for equality of the coefficients *Public* $\times$ *Vocal* and *Public* $\times$ *Representative*, which are my coefficients of interest. Standard errors are clustered at the classroom level.

Table A6: Discussion Group Make Students' Hypothetical behaviours Less Masculine (By Treatment)

	(1)	(2)	(3)	(4)	(5)	(6)
	Would Act Masculine		It's Right to Act Masculine		Peers Would Support Acting Masculine	
	Boys	Girls	Boys	Girls	Boys	Girls
Vocal	-0.329*** (0.0653)	-0.202*** (0.0562)	-0.243*** (0.0763)	-0.139** (0.0554)	-0.157** (0.0777)	-0.336*** (0.0776)
Representative	-0.156** (0.0740)	-0.246*** (0.0679)	-0.182* (0.0953)	-0.115* (0.0596)	-0.114 (0.0757)	-0.322*** (0.0731)
Observations	1,095	1,154	1,095	1,154	1,095	1,154
P-Value Treatment Comparison	0.0156	0.500	0.436	0.647	0.476	0.829

*** p<0.01, ** p<0.05, * p<0.1

Note: At the first endline, students were presented with three vignettes. The first one describes a situation in which a boy is afraid of showing their feelings to their other male friends for fearing social sanctions. The second one shows a boy who reacts with violence (e.g. a punch) after their friend refused to lend him a pen. Finally, the last one depicts a girl making a decision on whether to date or not a sensitive boy. For each vignette, I ask students whether they agree or disagree with three dimensions: (i) self-reported behaviours: whether they would act masculine, (ii) normative behaviours: whether they think the masculine behaviour was right, and (iii) school norms: whether their school peers would support acting masculine. This table presents regressions of an index, standardized by the control mean and standard deviation, within each of these three dimensions. Negative coefficients mean treated students become less supportive of masculine behaviours.