

We Don't Talk About Boys: Masculinity Norms Among Adolescents in Brazil

Ieda Matavelli*

Job Market Paper

September 3, 2024. See the latest version [here](#).

Abstract

Masculinity norms are cultural expectations around *men's* behaviors, such as the expectations that men should suppress their emotions and be violent. I measure masculinity norms among 2,608 adolescents in Rio de Janeiro and document large misperceptions about these norms: most boys and girls overestimate the share of peers that hold traditional views of masculinity. I examine whether a lack of horizontal communication or biased communication perpetuates misperceived norms through two field experiments in 25 schools. In the main experiment, I randomly assigned adolescents to a mediated discussion to learn peers' opinions about masculinity or a placebo discussion about recycling. Masculinity discussions reduce misperceptions about classmates' beliefs by at least 50% immediately, with effects persisting three weeks later. Discussions in which people self-select into speaking or are randomly asked to speak equally reduce misperceptions. This suggests that misperceptions were due to a lack of communication per se, as opposed to communication with only vocal types talking. In a second experiment, I found that misperceptions were reduced in unstructured communication with peers participants chose. This indicates that adolescents do not talk about masculinity even with close peers. Finally, I provide suggestive evidence that underestimating interest and comfort in these discussions might drive the lack of communication.

*University of New South Wales and University of British Columbia; iedamatavelli@gmail.com. I especially thank Matt Lowe and Jamie McCasland for their invaluable guidance, mentorship and advice since the inception of this project, and Pauline Grosjean and Nathan Nunn for their feedback and mentorship. I also thank Siwan Anderson and Claudio Ferraz for their comments and support. This study also benefited from comments from Deivis Angeli, Victoria Baranov, Nina Buchmann, Leonardo Bursztyn, Josh Dean, Alexia Delfino, Patrick Francois, Federico Masera, Vinicius Peçanha, Chris Roth, Heather Sarsons, Fernando Secco, Frank Schilbach, and Manisha Shah. I thank seminar participants at PacDev, ECBE, SIOE, URPP Conference on Boys and Men at the University of Zurich, University of Melbourne, Insper, Monash University, University of Auckland, and University of Sydney. Finally, I thank the Secretariat of Education of Rio de Janeiro, and especially Caroline Guedes, for collaborating on the project. I gratefully acknowledge financial support from the Canada Excellence Research Chairs program awarded to Dr Erik Snowberg in Data-Intensive Methods in Economics and the Center for Effective Global Action. This project was approved by UBC's Behavioral Research Ethics Board (H22-01226) and Insper's Research Ethics Committee (Opinion N. 213/2022 and N. 344/2024), and pre-registered in the AEA RCT Registry under codes AEARCTR-0009508 and AEARCTR-0013292.

1 Introduction

Men are considerably more likely than women to die from suicide or drug abuse (OECD, 2020), and commit over 90% of the world's homicides (UNODC, 2019). Social scientists have argued that cultural expectations around *men's* behaviors (i.e., masculinity norms) can, at least partially, explain these gaps (Jakupcak et al., 2002; Mahalik et al., 2007; Poteat et al., 2011; Wong et al., 2017). A central dimension of masculinity norms is *emotional restriction*, which prescribes that men are expected to hide their vulnerable feelings and emotions (e.g., *men should not cry*). Another dimension is *aggression*, which supports that men are expected to be violent (e.g., *men should use violence*). While a large body of work in economics studies gender norms about the appropriate behaviors of women, or women relative to men (e.g., *on the whole, men make better political leaders than women do*) (Alesina et al., 2013; Bertrand et al., 2015; Dhar et al., 2022; Bursztyn et al., 2020), we have little understanding of how people form their views about gender norms dictating men's behaviors.

Misperceived social norms – the existence of a wedge between one's perceptions of others' beliefs and others' actual beliefs – underlie the persistence of inefficient social equilibria in many contexts (Sherif, 1936; Postlewaite, 2011; Bicchieri, 2016; Bursztyn and Yang, 2022) and might be particularly relevant for masculinity norms. Overshooting others' beliefs in traditional masculinity might be harmful to men and society as men may suppress emotions or use violence if they think that is what others expect. Nevertheless, it remains an open question why misperceived norms persist.¹ One potential mechanism for persistence is the lack of horizontal communication (i.e., communication with peers) (Bursztyn et al., 2020), in which case understanding the barriers to communication might be relevant. Alternatively, horizontal communication might exist but be biased (Kitts, 2003). For example, it may be that the more masculine² people talk, and listeners may fail to correct this selection when updating their beliefs. In addition, people might lie in public to adjust to the prevailing perceived norm (Kuran, 1998), or talk only with a selected group of peers, and fail to learn about beliefs in the broader population.

In this paper, I experimentally examine whether the lack of communication or biased communication contributes to the persistence of misperceived social norms in the context of masculinity norms. I use two field experiments ($N = 2,608$) with 13 to 15-year-old boys and girls from 25 schools in Rio de Janeiro – known to have a strong masculine culture (Taylor et al., 2016). My main experimental manipulation tests for the lack of communication by encouraging a group discussion about masculinity. I then examine for biased communication by cross-randomizing whether participants

¹Several theoretical models could explain the persistence of misperceived social norms, such as motivated reasoning (Bénabou and Tirole, 2016), confirmation bias (Nickerson, 1998), false consensus (Marks and Miller, 1987; Thaler, 2000), pluralistic ignorance (Bicchieri, 2005). Empirical exceptions to the determinants of the persistence of misperceived social norms are Braghieri (2021) and Ho and Huang (2024), which discuss the role of social image concerns and silence, respectively.

²In this paper, I refer to people who agree more with traditional masculinity beliefs as "more masculine" or "traditionally masculine".

choose to speak or are randomly asked to speak in these discussions in a main experiment ($N = 2,249$). In a supplementary experiment ($N = 359$), I test whether more organic communication with close peers exists by allowing them to select their discussion peers. Early adolescence is a key age for the formation of beliefs around masculinity, as boys enter manhood (Kimmel et al., 2004; Way, 2011; Lundgren et al., 2013; Kågesten et al., 2016). The school environment provides a unique context to study these norms, as it constitutes an important part of the socialization of adolescents, reinforcing gender norms by, e.g., organizing activities by gender (Thorne, 1993; Bhana and Mayeza, 2016; Rosen and Nofziger, 2019). In my setting, schools are coeducational, and students within a given classroom attend all classes and activities together, intensifying the formation of within-classroom norms. This design also adds to recent calls by academics and public speakers to listen to boys' perspectives about masculinity (Reeves, 2022; Way, 2024).

In the main experiment, I test whether a lack of horizontal communication is a source of misperceptions by randomly assigning teenagers from the same classroom into a one-time 15-minute discussion about masculinity or a control discussion about recycling. To further test for biased communication, I cross-randomized the type of masculinity discussion. In the first type (*Randomized*), I test for lying by randomly selecting the people asked to speak, and comparing their public with their private views about masculinity from a survey immediately before the discussion. In the second type (*Voluntary*), I test for self-selection by introducing a topic and letting teenagers speak as they want and comparing speakers' masculinity beliefs across the two arms. The control discussions were about recycling practices and were only *Voluntary*, i.e., teenagers would speak as they want. I surveyed students before, immediately, and three weeks after the discussion. Boys and girls participated in these discussions. The discussions were mediated by a male mediator, who asked students whether they agree and why with the statements *men who cry are weak* and *men should use violence to get respect if necessary*, which represent the *restrictive emotionality* and *aggression* domains of masculinity. The mediator did not express their opinions to isolate for the effect of learning their peers' opinions. On average, there were 13 people in the discussions.³

Teenagers have large misperceptions about boys' and girls' beliefs about masculinity. I asked teenagers to guess the share of boys and girls, separately, in their classroom who agree with the statements about crying and violence. I define misperceptions as the difference, in percentage points, between one's guess about the fraction of relevant school classroom peers who agreed with each statement and the actual fraction of relevant peers who agreed with the statement before the discussions. On average, boys in the control group think that 32% and 29% of other boys and 33% and 16% of girls in their classroom agree with the masculinity statements about crying and violence. In comparison, 10% and 16% of boys agree with the beliefs about crying and violence. For girls, the agreement level is 5% for both statements. As a result, boys' misperceptions about

³In each session, a maximum of 6 teenagers would speak to allow for a cleaner comparison between the *Voluntary* and *Randomized* arms. In the limit, if all participants spoke, we could expect effects to be similar by construction since they were randomized into these groups.

other boys' beliefs are 22p.p. for crying and 13p.p. for violence, and boys' misperceptions about girls' beliefs are 28p.p. for crying and 11p.p. for violence. Girls' misperceptions are of similar magnitudes. Misperceptions about crying are likely larger because expressing emotions conflicts with expectations of male stoicism, and crying is usually a private behavior. Meanwhile, 80% of the public schools in Rio de Janeiro ([INEP, 2021](#)) have discussions about violence due to its importance as a public policy issue. Nevertheless, it is striking to find such large misperceptions, similar to the ones documented by [Bursztyn et al. \(2020\)](#), given peers interact daily in school.

I find that misperceived masculinity norms correlate strongly with behaviors associated with emotional restriction and aggression. Boys with larger misperceptions about crying are significantly less likely to have deep conversations with friends. Those with larger misperceptions about violence are also significantly more likely to be involved in violence, based both on self and peer-reported behaviors. Teenagers in schools located in favelas – regions dominated by drug gangs – misperceive masculinity norms about violence 10p.p. more than those in schools outside of favelas.

The masculinity discussions reduce boys' and girls' misperceptions by at least 50% in the short-run ($p < 0.001$), similarly across the *Randomized* and *Voluntary* arms. This supports the hypothesis that lack of communication drives misperceptions. Boys' *Voluntary* speakers are 25% more vocal than *Randomized* ones ($p = 0.07$) based on a peer-reported measure of vocality, so misperceptions would likely be smaller if more vocal people already spoke about masculinity.

Why do the *Randomized* and *Voluntary* groups similarly affect misperceptions? The public opinions expressed among *Randomized* and *Voluntary* speakers are similar, so participants learn the same information in both groups. In addition, they use similar narratives in these two groups. Similar effects happen because boys in the *Randomized* group lie in public towards having less masculine views, compared to their private views, so misperceptions would be smaller if average boys spoke about masculinity organically. In addition, boys who speak in the *Voluntary* group are, on average, 57% less masculine than the boys who speak in the *Randomized* group, measured by their private views ($p = 0.03$). In the pre-discussion survey, I find correlational evidence that the more masculine adolescents are also less vocal ($p < 0.001$), suggesting that self-selection among the less masculine is not an effect of the discussion setting. In contrast, girls' speakers are equally masculine across the two groups, and they do not lie. These results support that lack of communication drives misperceived masculinity norms, given lying and self-selection indicate less masculine views would be expressed.

Three weeks after the discussions, treatment effects on reducing misperceptions persist, suggesting that the one-time masculinity discussions did not generate organic conversations about it. This indicates there are strong barriers to communicating about masculinity. 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.⁴

⁴Nevertheless, there is evidence that randomly selecting some students to participate in multiple hours of anti-

I then show that the masculinity discussions make boys' beliefs about crying 50% less masculine compared to control boys immediately and three weeks after the discussion but do not reflect behavioral changes concerning emotional restriction and involvement in violence. The impacts on beliefs are consistent with the evidence that adolescents have more malleable preferences than adults (Kohlberg 1976; Markus and Nurius 1986). Girls' beliefs about masculinity do not change, but they were considerably less masculine compared to boys in the first place. The lack of behavioral effects suggests that updating behavior may take more time than updating beliefs or may need reinforcement to enact behavioral change, given the discussions happened once for 15 minutes. In this sense, longer-term interventions, as in Dhar et al. (2022), might be necessary.

In a supplementary experiment ($N = 359$) with 13 to 15-year-old boys and girls across three public schools in Rio de Janeiro,⁵ I test whether teenagers discuss their views about masculinity more organically with close peers. I relaxed two features of the main experiment: there was no mediator present all the time, and they could choose their discussion peers (i.e., it was not randomized). The discussions had a similar script and length as in the main experiment, and an average of 5 people. This design also allows for variation in the sex composition of the groups: 50% of them were single-sex. Everyone participated in the discussion within a classroom, and I randomized the outcome elicitation to be before or after it, allowing me to estimate causal effects.

I find that conversations with close peers about masculinity also reduce boys' misperceptions about boys and girls' misperceptions by about 50%. This indicates that teenagers do not discuss these topics even with close friends. Nevertheless, there is no evidence that boys' misperceptions about girls change, and they even slightly increase regarding violence. This increase is due to boys in boys-only group: their misperceptions about girls suggestively increase by 9p.p. for crying ($p = 0.28$) and 11p.p. for violence ($p = 0.27$), indicating a potential backlash effect, but they reduce once in the group with girls. In addition, boys' misperceptions about crying in boys-only groups reduce from 14p.p. to 3p.p. ($p = 0.01$), while about violence it remains unchanged at 8p.p. We can interpret this as evidence against *locker room talks*: even when in boys-only group, boys' misperceptions do not increase, suggesting that they do not express very masculine views in such setting. Interestingly, boys who self-select to boys-only groups are significantly less masculine ($p < 0.001$) than those in groups with girls. In contrast, for girls in girls-only groups, their misperceptions about boys suggestively decrease by 9p.p. for crying ($p = 0.12$) and 7 p.p. for violence ($p = 0.43$), suggesting girls' infer boys' views also by listening to other girls' opinions.

Taken together, my findings indicate that the lack of horizontal communication drives misperceived masculinity norms among adolescents. I do not find evidence of biased communication: peers who self-select into speaking are *less* masculine than average peers, and peers randomly

conflict training (i.e., encouraging top-down communication) changes perceived social norms against conflicts at the school level (Paluck et al. 2016).

⁵The participating schools in the supplementary experiment are not the same as the ones in the main experiment, but schools' and students characteristics' are statistically indistinguishable (See Table B5).

asked to speak lie towards being *less* masculine. Misperceptions would then be smaller if there were broad natural communication about masculinity. Further, there is no evidence that communication with close friends exists. In addition, for boys, it seems to be relevant to include girls in these discussions, as they do not infer girls' views based on boys' views when in conversations with boys only. Nevertheless, engaging participants in a one-time short discussion does not seem to generate broader discussions about masculinity. It seems to be important that adolescents learn new information first-hand.

One natural next step is understanding why adolescents do not talk about masculinity organically. In the supplementary experiment, I asked questions to measure the degree to which adolescents have miscalibrated views on how the conversation will go.⁶ Before the discussion, participants indicated how comfortable and interested they thought they would be in the conversation and whether they would feel more connected with peers afterward. After the discussion, they indicated their realized impressions. Within-individual comparisons of these impressions indicate that boys underestimate interest in and comfort during these discussions by roughly 40% ($p < 0.001$), and do not change their impressions about connection ($p = 0.4$), and similarly for girls.

Related Literature. This paper makes several contributions. First, 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), norms about men have received little attention. An exception is Baranov et al. (2023), but they study the historical origins of masculinity norms and not how people form their views about masculinity. In contrast, this paper provides causal evidence of how conversations with peers shape masculinity norms. 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 they do not 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.

Second, while a large body of work in economics uses simple information provision – a quantitative treatment – to correct misperceived norms (see Bursztyn and Yang 2022 for a review), they do not discuss where misperceptions come from. Bursztyn et al. (2020) provide suggestive evidence of a lack of communication as a source of misperceptions, but their design does not allow for causally testing this hypothesis. Recent work documents that limited attention to silent peers in a discussion increases misperceptions (Ho and Huang, 2024).⁷ My main contribution is to provide causal evidence on the nature of communication – a qualitative treatment – as a source of misperceptions. I further disentangle whether the types of communicators matter. In addition, I document misperceived norms among adolescents, which is a crucial stage for brain

⁶This exercise is inspired by Kardas et al. (2022), which show that miscalibrated expectations drive barriers to more intimate conversations among strangers.

⁷Webb (2024) finds that horizontal communication reduces discrimination against transgender, and rejects that a reduction in misperceptions about peers' discriminatory views drives these effects. Nevertheless, their misperception was small (5p.p.) to start with.

development and belief formation (Steinberg 2014), in an environment that constitutes an important part of adolescents' social network (Paluck and Shepherd 2012). No work to date has studied the formation of misperceived norms in such contexts.

Finally, I contribute to a large literature on masculinity in other disciplines. Other social sciences have studied masculinity norms for several decades (Connell, 1987; Carrigan et al., 1985; Thompson Jr and Pleck, 1986; Kimmel et al., 1989). A myriad of work has studied the relationship between masculinity and health outcomes (e.g., Mahalik and Rochlen 2006; Wong et al. 2017), aggressive behaviors (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 is correlational or comes from small-scale studies in the lab in developed countries. In low-income countries, public health scholars have 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). This work adds to this literature by measuring masculinity norms at scale among adolescents in a developing country. In addition, unlike 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 views and experiences regarding masculinity in a large-scale field experiment.

2 Adolescent (Misperceived) Masculinity Norms in Brazil

Masculinity Norms. Gender scholars use the terms *traditional masculinity*, *masculinity ideology*, *hegemonic masculinity* or *masculinities* to refer to the cultural expectations around attitudes, and beliefs that prescribe men's behaviors, inferiorizing "non-masculine" men or women (Connell, 1987; Kimmel et al., 1989; Connell, 2020). Despite the existence of many different masculinities, there is a common set of standards and expectations associated with the traditional male role (Pleck, 1995; Levant et al., 2007). Seven of these dimensions are avoidance of femininity, fear and hatred of homosexuals, self-reliance, aggression, achievement/status, non-relational attitudes toward sexuality, and restrictive emotionality. Social psychologists have developed an extensive measurement of traditional masculinity encompassing these dimensions (see Thompson Jr and Bennett 2015 for a review).

Developmental psychologists highlight that boys enter their teenage years resisting traditional masculinity by expressing their feelings of vulnerability and avoiding aggressive behaviors (Way, 2011; Way et al., 2014). However, as they transition into manhood in later adolescence, boys increasingly refer to the pressure to "man up" and avoid appearing feminine or gay, causing their emotionally expressive language to become more guarded. In essence, boys begin to disconnect from their emotions and others in pursuing "manhood". In this study, most boys are starting this transition, so it is a critical time to correct misperceptions about others' masculinity views,

as they may suggestively increase further as boys become adults, especially if they do not discuss these expectations. Hence, we may think of both one's masculinity beliefs and their beliefs about others as a lower bound to their lifetime beliefs.

IN PROGRESS! Context. In the Americas, 89% of homicide victims are men, affecting especially young black men ([UNODC, 2023](#)). In Latin America, the presence of organized crime and the recruitment of youth into these groups further increases the risks of homicide. This research took place in Rio de Janeiro, one of the largest urban regions in the world [CITE](#), with 18% of its territory dominated by organized crime ([Cruzado-RJ, 2024](#)). The majority of people recruited to the drug gangs in the city are black men aged 16 to 24 years old. Often, young men involved in gangs are desired as sexual partners by young women and admired by their male peers ([Barker, 2005](#)). Nevertheless, only a minority of young men become involved in these gangs. Pioneer work on masculinity among low-income black youth started in Rio de Janeiro in the late 90s, with the foundation of the world-leading NGO on masculinities *Instituto Promundo*. Contrary to popular opinion that portrays Brazil and Latin America as having a strong masculinity culture, their early work showed that many men resisted ideas about manhood around them ([Barker, 2005](#)).

Adolescents in my sample are public school students and are substantially more likely to come from economically disadvantaged backgrounds, be black, and live in favelas [CITE](#). I selected 25 schools across the city, 4 located in favelas. Violence affects students' day-to-day life: in 2022, 25% of the municipal schools in Rio de Janeiro were closed for at least one day because of shootings in their surroundings. Shooting episodes also prevented the field staff from visiting 4 schools on the scheduled date.

IN PROGRESS! Why Might We Expect Misperceived Masculinity Norms to Exist? Misperceptions about same-generation peers' views might arise because individuals base their views of others on sources other than the relevant group, such as from older generations (i.e., vertical transmission) ([Giuliano, 2020](#)), the media ([Paluck, 2009; Ferrara et al., 2012](#)), and socialization. In the absence of horizontal communication, adolescents could form their views about what their peers think based on e.g. the views of older peers, which may not reflect their generation's views. These views are less likely to erode in societies that value tradition

Given their environment, they might expect these norms to be present and strong, ...

3 Experimental Design

My experiments aim to understand whether misperceived social norms persist because of a lack of communication or because of biased communication. To test for lack of communication, I

randomly allocated participants to a mediated discussion session about masculinity or a control discussion about recycling. To test for biased communication with a broad set of peers, I cross-randomized whether participants self-selected (*Voluntary* group) or were randomly selected (*Randomized* group) to speak. In a supplementary experiment, I test for biased communication with close peers by allowing participants to select their discussion peers. This design also has a natural policy implication to correct misperceptions. Encouraging communication about a topic could be easily implemented and scalable through, e.g., school programs. In addition, it relates to recent calls by academics and public speakers to listen to boys in the debate about masculinity (Reeves, 2022; Way, 2024).

3.1 Main Experiment

3.1.1 Sample Selection

School Selection. I conducted the preregistered main experiment between June and October 2022. I coordinated with my partner, the Secretariat of Education of the city of Rio de Janeiro, and selected 22 schools covering 9 out of the 11 school districts in the city.⁸ This broadly covers the entire area of the city. Even though I did not randomly select the schools, they are fairly representative compared to all the 607 public schools offering secondary education in the city (see Table B5). Out of 12 characteristics, schools in my sample are only statistically different with respect to the share of white students compared to all the of schools ($p = 0.04$), which is similar to a difference obtained by chance.

Student Selection. My target sample consists of 7th to 9th graders (i.e., $\approx 12\text{-}14$ years old) across 88 classrooms. Within each class, the study (baseline-treatment-endline) took 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 grade classes, I prioritized upper-year students. My sample thus consists of 2,249 students (1,154 girls and 1,095 boys), with 60% 9th graders, 32% 8th graders, and 8% 7th graders.⁹

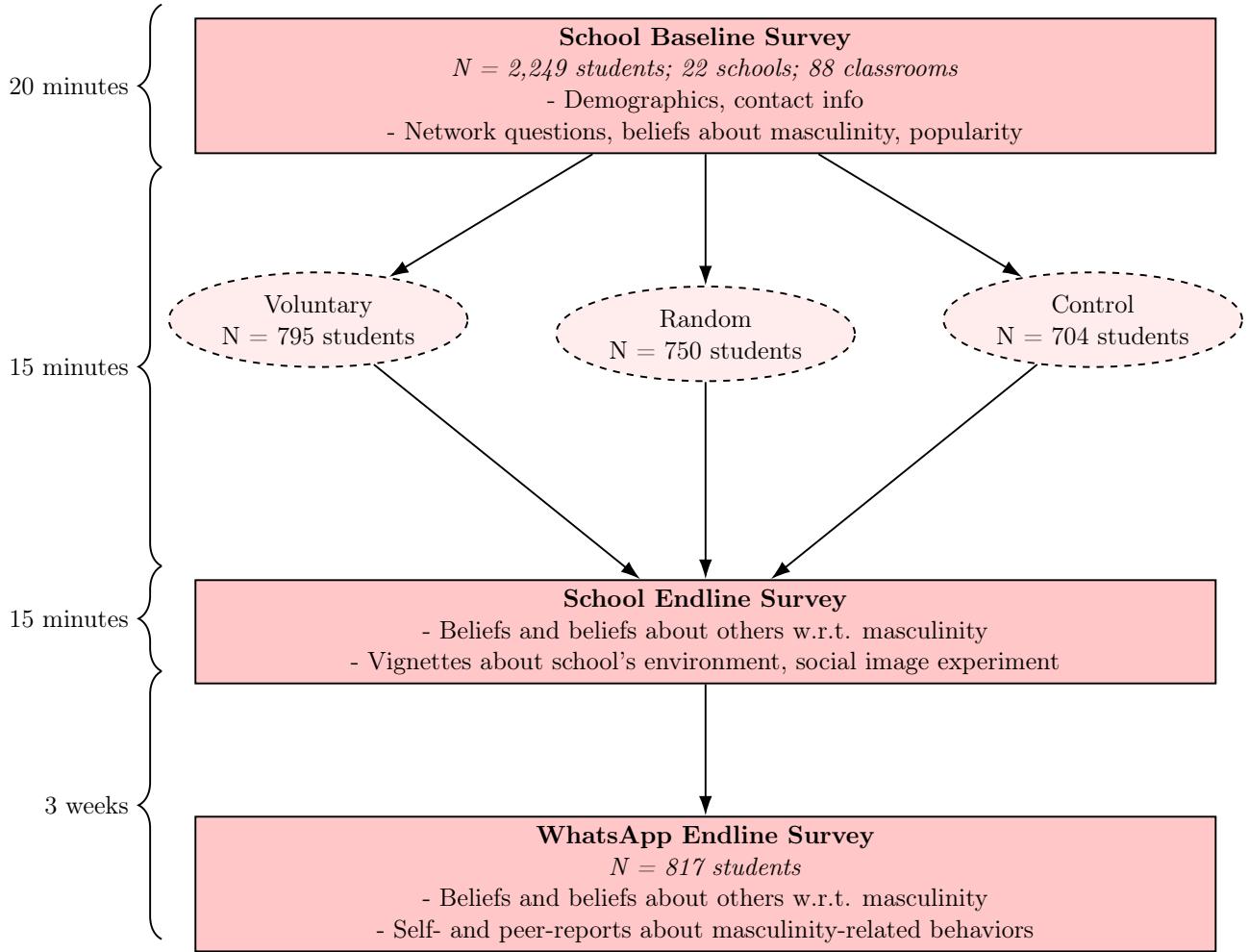
3.1.2 Treatment Conditions

Treatment Assignment. Figure 1 outlines the structure of the main experiment. Within classroom, I randomly assigned half of the students to one of three types of discussions, stratified by sex: Voluntary ($N = 795$), Randomized ($N = 750$), and Active Control ($N = 704$). Classrooms ($N = 88$) could then be one of three types: (i) $\frac{1}{2}$ Voluntary \times $\frac{1}{2}$ Active Control, (ii) $\frac{1}{2}$ Randomized \times $\frac{1}{2}$ Active Control, and (iii) $\frac{1}{2}$ Voluntary \times $\frac{1}{2}$ Randomized. I performed the randomization before

⁸In fact, I visited schools from all districts. I piloted the main experiment in two other districts, which were not included in the main experiment. I also included a school from an 11th district in the supplementary experiment.

⁹To avoid contamination across classes, the field team would only visit a school once.

Figure 1: Experimental Design - Main Experiment



Notes: This figure displays the design structure of the main experiment. Classrooms were randomized into one of three types: Class Type 1: Voluntary X Control; Class Type 2: Random X Control; Class Type 3: Voluntary X Random. Students were then randomly allocated into either the *Voluntary*, *Random*, or *Control* discussion within their classroom.

visiting the schools, upon receiving the list with students' names.¹⁰

Masculinity Discussions. The treatments consist of focus group-like discussions about masculinity. Male mediators led the sessions, asking participants 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*, and further explain and provide examples of their opinions.¹¹ ADD A DISCUSSION ON WHY

¹⁰Participating students represent about 75% of students in the participating schools. 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.

¹¹The mediators were members of the NGO *Luta pela Paz* (Fight for Peace), who are experienced in conducting this type of activity with youth. At the time of the intervention, they were piloting a discussion session on masculinity with youth across some favelas in Rio.

THESE TWO STATEMENTS AND WHAT THEY MEAN IN TERMS OF MASCULINITY. Participants first shared their views on the statement about crying, and then on the statement about violence.

The mediators did not express their personal opinions: their only role was to guide the discussion. In addition, we alternated a boy and a girl speaking, and a maximum of six students could talk. I set a maximum number of speakers to allow me to differentiate between the *Voluntary* and *Randomized* students. If everybody had the chance to speak, I would not expect any differences between the treatments as speakers could be similar by construction since they were randomized into each session. In addition, fixing the number of students in the discussions shuts down another potential confounding between *Voluntary* and *Randomized* discussions, which could have been how many students spoke in each of them. Figure A1 presents a roadmap of the discussions. On average, the discussions took 15 minutes, with 13 people in each session, and they could be of two types:

1. *Voluntary*: Mediators asked subjects in this group to raise their hands if they would like to share their views on the masculinity statements. The mediator always picked on the first male to raise their hand, then alternated between a female and a male until it reached a maximum of six students.¹² Hence, this treatment arm consists of only introducing a topic, aiming to mimic the dynamics of any discussions among students in the schools.
2. *Randomized*: Before the field team visited each school, I randomly selected students that the mediators would call out to speak following a random order. Following the same logic as in the *Voluntary* arm, mediators would first call out a boy, then a girl, to share their views until six students spoke. Called-out participants could refuse to speak, but this rarely happened, resulting in a strong first stage of 0.85 (F-stat = 548, Table B9).

Observers' Form. An external observer took notes during these discussions (survey form in Figure A3).¹³ They indicated (1) whether a student said they agreed or not with each statement, (2) keywords and quotes, (3) whether they shared a personal example, and (4) group dynamics (e.g. if there was laughter and jokes). I am then able to link the observers' notes with participants' baseline and endline responses. During these discussions, students sat in a circle together with the mediator and the observer (Figure A2).

Active 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 *Randomized* arm). The topic of recycling is not expected to affect perceptions about the school's current gender

¹²ADD NUMBERS OF SPEAKERS IN THE VOLUNTARY SESSIONS

¹³There were 4 observers (3 female and 1 male), which would rotate across each school.

norms. The active control group accounts for the effects of meeting attendance and attenuates experimenter demand effects. I instructed the mediators not to make any comments related to gender in any way **ADD NUMBERS**.

3.1.3 Data Collection and Outcomes

Baseline. All 2,249 participants completed a baseline survey, which included the following modules (Figure A8):¹⁴ (i) demographics;¹⁵ (ii) friendships and popularity; (iii) peer-reported measures of vocality, friendship and admiration; (iv) private views on whether agrees or disagrees with the masculinity statements *men who cry are weak* and *men should use violence to get respect if necessary*, and adherence to the *Meanings of Adolescent Masculinity Scale* (Oransky and Fisher 2009); (v) social desirability bias based on [Crowne and Marlowe \(1960\)](#).

Table 7 summarizes baseline characteristics of the sample and provides the p-value of an F-test of joint significance to test for covariate balance between the study arms, within sex. Among boys, 4 characteristics out of 27 are imbalanced at the 10% level: 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 are imbalanced at the 10% level: 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 man ($p = 0.07$).¹⁶

School Endline. Participants responded to an endline survey in the school, immediately after the discussions ended (Figure A9). I describe these outcomes below, and introduce other outcome measures when they appear in the discussion of my findings.

WhatsApp Endline. Three weeks after our visit to the school, I distributed a second endline survey sent to participants' WhatsApp numbers (Figure A10). 80% of boys and 87% of girls provided their WhatsApp information. Among those who provided their WhatsApp contact detail, 42% completed the WhatsApp endline. Attrition is not correlated with baseline characteristics differentially by treatment status for most characteristics, among the WhatsApp sample (Table B4). Similarly to the baseline survey imbalance, only four characteristics among boys are 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).

My main primary outcome, measured at both endline surveys, is the misperceptions with

¹⁴Participants self-administer the baseline and school endline surveys on tablets using Qualtrics offline. All baseline data collection happened prior to the revelation of the treatment assignment.

¹⁵I opted to ask students' sex, instead of gender, to avoid potential controversies as gender is a politically loaded word in Brazil.

¹⁶The results are similar whether or not these covariates are controlled for ([Figure ADD ROBUSTNESS](#).)

respect to the two beliefs about masculinity they discussed (*men who cry are weak* and *men should use violence to get respect if necessary*). I define misperceptions as the percentage point wedge between students' guesses¹⁷ of the percentage of boys and girls, separately, in their school classroom they think to agree with each of the statements and the actual percentage of boys and girls who agree with each statement at baseline. I follow the recommendation of [Bursztyn and Yang \(2022\)](#) and only elicit the guesses at endline to avoid priming and consistency effects. I discuss other outcomes when they appear in the discussion of my findings.

3.2 Supplementary Experiment

Sample Selection. I conducted the preregistered supplementary experiment in April 2024 with a sample of 359 8th-9th graders (i.e., \approx 13-14 years old) across 14 classrooms in 3 public schools in Rio de Janeiro. I selected the schools in coordination with my partner, the Secretariat of Education, similarly to how we did it in the main experiment. The selected schools are similar in terms of observable characteristics, compared to all the public schools in Rio de Janeiro (Table B5, Column 5) and to the schools included in the main experiment (Table B5, Column 6). Participating students are also similar across the two experiments with respect to most characteristics (Table B6), except boys in the supplementary experiment are less likely to live with a father ($p = 0.02$), more likely to live with a stepfather ($p < 0.01$), and are more masculine ($p < 0.01$).

Treatment Assignment. Figure A4 presents the structure of the supplementary experiment. In this experiment, all participants engaged in discussions about masculinity with peers they selected. To estimate the causal effects of the discussion, I randomized, stratified by sex, the outcome variables elicitation to be in the survey before ($N = 185$) or after ($N = 174$) the discussion.

Masculinity Discussion. At the end of the pre-discussion survey, it explained we would ask them to talk to their friends about their opinions of what society expects of men. Facilitators then instructed them to organize a group of 5 to 6 people and sit in a circle (Figure A5). Participants read the discussion guidelines on their tablets, which instructed them to discuss their views about the statements *men who cry are weak* and *men should use violence to get respect if necessary*, similar to the main experiment guidelines. The discussions were partially mediated: three facilitators rotated across the groups,¹⁸ asking if they understood the guidelines, shared their views, and heard their peers' opinions. Nevertheless, the mediators did not guide the discussions throughout, even though they were in the same room as the discussions took place.¹⁹ We timed the discussions

¹⁷I did not incentivize the elicitation of the guesses as my partner did not allow me to provide any sort of monetary and non-monetary incentives to the children.

¹⁸On average, there were XXXX groups in a classroom.

¹⁹I piloted these discussions without any mediation, but some participants did not talk about the masculinity statements. I added some degree of mediation to (i) have a stronger first stage in talking about masculinity and

to be 15 minutes long, to be consistent with the main experiment.

Data Collection and Outcomes. All 359 participants self-administered a pre-discussion survey, which included the following modules (Figure ??): (i) demographics; (ii) network questions asking students to name peers they spent the most time in the last week; (iii) four questions from the Crowne and Marlowe (1960) social desirability scale; (iv) questions on what they talk to their friends, including whether they talk about masculinity, and open-ended responses on what they talked, or why they do not talk; (v) adherence to the *Meanings of Adolescent Masculinity Scale* (Oransky and Fisher 2009). The survey then says we will ask them to discuss their opinions on what society expects of men with their friends, and they have to provide their impressions of how this discussion will go, regarding interest, comfort, and connection.

The main outcome of interest is the misperceptions with respect to girls' and boys' beliefs about crying and violence, elicited in the same way as in the main experiment. Other outcomes include their private views about the masculinity statements, besides self-reported behaviors, such as willingness to serve as an emotional support peer and to be an anti-bullying advocate in the school. I randomly allocated participants to respond to these questions either in the pre-discussion (control) or in the post-discussion (treated) survey.²⁰ Table 7 presents summary statistics and balance tests across a series of characteristics, separate for boys and girls. The only imbalance is that control girls are more likely to be white ($p = 0.02$) and less likely to be black ($p = 0.01$) than treated girls, and I show the effects on the main outcome are robust to controlling for these characteristics (Figure ADD).

Participants then responded to a short post-discussion survey. For control participants, it first elicited their post-discussion impressions with respect to interest, comfort, and connection, whereas treated participants first responded to the outcomes of interest before responding to their discussion impressions. Finally, they indicated the peers who participated in their discussion group and responded whether each peer agreed or disagreed with the statements *men who cry are weak* and *men should use violence to get respect if necessary*.²¹

Group Characteristics. There were 49 groups, with an average of 5.25 people (Figure A6). The groups were equally sex-balanced, and the average group had 47% of boys. Nevertheless, 24.6% of them were composed of girls only, and 23.8% of boys only (Figure A7). On average, 28% of their group was listed as a close friend, with 76% of peers listed as a close friend partici-

(ii) make it more comparable with the design of the main experiment.

²⁰I embedded the randomization on Qualtrics offline.

²¹One school did not send the list of participating students before the field team visited this school. As a result, the network question and the question to select which peers were in their discussion group could not be included. To allow me to test for gender composition effects, I added a question so they could indicate how many boys and how many girls were in their group.

pating in a group.²² ADD TABLE COMPARING AVERAGE IN-GROUP CHARACTERISTICS WITH CLASS-LEVEL CHARACTERISTICS. OR RUN DYAD-LEVEL REGRESSION OF $Y_i = 1$ FOR A GIVEN DYAD ON INDIVIDUAL CHARACTERISTICS, USING DYAD-LEVEL SE CORRECTION

4 Results on Misperceptions

4.1 Main Experiment

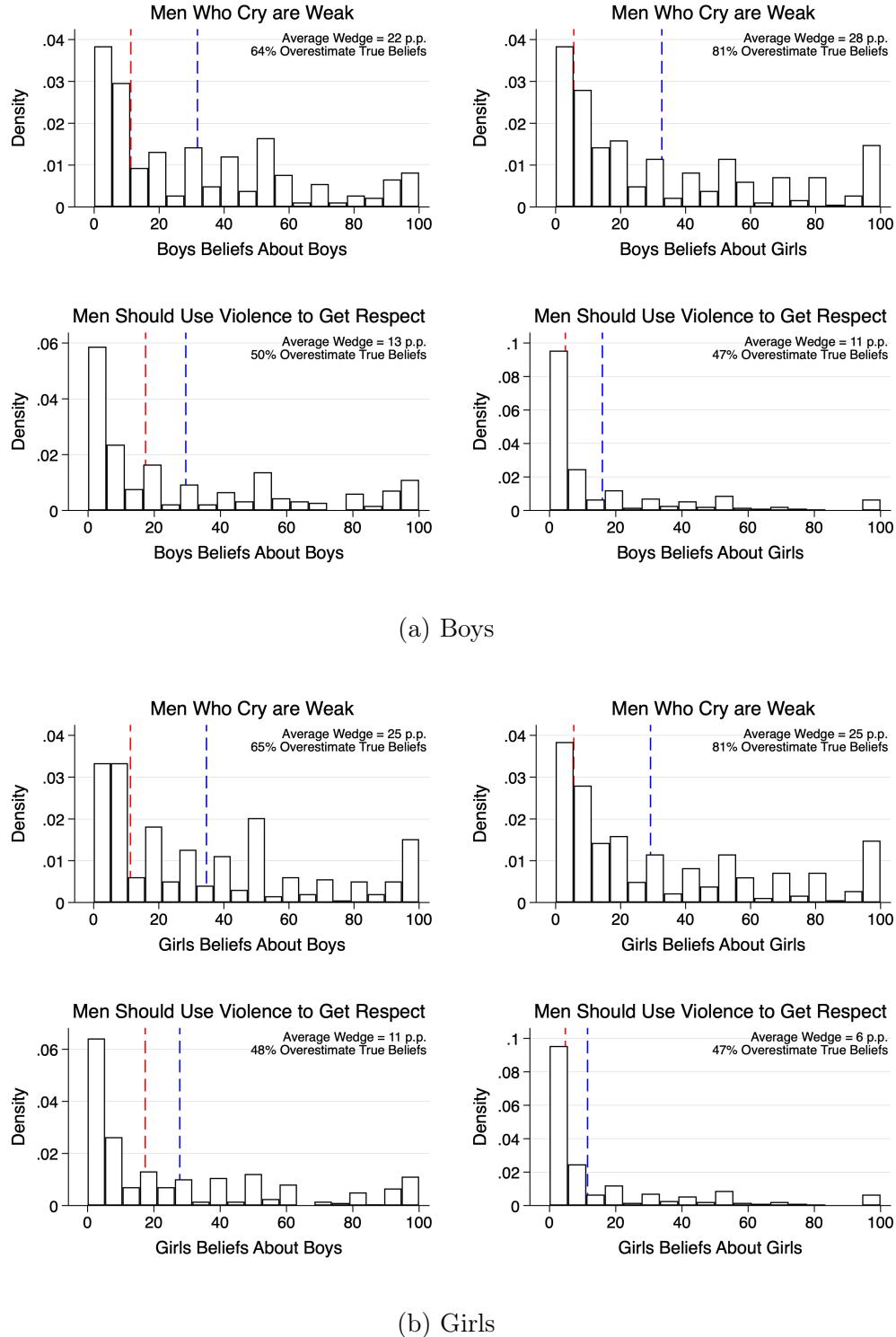
Misperceived Social Norms. Boys and girls systematically overestimate their peers' levels of agreement with statements about traditional masculinity (Figure 2). Boys' average guesses are that 32% and 29% of other boys and 33% and 16% of girls in their classroom agree with the masculinity statements about crying and violence, respectively (Panel a). Boys' baseline average level of agreement with the statement about crying is 10%, and 17% for the statement about violence; and girls' levels are 5% for both statements. These numbers result in average boys' wedges about boys' beliefs of 22 and 13p.p., and about girls' beliefs of 28 and 11p.p. about crying and violence, respectively. Girls are equally incorrect about their peers' beliefs about masculinity (Panel b).

It is striking to find such misperceptions in an environment in which people are interacting every day, given that by interacting they also get to know their peers' beliefs and behaviors. The misperceptions about crying I document are similar to the ones in [Bursztyn et al. \(2020\)](#) regarding the support for women working outside of the household, which has an average wedge of 24 p.p., whereas the misperceptions about violence are about half of that. The authors also present evidence showing that knowing more people from the reference group predicts lower misperceptions. In my sample, on the contrary, correlations indicate that having more friends either increases or has no effect on misperceptions, whereas wanting more emotional support from their same-sex friends predicts larger misperceptions (Figure A12). These findings suggest that, in environments in which people already know each other, just the number of friends may not predict the degree to which people misperceive others' views. Instead, friendship characteristics such as the lack of emotional support, which relates to communication, may be a potential driver of misperceptions. Demographic characteristics (e.g. age, race, household composition, religion), how popular and how admirable a person is have no significant relationships with misperceptions.

There are several possible explanations for why the misperceptions about crying may be larger than the misperceptions about violence. First, communication about emotions and the expression of emotions may be constrained by an expectation that men remain emotionally stoic, exacerbating misperceptions about crying. Hence, not talking about this may be a product of masculinity-related expectations. Second, because violence is a public policy issue of great importance in these

²²The average number of peers listed as someone they spent the most time together in the last week is 2.2.

Figure 2: Distribution of Guesses About Peers' Masculinity Beliefs



Notes: This figure plots the distribution of boys' and girls' endline guesses in the control group 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 in the control group, as the second-order beliefs are only elicited at the endline. Red dashed line plots average first order beliefs. Blue dashed line plots average second order beliefs.

communities, discussions about violence (and potentially expectations around violent behavior) are likely more common than discussions about crying. In fact, 80% of the municipal schools in Rio have school-level programs that discuss violence, whereas only 30% discuss gender equality ([INEP 2021](#)), focusing especially on violence against women and sexual harassment. Finally, crying can be a private behavior, whereas violence is usually a public one, so peers may infer others' views from the behaviors they observe.

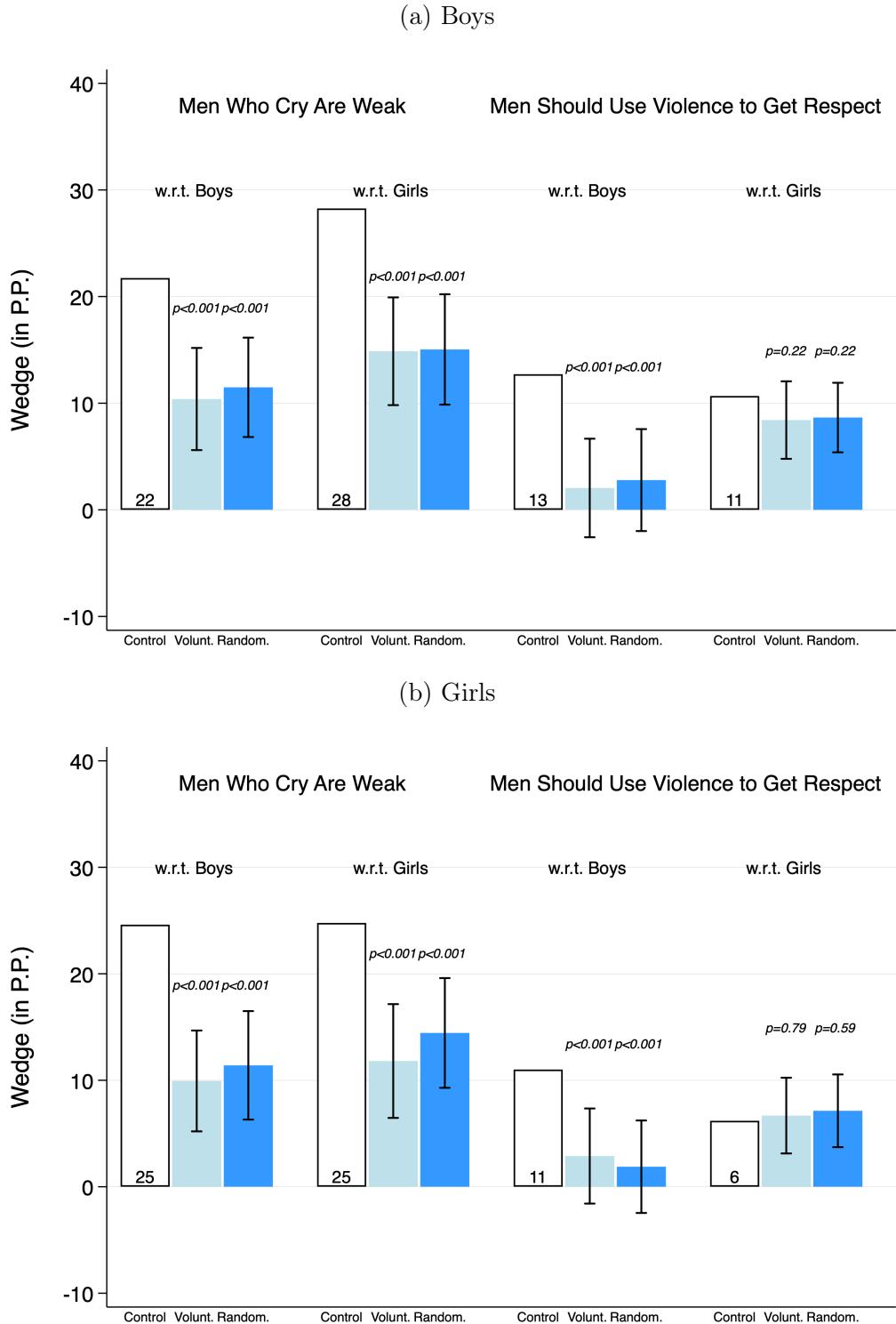
Immediate Effects of Discussions. The masculinity discussions reduce boys' and girls' misperceptions by over 50% across nearly all the comparison groups (Figure 3). In the control group, boys' average misperception about boys' beliefs about crying is 22p.p (Panel a, left plot). In the masculinity discussion in which people self-selected to speak (*Voluntary* arm), boys' average misperception is 10p.p. ($p < 0.001$), and 11p.p. ($p < 0.001$) for the group in which randomly selected participants spoke.²³ The discussions are equally effective in reducing boys' misperceptions about girls' beliefs about crying and boys' beliefs about violence ($p < 0.001$). Nevertheless, I cannot reject that the masculinity discussions shift boys' misperceptions about girls' views about violence ($p = 0.22$), even though they suggest a 23% reduction in the *Voluntary* and *Randomized* groups, compared to the control group. The masculinity discussions also reduce the misperceptions held by girls (Figure 3, Panel b).

Three Weeks Effects of Discussions. The treatment effects of the masculinity discussions persist after three weeks (Figure 4). In the control group, boys' average misperception about boys' beliefs about crying is 18p.p (Panel a, left plot). In the *Voluntary* discussions, boys' average misperceptions reduce to 9p.p. ($p = 0.02$), and to 7p.p. ($p < 0.001$) in the *Randomized* group. The discussions also significantly change boys' perceptions about girls about crying, and about violence for both sexes, except boys in the *Voluntary* group do change their views about girls' beliefs about violence ($p = 0.34$). The effects of the discussions on girls' misperceptions follow similarly (Panel b).

Comparing the three weeks with the immediate responses among the control group, I find that girls' misperceptions about crying reduce by 10 p.p. in the medium-run (Figure A14, Panel b), but boys' misperceptions do not (Figure A14, Panel a). This exercise is a further test of a lack of communication: the control group could have learned the information from their treated peers if the one-time masculinity discussion was enough to encourage organic communication about it in the classroom. The effects for girls do not depend on whether they had a friend in the masculinity discussions (i.e., a treated friend), except that having a treated boyfriend fully offsets the reduction in girls' misperceptions about boys' beliefs about crying. For boys, there is no strong evidence that having a treated friend impacts their misperceptions in the medium-run. Whereas

²³ADD TABLE WITH REGRESSION FORMAT RESULTS, WITH SPECIFICATIONS INCLUDING MEDIATOR FE AND INDIVIDUAL COVARIATES

Figure 3: Masculinity Discussions Reduce Misperceptions Immediately After Treatment



Notes: This figure shows the effects of the *Voluntary* and *Randomized* discussion treatments. The wedge is calculated as the 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*). A positive wedge means that people overestimate the prevalence of traditional beliefs about masculinity. 95% confidence intervals plotted, from a regression of the wedges on treatment status dummies, including school fixed effects. Standard errors are clustered at the classroom level.

there is some indication that the masculinity discussions generated communication among girls, my findings do not support that communication among boys took place.

4.1.1 Why Are Effects Similar Across The *Voluntary* and *Randomized* Groups?

In this section, I provide evidence that explains why the treatment effects of the *Voluntary* and *Randomized* discussions are statistically indistinguishable. I explore the public opinions shared in the discussions, the narratives used, the speakers' baseline characteristics, and the discussions' characteristics, as noted by the observers.

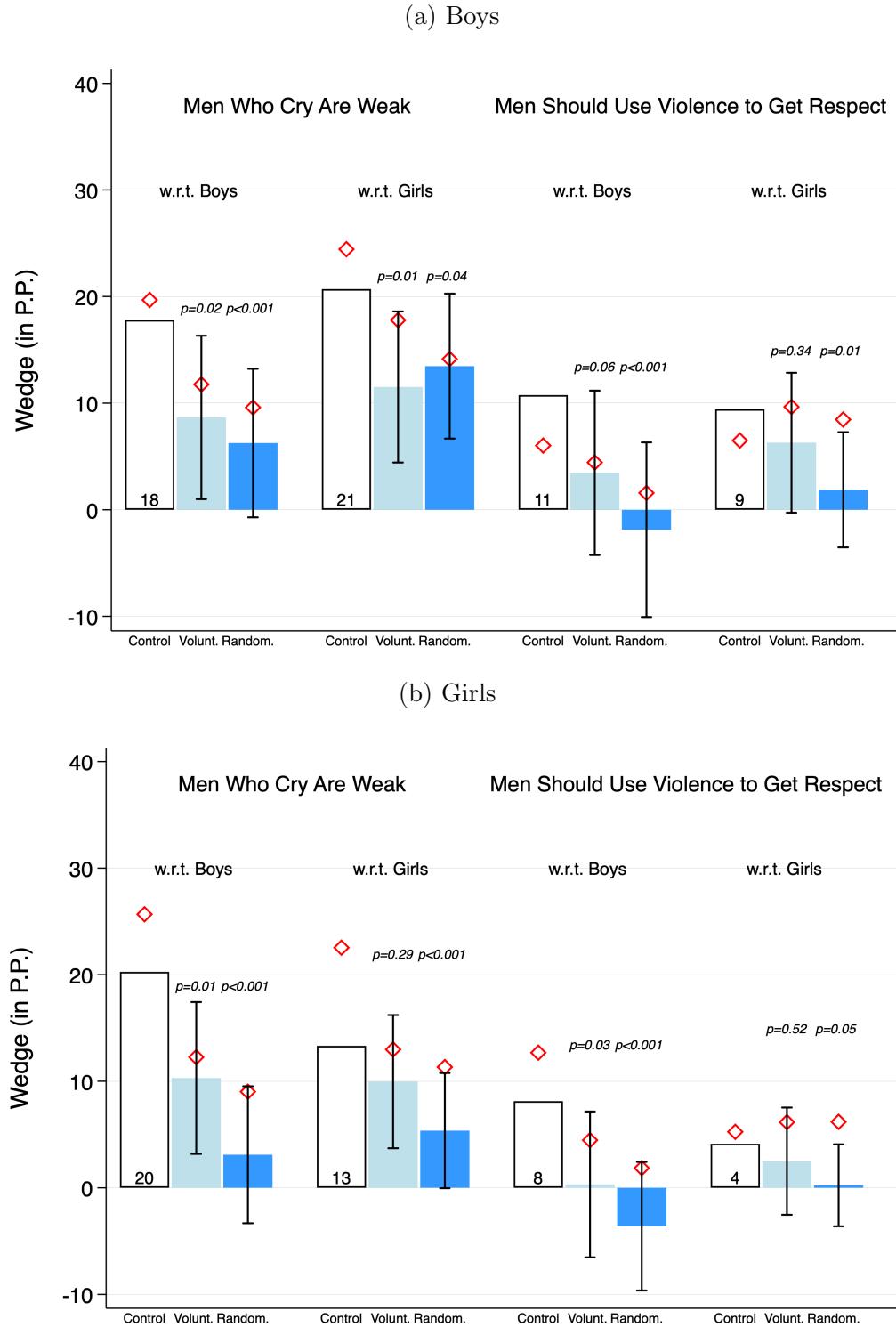
I find no evidence that people self-select into speaking about crying, but there is strong evidence that those with less masculine views about violence speak in the *Voluntary*, compared to the ones in the *Randomized* group. Figure 5 plots the average private and public opinions about crying and violence among first speakers in the *Voluntary* and *Randomized* discussions. I restrict the sample to first speakers within sex since their opinions have not yet been influenced by their peers.²⁴ Boys' and girls' private opinions about crying are not statistically different comparing the speakers in the *Voluntary* and *Randomized* groups, suggesting that there is no evidence of self-selection in this domain ($p = 0.68$ in Panel a; $p = 0.38$ in Panel b, respectively). Nevertheless, there is strong evidence of self-selection in the violence domain: only 2% of boys' first-speakers privately agree with the statement about violence in the *Voluntary*, compared to 20% in the *Randomized* group ($p = 0.01$). Girls also self-select in the violence domain ($p = 0.05$).

Despite some selection into speaking, boys' and girls' public opinions about crying and violence are the same. 8% of boys in the *Voluntary* group publicly agree with the statement about crying, compared to 7% in the *Randomized* group ($p = 0.89$). In the *Voluntary* group, 15% of boys publicly agree with the statement about violence, compared to 19% in the *Randomized* ($p = 0.55$). The same applies to girls' public opinions (Panel b). This means that even when there is self-selection (e.g. regarding the belief about violence), people in the discussions hear similar information. This happens because the less masculine boys who self-selected to speak in the *Voluntary* group lie in public to show more masculine views ($p < 0.01$), whereas those asked to speak in the *Randomized* group do not lie ($p = 0.72$), and similarly for girls. Hence, even though less masculine participants in the violence domain decide to speak in the *Voluntary* discussions, they then adjust their public views to be more masculine and provide similar views to the *Randomized* speakers.

Besides expressing similar public opinions, participants in the *Voluntary* and *Randomized* groups use similar narratives to support their views (Figure A13). The argument that narratives matter builds on a growing literature in economics on the power of narratives (e.g. Shiller 2017; Andre et al. 2021). To test this, research assistants manually categorized the quotes shared

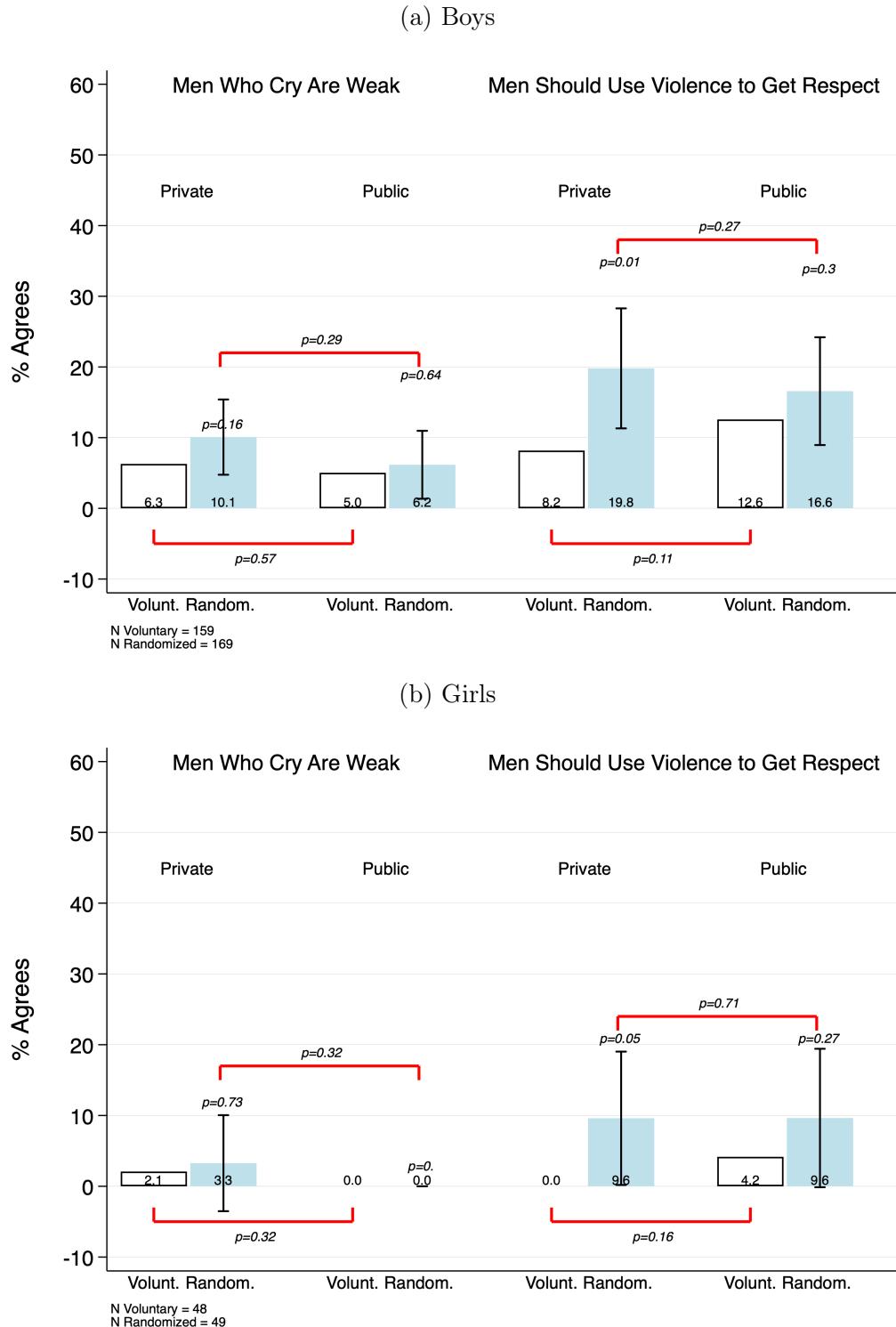
²⁴To allow me to compare their private and public opinions on the same scale, I recoded participants' public opinions coded as "Depends" by the observers as "Agree", since it meant they agreed in some circumstances.

Figure 4: Masculinity Discussions Have Persistent Effects on Misperceptions After Three Weeks



Notes: This figure plots the treatment effects for the *Voluntary* and *Randomized* 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.

Figure 5: Private and Public Opinions Among First-Speakers in the *Voluntary* and *Randomized* Discussions



Notes: This figure compares the average private (from baseline) and public (from the discussions) opinions among boys' first speakers (Panel a) and girls' first speakers (Panel b) in the *Voluntary* and *Randomized* groups. Error bars indicate 95% confidence intervals for the difference between the opinions of the *Voluntary* and *Randomized* speakers, obtained from a regression of a dummy equals 1 if a participant agreed with the respective statement, and 0 otherwise; on a dummy equals 1 if in the *Randomized* and 0 if in the *Voluntary* group, including school fixed effects and standard errors clustered at the classroom level. *p*-values for the difference between one's private and public opinions (above or below the red bars) are obtained from a paired t-test of equality of means.

in the discussions, as recommended by Ferrario and Stantcheva (2022).²⁵ For example, 70% of boys, equally across *Voluntary* and *Randomized* speakers ($p = 0.98$), justified their opinions on men crying by using arguments such as *crying is human*, categorized as *Everybody Has Feelings*. Similarly, roughly 50% of boys in both discussion groups ($p = 0.51$) justify their views on views using violence by arguing that there should be other ways to get respect, such as conversation. When supportive of men using violence as a way to get respect, participants mentioned violence should be used as a defense mechanism, categorized as *Honor/Fight back*. Generally, girls in both discussion groups also used similar narratives. In addition, speakers could choose not to provide any examples to support their views. Speakers in the *Randomized* group were less likely than those in the *Voluntary* group to not provide examples of their views about crying, but equally likely on their views about violence (ADD FIGURE).

I find that speakers in both the *Vocal* and *Representative* are similar in other baseline characteristics, besides the beliefs about crying and violence, except with respect to a vocality score (Table B11). 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,²⁶ 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.

Missing: (1) effects of anchoring among the randomized speakers – run IV regressions for this.
Answers: Are people's public opinions influenced by others?; (2) effects of discussion characteristics from observers' notes: observers could code the discussions as "too much laughter", "boys dominating", "girls dominating", "shy group", "engaged group", "conversation took time", "people wanted to debate", etc.

Discussion. Tying up to the hypotheses about the dynamics of communication, I show evidence that when speakers self-select on their private beliefs, less masculine participants speak. In such case, speakers who self-select lie in public to show more masculine views, providing similar views to representative ones. In addition, when randomly selected to speak, people do not lie, at least not to a large extent. Hence, only making people talk about a topic has the power to shift misperceived social norms. Nevertheless, it seems to be important to include all relevant individuals in these conversations, as the information learned does not reach control participants in the medium-run.

²⁵Table B12 presents all the categories used and provides some sample quotes for each of them.

²⁶The masculinity questions from the Meaning of Adolescence Masculinity Scale I included in the survey encompass questions on the restrictive emotionality dimension of masculinity. Hence, the absence of selection on the masculinity score is consistent with the absence of selection on the belief about crying in the discussions.

In Section 6, I discuss why adolescents may not talk about masculinity.

4.1.2 Heterogeneity

Self-Expression Effects. I find that boys randomly selected to speak in the *Randomized* discussions have roughly 5p.p. lower misperceptions in the short-run, compared to those who did not speak (Figure A15, Panel a). Three weeks later, however, these effects reverse, and boys who speak have roughly a 10p.p. larger misperceptions than listeners in most domains (Panel b). Among girls, there is no strong evidence that speaking affects their misperceptions immediately after the discussion (Panel c), but they have suggestively lower misperceptions about crying three weeks later (Panel d). These findings suggest that speaking generates stronger updating for boys immediately after the discussion, which vanishes in the medium-run. On the other hand, for girls, speaking has some medium-run impacts on belief updating.

Social Desirability. Social desirability bias does not drive the immediate and three weeks effects of the masculinity discussions on misperceptions. Empirically, social desirability bias could play a role if the effects of the discussions were stronger among people with high baseline scores of social desirability. However, the estimates in Table B13 suggest that having a high likelihood of giving socially desirable answers—measured by the [Crowne and Marlowe \(1960\)](#) social desirability index—do not predict statistically significant treatment effects on misperceptions. The only exception is in Panel C, where the coefficient on the interaction between *High Social Desirability Score* and *Voluntary* 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.

Relationship with Speakers. DO PEOPLE UPDATE MORE/LESS IF A PERSON I ADMIRE/LIST AS FRIEND SPEAK IN THE DISCUSSION? (REDUCED FORM - AMONG PARTICIPANTS IN THE RANDOMIZED GROUP)

School Violence. Heterogeneity by school levels of violence from admin data, if can find the publicly available data with school identifiers. Could also do heterogeneity by being in a favela vs not or can also define low vs high violent schools based on shootings around the school

4.2 Supplementary Experiment

Misperceived Social Norms. Boys and girls overestimate their peers' levels of agreement with statements about traditional masculinity to a similar extent as in the main experiment (Figure A16). Boys' average guesses are that 32% and 26% of other boys and 30% and 16% of girls in their

classroom agree with the masculinity statements about crying and violence, respectively (Panel a). Boys' baseline average level of agreement with the statement about crying is 12%, and 13% for the statement about violence; and girls' levels are 7% and 6%, respectively. These numbers result in average boys' wedges about boys' beliefs of 20 and 13p.p., and about girls' beliefs of 22 and 10p.p. about crying and violence, respectively. Girls are equally incorrect about their peers' beliefs about masculinity (Panel b).

Effects of Discussions with Friends. The masculinity discussions in which people choose who they want to be with reduce boys' misperceptions about other boys and reduce girls' misperceptions, but do not change boys' misperceptions about girls (Figure 6). Boys' average misperception about boys' beliefs about crying and violence reduce to 5p.p. and 7p.p. among the treated group, compared to 19p.p. and 12p.p. in the control group ($p < 0.01$ and $p = 0.1$, respectively). Boys' misperceptions about girls' beliefs about crying and about violence do not change ($p = 0.33$ and $p = 0.57$, respectively). The discussions are also effective in shifting girls' beliefs about boys' and girls' views (Panel b). Hence, differently from the main experiment, masculinity discussions with selected peers do not reduce boys' misperceptions about girls' views, and reduce girls' misperceptions about other girls' views about violence.

Sex Composition. The misperceptions of boys' in boys-only group reduce only regarding other boys' views about crying ($p = 0.01$), whereas boys' misperceptions about girls' views even increase in magnitude (Figure A17, Panel a). Once in groups with girls, boys' misperceptions reduce across all domains, except regarding girls' views about violence ($p = 0.45$). On the other hand, the effects of the discussions for girls are fairly similar depending on whether they are in girls-only or in mixed-sex groups, with girls' misperceptions about boys suggestively reducing even when they are in the girls-only groups (Panel b).

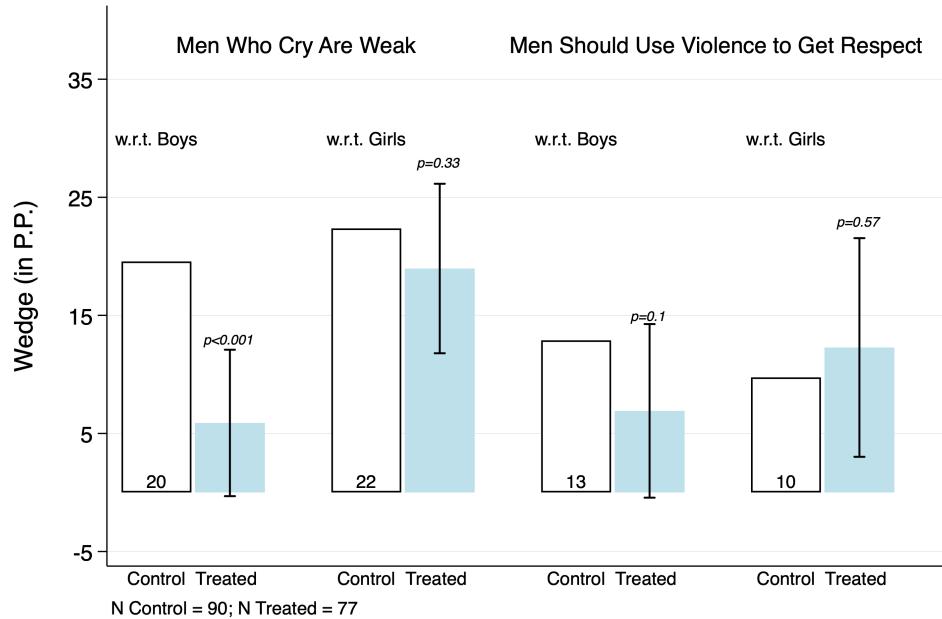
Add a summary of the results and how they link to the hypotheses.

5 Downstream Outcomes

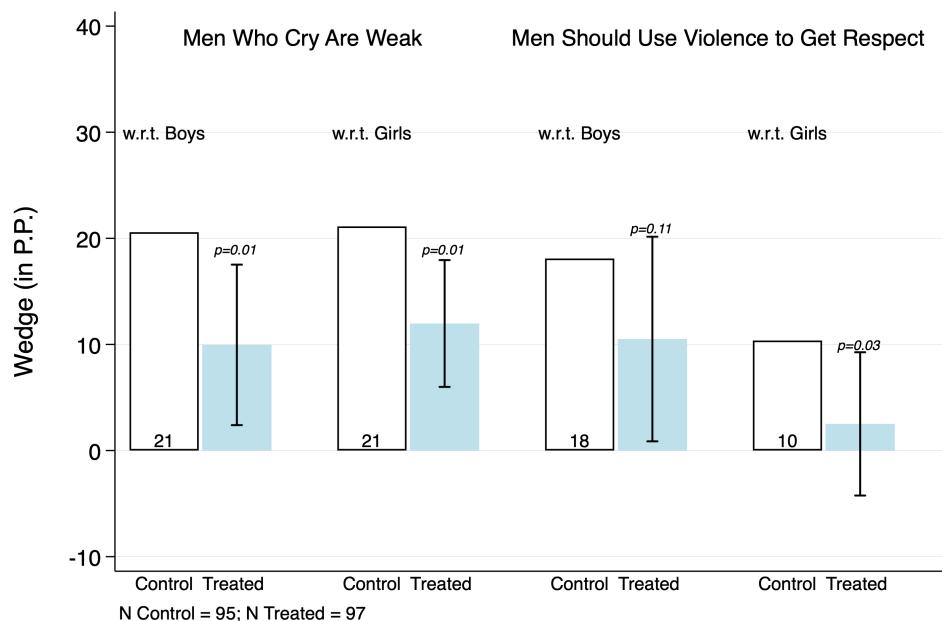
First-Order Beliefs. Immediately after the discussions, treated boys and girls become about 50% less likely to agree with the statement about crying, compared to the control mean (Table B14 - Panel A Columns 1 and 2). There are no significant effects on the beliefs about violence (Panel A Columns 3 and 4). Effects are similar across the *Voluntary* and *Randomized* treatments. In the medium-run, boys' beliefs with respect to both statements become about 50% more progressive for those in the *Randomized* group, whereas I do not find significant effects for boys in the *Voluntary* group (Table B14 - Panel B Columns 1 and 3). Estimates for girls are, statistically

Figure 6: Self-Selected Discussions Reduce Misperceptions

(a) Boys



(b) Girls



Notes:

and in magnitude, close to zero (Table B14 - 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 B14 - 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 B17). For simplicity, I pool both treatments, but the results are similar across them (see Table B18). 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.

Social Image Concerns. Table B15 (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 B16 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.

Behavioral Outcomes. Three weeks after the intervention, the discussion treatments have no effects on boys' self- and peer-reported behaviors. Table B19 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 B20 (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 B20 (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.

6 Why Don't Adolescents Talk About Masculinity?

Having shown causal and descriptive evidence that adolescents do not talk about masculinity, I now provide suggestive evidence that miscalibrated views about how these conversations hinder organic conversations.

In addition, evidence on open-text responses on why adolescents do not talk about it indicates that some of them..

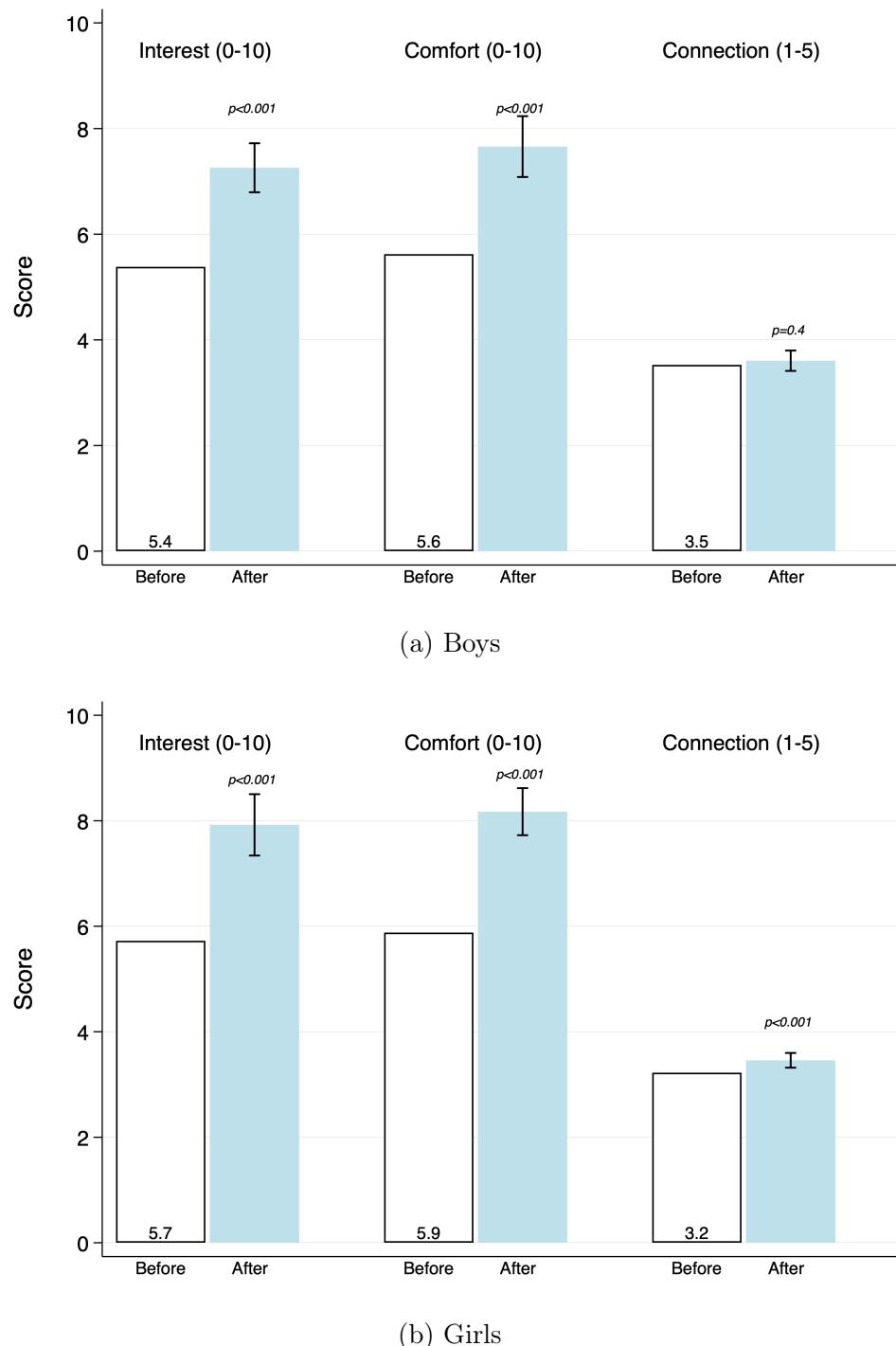
Barriers to Communication. Figure 7

7 Conclusion

NEED TO REWRITE!

This paper shows that lack of communication is an important driver for the persistence of

Figure 7: Boys and Girls Underestimate Interest and Comfort in the Masculinity Discussions



Notes: This figure plots students' perceptions about the discussions before and after they took place.

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: Voluntary students are similar to Randomized ones in all domains, with the exception of a Voluntaryity 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 can 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.

References

- Alesina, A., Giuliano, P., and Nunn, N. (2013). On the origins of gender roles: Women and the plough. *The quarterly journal of economics*, 128(2):469–530.
- Andre, P., Haaland, I., Roth, C., and Wohlfart, J. (2021). Narratives about the macroeconomy.
- Baranov, V., De Haas, R., and Grosjean, P. (2023). Men, male-biased sex ratios and masculinity norms: evidence from australia's colonial past. *Journal of Economic Growth*, 28(3):339–396.
- Barker, G. (2005). *Dying to be men: Youth, masculinity and social exclusion*. Routledge.
- Bénabou, R. and Tirole, J. (2016). Mindful economics: The production, consumption, and value of beliefs. *Journal of Economic Perspectives*, 30(3):141–164.
- Bertrand, M., Kamenica, E., and Pan, J. (2015). Gender identity and relative income within households. *The Quarterly Journal of Economics*, 130(2):571–614.
- Bhana, D. and Mayeza, E. (2016). We don't play with gays, they're not real boys... they can't fight: Hegemonic masculinity and (homophobic) violence in the primary years of schooling. *International journal of educational development*, 51:36–42.
- Bicchieri, C. (2005). *The grammar of society: The nature and dynamics of social norms*. Cambridge University Press.
- Bicchieri, C. (2016). *Norms in the wild: How to diagnose, measure, and change social norms*. Oxford University Press.
- Blattman, C., Jamison, J. C., and Sheridan, M. (2017). Reducing crime and violence: Experimental evidence from cognitive behavioral therapy in liberia. *American Economic Review*, 107(4):1165–1206.
- Bosson, J. K., Vandello, J. A., Burnaford, R. M., Weaver, J. R., and Arzu Wasti, S. (2009). Precarious manhood and displays of physical aggression. *Personality and Social Psychology Bulletin*, 35(5):623–634.
- Braghieri, L. (2021). Political correctness, social image, and information transmission. *Work Pap., Stanfod Univ., Stanfod, CA*.
- Bursztyn, L., González, A. L., and Yanagizawa-Drott, D. (2020). Misperceived social norms: Women working outside the home in saudi arabia. *American economic review*, 110(10):2997–3029.
- Bursztyn, L. and Yang, D. Y. (2022). Misperceptions about others. *Annual Review of Economics*, 14:425–452.
- Carrigan, T., Connell, B., and Lee, J. (1985). Toward a new sociology of masculinity. *Theory and society*, 14(5):551–604.
- Cheryan, S., Cameron, J. S., Katagiri, Z., and Monin, B. (2015). Manning up. *Social Psychology*.

- Connell, R. W. (1987). Hegemonic masculinity and emphasized femininity. *Gender and power: Society, the person, and sexual politics*, pages 183–88.
- Connell, R. W. (2020). *Masculinities*. Routledge.
- Cross, S. and Bagilhole, B. (2002). Girls' jobs for the boys? men, masculinity and non-traditional occupations. *Gender, Work & Organization*, 9(2):204–226.
- Crowne, D. P. and Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of consulting psychology*, 24(4):349.
- Cruzado-RJ, F. (2024). Mapa histórico dos grupos armados. <https://geni.uff.br/2024/06/04/atualizacao-do-mapa-historico-dos-grupos-armados/>.
- Dean, J. T. and Jayachandran, S. (2019). Changing family attitudes to promote female employment. In *AEA Papers and Proceedings*, volume 109, pages 138–42.
- Dhar, D., Jain, T., and Jayachandran, S. (2022). Reshaping adolescents' gender attitudes: Evidence from a school-based experiment in india. *American Economic Review*, 112(3):899–927.
- Ferrara, E. L., Chong, A., and Duryea, S. (2012). Soap operas and fertility: Evidence from brazil. *American Economic Journal: Applied Economics*, 4(4):1–31.
- Ferrario, B. and Stantcheva, S. (2022). Eliciting people's first-order concerns: text analysis of open-ended survey questions. In *AEA Papers and Proceedings*, volume 112, pages 163–69.
- Gibbs, A., Myrttinen, H., Washington, L., Sikweyiya, Y., and Jewkes, R. (2020). Constructing, reproducing and challenging masculinities in a participatory intervention in urban informal settlements in south africa. *Culture, health & sexuality*, 22(5):535–550.
- Giuliano, P. (2020). Gender and culture. *Oxford Review of Economic Policy*, 36(4):944–961.
- Heller, S. B., Shah, A. K., Guryan, J., Ludwig, J., Mullainathan, S., and Pollack, H. A. (2017). Thinking, fast and slow? some field experiments to reduce crime and dropout in chicago. *The Quarterly Journal of Economics*, 132(1):1–54.
- Ho, Y. and Huang, Y. (2024). Breaking the spiral of silence.
- Hossain, M., Zimmerman, C., Kiss, L., Abramsky, T., Kone, D., Bakayoko-Topolska, M., Annan, J., Lehmann, H., and Watts, C. (2014). Working with men to prevent intimate partner violence in a conflict-affected setting: a pilot cluster randomized controlled trial in rural côte d'ivoire. *BMC public health*, 14:1–13.
- INEP (2021). Sistema nacional de avaliação básica (saeb). *Ministério da Educação*.
- Jakupcak, M., Lisak, D., and Roemer, L. (2002). The role of masculine ideology and masculine gender role stress in men's perpetration of relationship violence. *Psychology of Men & Masculinity*, 3(2):97.
- Kågesten, A., Gibbs, S., Blum, R. W., Moreau, C., Chandra-Mouli, V., Herbert, A., and Amin, A. (2016). Understanding factors that shape gender attitudes in early adolescence globally: A mixed-methods systematic review. *PloS one*, 11(6):e0157805.

- Kardas, M., Kumar, A., and Epley, N. (2022). Overly shallow?: Miscalibrated expectations create a barrier to deeper conversation. *Journal of Personality and Social Psychology*, 122(3):367.
- Kimmel, M. S., Hearn, J., and Connell, R. W. (2004). *Handbook of studies on men and masculinities*. Sage Publications.
- Kimmel, M. S., Messner, M. A., et al. (1989). *Men's lives*, volume 115. Macmillan New York.
- Kitts, J. A. (2003). Egocentric bias or information management? selective disclosure and the social roots of norm misperception. *Social Psychology Quarterly*, pages 222–237.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-development approach. *Moral development and behavior: Theory research and social issues*, pages 31–53.
- Kuran, T. (1998). *Private truths, public lies: The social consequences of preference falsification*. Harvard University Press.
- Levant, R. F., Smalley, K. B., Aupont, M., House, A. T., Richmond, K., and Noronha, D. (2007). Initial validation of the male role norms inventory-revised (mrni-r). *The Journal of men's Studies*, 15(1):83–100.
- Lundgren, R., Beckman, M., Chaurasiya, S. P., Subedi, B., and Kerner, B. (2013). Whose turn to do the dishes? transforming gender attitudes and behaviours among very young adolescents in nepal. *Gender & Development*, 21(1):127–145.
- Mahalik, J. R., Burns, S. M., and Syzdek, M. (2007). Masculinity and perceived normative health behaviors as predictors of men's health behaviors. *Social science & medicine*, 64(11):2201–2209.
- Mahalik, J. R. and Rochlen, A. B. (2006). Men's likely responses to clinical depression: What are they and do masculinity norms predict them? *Sex roles*, 55:659–667.
- Marks, G. and Miller, N. (1987). Ten years of research on the false-consensus effect: An empirical and theoretical review. *Psychological bulletin*, 102(1):72.
- Markus, H. and Nurius, P. (1986). Possible selves. *American psychologist*, 41(9):954.
- Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of general psychology*, 2(2):175–220.
- OECD (2020). How's life? 2020: Measuring well-being.
- Oransky, M. and Fisher, C. (2009). The development and validation of the meanings of adolescent masculinity scale. *Psychology of Men & Masculinity*, 10(1):57.
- Paluck, E. L. (2009). Reducing intergroup prejudice and conflict using the media: a field experiment in rwanda. *Journal of personality and social psychology*, 96(3):574.
- Paluck, E. L. and Shepherd, H. (2012). The salience of social referents: a field experiment on collective norms and harassment behavior in a school social network. *Journal of personality and social psychology*, 103(6):899.

- Paluck, E. L., Shepherd, H., and Aronow, P. M. (2016). Changing climates of conflict: A social network experiment in 56 schools. *Proceedings of the National Academy of Sciences*, 113(3):566–571.
- Pérez-Martínez, V., Marcos-Marcos, J., Cerdán-Torregrosa, A., Briones-Vozmediano, E., Sanz-Barbero, B., Davó-Blanes, M., Daoud, N., Edwards, C., Salazar, M., La Parra-Casado, D., et al. (2023). Positive masculinities and gender-based violence educational interventions among young people: a systematic review. *Trauma, Violence, & Abuse*, 24(2):468–486.
- Pleck, J. H. (1995). Men's power with women, other men, and society: A men's movement analysis. In *The gender gap in psychotherapy: Social realities and psychological processes*, pages 79–89. Springer.
- Postlewaite, A. (2011). Social norms and preferences, chapter for the handbook for social economics edited by j. benhabib, a. bisin and m. jackson. In *Handbook of social economics*, volume 1, pages 31–67. Elsevier.
- Poteat, V. P., Kimmel, M. S., and Wilchins, R. (2011). The moderating effects of support for violence beliefs on masculine norms, aggression, and homophobic behavior during adolescence. *Journal of Research on Adolescence*, 21(2):434–447.
- Reeves, R. (2022). *Of Boys and Men: Why the Modern Male is Struggling, why it Matters, and what to Do about it*. Brookings Institution Press.
- Reidy, D. E., Shirk, S. D., Sloan, C. A., and Zeichner, A. (2009). Men who aggress against women: Effects of feminine gender role violation on physical aggression in hypermasculine men. *Psychology of Men & Masculinity*, 10(1):1.
- Rosen, N. L. and Nofziger, S. (2019). Boys, bullying, and gender roles: How hegemonic masculinity shapes bullying behavior. *Gender Issues*, 36(3):295–318.
- Shah, M., Seager, J., Montalvao, J., and Goldstein, M. (2023). Sex, power, and adolescence: Intimate partner violence and sexual behaviors. Technical report, National Bureau of Economic Research.
- Sherif, M. (1936). The psychology of social norms.
- Shiller, R. J. (2017). Narrative economics. *American economic review*, 107(4):967–1004.
- Steinberg, L. D. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Houghton Mifflin Harcourt.
- Taylor, A., Moura, T., and Barker, G. (2016). This isn't the life for you: Masculinities and nonviolence in rio de janeiro, brazil. results from the international men and gender equality survey (images) with a focus on urban violence. *Washington, DC and Rio de Janeiro, Brazil: Promundo*, 2016.
- Thaler, R. H. (2000). From homo economicus to homo sapiens. *Journal of economic perspectives*, 14(1):133–141.
- Thompson Jr, E. H. and Bennett, K. M. (2015). Measurement of masculinity ideologies: A (critical) review. *Psychology of Men & Masculinity*, 16(2):115.

- Thompson Jr, E. H. and Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist*, 29(5):531–543.
- Thorne, B. (1993). *Gender play: Girls and boys in school*. Rutgers University Press.
- UNODC (2019). Global study on homicide.
- UNODC (2023). Global study on homicide.
- Way, N. (2011). *Deep secrets: Boys' friendships and the crisis of connection*. Harvard University Press.
- Way, N. (2024). *Rebels with a Cause: Reimagining Boys, Ourselves, and Our Culture*. Dutton.
- Way, N., Cressen, J., Bodian, S., Preston, J., Nelson, J., and Hughes, D. (2014). “it might be nice to be a girl... then you wouldn’t have to be emotionless”: Boys’ resistance to norms of masculinity during adolescence. *Psychology of Men & Masculinity*, 15(3):241.
- Webb, D. (2024). Silence to solidarity: Using group dynamics to reduce anti-transgender discrimination in india.
- Wong, Y. J., Ho, M.-H. R., Wang, S.-Y., and Miller, I. (2017). Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of counseling psychology*, 64(1):80.

ONLINE APPENDIX

We Don't Talk About Boys: Masculinity Norms Among Adolescents in Brazil

Ieda Matavelli

University of New South Wales

Online Appendix A: Supplementary Figures

Figure A1: Roadmap of Discussions

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!

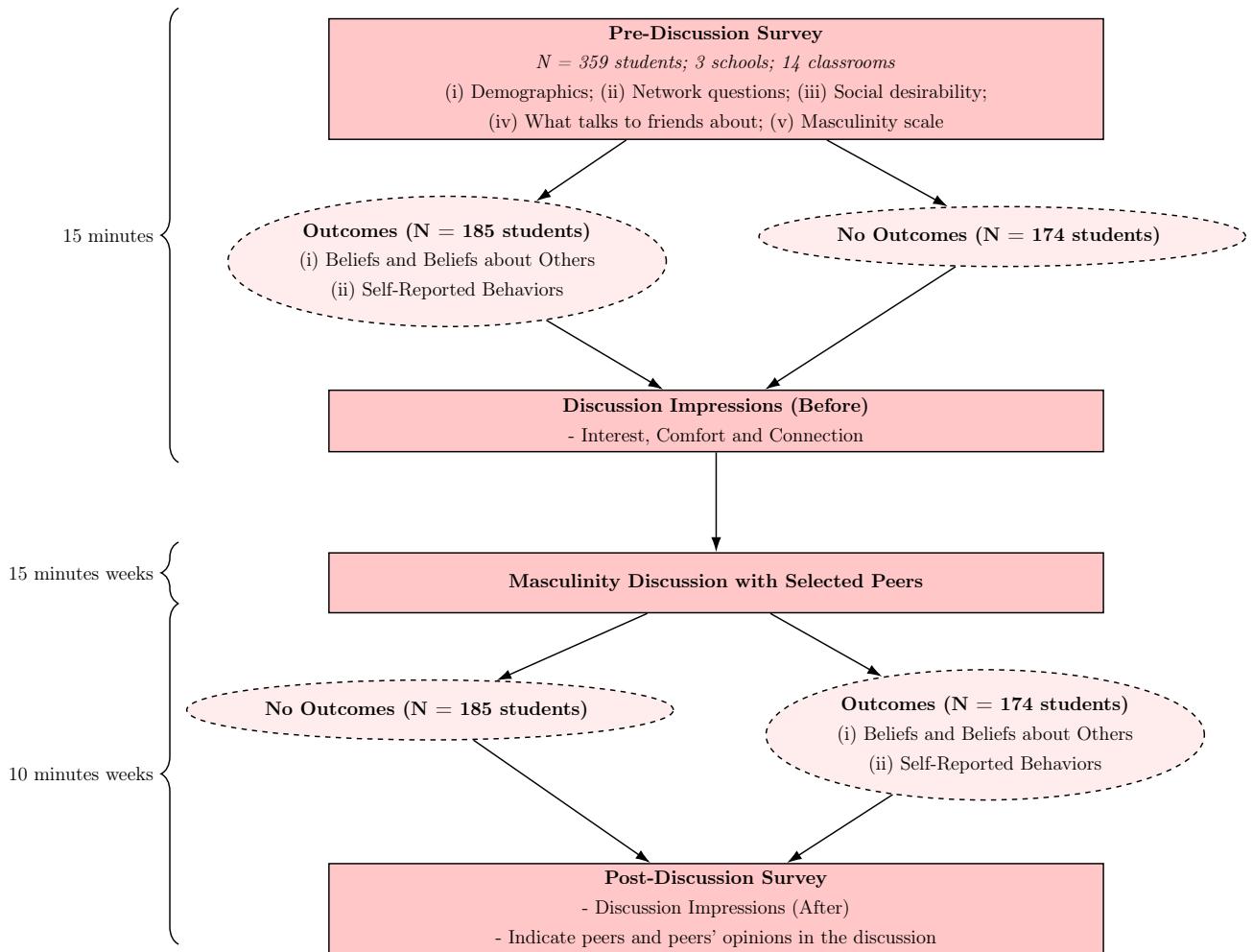
Figure A2: Main Experiment Discussion Session Setting



Figure A3: Observers Form

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: Experimental Design - Supplementary Experiment



Note: This figure presents the design of the supplementary experiment. All participants engaged in a discussion about masculinity with peers they selected. To estimate the causal effects of the discussion, I randomized the outcome variables elicitation to be before or after it, stratified by sex.

Figure A5: Supplementary Experiment Discussion Session Setting



Figure A6: Supplementary Experiment Discussion Group Size

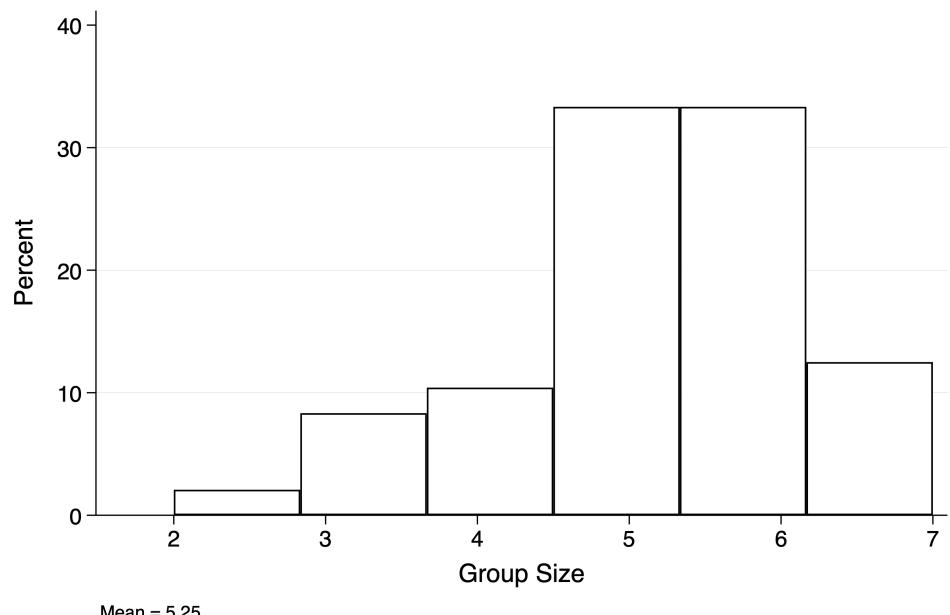


Figure A7: Supplementary Experiment Share of Boys Within Group

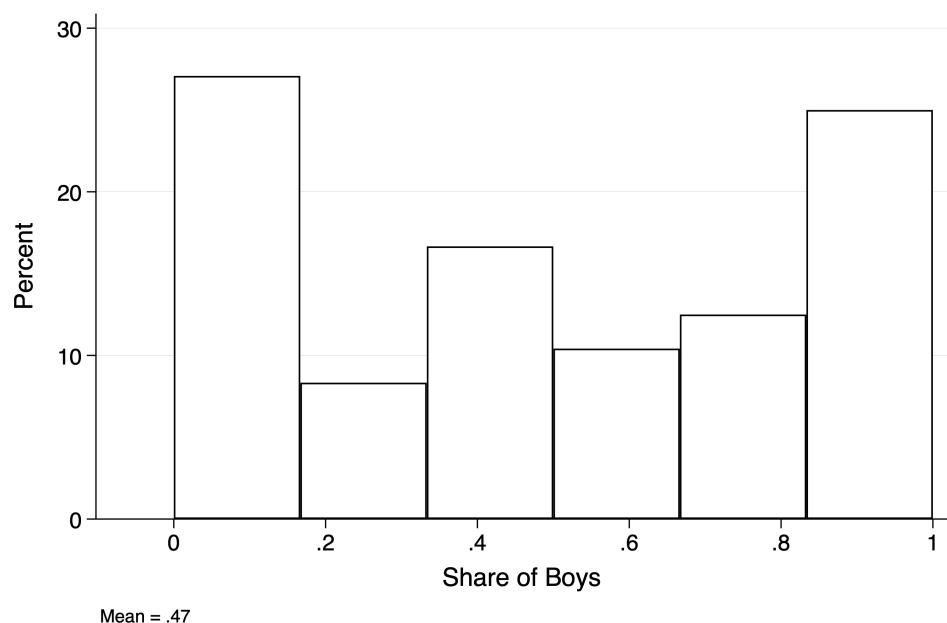


Figure A8: Baseline Survey

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

Baseline Survey (Continued)

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

Figure A9: Endline Survey 1 - Immediately After Treatment

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.

Endline Survey 1 - Immediately After Treatment (Continued)

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.

Figure A10: Endline Survey 2 - 3 Weeks After Treatment

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 address 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
(<input type="checkbox"/> yes (<input type="checkbox"/> 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}
(<input type="checkbox"/> I want to post this image on my Instagram and will upload a screenshot to confirm. (<input type="checkbox"/> I do not want to post this image on my Instagram. (<input type="checkbox"/> I do not own an Instagram account.

Figure A11: Endline Survey 2 - 3 Weeks After Treatment (Continued)

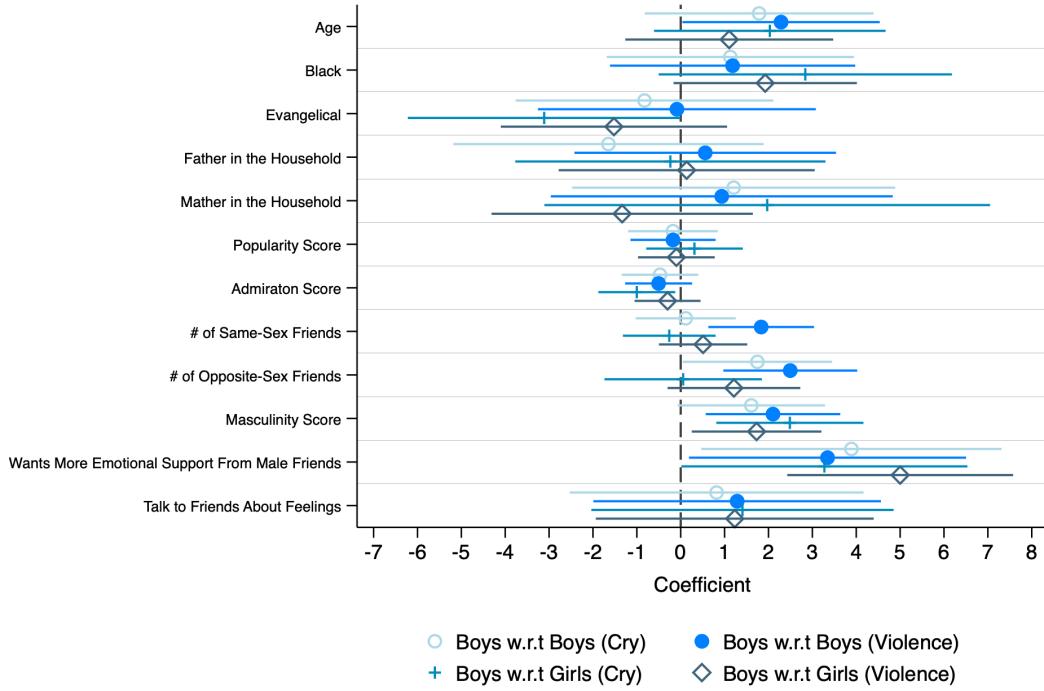
Please upload a screenshot of your Instagram to attest you posted the image on your story or feed.

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

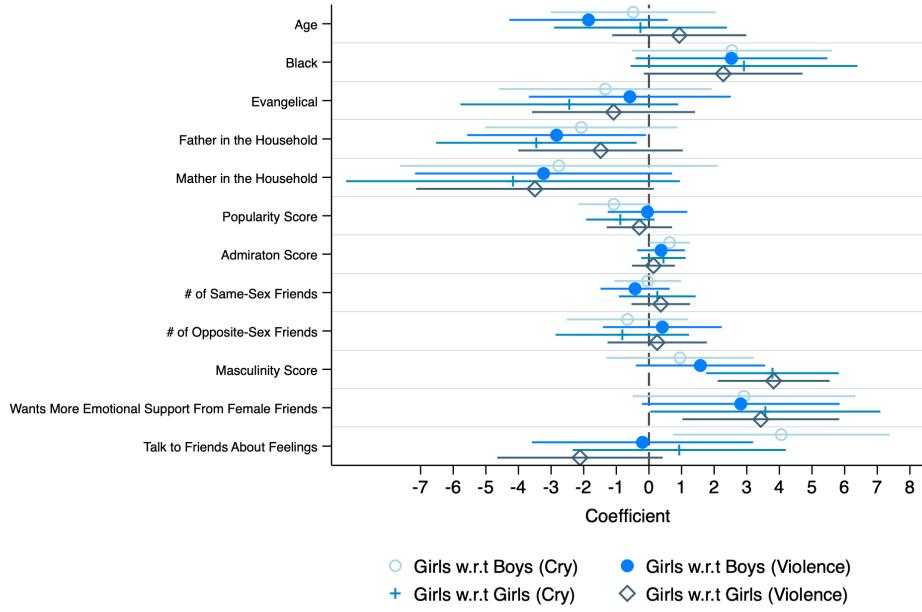
{Box for upload}



Figure A12: Correlates of Misperceptions



(a) Boys

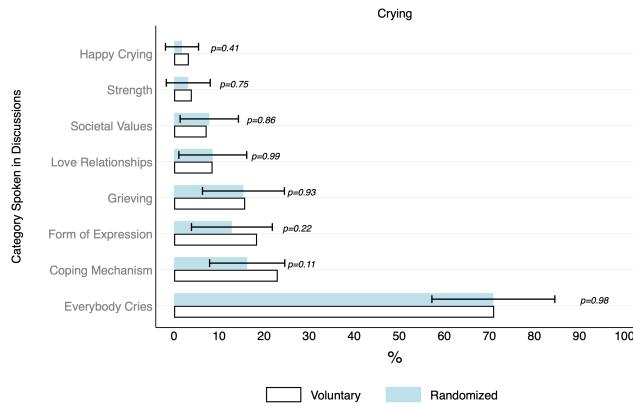


(b) Girls

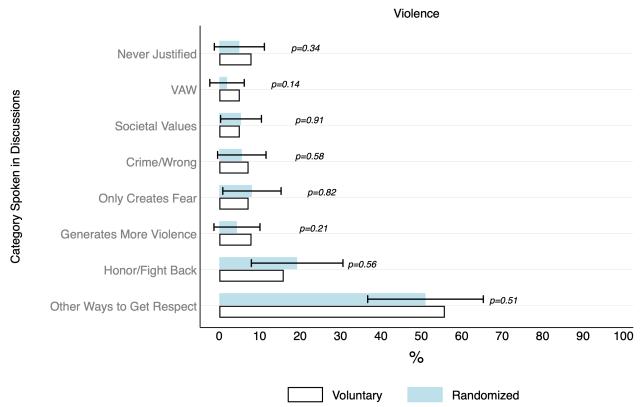
Note: This figure plots the regression coefficients of the boys' (Panel a) and girls' (Panel b) misperceptions about crying and violence on a series of baseline characteristics. The regression includes treatment dummies and school-classroom fixed effects. Horizontal bars indicate 90% confidence intervals. Standard errors are clustered at the school-classroom level.

Figure A13: Narratives to Justify Opinions During the Masculinity Sessions

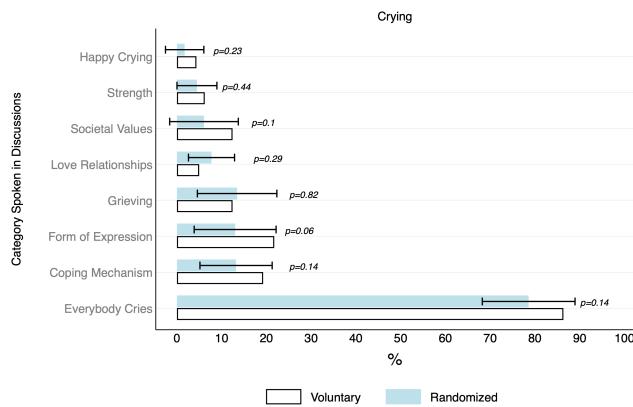
(a) Boys - Men Who Cry Are Weak



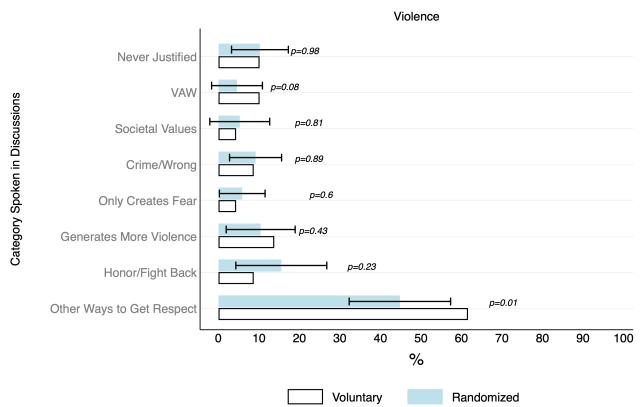
(b) Boys - Men Should Use Violence



(c) Girls - Men Who Cry Are Weak

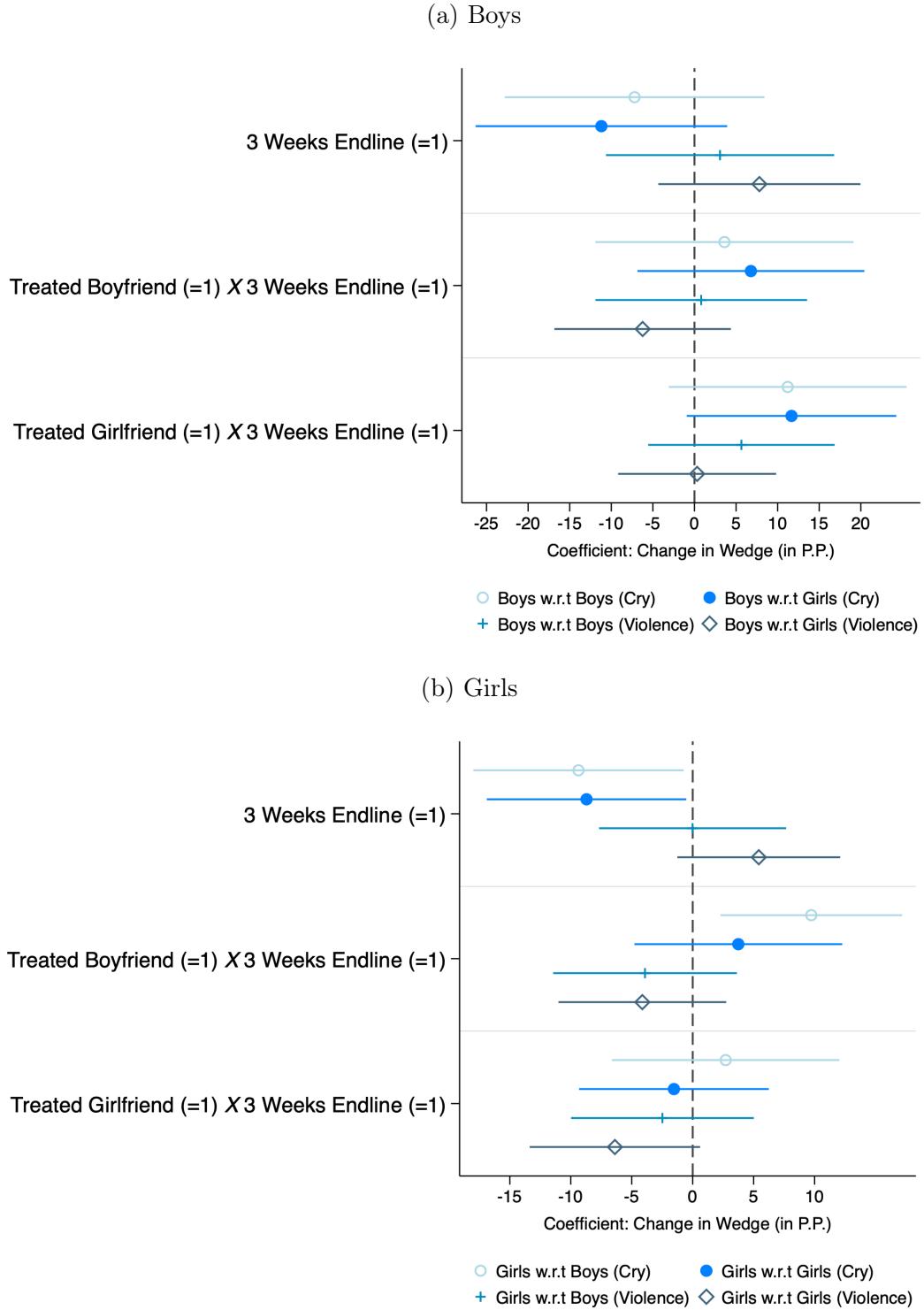


(d) Girls - Men Should Use Violence



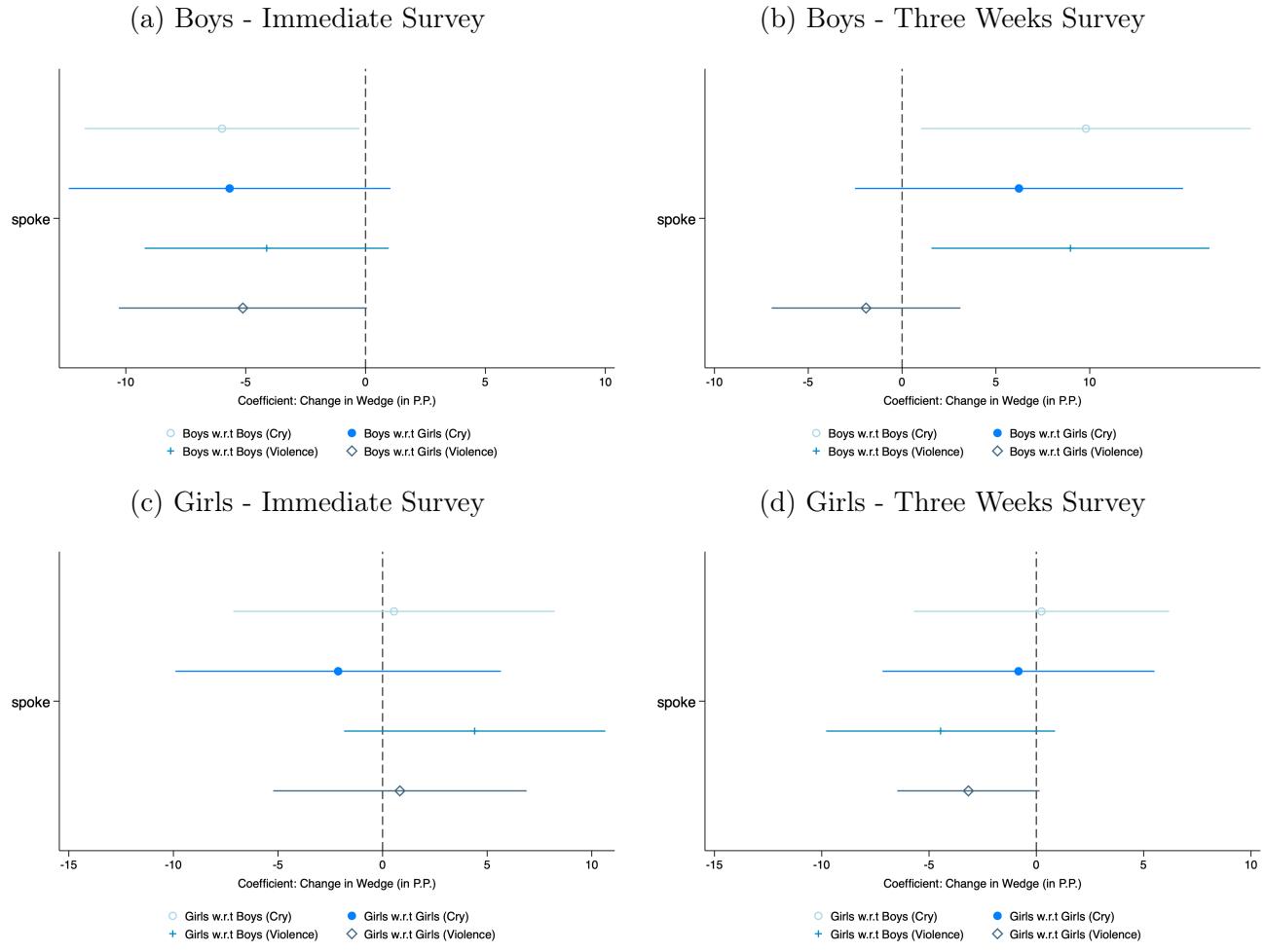
Notes: This figure plots the distribution of topics discussed in the masculinity sessions, separated by boys and girls and by discussion type (i.e. *Voluntary* and *Randomized*). The bars represent the percentage of times a topic was mentioned. Note that the categories were not mutually exclusive, so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

Figure A14: Change in Misperceptions Between the Immediate and the Three Weeks Follow Up, Among the Control Group



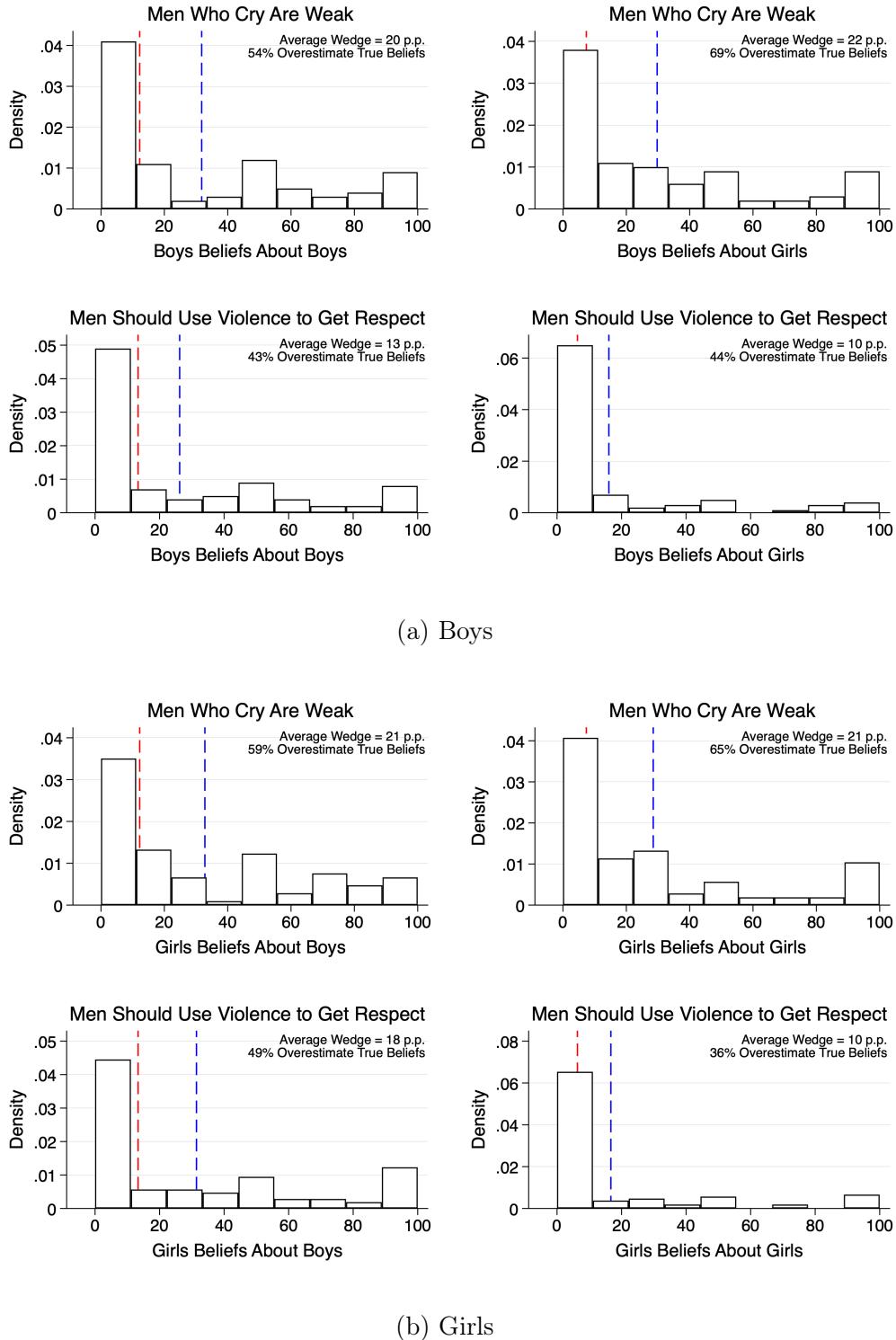
Notes: This figure plots the coefficients of regressions among control participants from their wedges with respect to boys' and girls' beliefs on a dummy equals 1 if the wedge was measured in the three weeks endline and 0 if it was measured in the immediate endline; an interaction term between a dummy equals 1 if they have at least one treated boyfriend and the three weeks endline dummy; an interaction term between a dummy equals 1 if they have at least one treated girlfriend and the three weeks endline dummy; including individual fixed effects. Horizontal bars indicate 90% confidence intervals. Standard errors are clustered at the school-classroom level.

Figure A15: Causal Effects of Speaking vs Listening in the *Randomized* Discussions



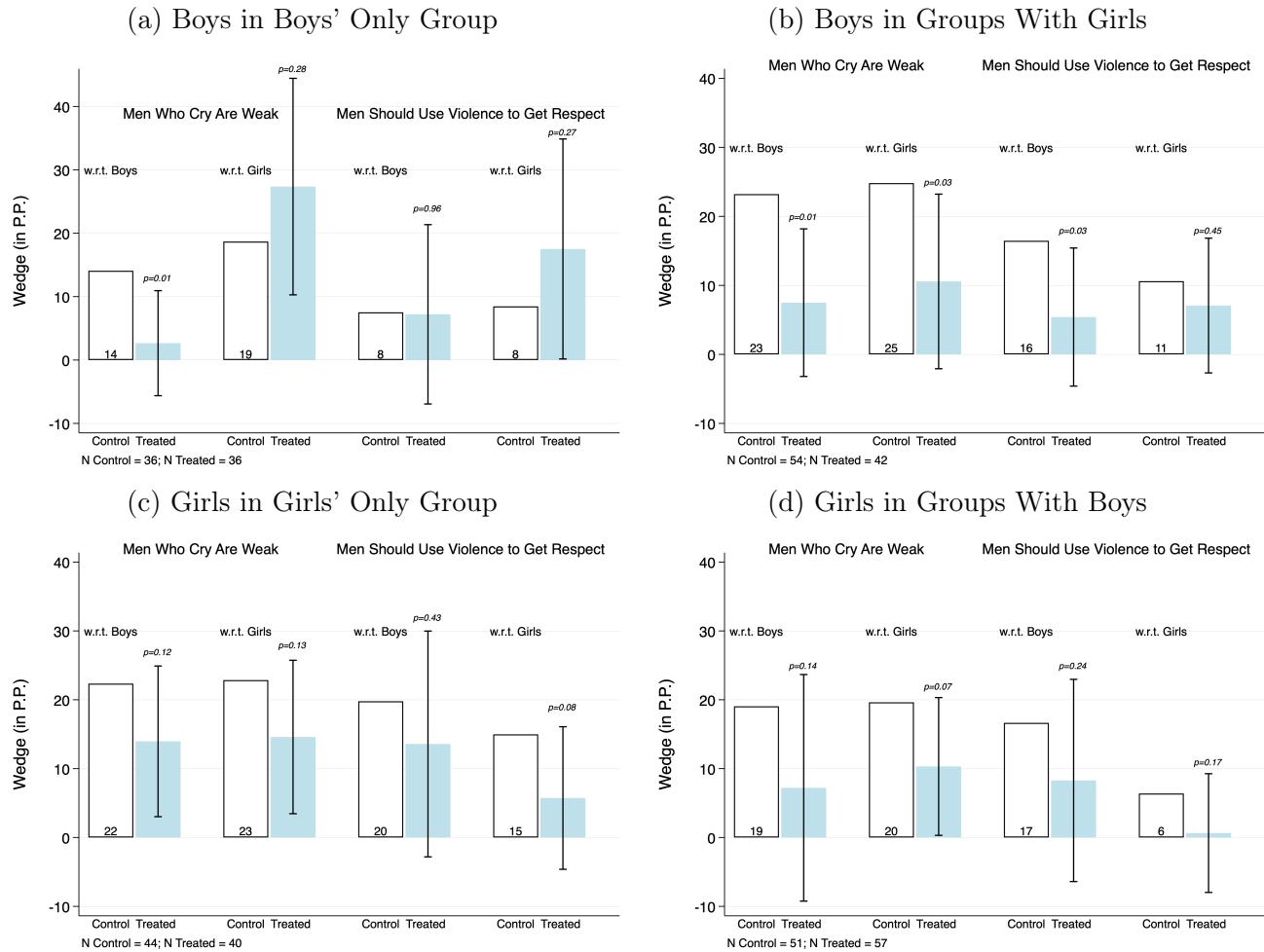
Notes: This figure plots the coefficients on the effects of speaking in the *Randomized* discussions. The coefficients are from an IV regression, in which I instrument the realized speaking in the regression by the theoretical random assignment for speaking. The dependent variables are the immediate (Panels a and c) three weeks misperceptions (Panels b and d). I control for the misperception at the immediate survey in the regressions for the three weeks misperceptions. All regressions include school-fixed effects. Standard errors clustered at the school-classroom level.

Figure A16: Distribution of Second Order Beliefs About Masculinity (Supplementary Experiment)



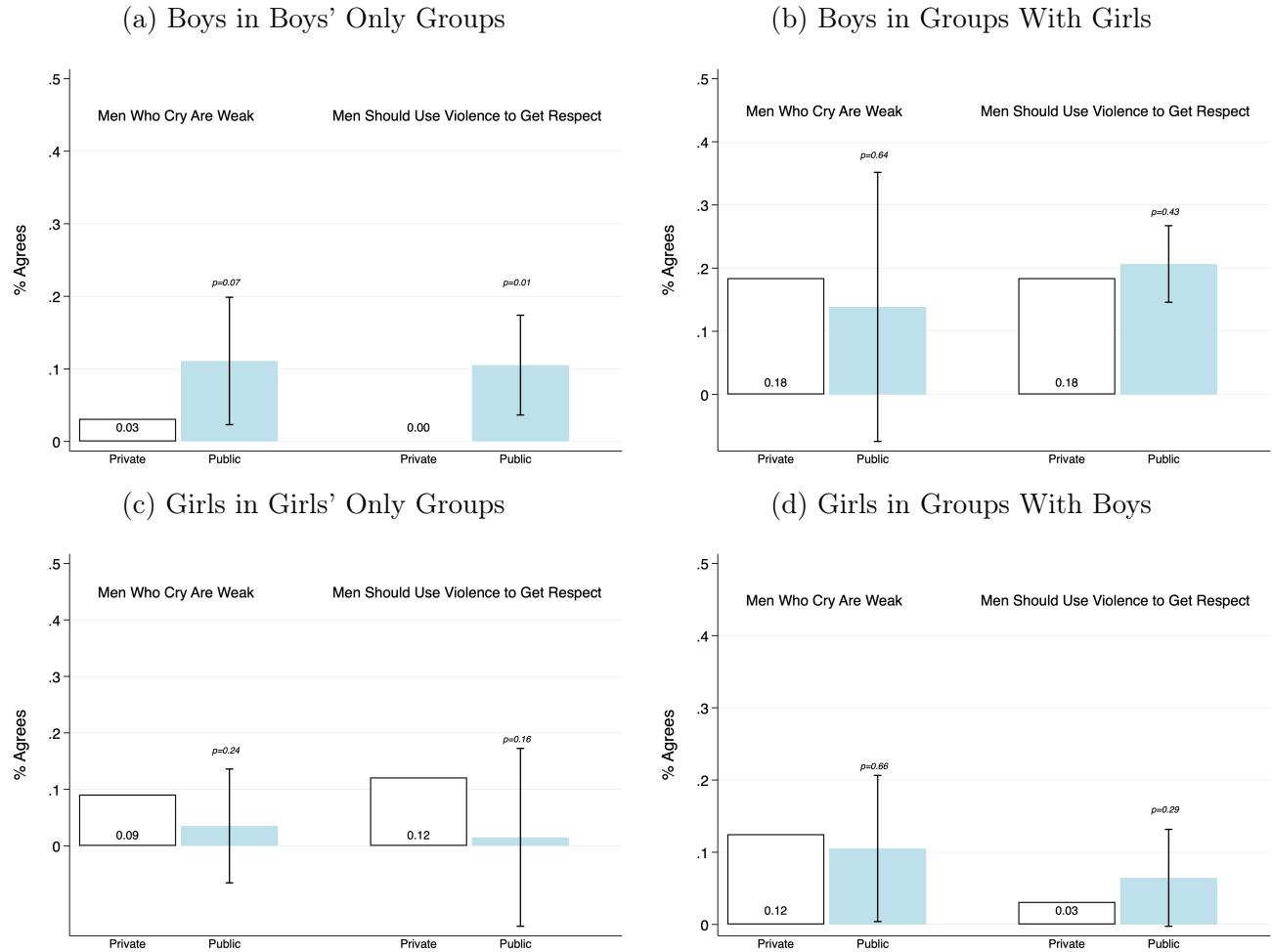
Notes: This figure plots the distribution of boys' and girls' endline guesses in the control group about the share of their male and female classmates they think agree with the statements *men who cry are weak* and *men should use violence to get respect if necessary* (i.e. their second order beliefs). The sample consists of 376 girls and 328 boys in the control group, as the second-order beliefs are only elicited at the endline. **Red** dashed line plots average first order beliefs. **Blue** dashed line plots average second order beliefs.

Figure A17: Effects By Sex Composition of the Group (Supplementary Experiment)



Notes:

Figure A18: Boys in Boys-Only Group Are More Masculine in Public, Whereas Girls in Girls-Only Group Are Less Masculine in Public (Supplementary Experiment)



Notes: The public opinions are the average reported opinions across all reporters. This includes control participants' opinions only (i.e., those who responded to the outcome variables before the discussion).

Online Appendix B: Supplementary Tables

Table B1: Schools' Characteristics - All and Study Schools

	All Schools	Main Experiment	Small-Scale	All-Main P-Value	All-Small P-Value	Main-Small P-Value	Joint P-Value
Boys	0.51 (0.03)	0.51 (0.04)	0.50 (0.02)	0.40	0.55	0.70	0.49
Black	0.55 (0.09)	0.54 (0.09)	0.57 (0.16)	0.68	0.65	0.70	0.88
Students per Class	32.94 (4.21)	33.23 (3.31)	32.25 (4.25)	0.74	0.78	0.64	0.86
Students per Teacher	20.51 (24.01)	12.41 (5.22)	11.02 (6.92)	0.11	0.49	0.69	0.00***
Internet for Learning	0.52 (0.50)	0.68 (0.48)	0.33 (0.58)	0.13	0.51	0.23	0.22
Lunchroom	0.99 (0.12)	0.95 (0.21)	1.00 (0.00)	0.23	0.83	0.31	0.01**
Sport Court	0.83 (0.38)	0.82 (0.39)	1.00 (0.00)	0.91	0.43	0.03**	0.00***
Green Area	0.43 (0.50)	0.36 (0.49)	0.67 (0.58)	0.54	0.40	0.30	0.56
Number of Classrooms in Use	14.06 (5.41)	13.05 (4.80)	16.33 (7.51)	0.37	0.47	0.37	0.49
Student Union	0.83 (0.37)	0.91 (0.29)	1.00 (0.00)	0.33	0.44	0.14	0.00***
Accessible Facilities	0.59 (0.49)	0.50 (0.51)	0.33 (0.58)	0.36	0.36	0.57	0.41

Source: 2021 Brazilian School Census

Table B2: Students' Characteristics - Comparison Main and Supplementary Experiments

	Boys			Girls		
	Main Experiment	Small-Scale	P-Value	Main Experiment	Small-Scale	P-Value
Age	13.95 (0.95)	14.03 (0.58)	0.08*	13.88 (0.87)	13.87 (0.60)	0.93
White	0.30 (0.46)	0.20 (0.40)	0.00***	0.32 (0.47)	0.27 (0.44)	0.02**
Black	0.65 (0.48)	0.78 (0.42)	0.00***	0.62 (0.48)	0.68 (0.47)	0.02**
Evangelical	0.41 (0.49)	0.32 (0.47)	0.00***	0.37 (0.48)	0.39 (0.49)	0.28
Catholic	0.20 (0.40)	0.15 (0.36)	0.01***	0.17 (0.38)	0.10 (0.30)	0.00***
Lives W/ Mother	0.84 (0.37)	0.87 (0.33)	0.08*	0.86 (0.35)	0.88 (0.33)	0.29
Lives W/ Father	0.46 (0.50)	0.38 (0.49)	0.00***	0.43 (0.50)	0.36 (0.48)	0.01***
Lives W/ Step Father	0.14 (0.35)	0.25 (0.43)	0.00***	0.14 (0.35)	0.16 (0.36)	0.49
Talks to Friends About Boys	0.09 (0.28)	0.09 (0.29)	0.89	0.51 (0.50)	0.42 (0.49)	0.00***
Talks to Friends About Girls	0.50 (0.50)	0.56 (0.50)	0.01**	0.32 (0.47)	0.24 (0.43)	0.00***
Talks to Friends About Situations That Made You Sad	0.16 (0.37)	0.13 (0.34)	0.14	0.46 (0.50)	0.41 (0.49)	0.05**
Agrees With Men Who Cry Are Weak	0.10 (0.30)	0.10 (0.30)	0.97	0.04 (0.21)	0.05 (0.22)	0.42
Agrees With Men Should Use Violence to Get Respect	0.17 (0.37)	0.12 (0.32)	0.01***	0.05 (0.22)	0.05 (0.22)	0.98
Social Desirability Score, 0-4	2.81 (0.97)	2.86 (0.97)	0.30	2.83 (0.94)	2.92 (0.92)	0.07*
Masculinity Score, 0-4	1.17 (1.03)	1.58 (1.07)	0.00***	0.54 (0.84)	1.15 (1.13)	0.00***

Notes:

Table B3: Balance Tests - Supplementary Experiment

	Boys			Girls		
	Treated	Control	P-Value	Treated	Control	P-Value
Age	14.01 (0.59)	14.05 (0.57)	0.36	13.87 (0.63)	13.88 (0.56)	0.87
White	0.22 (0.42)	0.18 (0.39)	0.23	0.39 (0.49)	0.15 (0.36)	0.00***
Black	0.76 (0.43)	0.80 (0.40)	0.22	0.53 (0.50)	0.83 (0.38)	0.00***
Evangelical	0.35 (0.48)	0.28 (0.45)	0.06*	0.37 (0.48)	0.42 (0.49)	0.21
Catholic	0.11 (0.32)	0.19 (0.40)	0.01***	0.09 (0.29)	0.11 (0.32)	0.41
Lives W/ Mother	0.87 (0.34)	0.88 (0.32)	0.56	0.92 (0.28)	0.84 (0.36)	0.01***
Lives W/ Father	0.34 (0.47)	0.43 (0.50)	0.02**	0.39 (0.49)	0.32 (0.47)	0.10*
Lives W/ Step Father	0.29 (0.45)	0.20 (0.40)	0.02**	0.16 (0.37)	0.15 (0.36)	0.88
Talks to Friends About Boys	0.11 (0.32)	0.06 (0.24)	0.04**	0.36 (0.48)	0.49 (0.50)	0.00***
Talks to Friends About Girls	0.56 (0.50)	0.56 (0.50)	0.93	0.19 (0.40)	0.28 (0.45)	0.02**
Talks to Friends About Situations That Made You Sad	0.16 (0.36)	0.10 (0.30)	0.06*	0.42 (0.49)	0.41 (0.49)	0.81
Social Desirability Score, 0-4	2.88 (0.92)	2.84 (1.03)	0.60	3.03 (0.92)	2.80 (0.91)	0.00***
Masculinity Score, 0-4	1.49 (1.13)	1.69 (0.99)	0.03**	1.06 (1.08)	1.24 (1.16)	0.07*

Notes:

	<i>Boys</i>				<i>Girls</i>		
	Vocal (N = 384)	Repr. (N = 383)	Control (N = 328)	P-Value -	Vocal (N = 411)	Repr. (N = 367)	(P)
Age	13.94 (0.97)	13.93 (0.99)	13.99 (0.86)	0.58	13.90 (0.87)	13.82 (0.85)	
White	0.27 (0.45)	0.29 (0.45)	0.35 (0.48)	0.09*	0.37 (0.48)	0.29 (0.46)	
Black	0.68 (0.47)	0.65 (0.48)	0.59 (0.49)	0.05**	0.59 (0.49)	0.64 (0.48)	
Evangelical	0.43 (0.50)	0.38 (0.49)	0.42 (0.49)	0.44	0.37 (0.48)	0.39 (0.49)	
Catholic	0.20 (0.40)	0.21 (0.41)	0.20 (0.40)	0.91	0.17 (0.37)	0.17 (0.38)	
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)	
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)	
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)	
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)	
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)	
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)	
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)	
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)	
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)	
Would Like More Emotional Support from Male Friends	0.42 (0.49)	0.46 (0.50)	0.40 (0.49)	0.18	-	-	

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 B4: WhatsApp Sample Characteristics - By Sex and Treatment Status

	<i>Boys</i>				<i>Girls</i>			
	Vocal (N = 126)	Repr. (N = 132)	Control (N = 117)	P-Value -	Vocal (N = 193)	Repr. (N = 132)	Control (N = 117)	P-Value -
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

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 B5: Schools' Characteristics - All and Study Schools

	All Schools	Main Experiment	Small-Scale	All-Main P-Value	All-Small P-Value	Main-Small P-Value	Joint P-Value
Boys	0.51 (0.03)	0.51 (0.04)	0.50 (0.02)	0.40	0.55	0.70	0.49
Black	0.55 (0.09)	0.54 (0.09)	0.57 (0.16)	0.68	0.65	0.70	0.88
Students per Class	32.94 (4.21)	33.23 (3.31)	32.25 (4.25)	0.74	0.78	0.64	0.86
Students per Teacher	20.51 (24.01)	12.41 (5.22)	11.02 (6.92)	0.11	0.49	0.69	0.00***
Internet for Learning	0.52 (0.50)	0.68 (0.48)	0.33 (0.58)	0.13	0.51	0.23	0.22
Lunchroom	0.99 (0.12)	0.95 (0.21)	1.00 (0.00)	0.23	0.83	0.31	0.01**
Sport Court	0.83 (0.38)	0.82 (0.39)	1.00 (0.00)	0.91	0.43	0.03**	0.00***
Green Area	0.43 (0.50)	0.36 (0.49)	0.67 (0.58)	0.54	0.40	0.30	0.56
Number of Classrooms in Use	14.06 (5.41)	13.05 (4.80)	16.33 (7.51)	0.37	0.47	0.37	0.49
Student Union	0.83 (0.37)	0.91 (0.29)	1.00 (0.00)	0.33	0.44	0.14	0.00***
Accessible Facilities	0.59 (0.49)	0.50 (0.51)	0.33 (0.58)	0.36	0.36	0.57	0.41

Source: 2021 Brazilian School Census

Table B6: Students' Characteristics - Comparison Main and Supplementary Experiments

	<i>Boys</i>			<i>Girls</i>		
	Main Experiment	Small-Scale	P-Value	Main Experiment	Small-Scale	P-Value
Age	13.95 (0.95)	13.97 (0.72)	0.80	13.88 (0.87)	13.77 (0.70)	0.10
White	0.30 (0.46)	0.28 (0.45)	0.51	0.32 (0.47)	0.34 (0.47)	0.69
Black	0.65 (0.48)	0.70 (0.46)	0.17	0.62 (0.48)	0.61 (0.49)	0.81
Evangelical	0.41 (0.49)	0.34 (0.48)	0.10	0.37 (0.48)	0.38 (0.49)	0.82
Catholic	0.20 (0.40)	0.16 (0.37)	0.21	0.17 (0.38)	0.16 (0.37)	0.77
Lives W/ Mother	0.84 (0.37)	0.87 (0.33)	0.26	0.86 (0.35)	0.85 (0.35)	0.82
Lives W/ Father	0.46 (0.50)	0.36 (0.48)	0.02**	0.43 (0.50)	0.38 (0.49)	0.20
Lives W/ Step Father	0.14 (0.35)	0.23 (0.42)	0.00***	0.14 (0.35)	0.14 (0.34)	0.78
Talks to Friends About Boys	0.09 (0.28)	0.10 (0.30)	0.76	0.51 (0.50)	0.47 (0.50)	0.24
Talks to Friends About Girls	0.50 (0.50)	0.51 (0.50)	0.77	0.32 (0.47)	0.28 (0.45)	0.22
Talks to Friends About Situations That Made You Sad	0.16 (0.37)	0.15 (0.36)	0.74	0.46 (0.50)	0.44 (0.50)	0.62
Agrees With Men Who Cry Are Weak	0.10 (0.30)	0.11 (0.31)	0.77	0.04 (0.21)	0.04 (0.20)	0.87
Agrees With Men Should Use Violence to Get Respect	0.17 (0.37)	0.17 (0.37)	0.99	0.05 (0.22)	0.05 (0.22)	0.96
Social Desirability Score, 0-4	2.81 (0.97)	2.83 (1.01)	0.79	2.83 (0.94)	2.77 (0.98)	0.45
Masculinity Score, 0-4	1.17 (1.03)	1.50 (1.06)	0.00 ***	0.54 (0.84)	1.04 (1.14)	0.00***

Notes:

Table B9: Balance Tests - Supplementary Experiment

Table B10: *Randomized* and *Voluntary* Speakers' Private and Public Opinions Comparison

	Private Opinions			Public Opinions		
	Cry	Violence	Mean	Cry	Violence	Mean
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Boys Who Spoke						
Vocal	-3.80 (2.69)	-11.59*** (4.27)	-7.70** (2.96)	0.02 (0.03)	-0.07 (0.06)	-0.03 (0.04)
Observations	329.00	329.00	329.00	328.00	329.00	329.00
Dep. Var. Mean (<i>Randomized</i> Speakers)	8.82	19.41	14.12	0.07	0.23	0.15
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Girls Who Spoke						
<i>Voluntary</i> Speakers (=1)	0.29 (1.78)	-1.98 (2.41)	-0.85 (1.71)	0.02 (0.01)	-0.02 (0.05)	0.00 (0.03)
Observations	332.00	332.00	332.00	332.00	332.00	332.00
Dep. Var. Mean (<i>Randomized</i> Speakers)	1.81	6.63	4.22	0.00	0.10	0.05
School FE	Yes	Yes	Yes	Yes	Yes	Yes

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

Notes: This table presents regression coefficients within the sample of speakers in the *Voluntary* and *Randomized* groups. The dependent variables are participants' private and public opinions about crying (Columns 1 and 4, respectively), violence (Column 2 and 5, respectively), and the average public and private opinions across crying and violence (Columns 3 and 6, respectively). The independent variable of interest is a dummy equals 1 if the speaker was in the *Voluntary* group, and 0 if in the *Randomized* group. All regressions include school fixed effects and standard errors clustered at the school-classroom level.

Table B11: Voluntary Speakers Only Differ From Randomized Ones in a Voluntaryity Score

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

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

Notes: This table presents regressions of each dependent variable on an indicator if a person spoke in the *Voluntary* group, where the omitted category is a person who spoke in the *Randomized* group. *Voluntaryity*, *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 B12: 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*.

Table B13: Social Desirability Does Not Drive Differential Effects on Misperceptions Across Treatment Groups

	(1) Men Who Cry are Weak Boys	(2) Men Who Cry are Weak Girls	(3) Men Should Use Violence to Get Respect Boys	(4) Men Should Use Violence to Get Respect Girls
Panel A: School Endline - Immediately After Treatment (Sample of Boys)				
Voluntary	-11.46** (5.140)	-12.25** (5.970)	-10.42* (5.926)	-3.638 (4.557)
Randomized	-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 Voluntary	0.103 (1.671)	-0.354 (1.967)	-0.0677 (1.847)	0.532 (1.441)
High Social Desirability Score X Randomized	-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)				
Voluntary	-7.955* (4.663)	-8.410* (4.857)	-4.240 (5.265)	5.641 (4.786)
Randomized	-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 Voluntary	-2.426 (1.631)	-1.673 (1.720)	-1.393 (1.606)	-1.869 (1.516)
High Social Desirability Score X Randomized	-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)				
Voluntary	-9.171 (10.80)	-0.737 (9.104)	-23.79*** (9.009)	-8.199 (7.061)
Randomized	-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 Voluntary	-0.149 (3.028)	-2.821 (2.563)	5.619* (2.836)	1.905 (2.287)
High Social Desirability Score X Randomized	-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)				
Voluntary	-1.047 (6.885)	-2.763 (6.998)	-1.071 (7.413)	-1.156 (4.763)
Randomized	-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 Voluntary	-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

Notes: 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 B14: Discussion Groups Make Boys' First-Order Beliefs Less Masculine Immediately and Three 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				
Voluntary	-0.0381** (0.0167)	-0.0289*** (0.00955)	-0.0144 (0.0283)	-0.0209 (0.0175)
Randomized	-0.0476*** (0.0158)	-0.0210* (0.0114)	-0.0358 (0.0328)	0.0122 (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				
Voluntary	-0.0112 (0.0247)	-0.000792 (0.0109)	-0.0266 (0.0567)	0.0314 (0.0210)
Randomized	-0.0444* (0.0252)	0.00752 (0.0135)	-0.107** (0.0462)	0.00335 (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

Notes: 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 B15: Discussion Groups Reduce Boys' Social Image Concerns Toward Less Masculine Behaviors in Public (Pooled)

	(1) Last Cried	(2) Last Violent	(3) Joy of Destruction
Panel A: All Boys			
Public	0.134 (0.134)	0.0704 (0.107)	0.0845 (0.123)
Treated	0.0121 (0.103)	0.0223 (0.0945)	0.0644 (0.0950)
Public × Treated	-0.156 (0.152)	-0.0866 (0.133)	-0.119 (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 (0.209)	0.253 (0.174)	0.145 (0.142)
Treated	0.132 (0.160)	0.0606 (0.138)	0.281* (0.158)
Public × Treated	-0.0649 (0.263)	-0.290 (0.211)	-0.335* (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

Notes: 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* × *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 B16: Discussion Groups Reduce Boys' Social Image Concerns Toward Less Masculine Behaviors in Public (By Treatment)

	(1) Last Cried	(2) Last Violent	(3) Joy of Destruction
Panel A: All Boys			
Public	0.129 (0.129)	0.0707 (0.108)	0.0830 (0.121)
Vocal	0.0696 (0.116)	-0.0358 (0.104)	0.0716 (0.116)
Representative	-0.0454 (0.110)	0.0796 (0.116)	0.0545 (0.107)
Public × Representative	-0.0757 (0.158)	-0.141 (0.148)	-0.0174 (0.156)
Public × Vocal	-0.225 (0.171)	-0.0313 (0.161)	-0.213 (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 (0.201)	0.250 (0.174)	0.140 (0.140)
Vocal	0.202 (0.160)	-0.0857 (0.175)	0.302* (0.179)
Representative	0.0585 (0.197)	0.194 (0.173)	0.251 (0.200)
Public × Representative	0.0639 (0.308)	-0.477* (0.249)	-0.190 (0.281)
Public × Vocal	-0.185 (0.277)	-0.102 (0.268)	-0.450** (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* × *Vocal* and *Public* × *Representative*, which are my coefficients of interest. Standard errors are clustered at the classroom level.

Table B17: Discussion Group Make Students' Hypothetical Behaviors Less Masculine (Pooled)

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

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

Notes: 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 B18: Discussion Group Make Students' Hypothetical Behaviors Less Masculine (By Treatment)

	(1)	(2)	(3)	(4)	(5)	(6)
	Would Act Masculine Boys	It's Right to Act Masculine Girls	Peers Would Support Acting Masculine Boys			
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.

Table B19: Discussion Group Has No Effects on Boys' Self-Reported behaviors

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

Notes: 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 front 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 B20: Discussion Group Has No Effects on Boys' Peer-Reported Behaviors

Dep. Var. (Share):	(1) Negative Behaviors			(2) Positive Behaviors			(7) Positive Average
	Inappropriate Language	Violence	Negative Average	Non-Conflict Resolution	Sensitive	Respectful to Girls	
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

Notes: 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.

Online Appendix C: Supplementary Materials

C.1 Consent Process

I visited the 22 participating schools to discuss the study purposes, schedule the study day, obtain the list of students from participating classes, and hand the parental consent and assent forms to principals. I instructed principals to deliver the consent forms to students at least one week prior to the scheduled study day, and I sent reminders to guarantee this timeline they followed this time. I obtained parental consent in an opt-out way: parents had to sign the form to withhold consent.

Otherwise, consent was assumed. The consent forms communicated to parents and students that this study aimed to understand how the societal expectations around boys' behaviors are formed.

C.2 Relation to AEA pre-registration