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

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Job Market Paper

December 12, 2024. Click here for the latest version.

Abstract

Masculinity norms are the beliefs about what men should or not do, such as that men should suppress their emotions or use violence. 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 (i.e., communication with peers) or biased communication (i.e., communication with a selected group) perpetuates misperceived norms through two field experiments in 25 schools. In a first 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 about 50% immediately, with effects persisting three weeks later. Discussions in which people self-select into speaking or are randomly asked to speak reduce misperceptions equally. This suggests that misperceptions are due to a lack of broad communication with peers. In a second experiment in a similar setting, adolescents choose the peers with whom they want to discuss masculinity. Encouraging communication with chosen peers also reduces misperceptions, suggesting that adolescents do not talk about masculinity even with closer peers. Evidence from this experiment shows that underestimating interest and comfort in these discussions might explain the lack of communication.

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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 the beliefs about what men should or not do, i.e. masculinity norms, can, at least partially, explain these gender 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 prescribes that men are expected to use violence. While a growing body of work in economics studies gender norms constraining the behaviors of women, or women relative to men (Alesina et al., 2013; Bertrand et al., 2015; Bursztyn et al., 2020; Dhar et al., 2022), the study of masculinity norms remain overlooked.

Overestimating others' beliefs in traditional masculinity might be harmful to men and society as men could avoid help-seeking behaviors or use violence if they incorrectly think that is what others expect. Hence, shedding light on the mechanisms that sustain undesirable norms in equilibrium might be important. What factors contribute to the persistence of misperceived social norms?[1] On the one hand, misperceptions about others' beliefs could persist due to a lack of horizontal communication, i.e. communication with peers (Bursztyn et al., 2020). In the absence of horizontal communication, people might infer their peers' views from older family members (Bisin and Verdier, 2001) or the media (Ferrara et al., 2012). In such cases, understanding the barriers to communication might be relevant. On the other hand, horizontal communication could exist but be biased (Kitts, 2003). For example, it may be that the more masculine[2] people talk, and listeners may fail to correct for this selection when updating their beliefs. In addition, people could talk only with a selected group, such as more vocal or closer peers.

In this paper, I experimentally examine whether a 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 with 13 to 15-year-old boys and girls from 25 coeducational schools in Rio de Janeiro—known to have a strong masculine culture (Taylor et al., 2016). Early adolescence is a key stage 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). In the first experiment (N = 2,249), I examine whether a lack of communication exists by encouraging a group discussion about masculinity. I also test for biased communication by randomizing whether participants self-select into speaking or are randomly asked to speak in these discussions. In the

[1]Several 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), and 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.

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

second experiment (N = 359), I examine whether more natural communication with closer friends exists by allowing them to select their discussion peers. This design also adds to recent calls in the policy arena to listen to boys' perspectives about masculinity (Reeves, 2022; Way, 2024).

Teenagers have large misperceptions about boys' and girls' beliefs about masculinity. In a pre-discussion survey, I measure masculinity by eliciting whether they agree or disagree 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* dimensions of masculinity. In a post-discussion survey, adolescents guessed the percentage of boys and girls, separately, in their classroom who agree with these statements. I define misperceptions as the difference, in percentage points, between one's guess about the percentage of boys or girls in their classroom who agreed with each statement and the actual fraction who agreed with the statement. Only 10% of boys agree with the belief about crying. In contrast, boys guess that 31% of other boys in their classroom agree with this statement. Hence, boys misperceive other boys' beliefs about crying by 21p.p. Following a similar logic, boys misperceive girls' beliefs about crying by 28p.p. Boys misperceive other boys' and girls' beliefs about violence by 13p.p. and 11p.p., respectively. Girls' misperceptions are of similar magnitudes. The propensity to provide socially desirable answers, measured using the Crowne and Marlowe (1960) scale, does not significantly predict misperceptions.

In the first 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. In the masculinity discussions, male mediators asked students whether they agreed and why with the statements about crying and violence. These discussions could be of two types. In the *Voluntary* type, adolescents self-selected into speaking. In the *Randomized* type, I randomly selected the adolescents asked to speak. 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 mediators did not express their opinions to isolate the effect of learning their peers' opinions. On average, there were 13 people in the discussions.[3]

The masculinity discussions reduce boys' and girls' misperceptions by about 50% in the short-run ($p < 0.001$), similarly across the *Randomized* and *Voluntary* arms. Boys' *Voluntary* speakers are 25% more vocal than *Randomized* ones ($p = 0.07$) based on a peer-reported measure of vocality. This suggests that even vocal types do not talk about masculinity at school; otherwise, participants in the *Voluntary* group would not have learned any new information. The likelihood of providing more socially desirable answers does not explain these results.

Why do the *Randomized* and *Voluntary* groups similarly affect misperceptions? The public

[3]In 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.

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 naturally. 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 later, the effects of the masculinity discussions on misperceptions persist. This indicates that the adolescents retained what they learned and that such information did not spillover to those in the control discussion. Persistence suggests that the one-time masculinity discussions did not generate natural conversations about it. This result sheds some light on the way norms are formed: in a social environment such as schools, encouraging communication among a random part of a social network (i.e., half a classroom) about a stigmatized topic is not sufficient to change perceived norms more broadly.[4]

Besides correcting boys' perceptions of their peers' agreement with masculinity norms, the masculinity discussions make boys 50% less likely to agree with the statement about crying, immediately and three weeks after the discussion. Nevertheless, belief changes do not reflect behavioral changes around low-incidence behaviors such as the expression of vulnerable emotions (e.g., crying) and involvement in violence. The impacts on beliefs are consistent with the evidence that adolescents have malleable views (Kohlberg 1976; Markus and Nurius 1986). Girls' beliefs about masculinity do not change, but they are considerably less masculine compared to boys in the first place. The lack of behavioral effects suggests that updating behavior may take longer than updating beliefs or need reinforcement to enact behavioral change. In this sense, longer-term interventions might be necessary (as in Dhar et al. 2022).

In a second 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 naturally with closer peers. I relaxed two features of the first 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 first experiment, and an average of 5

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

[5]The participating schools are not the same across the first and second experiments. Nevertheless, schools and students' characteristics are statistically indistinguishable (See Table B3).

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 other boys by about 50%. 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 groups: 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. In contrast, when in boys-only groups, boys' misperceptions about other boys reduce for crying ($p = 0.01$), and do not change for violence. We can interpret this as evidence against *locker room talks*: even when in boys-only groups, boys' misperceptions about other boys' beliefs do not increase, suggesting that they do not express very masculine views in such a setting. Interestingly, boys who self-select to boys-only groups are significantly less masculine ($p < 0.001$) than those in groups with girls. For girls in girls-only groups, their misperceptions about boys suggestively decrease, so they might infer boys' views by listening to other girls' opinions only.

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 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 closer friends exists. In addition, for boys, it seems to be relevant to include girls in these discussions, as they do not infer girls' 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, as effects persist three weeks later.

One natural next step is understanding why adolescents do not naturally talk about masculinity. In the second experiment, I measured whether adolescents have miscalibrated views on how the conversations would go.[6] Before the discussion, participants indicated how comfortable and interested 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 before and after the discussions indicate that boys underestimate interest and comfort by roughly 40% ($p < 0.001$), and similarly for girls.

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 perceptions about these norms. In contrast, this paper provides causal evidence

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

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 dimensions of masculinity. In recent work, we measure masculinity norms in over 40 countries and show that adherence to traditional masculinity norms strongly predicts behaviors in important socioeconomic domains related to economics, health, and politics (DeHaas et al., 2024). 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 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.

[7] Webb (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.).

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 feminity, 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 pressures 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.

Context. This research took place in Rio de Janeiro, where organized crime dominates 18% of its territory (Cruzado-RJ, 2024). 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. 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. In-depth interviews among low-income black youth in Rio de Janeiro highlight the importance of engaging boys in programs that resignify notions of manhood by e.g. encouraging caregiving and normalizing emotional vulnerabilities as violence prevention tools (Barker and Loewenstein, 1997; Taylor et al., 2016).[8]

Adolescents in my sample are public school students and are more likely to come from economically disadvantaged backgrounds, be black, and live in favelas, compared to a representative sample from Rio. I selected 25 schools across the city. The selected schools are distributed across

[8]Pioneer work on masculinities outside of the developed world started in Rio in the late 90s, giving birth to the world-leading NGO on masculinities *Instituto Promundo*—now split into *Equimundo* and *Promundo Brazil*. They have many masculinity-related programs around the world, including in the US, Mexico, Mozambique and Portugal.

10 of the 11 school districts in Rio, allowing for variation in socioeconomic characteristics in the schools' surroundings. For example, there are four schools located in favelas and three located in the wealthiest areas in the city. Nevertheless, students from schools outside of favelas are also likely to live 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.[9] Shooting episodes also caused four delays in my field operations.

Living in such an environment may further increase the pressures to conform to traditional masculinity norms. In this context, boys' traditionally masculine behaviors may be rewarded, both by other boys and girls. For example, boys may see guns as tools to achieve status and to demonstrate power and control over other men and women, especially combined with the existing social vulnerabilities in these areas (Barker, 2005). In addition, boys in focus groups I conducted often said that they were ashamed to share their vulnerable feelings with friends, as they thought their friends expected them to be tough and could punish them otherwise.

The school environment also 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.

What Could Drive Misperceived Masculinity Norms? Misperceptions about same generation peers' views might exist for multiple reasons. Adolescents might form these views based on their parents' views (i.e., vertical transmission) (Bisin and Verdier, 2001; Giuliano, 2020), who might hold outdated beliefs about masculinity. They could also infer traditional views of masculinity from (social) media channels (Paluck, 2009; Ferrara et al., 2012). This is especially relevant with the rise of the *Red Pill* ideology, which disseminates misogynous content and traditional views of manhood as being superior in social media channels.[10] Alternatively, misperceived views about traditional masculinity norms may exist if these norms were optimal in the past, but no longer are in current days (i.e., cultural mismatches exist) (Gelfand, 2021; Nunn, 2022; Gelfand et al., 2024).

Regardless of the foundations of misperceived norms, one explanation for their persistence is that people do not communicate their private views with a broad set of same-generation peers. In my sample, only 14% of boys talk to other boys and 7% to girls at school about what society expects of men.[11] When asked what they talk about in an open-ended question, only 22% say

[9] https://g1.globo.com/rj/rio-de-janeiro/noticia/2023/07/31/em-meio-a-tiroteios-mais-escolas-fecharam-no-1o-semestre-de-2023-do-que-em-todo-o-ano-passado.ghtml. Accessed on September 11, 2024.

[10] https://g1.globo.com/al/alagoas/especial-publicitario/secom-secretaria-de-comunicacao-social/juntos-por-uma-alagoas-de-todos/noticia/2023/02/28/semudh-alerta-responsaveis-sobre-o-crescimento-do-consumo-de-conteudos-machistas-na-internet.ghtml. Accessed on September 11, 2024

[11] This data comes from the baseline survey in the second experiment (N = 167 boys and N = 192 girls). I asked

they discuss that men should not be violent, especially against women. In addition, 26% talk about positive aspects of manhood, such as being responsible and hard worker. So it is not only that they rarely talk about masculinity. Even when they do talk about it, they rarely criticize traditional masculinity norms.

3 Experimental Design

My experiments aim to understand whether misperceived social norms persist because of a lack of communication or biased communication. In the first experiment, 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 the second 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 Experiment 1

3.1.1 Sample Selection

School Selection. I conducted this preregistered 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.[12] 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 B3). Out of 12 characteristics, schools in my sample are only statistically different concerning the share of white students compared to all the 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., $\approx$ 12-14 years old) across 88 classrooms. Within each classroom, the study (baseline-treatment-endline) took 50-60 minutes. Due to time constraints, no more than 5 classrooms from the same school could participate. To accommodate this, in schools with over 5 7th-9th grade classes, I prioritized upper-year students.

"Do you talk about what society expects of men?". For those who answered "Yes", I then asked who they talk to (e.g. male school friends, female school friends, mother, father), and an open-ended question on what they talk about.

[12] In fact, I visited schools from all districts. I piloted this experiment in two other districts, which were not included in the main sample. I also included a school from an 11th district in Experiment 2.

My sample thus consists of 2,249 students (1,154 girls and 1,095 boys), being 60% 9th graders, 32% 8th graders, and 8% 7th graders.[13]

3.1.2 Treatment Conditions

Treatment Assignment. Figure 1 outlines the structure of Experiment 1. 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 X $\frac{1}{2}$ Active Control, (ii) $\frac{1}{2}$ Randomized X $\frac{1}{2}$ Active Control, and (iii) $\frac{1}{2}$ Voluntary X $\frac{1}{2}$ Randomized. I performed the randomization before visiting the schools, upon receiving the list with students' names.

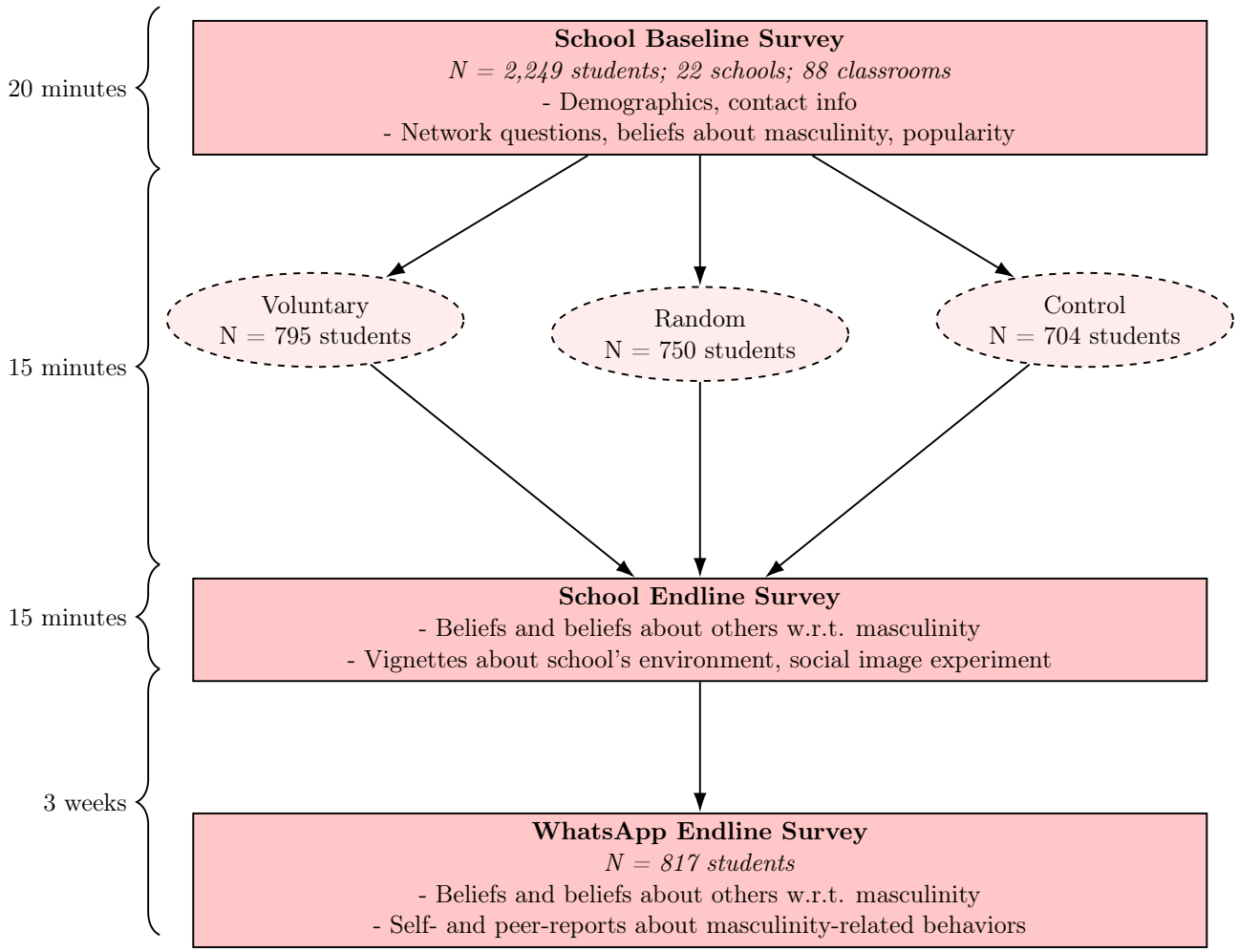
Masculinity Discussions. The treatments consist of focus group-like discussions about masculinity. Male mediators led the sessions, asking participants to share whether they agree or not with the statements "men who cry are weak" and "men should use violence to get respect if necessary", and further explain and provide examples of their opinions.[14] These statements represent the *emotional restriction* and *aggression* dimensions of masculinity. In focus groups I conducted with boys, they often mentioned that expressing vulnerable emotions, such as crying, is seen as a weakness for men and a reason for mockery. In addition, they described that using violence is sometimes rewarded in their context, and it could give some social status. The statement about crying was also inspired by questions from the *Man Box* study (Barker et al., 2017) and the *Male Role Norms Inventory-Adolescent-revised* (Levant et al., 2012). The statement about violence came directly from the *Man Box* study. I piloted extensively, and adolescents comprehended their meaning well.

In the discussions, 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. This avoids potential confoundings related to learning the mediators' opinions. In addition, I 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 spoke, 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

[13] To avoid contamination across classes, the field team would only visit a school once. Participating students represent about 75% of students in the schools. This difference is mainly due to students being absent rather than parents or students not consenting to their participation.

[14] The 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 black youth across some favelas in Rio.

Figure 1: Experimental Design - Experiment 1



Notes: This figure displays the design structure of the Experiment 1. 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.

average, the discussions took 15 minutes, with 13 people in each session, and they could be of two types:

1. *Voluntary*: Mediators asked subjects to raise their hands if they would like to share their views on the masculinity statements. The mediator always picked on the first boy to raise their hand, then alternated between a girl and a boy until it reached a maximum of six students. Hence, this treatment arm consists of only introducing a topic, aiming to mimic the dynamics of classroom-based discussions.

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 when regressing a realized on a predicted speaking dummy ($\beta = 0.85$, F-stat = 548, Table B6).

Observers' Form. A research assistant observer took notes during these discussions (survey form in Figure A3).[15] They indicated (1) whether a student agreed, disagreed or was on the face about 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 can then link the observers' notes with participants' baseline and endline individual responses. During these discussions, students sat in a circle 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 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 norms. The active control group accounts for the effects of meeting attendance and attenuates experimenter demand effects. I instructed the mediators not to comment on gender in any way. I find no difference in the levels of agreement with the statements about crying and violence between the survey immediately before and immediately after the discussion ($p = 0.8$).

3.1.3 Data Collection and Outcomes

Baseline. All 2,249 participants completed a baseline survey, which included the following modules:[16] (i) demographics;[17] (ii) friendships and popularity; (iii) peer-reported measures of vocality,

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

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

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

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 B1 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 ($p = 0.07$).[18]

School Endline. Participants responded to an endline survey in the school, immediately after the discussions ended. 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. 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 B2). 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 about 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' guesses[19] 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.

[18] The main treatment effects are robust to including these variables as controls (Table B8).

[19] I 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.

3.2 Experiment 2

Sample Selection. I conducted this preregistered 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 Experiment 1. The selected schools are similar in terms of observable characteristics, compared to all the public schools in Rio de Janeiro (Table B3, Column 5) and to the schools included in the Experiment 1 (Table B3, Column 6). Participating students are also similar across the two experiments for most characteristics (Table B4), except boys in the Experiment 2 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 Experiment 2. 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 Experiment 1 guidelines. The discussions were partially mediated: three facilitators rotated across the groups,[20] 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.[21] We timed the discussions to be 15 minutes long, to be consistent with the Experiment 1.

Data Collection and Outcomes. All 359 participants self-administered a pre-discussion survey, which included the following modules: (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

[20] On average, there were 5 discussion groups in a classroom.

[21] I 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 (ii) make it more comparable with the design of Experiment 1.

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 about girls' and boys' beliefs about crying and violence, elicited in the same way as in the Experiment 1. 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.[22] Table B5 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.

Participants then responded to a short post-discussion survey. For control participants, it first elicited their post-discussion impressions regarding 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".[23]

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 participating in a group.[24]

4 Results on Misperceptions

4.1 Experiment 1

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'

[22] I embedded the randomization on Qualtrics offline.

[23] One 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.

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

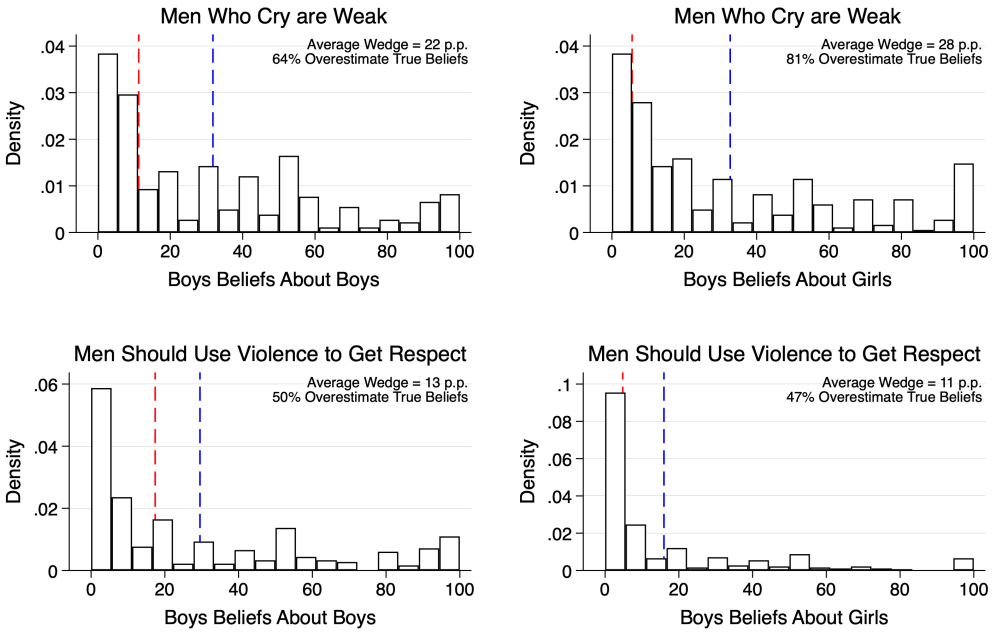
wedges about boys' beliefs of 22 and 13p.p., and about girls' beliefs of 28 and 11p.p. about crying and violence, respectively. Girls are equally incorrect about their peers' beliefs about masculinity (Panel b).

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 A8). 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.

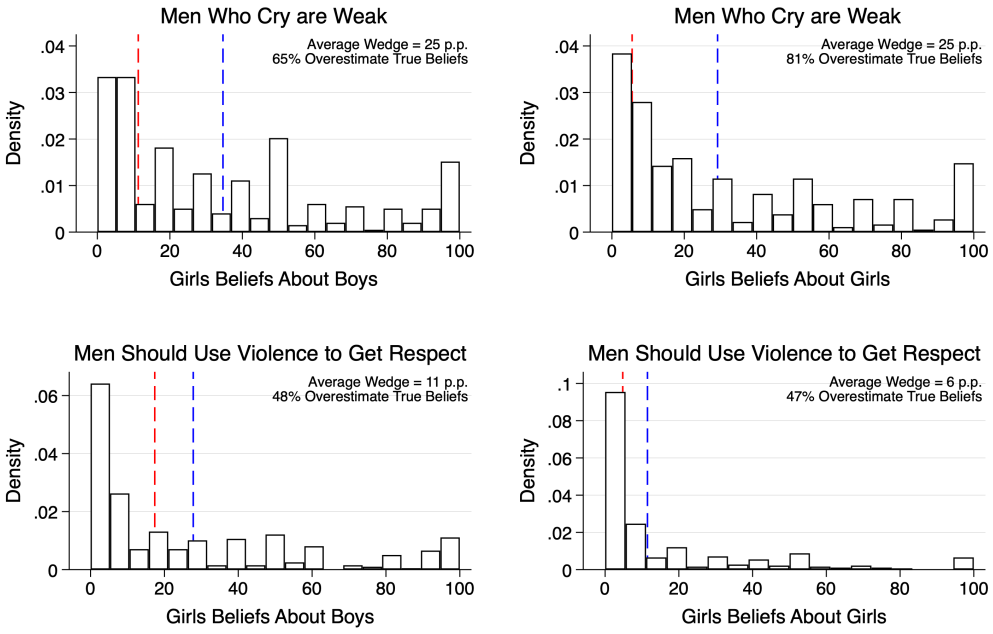
There are several possible explanations for why the misperceptions about crying may be larger than the misperceptions about violence. First, communication about emotions and the expression of emotions may be constrained by an expectation that men remain emotionally stoic, exacerbating misperceptions 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 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. 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,

Figure 2: Distribution of Guesses About Peers' Masculinity Beliefs



(a) Boys



(b) Girls

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.

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).

A natural question is whether adolescents talk to their friends about what they learned in the discussions three weeks later (i.e., whether information spillovers). I find suggestive evidence that girls in the control group talk about the masculinity discussions after it's over, especially with their other girlfriends (Table B12). 3-weeks later, girls with at least one treated girlfriend suggestively have lower misperceptions about other girls' beliefs about crying (-5.7p.p., p=0.49, Panel B - Column 4) and violence (-10.8p.p, p=0.14, Panel B - Column 8), compared to their misperceptions immediately after the discussions. Boys with at least one treated boyfriend have suggestively smaller misperceptions about other boys' beliefs about crying, but suggestively larger misperceptions about violence, comparing their three weeks with their misperceptions immediately after the discussions. These are all noisy estimates as they consist of the sample of participants in the control group who responded to the WhatsApp survey. As a further test, comparing the three weeks with the immediate responses among the control group, girls' misperceptions about crying reduce by 10 p.p. three weeks later (Figure A10, Panel b), but boys' misperceptions do not change (Figure A10, Panel a).

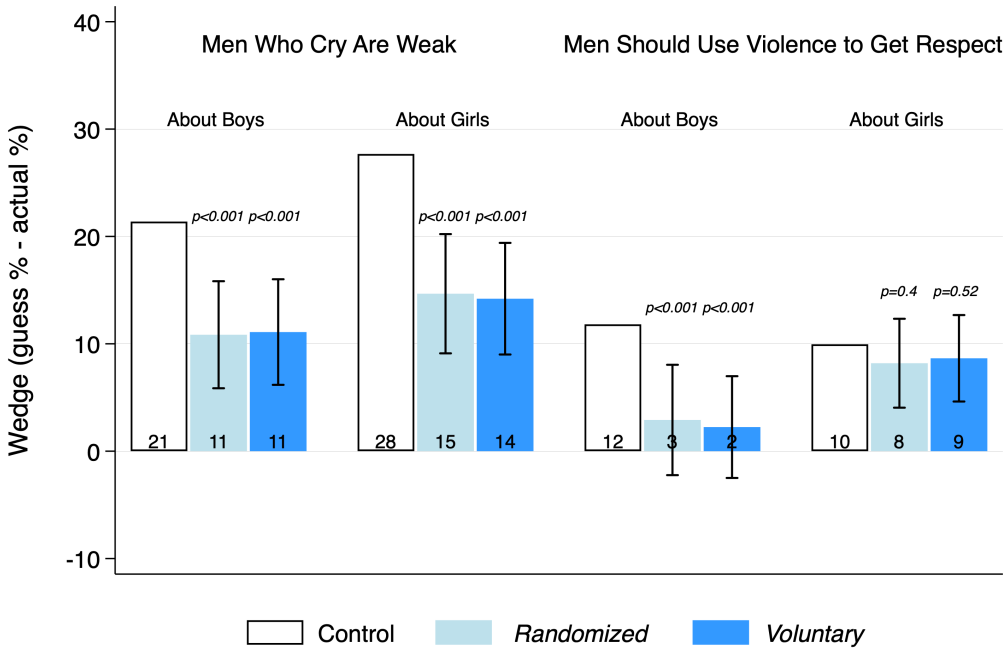
These exercises are a further suggestive test of a lack of communication: the control group could have learned the information from their treated peers if the one-time masculinity discussion was enough to encourage natural communication about it in the classroom. While there is some evidence that girls talk to their other girlfriends about the discussions, there is no strong evidence that having a treated friend impacts boys' misperceptions three weeks later.

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

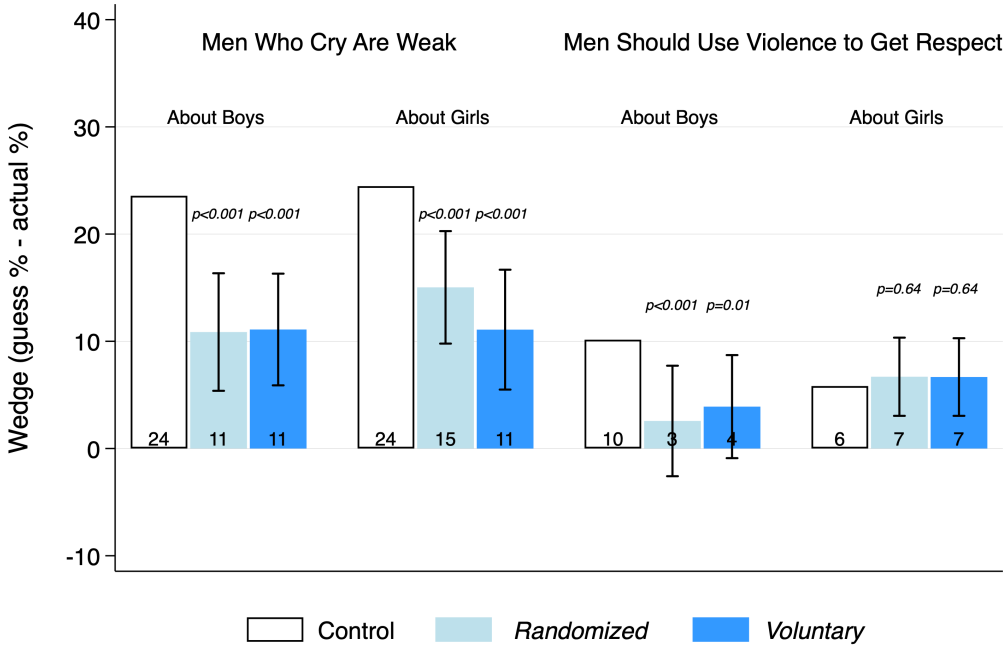
In this section, I provide evidence that explains why the treatment effects of the *Voluntary* and *Randomized* discussions are statistically indistinguishable. I explore the public opinions shared in the discussions, the narratives used, the speakers' baseline characteristics, and the discussions' characteristics,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

Figure 3: Masculinity Discussions Reduce Misperceptions Immediately After Treatment

(a) Boys



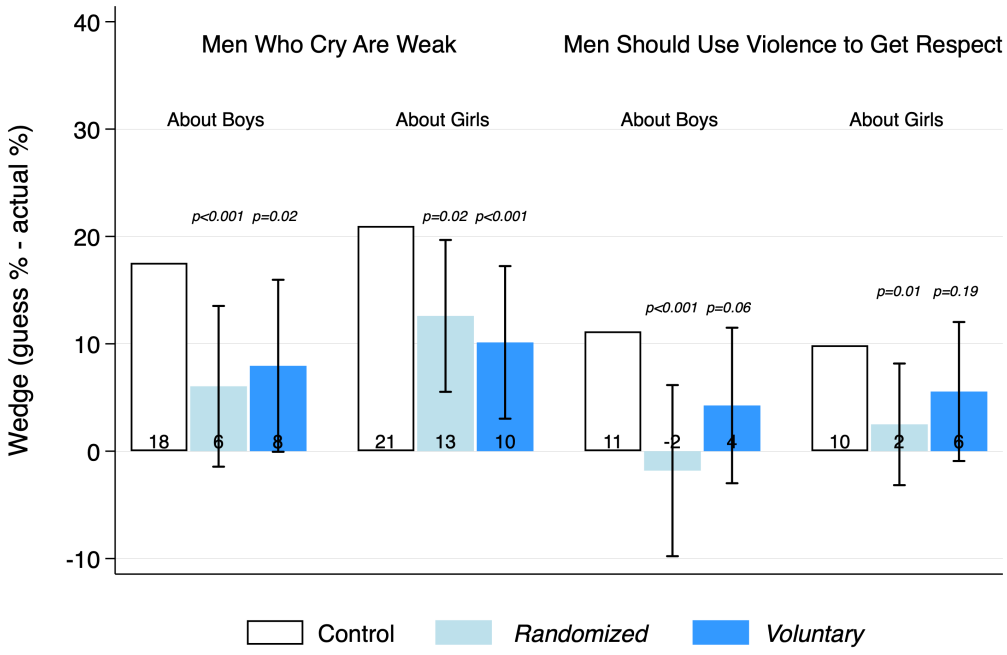
(b) Girls



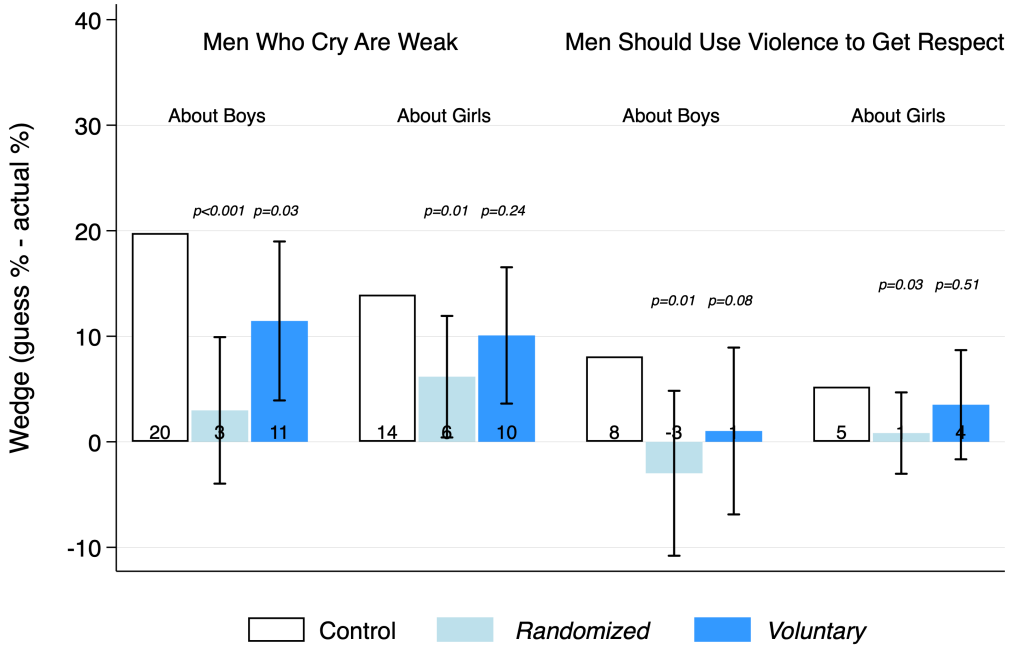
Notes: This figure shows the effects of the *Voluntary* and *Randomized* discussion treatments. The wedge is calculated as the difference, in percentage points, between *(participants' guesses about the percentage of their male or female peers agreeing with each statement)* and *(the true percentage 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.

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

(a) Boys



(b) Girls



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.

I find no evidence that people self-select into speaking about crying, but there is strong evidence that boys with less masculine views about violence speak in the *Voluntary*, compared to the ones in the *Randomized* group. Table 1 (Columns 1-3) presents regression coefficients from speakers' private opinions about crying and violence on a dummy equal to 1 if they spoke in the *Voluntary* discussions and 0 if they spoke in the *Randomized* discussions. Boys' private opinions about crying (Column 1, Panels A and B) are not statistically different comparing the speakers in the *Voluntary* and *Randomized* groups. This suggests that there is no evidence of self-selection in this dimension. Nevertheless, there is strong evidence of self-selection in the violence dimension among boys (Column 2, Panel A): boys who self-selected into speaking in the *Voluntary* group are 11p.p. less likely ($p<0.001$) to privately agree with the statement about violence, compared to boys randomly asked to speak in the *Randomized* group. Taking the mean across the levels of agreement with the crying and violence statements, boys' speakers in the *Voluntary* group are 50% less masculine than those in the *Randomized* group (Panel A, Column 3). There is no evidence of self-selection among girls (Panel B).

Despite some selection into speaking, boys' and girls' public opinions about crying and violence are not statistically different across the masculinity discussion groups (Table 1, Columns 4-6). Boys and girls in the *Voluntary* discussions publicly express similar opinions to the ones in the *Randomized* ones (Panels A and B). Hence, participants learn the same information regardless if they are in the *Voluntary* or *Randomized* discussions. This happens because, on average, *Randomized* speakers lie towards being less masculine in public, compared to their private views. In private, 5.6% of boys agree with the statement about crying, compared to 0.6% in public ($p=0.01$). Similarly, 15.6% of boys agree with the statement about violence in public, compared to 7.8% in private ($p=0.01$). Hence, *less* masculine boys self-select into speaking in the *Voluntary* discussions, and *Randomized* speakers lie towards being *less* masculine. So the publicly expressed opinions are similar.

Table 1: Less Masculine Boys Self-Select Into-Speaking in the *Voluntary* Discussions, But Express Similar Public Opinions to *Representative*

	Private Opinions			Public Opinions		
	Cry	Violence	Mean	Cry	Violence	Mean
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Boys Who Spoke						
Voluntary Speaker (=1)	-0.038	-0.116***	-0.077**	0.017	-0.070	-0.028
	(0.027)	(0.043)	(0.030)	(0.033)	(0.059)	(0.038)
Observations	329	329	329	328	329	328
Dep. Var. Mean (*Randomized* Speakers)	0.09	0.19	0.14	0.07	0.23	0.15
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Girls Who Spoke						
Voluntary Speaker (=1)	0.003	-0.020	-0.008	0.022	-0.021	0.000
	(0.018)	(0.024)	(0.017)	(0.014)	(0.048)	(0.026)
Observations	332	332	332	332	332	332
Dep. Var. Mean (*Randomized* Speakers)	0.02	0.07	0.04	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 dependent variables in Columns (1) and (2) are participants' private opinions about crying and violence, which are a dummy equal to 1 if they agreed with the statement, and 0 otherwise. For the public opinions (Columns 4 and 5), the dependent variables are equal to 0 if they publicly disagreed with the statement, equal to 1 if they said that whether they agree or not depends on the situation, and 2 if they publicly agreed. The dependent variables in Column (3) and (6) is the mean opinions across crying and violence in Columns (1) and (2) and (4) and (5), repectively. 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. One boy in the *Representative* group preferred not to express any opinions about crying, which explains the missing observation in Columns (4) and (6) in Panel A, compared to the other ones. All regressions include school fixed effects and standard errors clustered at the school-classroom level.

Besides expressing similar public opinions, participants in the *Voluntary* and *Randomized* groups use similar narratives to support their views (Figure A9). 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 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

[25]Table B10 presents all the categories used and provides some sample quotes for each of them.

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.

I find that speakers in both the *Vocal* and *Representative* are similar in other baseline characteristics, besides their beliefs about crying and violence, except for a vocality score (Table B9). To measure vocality, I asked peers to select the top 5 most talkative people in their class. The vocality score counts the number of 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.

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. 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 A11, 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

[26]The 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.

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 B11 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.

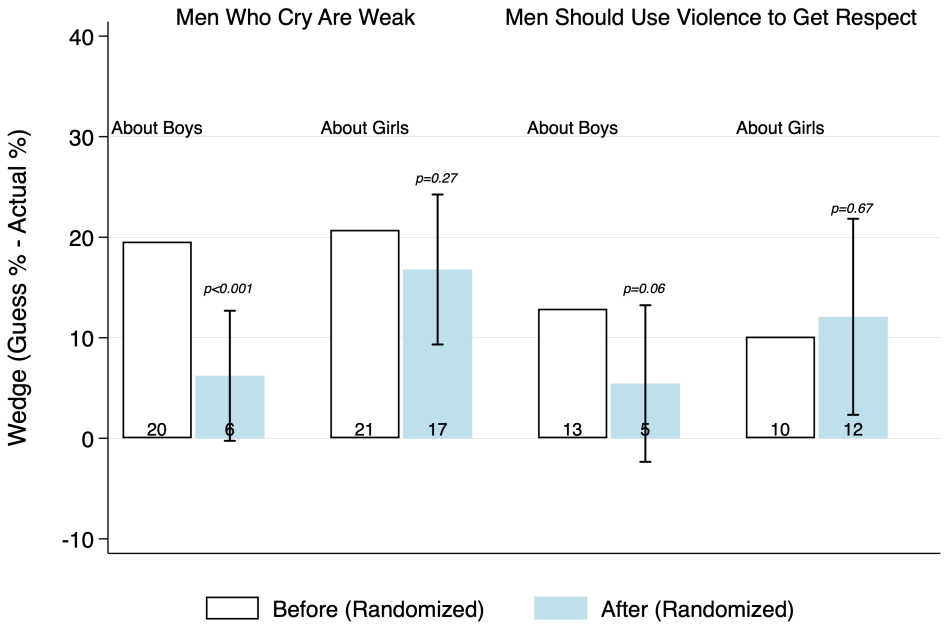
4.2 Experiment 2

Misperceived Social Norms. Boys and girls overestimate their peers' levels of agreement with statements about traditional masculinity to a similar extent as in Experiment 1 (Figure A12). 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).

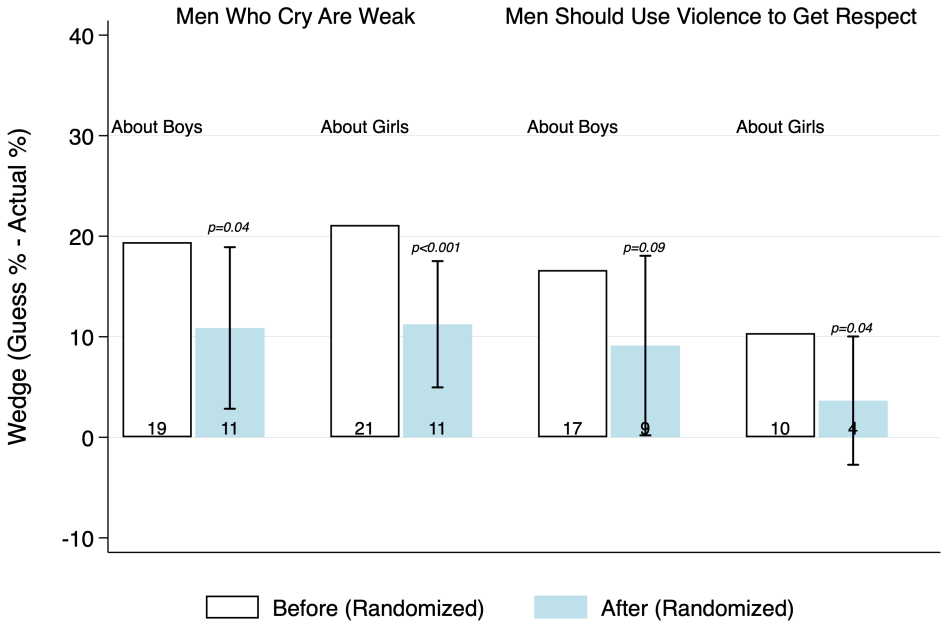
Effects of Discussions with Friends. The masculinity discussions in which people choose who they want to be with reduce boys' misperceptions about other boys and reduce girls' misperceptions, but do not change boys' misperceptions about girls (Figure 5). Boys' average misperception about boys' beliefs 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 Experiment 1, masculinity discussions with selected peers do not reduce boys' misperceptions about girls' views, and reduce girls' misperceptions about other girls' views about violence.

Figure 5: Self-Selected Discussions Reduce Misperceptions

(a) Boys



(b) Girls



Notes: This figure plots the treatment effects of the discussions in Experiment 2. 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)*. *Control* participants made the guesses before the discussion, and *Treated* participants made the guesses after the discussion. 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.

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 A13, 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).

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 B13 - 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 about 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 B13 - Panel B Columns 1 and 3). Estimates for girls are, statistically and in magnitude, close to zero (Table B13 - 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 B13 - 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 B16). For simplicity, I pool both treatments, but the results are similar across them (see Table B17). 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 B14 (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* × *Treated*. Table B15 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 B18 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 B19 (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 B19 (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 spam 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 descriptive and causal evidence that adolescents do not talk about masculinity, I now provide suggestive evidence that miscalibrated views about how these conversations will go may hinder natural conversations. In Experiment 2 experiment, I asked adolescents to predict how interested and how comfortable they would feel in the conversations with their peers, on a 0 (not interested/not comfortable at all) to 10 (extremely interested/extremely comfortable) scale. I also asked how much their predicted emotional connection with their discussion peers would increase, from 1 - not increase at all to 5 - increase a lot. Participants made the predictions before choosing their group, but after reading the discussion instructions. After the discussions, they answered to the same questions, this time rating how the conversation went. Kardas et al. (2022) inspired this exercise, who show that people overestimate how awkward conversations with strangers about a deep topic (e.g., describing a time they cried in front of someone else) will go.

Within-individual comparisons before and after the masculinity discussions show that boys and girls significantly underestimate interest and comfort in these discussions (Figure 6). Before the discussions, boys' average self-reported interest was 5.4, increasing to 7.2 afterward (Panel A, $p<0.001$). 18% of boys said they were not interested at all before the discussions, compared to only 3.6% after. The share of boys saying they are extremely interested and comfortable nearly doubled, getting close to 40%. There was no significant change in increased perceived connection with peers, which continued nearly stable at 3.5. The effects for girls follow similarly (Panel B): they underestimate interest and comfort in the masculinity discussions. Baseline correlations indicate that a 1 s.d. increase in declared interest and comfort in the discussions increases the likelihood of talking about masculinity by about 6% ($p=0.02$ for interest and $p=0.06$ for comfort).

My findings suggest that people may have miscalibrated views about how conversations will go, even among peers with whom they interact daily. I interpret this result as an additional piece of evidence of lack of communication: if adolescents in school talked about masculinity with their friends, we could expect them to have less miscalibrated views about the conversations. For example, Kardas et al. (2022) do not find evidence that people have miscalibrated views about how deep conversations with close peers (e.g., close friends, family members, partners) will go.

In addition, 37% of boys and 14% of girls say spontaneously, in open-text responses, that they are not interested in these discussions or that they would not feel comfortable talking about it.[27] Comparing the self-reported interest and comfort in these discussions among this subgroup, declared interest increased by 2.4 points ($p<0.001$) and comfort by 3 points ($p<0.001$) after the

[27]This was a follow-up question for those who answered "No" to the question "*Do you talk about what society expects of men*". It was asked before they declared their interest and comfort in the discussions.

discussion. In addition, 24% of boys and 12% of girls say they do not know why they do not discuss what society expects of men. The discussions also significantly improve the perceptions of interest and comfort among this subgroup. Together, these findings suggest that there are strong barriers to discussing masculinity. Nevertheless, when encouraged to talk about masculinity, adolescents positively update their impressions.

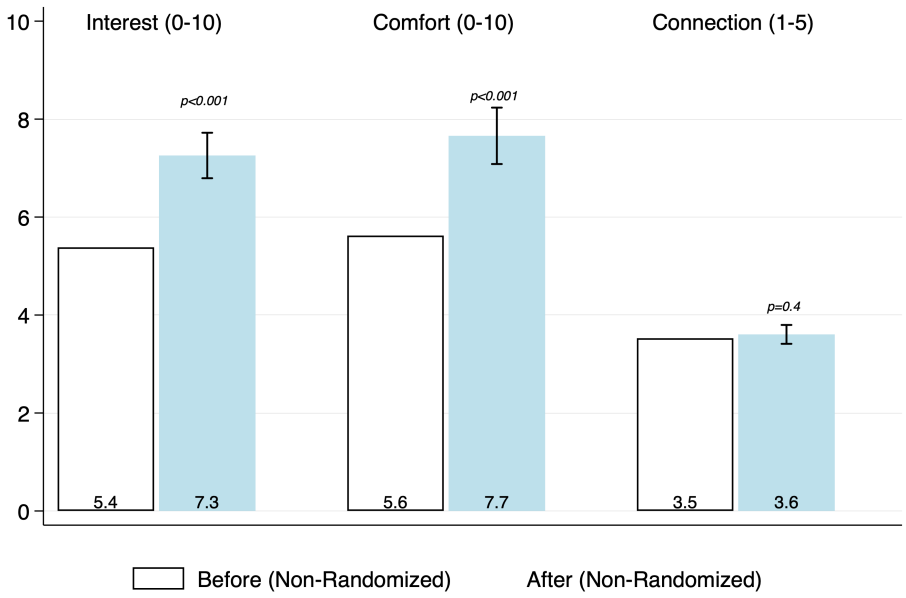
7 Conclusion

This paper studies how adolescents form their perceptions of gender norms about men. I first document that a minority of boys and girls have traditional views about masculinity, but they believe that a larger share of their peers have these views, creating a wedge between one's actual beliefs and others' predicted beliefs. I then provide causal evidence that a lack of horizontal communication drives these misperceptions. In a randomized controlled trial fielded among adolescents in Rio de Janeiro, I show that a 15-minute discussion about masculinity effectively reduces misperceptions regardless of whether participants self-select into speaking, are randomly asked to speak, or speak with a close group of friends. The effects of the discussions on misperceptions persist after three weeks, as adolescents in the control group did not change their views about others' beliefs. This suggests that a one-time discussion about masculinity did not generate broader discussions outside the intervention setting. I provide suggestive evidence that underestimating comfort and interest in these discussions may drive the lack of communication. Despite the reductions in misperceptions, I do not observe changes in associated behaviors, such as emotional restriction and violence, three weeks later.

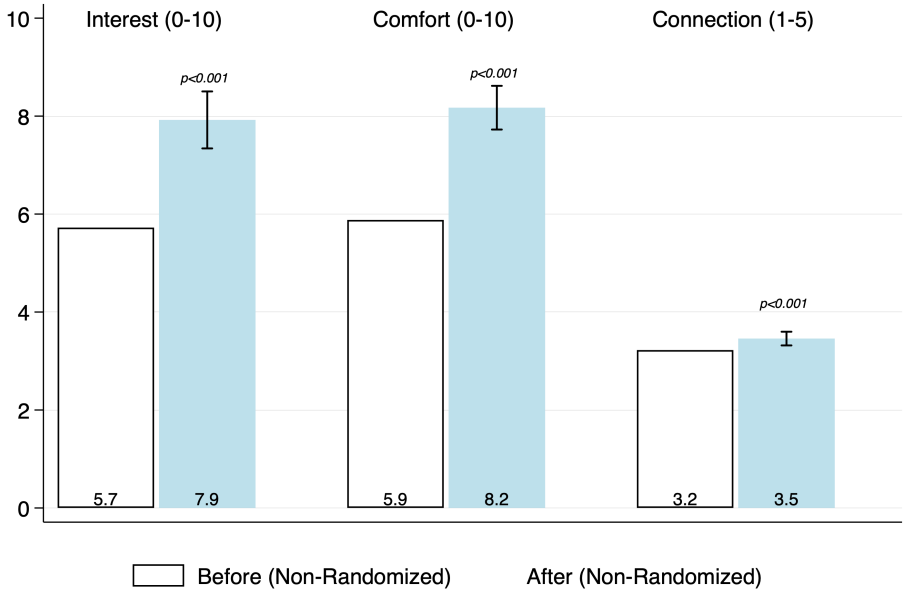
My findings contribute to the burgeoning debate on the "crisis of connection" among boys (Reeves, 2022; Way, 2024). In a recent book, Way (2024) calls for the importance of policies to dismantle traditional masculinity and promote healthy emotional expression in boys and men. I showed that encouraging communication and demystifying potential barriers to communication about traditional masculinity norms can shift collective social norms. Including such discussions in school curriculums seems to be a cost-effective, scalable approach. Further research is needed to investigate whether these discussions improve connection and mental health. Targeting early adolescence—when boys start the transition from boyhood to manhood—appears crucial for preventing the solidification of harmful masculinity beliefs as they become adults (Way, 2011). More research is needed to estimate whether discussions among adult men would yield similar results. Including mixed-gender discussions can be especially impactful, as I find that boys in boys-only groups have more inaccurate perceptions of girls' views after the discussions.

A fruitful avenue for future research is investigating where adolescents learn their views about masculinity. This is especially relevant with the rise of masculinist influencers in social media, which propagate misogynous content and traditional views of manhood as being superior. Studies

Figure 6: Boys and Girls Underestimate Interest and Comfort in the Masculinity Discussions



(a) Boys



(b) Girls

Notes: This figure plots participants' impressions about the discussions before and after they took place, based on N = 167 boys and N = 192 girls in Experiment 2. They read the following on their survey: *Now, we are going to ask you to talk to your friends about your opinions on what society expects from a man. Before you start the conversation, please answer the following questions silently: 1. How interested are you in listening to your friends' opinions about this topic? (from 0-not interested at all to 10-Very interested), 2. How comfortable do you think you will feel during these conversations? (from 0-not comfortable at all to 10-Very comfortable) , 3. How much more connected do you think you will feel with your friends after the discussion (from 1-a lot less connected to 5-a lot more connected.* After the discussions, they answered, on the same scales: *1. How interesting was it for you to listen to your friends' opinions?, 2. How comfortable did you feel during these conversations?, 3. How much more connected do you think you will feel with your friends after the discussion?*. The p-values come from a regression comparing the scores before and after, including individual fixed effects.

addressing what drives boys' and men's demands for such masculinist content might be an important topic for future work. A hypothesis is that there is a self-reinforcing loop: boys consume such content because they feel disconnected from society, further increasing the sense of disconnection.

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ONLINE APPENDIX

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

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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

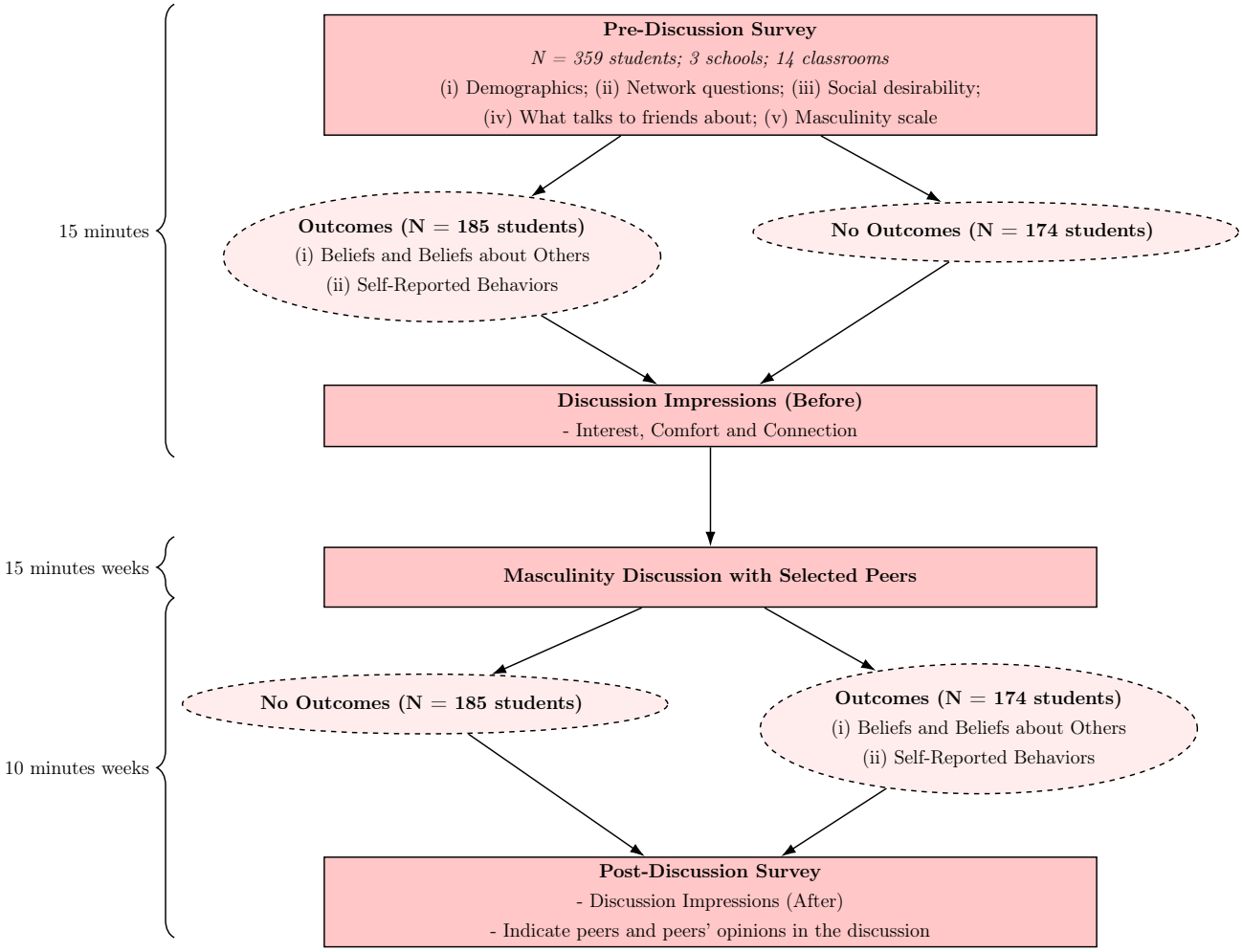
Conversation took time to happen

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

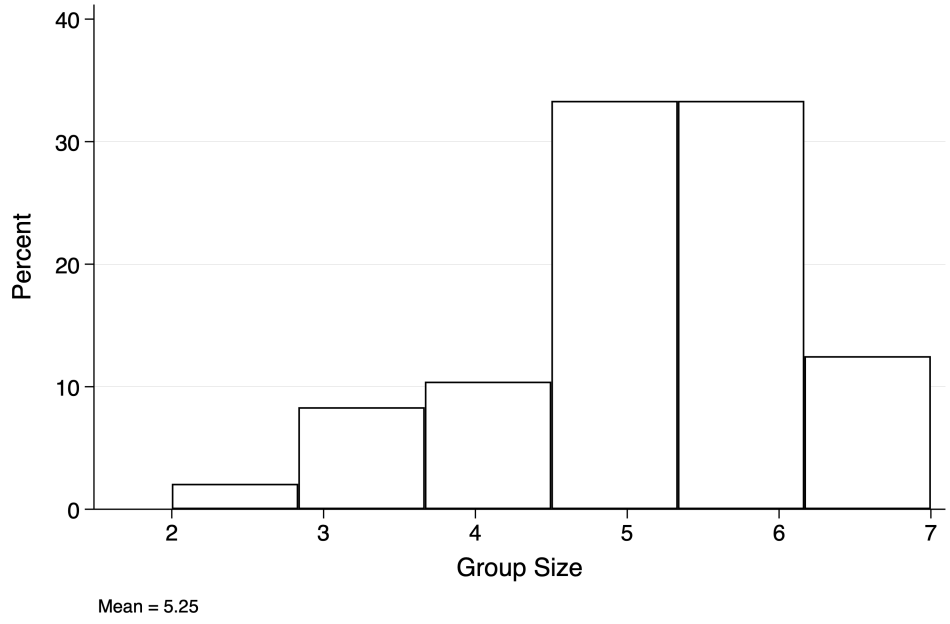


Figure A7: Supplementary Experiment Share of Boys Within Group

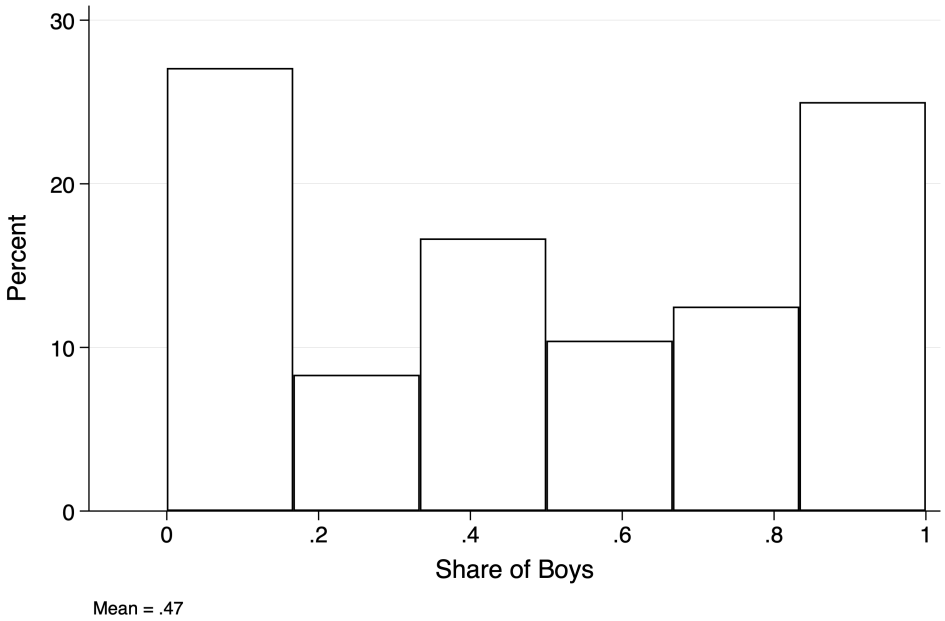
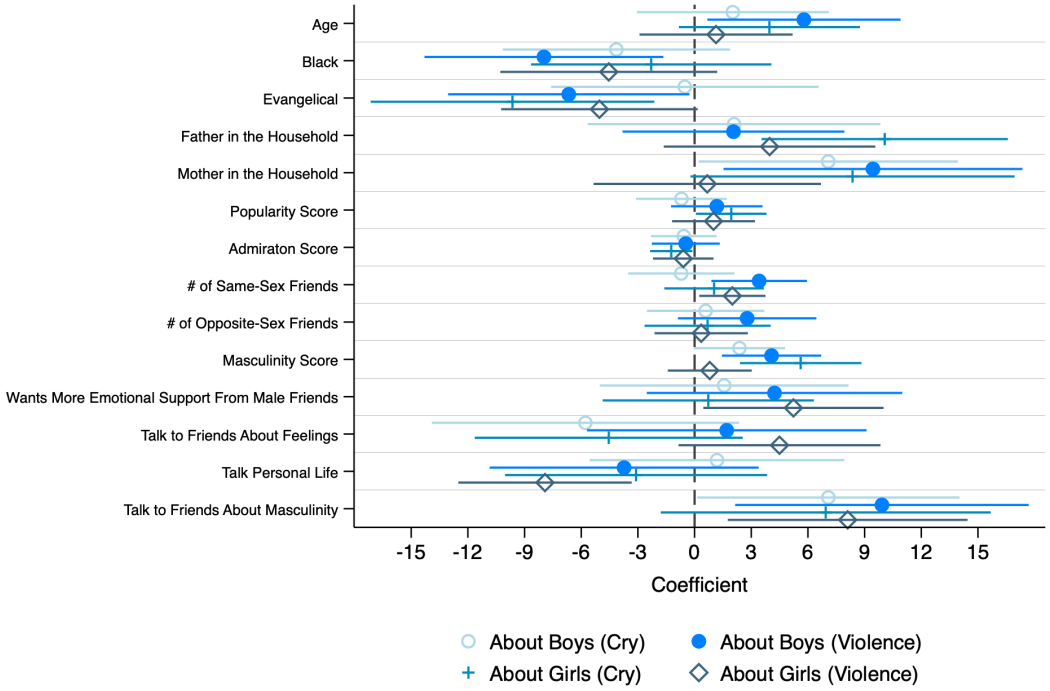
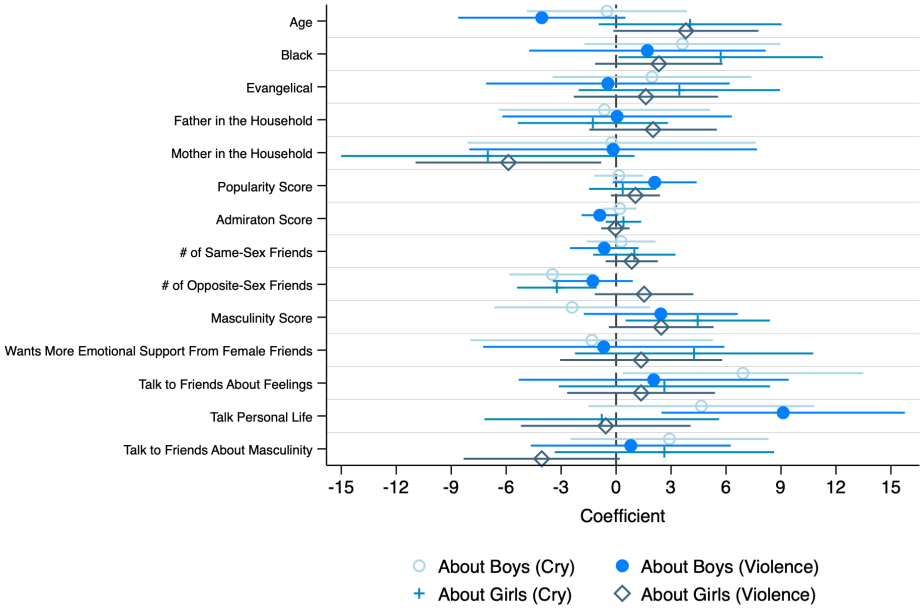


Figure A8: Correlates of Mispercepetions



(a) Boys



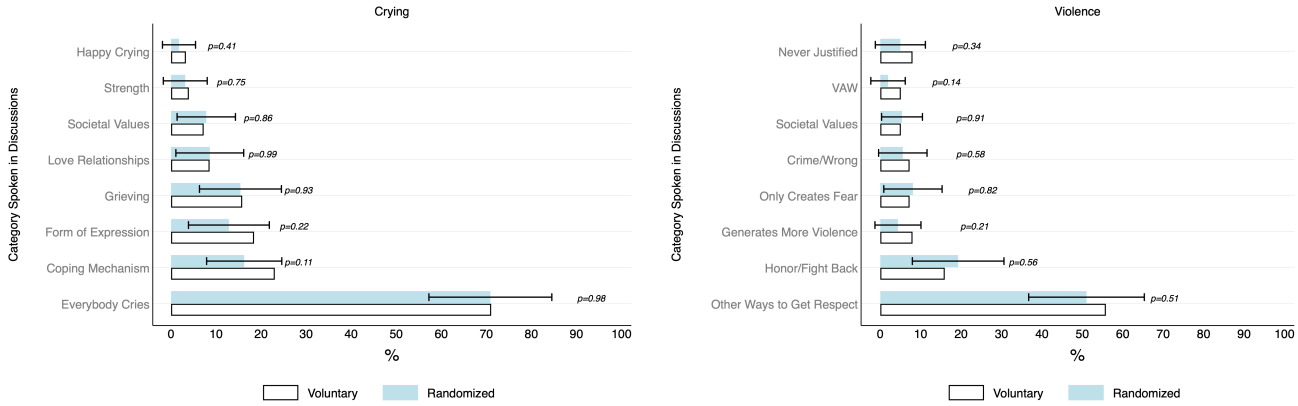
(b) Girls

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 sample consists of boys (N=328) and girls (N=376) in the control group. The regressions include school-classroom fixed effects. Horizontal bars indicate 90% confidence intervals. Standard errors are clustered at the school-classroom level.

Figure A9: Narratives to Justify Opinions During the Masculinity Sessions

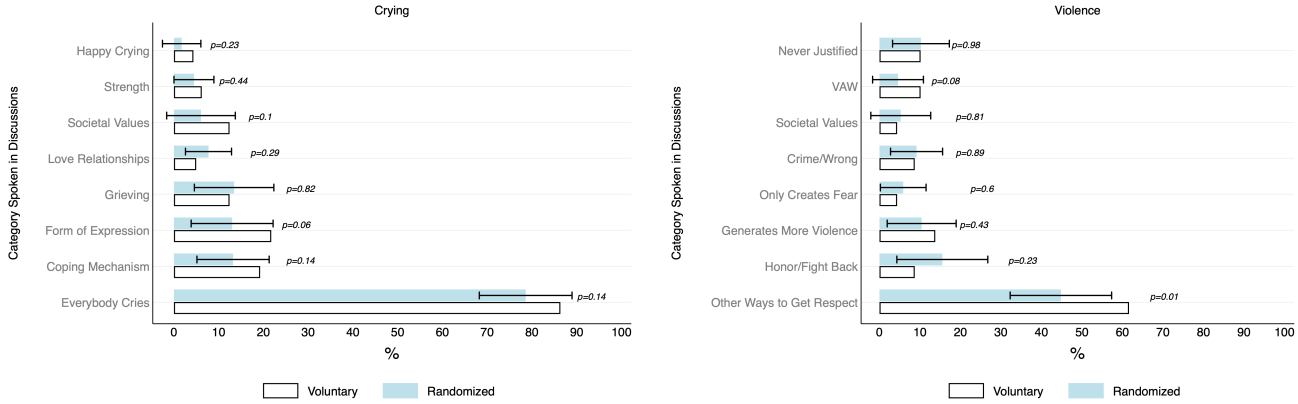
(a) Boys - Men Who Cry Are Weak

(b) Boys - Men Should Use Violence



(c) Girls - Men Who Cry Are Weak

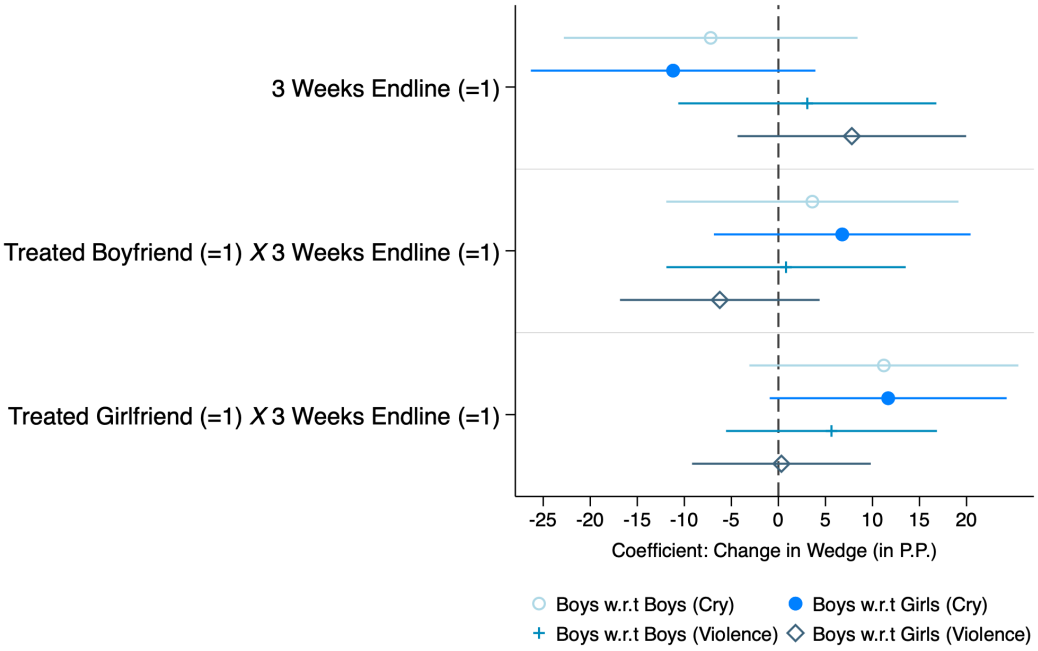
(d) Girls - Men Should Use Violence



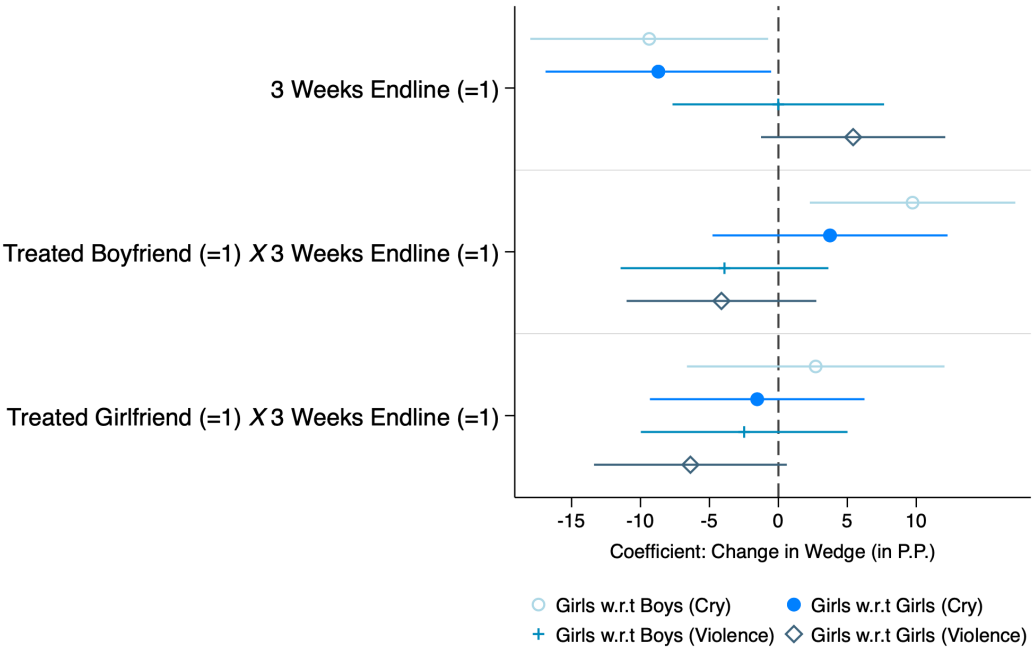
Notes: This figure plots the distribution of topics discussed in the masculinity sessions, separated by boys and girls and by discussion type (i.e. *Voluntary* and *Randomized*). The bars represent the percentage of times a topic was mentioned. Note that the categories were not mutually exclusive, so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

Figure A10: Change in Misperceptions Between the Immediate and the Three Weeks Follow Up, Among the Control Group

(a) Boys



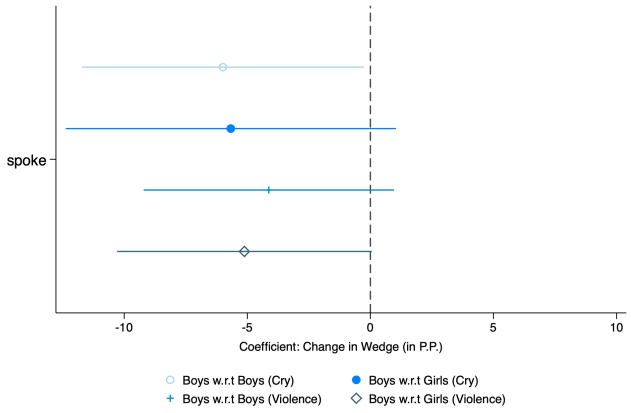
(b) Girls



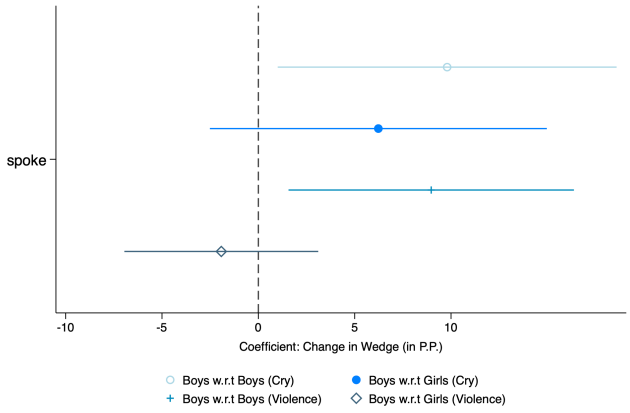
Notes: This figure plots the coefficients of regressions among control participants from their wedges with respect to boys' and girls' beliefs on a dummy equals 1 if the wedge was measured in the three weeks endline and 0 if it was measured in the immediate endline; an interaction term between a dummy 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 A11: Causal Effects of Speaking vs Listening in the *Randomized* Discussions

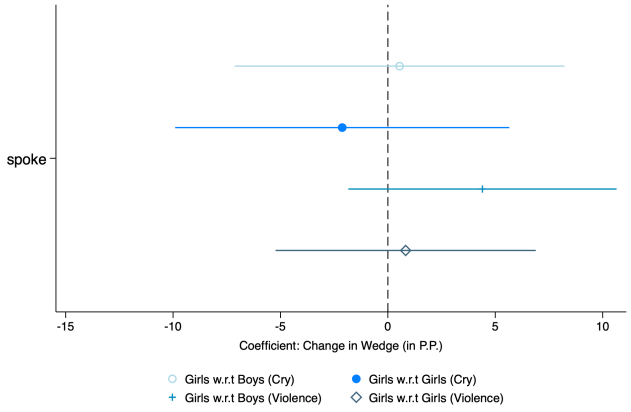
(a) Boys - Immediate Survey



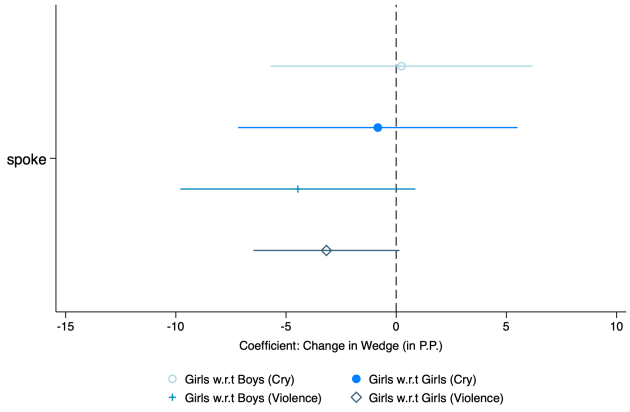
(b) Boys - Three Weeks Survey



(c) Girls - Immediate Survey

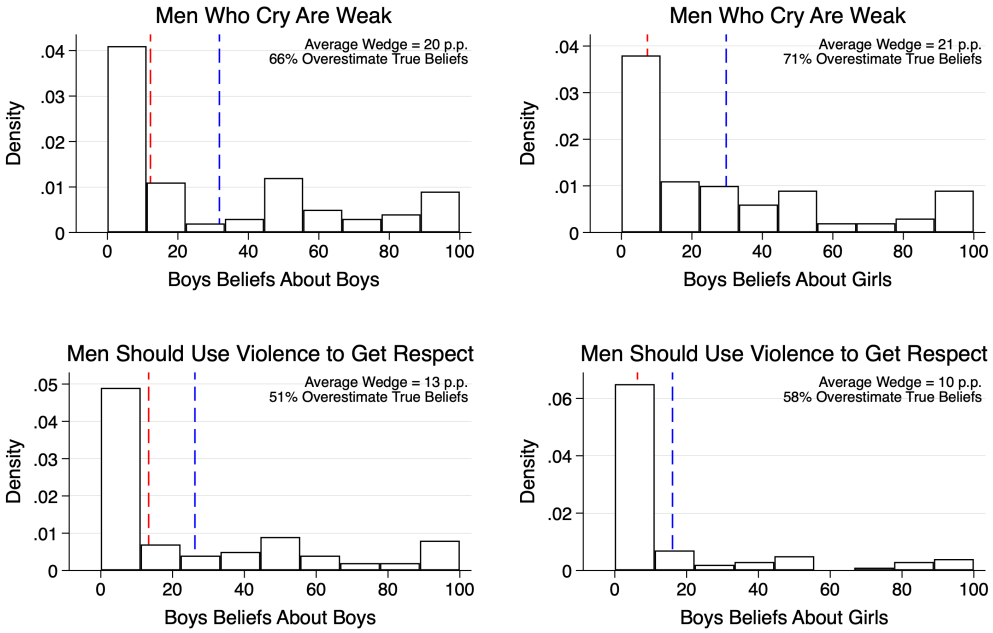


(d) Girls - Three Weeks Survey

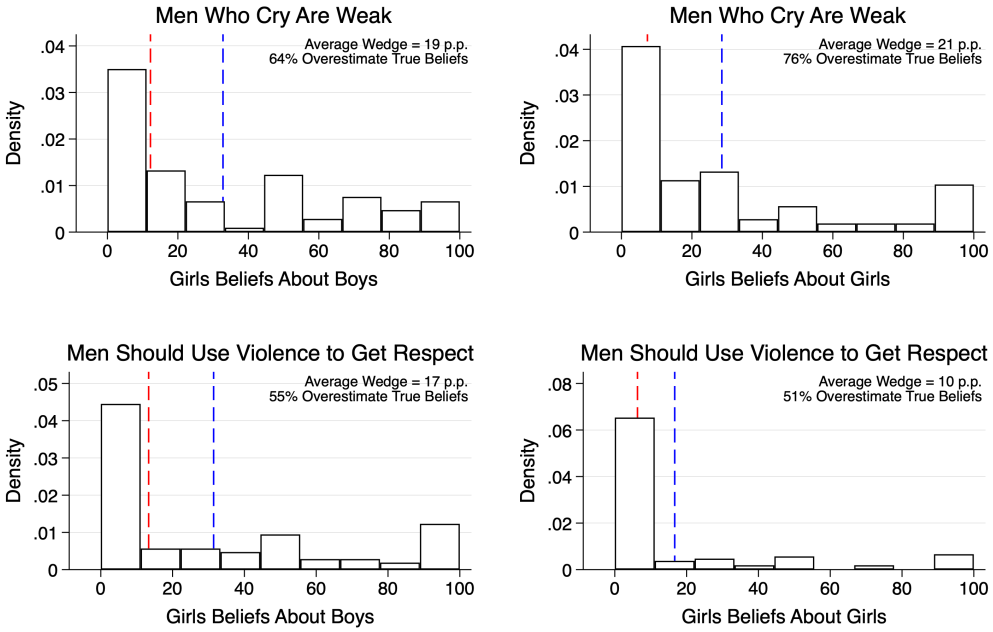


Notes: This figure plots the coefficients on the effects of speaking in the *Randomized* discussions. The coefficients are from an IV regression, in which I instrument the realized speaking in the regression by the theoretical random assignment for speaking. The dependent variables are the immediate (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 A12: Distribution of Second Order Beliefs About Masculinity (Supplementary Experiment)



(a) Boys

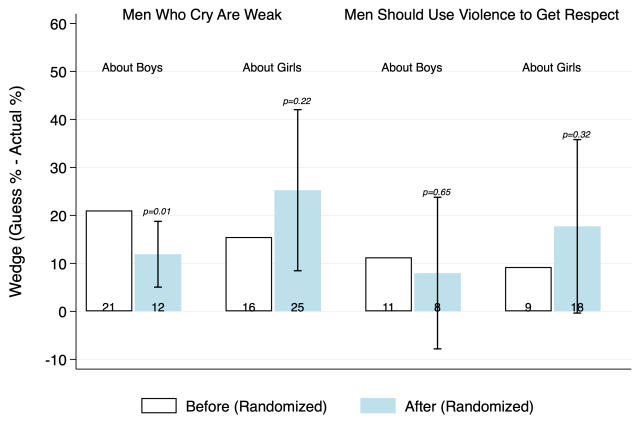


(b) Girls

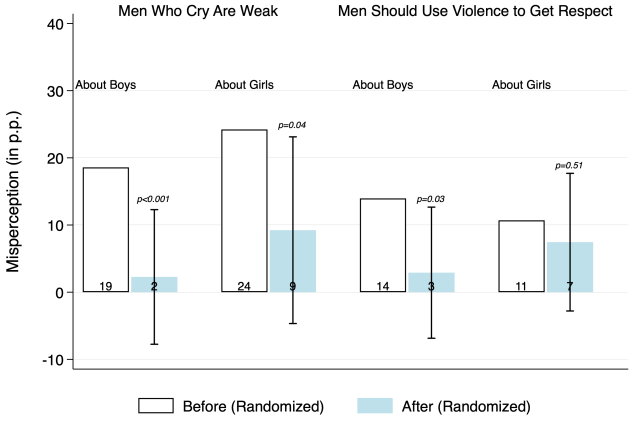
Notes: This figure plots the distribution of boys' and girls' endline guesses in the control group about the share of their male and female classmates they think agree with the statements *men who cry are weak* and *men should use violence to get respect if necessary* (i.e. their second order beliefs). 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 A13: Effects By Sex Composition of the Group (Supplementary Experiment)

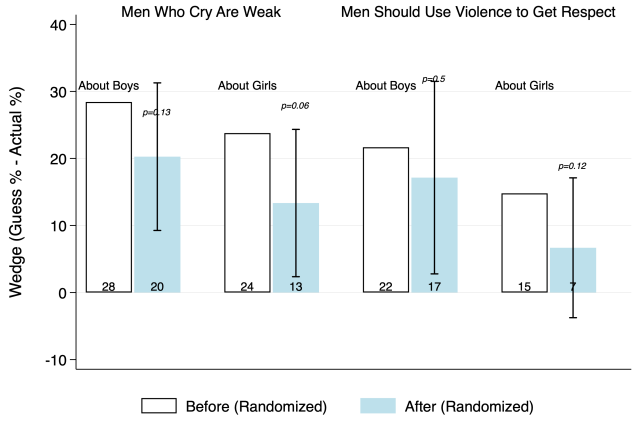
(a) Boys in Boys' Only Group



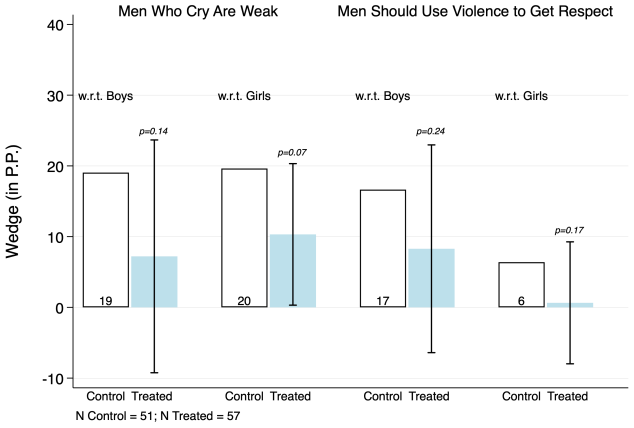
(b) Boys in Groups With Girls



(c) Girls in Girls' Only Group



(d) Girls in Groups With Boys

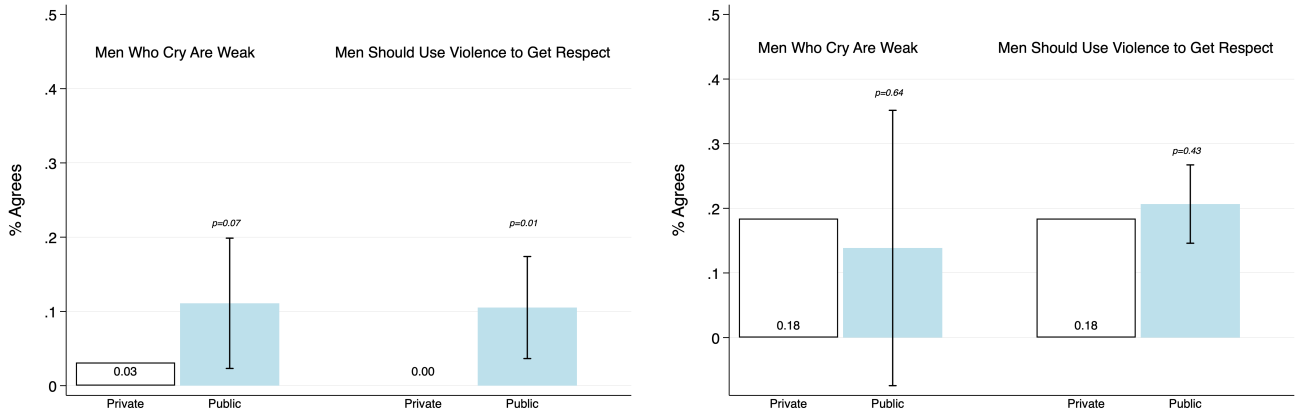


Notes:

Figure A14: Boys in Boys-Only Group Are More Masculine in Public, Whereas Girls in Girls-Only Group Are Less Masculine in Public (Supplementary Experiment)

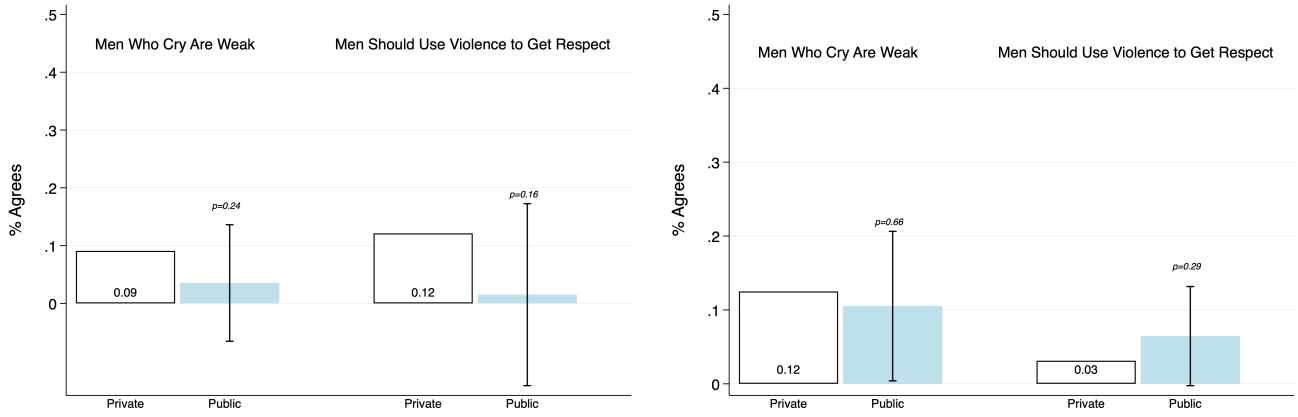
(a) Boys in Boys' Only Groups

(b) Boys in Groups With Girls



(c) Girls in Girls' Only Groups

(d) Girls in Groups With Boys



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: Baseline Characteristics - By Sex And Treatment Status

	Boys				Girls			
	Voluntary (N = 384)	Randomized (N = 383)	Control (N = 328)	P-Value	Voluntary (N = 411)	Randomized (N = 367)	Control (N = 376)	P-Value
	(1)	(2)	(3)		(4)	(5)	(6)	
Age	13.94	13.93	13.99	0.58	13.90	13.82	13.91	0.26
	(0.97)	(0.99)	(0.86)		(0.87)	(0.85)	(0.88)	
White	0.27	0.29	0.35	0.09*	0.37	0.29	0.31	0.06*
	(0.45)	(0.45)	(0.48)		(0.48)	(0.46)	(0.46)	
Black	0.68	0.65	0.59	0.05*	0.59	0.64	0.64	0.30
	(0.47)	(0.48)	(0.49)		(0.49)	(0.48)	(0.48)	
Evangelical	0.43	0.38	0.42	0.44	0.37	0.39	0.34	0.25
	(0.50)	(0.49)	(0.49)		(0.48)	(0.49)	(0.47)	
Catholic	0.20	0.21	0.20	0.91	0.17	0.17	0.17	0.97
	(0.40)	(0.41)	(0.40)		(0.37)	(0.38)	(0.38)	
Lives W/ Mother	0.82	0.86	0.84	0.20	0.86	0.88	0.85	0.50
	(0.39)	(0.34)	(0.37)		(0.35)	(0.33)	(0.36)	
Lives W/ Father	0.46	0.48	0.43	0.36	0.42	0.45	0.41	0.44
	(0.50)	(0.50)	(0.50)		(0.49)	(0.50)	(0.49)	
Lives W/ Step Father	0.14	0.14	0.16	0.66	0.13	0.15	0.15	0.81
	(0.34)	(0.35)	(0.37)		(0.34)	(0.36)	(0.35)	
Talks to Friends About Boys	0.08	0.08	0.11	0.28	0.47	0.55	0.52	0.06*
	(0.28)	(0.26)	(0.31)		(0.50)	(0.50)	(0.50)	
Talks to Friends About Girls	0.50	0.48	0.51	0.66	0.31	0.29	0.36	0.11
	(0.50)	(0.50)	(0.50)		(0.46)	(0.46)	(0.48)	
Talks to Friends About Personal Life	0.36	0.35	0.36	0.95	0.65	0.66	0.64	0.78
	(0.48)	(0.48)	(0.48)		(0.48)	(0.47)	(0.48)	
Talks to Friends About Situations That Made You Sad	0.16	0.17	0.15	0.77	0.45	0.49	0.44	0.27
	(0.37)	(0.38)	(0.36)		(0.50)	(0.50)	(0.50)	
Talks to Friends About Feelings or Personal Problems	0.44	0.42	0.38	0.23	0.65	0.67	0.66	0.84
	(0.50)	(0.49)	(0.49)		(0.48)	(0.47)	(0.47)	
Talks to Friends About What Society Expects from a Man	0.23	0.26	0.23	0.65	0.50	0.44	0.52	0.07*
	(0.42)	(0.44)	(0.42)		(0.50)	(0.50)	(0.50)	
Would Like More Emotional Support from Male Friends	0.42	0.46	0.40	0.18				
	(0.49)	(0.50)	(0.49)					
Would Like More Emotional Support from Female Friends					0.75	0.79	0.76	0.32
					(0.43)	(0.41)	(0.43)	
Importance Given To Popularity, 0-4	1.05	1.23	1.10	0.14	0.63	0.70	0.80	0.12
	(1.25)	(1.33)	(1.28)		(1.00)	(1.02)	(1.11)	
Influenced by School Girls, 0-3	0.99	1.09	0.93	0.07*	0.54	0.61	0.65	0.21
	(0.93)	(0.94)	(0.90)		(0.86)	(0.90)	(0.91)	
Influenced by School Boys, 0-3	1.05	0.99	0.94	0.32	0.92	0.98	1.04	0.26
	(0.97)	(0.97)	(0.98)		(0.96)	(0.98)	(0.97)	
Agrees With Men Who Cry Are Weak	0.10	0.09	0.11	0.68	0.03	0.04	0.06	0.30
	(0.30)	(0.29)	(0.32)		(0.18)	(0.20)	(0.23)	
Agrees With Men Should Use Violence to Get Respect	0.18	0.15	0.17	0.63	0.07	0.04	0.05	0.32
	(0.38)	(0.36)	(0.38)		(0.25)	(0.20)	(0.21)	
Vocality Score	4.18	4.01	3.68	0.30	4.23	4.60	4.38	0.51
	(4.48)	(4.24)	(4.15)		(4.36)	(4.78)	(4.45)	
Social Network Score	2.09	1.89	2.09	0.10*	2.07	2.13	2.15	0.75
	(1.55)	(1.48)	(1.56)		(1.43)	(1.48)	(1.52)	
Admiration Score	1.55	1.45	1.46	0.70	2.34	2.35	2.48	0.69
	(1.78)	(1.73)	(1.79)		(2.62)	(2.67)	(2.52)	
Social Desirability Score, 0-4	2.84	2.82	2.77	0.69	2.85	2.83	2.80	0.75
	(0.93)	(1.00)	(0.97)		(0.92)	(0.98)	(0.92)	
Masculinity Score, 0-4	1.14	1.21	1.17	0.66	0.52	0.55	0.55	0.85
	(0.95)	(1.08)	(1.07)		(0.82)	(0.83)	(0.88)	
Gave WhatsApp	0.82	0.76	0.82	0.12	0.87	0.89	0.86	0.67
	(0.38)	(0.43)	(0.39)		(0.34)	(0.32)	(0.34)	

Notes: 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 B2: WhatsApp Sample Characteristics - By Sex and Treatment Status

	Boys				Girls			
	Voluntary (N = 126)	Randomized (N = 132)	Control (N = 117)	P-Value	Voluntary (N = 193)	Randomized (N = 173)	Control (N = 163)	P-Value
	(1)	(2)	(3)		(4)	(5)	(6)	
Age	13.77	14.07	14.07	0.01***	13.90	13.87	14.00	0.32
	(0.84)	(0.99)	(0.87)		(0.84)	(0.80)	(0.90)	
White	0.28	0.31	0.37	0.34	0.40	0.29	0.37	0.07*
	(0.45)	(0.46)	(0.48)		(0.49)	(0.46)	(0.48)	
Black	0.68	0.63	0.56	0.16	0.55	0.63	0.60	0.32
	(0.47)	(0.48)	(0.50)		(0.50)	(0.48)	(0.49)	
Evangelical	0.45	0.38	0.44	0.44	0.35	0.40	0.31	0.16
	(0.50)	(0.49)	(0.50)		(0.48)	(0.49)	(0.46)	
Catholic	0.21	0.27	0.24	0.56	0.20	0.19	0.21	0.80
	(0.41)	(0.45)	(0.43)		(0.40)	(0.39)	(0.41)	
Lives W/ Mother	0.83	0.89	0.79	0.10	0.88	0.88	0.87	0.93
	(0.38)	(0.32)	(0.41)		(0.33)	(0.33)	(0.34)	
Lives W/ Father	0.42	0.52	0.47	0.28	0.44	0.49	0.42	0.45
	(0.50)	(0.50)	(0.50)		(0.50)	(0.50)	(0.50)	
Lives W/ Step Father	0.13	0.16	0.18	0.53	0.14	0.12	0.13	0.91
	(0.34)	(0.37)	(0.39)		(0.35)	(0.33)	(0.34)	
Talks to Friends About Boys	0.06	0.12	0.14	0.08*	0.46	0.56	0.56	0.08*
	(0.24)	(0.33)	(0.35)		(0.50)	(0.50)	(0.50)	
Talks to Friends About Girls	0.42	0.49	0.48	0.43	0.31	0.27	0.38	0.08*
	(0.49)	(0.50)	(0.50)		(0.46)	(0.44)	(0.49)	
Talks to Friends About Personal Life	0.43	0.43	0.45	0.92	0.70	0.71	0.70	0.97
	(0.50)	(0.50)	(0.50)		(0.46)	(0.46)	(0.46)	
Talks to Friends About Situations That Made You Sad	0.16	0.21	0.15	0.41	0.52	0.51	0.45	0.34
	(0.37)	(0.41)	(0.36)		(0.50)	(0.50)	(0.50)	
Talks to Friends About Feelings or Personal Problems	0.42	0.44	0.36	0.44	0.62	0.65	0.71	0.26
	(0.49)	(0.50)	(0.48)		(0.49)	(0.48)	(0.46)	
Talks to Friends About What Society Expects from a Man	0.20	0.29	0.24	0.32	0.51	0.47	0.55	0.37
	(0.40)	(0.45)	(0.43)		(0.50)	(0.50)	(0.50)	
Would Like More Emotional Support from Male Friends	0.39	0.41	0.41	0.89				
	(0.49)	(0.49)	(0.49)					
Would Like More Emotional Support from Female Friends					0.76	0.78	0.80	0.59
					(0.43)	(0.41)	(0.40)	
Importance Given To Popularity, 0-4	0.95	1.16	0.79	0.04**	0.60	0.72	0.86	0.08*
	(1.15)	(1.27)	(1.03)		(0.98)	(0.99)	(1.15)	
Influenced by School Girls, 0-3	0.86	1.02	0.84	0.16	0.49	0.58	0.58	0.48
	(0.83)	(0.87)	(0.79)		(0.83)	(0.81)	(0.84)	
Influenced by School Boys, 0-3	1.00	1.02	0.89	0.51	0.91	0.99	1.01	0.62
	(0.92)	(0.92)	(0.93)		(0.93)	(0.95)	(0.94)	
Agrees With Men Who Cry Are Weak	0.07	0.04	0.09	0.30	0.02	0.03	0.03	0.61
	(0.25)	(0.20)	(0.28)		(0.13)	(0.17)	(0.17)	
Agrees With Men Should Use Violence to Get Respect	0.14	0.11	0.11	0.67	0.03	0.02	0.04	0.24
	(0.35)	(0.32)	(0.32)		(0.18)	(0.12)	(0.20)	
Vocality Score	5.08	4.85	5.30	0.77	4.61	4.95	5.17	0.55
	(5.23)	(4.48)	(5.16)		(4.60)	(4.98)	(4.85)	
Social Network Score	2.38	2.11	2.17	0.34	2.25	2.19	2.33	0.69
	(1.63)	(1.33)	(1.67)		(1.44)	(1.43)	(1.60)	
Admiration Score	1.90	1.73	1.74	0.77	2.60	2.59	2.90	0.49
	(2.29)	(1.82)	(2.22)		(2.77)	(2.72)	(2.75)	
Social Desirability Score, 0-4	2.89	2.87	2.91	0.95	2.88	2.80	2.80	0.62
	(0.88)	(1.06)	(0.94)		(0.91)	(0.99)	(0.92)	
Masculinity Score, 0-4	1.11	1.05	1.09	0.89	0.42	0.51	0.47	0.45
	(0.92)	(1.06)	(1.08)		(0.71)	(0.77)	(0.80)	
Gave WhatsApp	1.00	1.00	1.00		1.00	1.00	1.00	
	(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.00)	

Notes: 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 B3: 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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Boys	0.51	0.51	0.50	0.40	0.55	0.70	0.49
	(0.03)	(0.04)	(0.02)				
Black	0.55	0.54	0.57	0.68	0.65	0.70	0.88
	(0.09)	(0.09)	(0.16)				
Students per Class	32.94	33.23	32.25	0.74	0.78	0.64	0.86
	(4.21)	(3.31)	(4.25)				
Students per Teacher	20.51	12.41	11.02	0.11	0.49	0.69	0.00***
	(24.01)	(5.22)	(6.92)				
Internet for Learning	0.52	0.68	0.33	0.13	0.51	0.23	0.22
	(0.50)	(0.48)	(0.58)				
Lunchroom	0.99	0.95	1.00	0.23	0.83	0.31	0.01**
	(0.12)	(0.21)	(0.00)				
Sport Court	0.83	0.82	1.00	0.91	0.43	0.03**	0.00***
	(0.38)	(0.39)	(0.00)				
Green Area	0.43	0.36	0.67	0.54	0.40	0.30	0.56
	(0.50)	(0.49)	(0.58)				
Number of Classrooms in Use	14.06	13.05	16.33	0.37	0.47	0.37	0.49
	(5.41)	(4.80)	(7.51)				
Student Union	0.83	0.91	1.00	0.33	0.44	0.14	0.00***
	(0.37)	(0.29)	(0.00)				
Accessible Facilities	0.59	0.50	0.33	0.36	0.36	0.57	0.41
	(0.49)	(0.51)	(0.58)				

Notes: This table compares the means of student and school characteristics from Rio de Janeiro's School Census and this paper's Main and Supplementary Experiments. Columns (1), (2), and (3) present the respective variable means for each sample. Column (4) presents p-valaues of a t-test comparing the variable means between the School Census and the Main Experiment; Column (5) presents p-values of a t-test comparing the variable means between the School Census and the Supplementary Experiment; Column (5) presents p-values of a t-test comparing the variable means between the Main Experiment and the Supplementary Experiment; Column (7) presents p-values of a F-test comparing the variable means across the SchoolC

Table B4: Students' Characteristics - Comparison Main and Supplementary Experiments

	Boys			Girls		
	Main Experiment	Small-Scale	P-Value	Main Experiment	Small-Scale	P-Value
	(1)	(2)	(3)	(4)	(5)	(6)
Age	13.95	13.97	0.80	13.88	13.77	0.10*
	(0.95)	(0.72)		(0.87)	(0.70)	
White	0.30	0.28	0.51	0.32	0.34	0.69
	(0.46)	(0.45)		(0.47)	(0.47)	
Black	0.65	0.70	0.17	0.62	0.61	0.81
	(0.48)	(0.46)		(0.48)	(0.49)	
Evangelical	0.41	0.34	0.10	0.37	0.38	0.82
	(0.49)	(0.48)		(0.48)	(0.49)	
Catholic	0.20	0.16	0.21	0.17	0.16	0.77
	(0.40)	(0.37)		(0.38)	(0.37)	
Lives W/ Mother	0.84	0.87	0.26	0.86	0.85	0.82
	(0.37)	(0.33)		(0.35)	(0.35)	
Lives W/ Father	0.46	0.36	0.02**	0.43	0.38	0.20
	(0.50)	(0.48)		(0.50)	(0.49)	
Lives W/ Step Father	0.14	0.23	0.00***	0.14	0.14	0.78
	(0.35)	(0.42)		(0.35)	(0.34)	
Talks to Friends About Boys	0.09	0.10	0.76	0.51	0.47	0.24
	(0.28)	(0.30)		(0.50)	(0.50)	
Talks to Friends About Girls	0.50	0.51	0.77	0.32	0.28	0.22
	(0.50)	(0.50)		(0.47)	(0.45)	
Talks to Friends About Situations That Made You Sad	0.16	0.15	0.74	0.46	0.44	0.62
	(0.37)	(0.36)		(0.50)	(0.50)	
Agrees With Men Who Cry Are Weak	0.10	0.11	0.77	0.04	0.04	0.87
	(0.30)	(0.31)		(0.21)	(0.20)	
Agrees With Men Should Use Violence to Get Respect	0.17	0.17	0.99	0.05	0.05	0.96
	(0.37)	(0.37)		(0.22)	(0.22)	
Social Desirability Score, 0-4	2.81	2.83	0.79	2.83	2.77	0.45
	(0.97)	(1.01)		(0.94)	(0.98)	
Masculinity Score, 0-4	1.17	1.50	0.00***	0.54	1.04	0.00***
	(1.03)	(1.06)		(0.84)	(1.14)	

Notes: In this table, columns (1), (2), (4), and (5) present the mean student characteristics by experiment and sex. Columns (3) and (5) show the p-value of the t-test comparing the means of each variable between the Main and Supplementary Experiments, for boys and girls, respectively.

Table B5: Balance Tests - Supplementary Experiment

	Boys			Girls		
	Treated	Control	P-Value	Treated	Control	P-Value
	(1)	(2)	(3)	(4)	(5)	(6)
Age	13.98	13.96	0.88	13.75	13.78	0.72
	(0.78)	(0.66)		(0.77)	(0.63)	
White	0.26	0.30	0.54	0.42	0.26	0.02**
	(0.44)	(0.46)		(0.50)	(0.44)	
Black	0.71	0.69	0.75	0.53	0.70	0.01**
	(0.46)	(0.47)		(0.50)	(0.46)	
Evangelical	0.34	0.34	0.93	0.37	0.38	0.85
	(0.48)	(0.48)		(0.48)	(0.49)	
Catholic	0.16	0.17	0.82	0.15	0.18	0.60
	(0.36)	(0.38)		(0.36)	(0.38)	
Lives W/ Mother	0.87	0.88	0.75	0.88	0.82	0.25
	(0.34)	(0.32)		(0.32)	(0.38)	
Lives W/ Father	0.31	0.42	0.16	0.38	0.38	0.97
	(0.47)	(0.50)		(0.49)	(0.49)	
Lives W/ Step Father	0.27	0.19	0.28	0.14	0.13	0.95
	(0.44)	(0.40)		(0.35)	(0.34)	
Talks to Friends About Boys	0.11	0.08	0.47	0.44	0.49	0.47
	(0.32)	(0.27)		(0.50)	(0.50)	
Talks to Friends About Girls	0.52	0.49	0.71	0.24	0.31	0.30
	(0.50)	(0.50)		(0.43)	(0.46)	
Talks to Friends About Situations That Made You Sad	0.16	0.14	0.82	0.42	0.46	0.55
	(0.36)	(0.35)		(0.50)	(0.50)	
Social Desirability Score, 0-4	2.91	2.74	0.28	2.80	2.74	0.68
	(0.98)	(1.04)		(1.02)	(0.94)	
Masculinity Score, 0-4	1.46	1.56	0.53	0.93	1.14	0.18
	(1.11)	(1.01)		(1.05)	(1.21)	

Notes: This table shows the mean student characteristics by sex and treatment arm in columns (1), (2), (4), and (5). Columns (3) and (6) present the p-values of the t-test comparing the means between the control and treatment groups, by sex.

Table B6: First-stage among randomized speakers

	Spoke		
	All	Boys	Girls
	(1)	(2)	(3)
Randomly Assigned to Speak	0.849***	0.838***	0.852***
	(0.036)	(0.046)	(0.047)
Observations	750	382	366
F-Stat	548.16	332.66	334.45
School FE	Yes	Yes	Yes

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

Notes: This table presents regression coefficients within the sample of those in the *Randomized* group only. The dependent variable is a dummy equal to 1 if a a participant spoke in the discussion. The independent variable of interest is a dummy equal to 1 if the speaker was randomly assigned to speak in the *Randomized* discussion. All regressions include school-classroom fixed effects and standard errors clustered at the school-classroom level.

Table B7: Effects of the Discussions Are Robust To Including Controls Unbalanced at Baseline (Immediately After Treatment)

	Wedge: Men Who Cry Are Weak				Wedge: Men Should Violence to Get Respect			
	To boys		To girls		To boys		To girls	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Boy								
Voluntary	-10.290***	-10.540***	-13.483***	-13.564***	-9.573***	-9.823***	-1.307	-1.307
	(2.474)	(2.540)	(2.615)	(2.650)	(2.384)	(2.369)	(2.026)	(2.063)
Randomized	-10.540***	-10.914***	-13.019***	-13.103***	-8.911***	-9.276***	-1.765	-1.774
	(2.508)	(2.485)	(2.794)	(2.841)	(2.586)	(2.526)	(2.083)	(2.101)
Observations	1,095	1,095	1,095	1,095	1,095	1,095	1,095	1,095
Dep. Var. Mean (Control Group)	21.38	21.38	27.68	27.68	11.82	11.82	9.96	9.96
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unbalanced Controls	No	Yes	No	Yes	No	Yes	No	Yes
Panel B: Girls								
Voluntary	-12.475***	-12.358***	-13.388***	-13.222***	-6.242**	-6.172**	0.842	0.751
	(2.620)	(2.663)	(2.812)	(2.822)	(2.418)	(2.442)	(1.821)	(1.869)
Randomized	-12.711***	-12.680***	-9.443***	-9.301***	-7.580***	-7.495***	0.867	1.047
	(2.758)	(2.784)	(2.639)	(2.666)	(2.593)	(2.630)	(1.835)	(1.860)
Observations	1,154	1,154	1,154	1,154	1,154	1,154	1,154	1,154
Dep. Var. Mean (Control Group)	23.57	23.57	24.47	24.47	10.15	10.15	5.83	5.83
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unbalanced Controls	No	Yes	No	Yes	No	Yes	No	Yes

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

Notes: This table presents regression coefficients of the treatment effects of the *Randomized* and *Voluntary* discussions on boys' (Panel A) and girls' (Panel B) misperceptions about crying and violence in the survey immediate after treatment (Columns 1, 3, 5, and 7). Columns 2, 4, 6, and 8 present robustness to including controls that are unbalanced at baseline, as highlighted in Table B1. All regressions include school fixed effects. Standard errors clustered at the school-classroom level.

Table B8: Effects of the Discussions Are Robust To Including Controls Unbalanced at Baseline (Three Weeks Later)

	Wedge: Men Who Cry Are Weak				Wedge: Men Should Violence to Get Respect			
	To boys		To girls		To boys			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Boys								
Voluntary	-9.591**	-9.605**	-10.850***	-10.907***	-6.906*	-6.678*	-4.311	-4.469
	(4.028)	(4.068)	(3.574)	(3.652)	(3.642)	(3.662)	(3.256)	(3.302)
Randomized	-11.502***	-11.682***	-8.383**	-8.435**	-12.974***	-12.661***	-7.367**	-7.076**
	(3.765)	(3.863)	(3.557)	(3.602)	(4.007)	(4.054)	(2.849)	(2.904)
Observations	354	354	354	354	342	342	342	342
Dep. Var. Mean (Control Group)	17.54	17.54	20.98	20.98	11.16	11.16	9.87	9.87
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unbalanced Controls	No	Yes	No	Yes	No	Yes	No	Yes
Panel B: Girls								
Voluntary	-8.332**	-8.637**	-3.864	-3.891	-7.070*	-7.208*	-1.711	-1.725
	(3.789)	(3.779)	(3.249)	(3.231)	(3.976)	(3.849)	(2.601)	(2.567)
Randomized	-16.806***	-16.936***	-7.773***	-8.014***	-11.076***	-11.491***	-4.398**	-4.672**
	(3.491)	(3.584)	(2.896)	(2.929)	(3.930)	(4.049)	(1.939)	(2.004)
Observations	504	504	504	504	490	490	490	490
Dep. Var. Mean (Control Group)	19.78	19.78	13.94	13.94	8.09	8.09	5.22	5.22
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unbalanced Controls	No	Yes	No	Yes	No	Yes	No	Yes

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

Notes: This table presents regression coefficients of the treatment effects of the *Randomized* and *Voluntary* discussions on boys' (Panel A) and girls' (Panel B) misperceptions about crying and violence in the survey three weeks after treatment (Columns 1, 3, 5, and 7). Columns 2, 4, 6, and 8 present robustness to including controls that are unbalanced at baseline, as highlighted in Table B1. All regressions include school fixed effects. Standard errors clustered at the school-classroom level.

Table B9: *Voluntary* Speakers Only Differ From Randomized Ones in a Vocality Score

	Vocality	Popularity	Admiration	Masculinity	Social Desirability
	(1)	(2)	(3)	(4)	(5)
Panel A: Boys					
Voluntary	0.950*	-0.013	-0.023	-0.087	-0.028
	(0.495)	(0.160)	(0.185)	(0.114)	(0.099)
Observations	329	329	329	329	329
School Fixed Effects	Yes	Yes	Yes	Yes	Yes
Randomized Mean	3.95	2.02	1.51	1.15	2.85
Panel B: Girls					
Voluntary	1.267**	0.089	0.374	0.031	-0.186*
	(0.523)	(0.154)	(0.348)	(0.075)	(0.111)
Observations	332	332	332	332	332
School Fixed Effects	Yes	Yes	Yes	Yes	Yes
Randomized Mean	4.36	2.01	2.39	0.46	2.92

*** 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*. *Vocality*, *Network*, and *Admiration* are the count of how many times a participant was selected by their friends as being, respectively: among the top 5 most talkative people in the class, among the people someone spent the most time with in the last week, among the people someone admires the most. *Masculinity* is a score from 0 to 4 from a Masculinity Scale, with a larger number for self-reports of more traditionally masculine beliefs. *Desirability* is a score from 0 to 4 from the Social Desirability Scale, with a larger number meaning that the person gives more socially desirable answers. Standard errors are clustered at the classroom level.

Table B10: Categories and Examples Shared in the Masculinity Discussions

Men Who Cry Are Weak			Men Should Use Violence to Get Respect When 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 respect him for that.	42
Happy Crying	Crying when you win a competition	18	Never Justified/Doesn't	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			

Notes: This table presents examples of students' statements during masculinity discussions, categorized by the research assistants according to the content of the statements.

Table B11: Social Desirability Does Not Drive Differential Effects on Misperceptions Across Treatment Groups

	Men Who Cry Are Weak				Men Should Use Violence			
	Boys		Girls		Boys		Girls	
	To Boys (1)	To Girls (2)	To Boys (3)	To Girls (4)	To Boys (5)	To Girls (6)	To Boys (7)	To Girls (8)
Panel A: School Endline - Immediately After Treatment								
Voluntary	-8.753**	-13.813***	-9.758***	-14.210***	-10.094**	-1.340	-6.722	0.303
	(3.623)	(3.667)	(3.456)	(3.984)	(4.228)	(3.401)	(4.110)	(3.471)
Randomized	-7.912*	-11.662**	-11.214***	-9.335**	-7.870	-1.140	-7.458*	0.547
	(4.195)	(4.496)	(3.824)	(4.087)	(5.085)	(3.404)	(4.011)	(3.296)
High Social Desirability Score	-2.979	-3.294	-0.722	-2.286	-6.677	-4.854*	-2.840	-2.672
	(3.503)	(3.425)	(3.379)	(3.485)	(4.256)	(2.692)	(3.553)	(2.246)
High Social Desirability Score × Voluntary	-2.360	0.513	-4.068	1.316	0.812	0.058	0.820	0.905
	(4.534)	(4.543)	(4.687)	(4.873)	(4.918)	(3.656)	(4.578)	(3.818)
High Social Desirability Score × Randomized	-3.761	-1.867	-2.212	-0.054	-1.258	-0.720	-0.053	0.595
	(4.808)	(4.561)	(4.406)	(4.966)	(5.764)	(3.620)	(4.923)	(3.753)
Observations	1095	1095	1154	1154	1095	1095	1154	1154
Control Mean	21.38	27.68	23.57	24.47	11.82	9.96	10.15	5.83
Panel B: WhatsApp Endline - 3 Weeks After Treatment								
Voluntary	-16.313**	-11.684	-8.463	-6.501	-20.969***	-10.303	-8.073	-3.560
	(7.961)	(7.124)	(5.377)	(4.692)	(7.506)	(6.203)	(5.733)	(3.751)
Randomized	-18.122**	-7.092	-24.167***	-13.291***	-26.366***	-10.364*	-13.334**	-5.024*
	(8.331)	(7.841)	(4.704)	(3.876)	(7.953)	(6.033)	(5.087)	(2.857)
High Social Desirability Score	-18.080***	-1.631	-3.892	-1.552	-19.715**	-6.393	1.136	-0.911
	(6.273)	(6.449)	(5.008)	(3.842)	(7.711)	(5.897)	(5.637)	(3.185)
High Social Desirability Score × Voluntary	7.979	1.033	0.346	4.022	19.084**	8.297	1.443	2.798
	(8.245)	(7.743)	(6.376)	(6.230)	(9.113)	(7.228)	(6.741)	(4.272)
High Social Desirability Score × Randomized	9.218	-1.838	11.315*	8.477*	18.520**	4.075	3.470	0.981
	(8.530)	(8.924)	(5.959)	(5.051)	(8.301)	(6.560)	(6.444)	(3.781)
Observations	354	354	504	504	342	342	490	490
Control Mean	17.54	20.98	19.78	13.94	11.16	9.87	8.09	5.22
School FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Notes: This table presents regression coefficients that estimates whether social desirability explains the effects on misperceptions. The main coefficients of interest are the interaction terms *High Social Desirability* × *Voluntary* and *High Social Desirability* × *Randomized*. Social desirability score is a baseline measure of the participants' propensity to give socially desirable answers, based on the Crowne and Marlowe (1960) scale. *High Social Desirability* is a dummy equal to 1 if a participants' baseline social desirability score is at least at the sample median, and 0 otherwise. The outcome variables are the misperceptions, in percentage points, of boys' beliefs about boys and girls for the statements *Men Who Cry Are Weak* (Columns 1 and 2) and *Men Should Use Violence to Get Respect If Necessary* (Column 5 and 6) at the immediate (Panel A) and three-weeks later follow up surveys 2 (Panel B). Columns (3), (4), (7) and (8) present the same regression estimates for girls. Standard errors are clustered at the classroom level. All regressions include school fixed effects

Table B12: Control Girls Who Have At Least One Treated Girl Friend Have Smaller Misperceptions About Other Girls' Beliefs 3 Weeks Effects

	Delta: Men Who Cry Are Weak				Delta: Men Should Violence to Get Respect			
	Boys		Girls		Boys		Girls	
	To Boys	To Girls	To Boys	To Girls	To Boys	To Girls	To Boys	To Girls
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Boy-Friends Controls								
Has Any Treated Boy Friends	-6.279	6.188	13.410	-8.455	9.399	2.743	-8.655	2.578
	(18.238)	(9.221)	(9.597)	(12.470)	(11.842)	(8.436)	(9.996)	(7.669)
Number of Boy Friends	-1.412	-1.252	1.154	3.124	-3.748	-2.206	2.425	-3.082
	(5.233)	(4.575)	(3.488)	(2.343)	(5.262)	(5.726)	(3.028)	(4.492)
Panel B: Girl-Friends Controls								
Has Any Treated Girl Friends	2.879	6.909	3.814	-5.714	0.734	1.814	-5.884	-10.802
	(12.522)	(13.350)	(11.529)	(8.290)	(11.905)	(11.551)	(8.803)	(7.172)
Number of Girl Friends	2.758	-4.315	-3.495	0.472	-1.750	-2.829	1.668	3.027
	(7.281)	(6.623)	(4.331)	(4.101)	(7.590)	(6.591)	(1.959)	(2.151)
Panel C: Any-Friends Controls								
Has Any Treated Friends	-0.920	7.364	9.595	-5.737	3.485	-11.883	-5.603	-14.292*
	(35.365)	(17.935)	(11.295)	(6.890)	(23.957)	(19.143)	(10.260)	(7.707)
Number of Friends	0.025	-1.718	-0.113	0.778	-3.255	-3.181	1.040	0.313
	(3.923)	(3.232)	(2.355)	(2.018)	(3.164)	(3.539)	(1.198)	(1.797)
Observations	110	110	159	159	107	107	154	154
Dep. Var. Mean	-1.65	-3.16	-5.29	-8.99	5.15	3.29	-2.66	-0.09
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Notes: This table presents regression coefficients among control participants which estimate whether having a treated friend impacts their change in misperceptions between the follow-up survey immediately after and the one 3 weeks after the discussions. The dependent variables are the percentage point difference in the misperceptions about crying (Columns 1-4) and violence (Columns 5-8) between the 3-week and the immediate follow-up surveys. *Has Any Treated Boy Friends*, *Has Any Treated Girl Friends*, and *Has Any Treated Friends* are a dummy equal to 1 if the participant listed at least one treated boy, one treated girl, or either one treated boy or a treated girl as someone they spent the most time with in the last two weeks. *Number Boy Friends*, *Number of Girl Friends*, *Number of Friends* are the total number of boys, girls, or boys and girls listed as someone they spent the most time with in the last two weeks. All regressions include school fixed effects. Standard errors clustered at the school-classroom level.

Table B13: Discussion Groups Make Boys' First-Order Beliefs Less Masculine Immediately and Three Weeks After

	Men Who Cry Are Weak		Men Should Use Violence	
	Boys	Girls	Boys	Girls
	(1)	(2)	(3)	(4)
Panel A: School Endline - Immediately After Treatment				
Voluntary	-0.038**	-0.029***	-0.014	-0.021
	(0.017)	(0.010)	(0.028)	(0.018)
Randomized	-0.048***	-0.021*	-0.036	0.012
	(0.016)	(0.011)	(0.033)	(0.020)
Observations	1,095	1,154	1,095	1,154
School Fixed Effects	Yes	Yes	Yes	Yes
Control Mean	0.09	0.04	0.20	0.06
P-Value Treatment Comparison	0.52	0.28	0.48	0.12
Panel B: Whatsapp Endline - 3 Weeks After Treatment				
Voluntary	-0.011	-0.001	-0.027	0.031
	(0.025)	(0.011)	(0.057)	(0.021)
Randomized	-0.044*	0.008	-0.107**	0.003
	(0.025)	(0.013)	(0.046)	(0.021)
Observations	375	529	375	529
School Fixed Effects	Yes	Yes	Yes	Yes
Control Mean	0.08	0.01	0.19	0.04
P-Value Treatment Comparison	0.11	0.50	0.10	0.22

*** 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 B14: Discussion Groups Reduce Boys' Social Image Concerns Toward Less Masculine Behaviors in Public (Pooled)

	Last Cried	Last Violent	Joy of Destruction
	(1)	(2)	(3)
Panel A: All Boys			
Public	0.129	0.070	0.082
	(0.129)	(0.107)	(0.120)
Treated	0.012	0.022	0.063
	(0.099)	(0.095)	(0.092)
Public × Treated	-0.150	-0.087	-0.115
	(0.146)	(0.133)	(0.137)
Observations	1,095	1,095	1,095
School Fixed Effects	Yes	Yes	Yes
Control-Private Mean of Dep. Var	2.07	1.83	0.45
Panel B: Less Masculine Boys (Based on Masculinity Score)			
Public	0.100	0.253	0.141
	(0.201)	(0.174)	(0.138)
Treated	0.127	0.061	0.273*
	(0.154)	(0.138)	(0.154)
Public × Treated	-0.062	-0.290	-0.326*
	(0.253)	(0.211)	(0.192)
Observations	330	330	330
School Fixed Effects	Yes	Yes	Yes
Control-Private Mean of Dep. Var	1.89	1.44	0.38

*** 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 provides the 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 B15: Discussion Group Make Students' Hypothetical Behaviors Less Masculine (By Treatment)

	Last Cried	Last Violent	Joy of Destruction
	(1)	(2)	(3)
Panel A: All Boys			
Public	0.129	0.071	0.083
	(0.129)	(0.107)	(0.120)
Voluntary	0.070	-0.036	0.071
	(0.117)	(0.104)	(0.116)
Randomized	-0.045	0.079	0.054
	(0.110)	(0.116)	(0.107)
Public × Voluntary	-0.226	-0.031	-0.212
	(0.172)	(0.161)	(0.165)
Public × Randomized	-0.076	-0.141	-0.017
	(0.158)	(0.148)	(0.156)
Observations	1,095	1,095	1,095
School FE	Yes	Yes	Yes
P-Value Treatment Comparison (Interaction Terms)	0.33	0.49	0.23
Panel B: Less Masculine Boys (Based on Masculinity Score)			
Public	0.101	0.249	0.140
	(0.201)	(0.174)	(0.139)
Voluntary	0.202	-0.085	0.300*
	(0.161)	(0.174)	(0.178)
Randomized	0.059	0.194	0.250
	(0.198)	(0.173)	(0.199)
Public × Voluntary	-0.185	-0.102	-0.448**
	(0.278)	(0.267)	(0.204)
Public × Randomized	0.064	-0.476*	-0.189
	(0.309)	(0.248)	(0.280)
Observations	330	330	330
School FE	Yes	Yes	Yes
P-Value Treatment Comparison (Interaction Terms)	0.40	0.21	0.39

*** 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 in the *Voluntary* or Randomized 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 × Voluntary* and *Public × Randomized*, which are my coefficients of interest. Standard errors are clustered at the classroom level.

Table B16: Discussion Group Make Students' Hypothetical Behaviors Less Masculine (By Treatment)

	Would Act Masculine		It's Right to Act Masculine		Peers Would Support Acting Masculine	
	Boys	Girls	Boys	Girls	Boys	Girls
	(1)	(2)	(3)	(4)	(5)	(6)
Voluntary	-0.329***	-0.202***	-0.243***	-0.139**	-0.157**	-0.336***
	(0.065)	(0.056)	(0.076)	(0.055)	(0.078)	(0.078)
Randomized	-0.156**	-0.246***	-0.182*	-0.115*	-0.114	-0.322***
	(0.074)	(0.068)	(0.095)	(0.060)	(0.076)	(0.073)
Observations	1,095	1,154	1,095	1,154	1,095	1,154
P-Value Treatment Comparison	0.02	0.50	0.44	0.65	0.48	0.83

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

	Would Act Masculine		It's Right to Act Masculine		Peers Would Support Acting Masculine	
	Boys	Girls	Boys	Girls	Boys	Girls
	(1)	(2)	(3)	(4)	(5)	(6)
Treated	-0.242***	-0.223***	-0.213***	-0.128**	-0.135*	-0.330***
	(0.060)	(0.053)	(0.077)	(0.051)	(0.071)	(0.068)
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 Has No Effects on Boys' Self-Reported Behaviors

	Was Involved in Physical Fight	Cried In Front of a Friend	Had a Deep Talk
	(1)	(2)	(3)
Treated	0.002	0.012	0.007
	(0.035)	(0.048)	(0.058)
Observations	337	336	334
Control Mean of Dep. Var	0.10	0.15	0.34

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

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 from of a friend (Column 2); had a deep conversation with a friend about their personal life or insecurities (Column 3). All regressions include school fixed effects. Standard errors clustered at the school-classroom level.

Table B19: Discussion Group Has No Effects on Boys' Peer-Reported Behaviors

	Negative Behaviors			Positive Behaviors			
	Inappropriate Language	Violence	Negative Average	Non-Conflict Resolution	Sensitive	Respectful to Girls	Positive Average
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: All Reporters							
Treated	-0.039	0.029	-0.005	0.004	0.015	-0.032*	-0.004
	(0.025)	(0.018)	(0.018)	(0.019)	(0.016)	(0.017)	(0.012)
Observations	1,043	1,043	1,043	1,043	1,043	1,043	1,043
Control Mean Dep. Var	0.50	0.18	0.34	0.33	0.23	0.74	0.43
Panel B: Control Reporters							
Treated	0.005	0.026	0.016	-0.022	-0.034	-0.032	-0.030*
	(0.030)	(0.023)	(0.023)	(0.024)	(0.024)	(0.022)	(0.016)
Observations	574	574	574	574	574	574	574
Control Mean Dep. Var	0.54	0.19	0.37	0.32	0.26	0.74	0.44

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

Notes: Each outcome corresponds to the share (number of reported behaviors/number 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.