5-2019

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Breaking Gender Barriers Through Literature in the Elementary and Pre-School Classroom

Submitted on May 20, 2019

in fulfillment of final requirements for the MAED degree

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Acknowledgments

We want to thank our families and friends for supporting us through this process. We also want to thank our incredible colleagues in the Master’s program and at our schools.
Abstract

The following research assesses how reading and discussing stories that counter gender stereotypes can increase cooperation and decrease conflict between primary- and elementary-aged students of different genders, as well as to expand students’ conceptions of self and others beyond traditional gender expectations. The six-week study involved 50 participants total, 21 between the ages of 3 and 6 and 29 between the ages of 6 and 9 at two separate Montessori public charter schools in Minnesota. Each participant completed an activity pre- and post-intervention concerning the feminine and masculine traits that they would choose to describe themselves and those that could describe someone they’d want to be friends with. 10-minute observations were taken daily to record instances of cooperation and conflict between children of different genders. Pertinent quotes were recorded during observation periods and in discussions about the counter-stereotypical stories. Results showed an increase in the number of friendships between genders, and a greater number of traits chosen to describe selves and potential friends at the elementary school level. Further research in the area is needed to discover the long-term effects of counter-stereotypical literature, the importance of adults examining their own gender biases, and interventions beyond literature to counter patriarchal norms in classrooms.

*Keywords:* Montessori, gender, storytelling
A three-year-old boy argues with a five-year-old girl at his lunch table, insisting, despite her protest, that “girls don’t eat dinner.” The next week, he gleefully tells the table that when he grows up he “wants to be a mommy,” only to be told that this is impossible. A first-grade boy tells his third-grade female peers that they only wear dresses, even though all of them are wearing pants at the time of his assertion. A five-year-old girl comments, with a smirk and emerging giggle, “Why is he wearing that?” when a boy comes to school in a pink shirt. In an elementary classroom of first- to third-graders, children start to use the word “gay” as an insult, reserved for boys who cuddle too much or cry too hard.

We witnessed these incidents in our classrooms in the weeks leading up to our research, as we noticed more and more children expressing beliefs about gender in our classrooms. We saw children as young as three beginning to categorize the meaning of the words “boy” and “girl,” and all that goes along with them. Students make statements about boys or girls, then look to adults for affirmation of these separate categories. These students, however, were also very clear about the injustice of different treatment based on different gender. When asked about his comment of girls only wearing dresses, the first-grader quickly admitted that it was not fair that girls should be expected to act in a certain way solely based on their gender. Dr. Montessori (1969) observed that children are naturally compassionate and are attracted to fairness unless something disrupts their development (338). It was clear that honest discussion around gender norms resonated with these young children and appealed to their love of reason and justice.

As teachers, we observed children grappling with gender, analyzing and setting rules and inferring where shame should be applied, with or without our intentional intervention. We also saw, both through our own experiences and through national reckonings around male violence against women, that the impressions we have of what is right, deserved, and natural based on our
gender have formative implications for the way we treat each other and ourselves. We also recognize that in a profession where the vast majority of teachers are women, the fact that boys have lower engagement in school and are disciplined more frequently requires reflection on the gender dynamics at play in a classroom.

We are aware, too, that stress related to gender identity intersects with other systems of oppression to compound negative health outcomes for men and women of marginalized groups. Though we have not seen a strong emphasis on addressing gender roles and expectations intentionally in our own teacher training or professional development, we feel it is an integral part of education, as described by Dr. Montessori, “as a help to life; an education from birth that brings about a revolution: a revolution that eliminates every violence” (1969). We designed our study to respond to and challenge the gender stereotypes and expectations that we have seen children internalizing and enforcing in our classrooms, as well as the growing body of research that suggests that forming one’s identity around strict, traditional gender roles correlates with various poor mental health outcomes and generates violence.

Both researchers wanted to focus on gender dynamics after previous experiences teaching in elementary classrooms. One inherited a classroom, and was told that the former guides—both male—could not “handle” the emotions of the girls in the class, and wondered about the effects of adults addressing female emotion as fundamentally irrational. The other observed boys in fourth grade as they seemed to go through a transformation over the school year. They started out being quite physically and verbally affectionate with each other, but over the course of the year began flinging the word “gay” around, as though it were an insult, to describe boys who showed too much vulnerability or who hugged another boy. Fights and outbursts seemed to come from a place of needing to prove oneself tough, and boys who did not display masculine skills
were sometimes mercilessly mocked or even beaten, as in the case of the boy who was thrown to the ground and kicked by other boys for being “pathetic” at basketball. In addition, while mixed-gender working groups were often more successful at staying on task, the children often resisted being put in groups together. Boys, in particular, seemed to have a negative attitude toward working with girls. It was with these experiences in mind that the researchers chose to examine what could be done about toxic gender dynamics from an early age.

To counter damaging gender expectations within our own students, we began considering storytelling as a means to broaden their understanding and to have discussions with them around gender. Authors and publishers of children’s literature are more aware than ever that it is necessary to create work that reflects the numerous possibilities of identity, including gender, so that all children feel represented in literature. Indeed, there is now a plethora of narratives that highlight the spectrum of gender identity. Literature is also an effective means to discuss pertinent themes, as it appeals to children’s imagination and their empathy.

We selected numerous stories to read to our classes that challenged traditional views of gender stereotypes. It was easiest to find stories where girls embraced “masculine” traits of grit, adventurousness, courage, and toughness, both in fiction and non-fiction. There is still a dearth of literature where boys display “feminine” traits of sensitivity and vulnerability, and are rewarded for it, as well as literature that portrays children who do not identify within the gender binary or the gender they were assigned at birth. This supports our thesis that even in an age of unprecedented gender equality, that equality is contingent on the supremacy of traditionally masculine traits; the underlying assumption is that equality can be reached by women and girls embracing valued masculine traits. Our project addresses the fact that patriarchy cannot be truly
challenged without uplifting traditionally feminine traits as valuable enough to be valid for people of any gender to express and embrace.

**Background**

We conducted this research study in two classrooms simultaneously: a lower elementary classroom and a primary classroom, both public charter Montessori schools in a midwestern metropolitan area. The lower elementary classroom had 29 students ranging from 6-9 years old, while the primary classroom had 21 students between 3-6 years old. The classes both had more female-identifying students than male-identifying students—31 out of the 50 students between the 2 classes were cis-female. 18 of the students were cis-male, and one student was transgender identifying as male. Both classrooms were racially and economically diverse.

The purpose of this research was to examine the extent to which storytelling and discussion countering gender stereotypes would reduce conflict and increase cooperation among young children. We investigated the effect of this storytelling on the children’s own self-perception as well, specifically the extent to which attitudes changed about who children felt they could be friends with, and what descriptive words they applied to themselves. Thus, we aimed to observe the effects we could have on the gender attitudes of these 50 students.

**Theoretical Framework**

Our inquiry fits generally into the framework of Critical Feminist Theory, which focuses on gender in society and how power is influenced by gender. It “makes the personal political” by investigating the way that power is embedded in gender dynamics and the effects that has on individuals, relationships, and society at large (Wildman, 2007, p. 1).

Within Critical Feminist Theory, we focused on the power and oppression present within the gender expectations of a patriarchal society, as explained by bell hooks. hooks defined the
patriarchy as “a political-social system that insists that males are inherently dominating, superior to everything and everyone deemed weak, especially females, and endowed with the right to dominate and rule over the weak and to maintain that dominance through various forms of psychological terrorism and violence” (1994, p. 1). Just as patriarchal norms devalue traditionally female traits and punish women who reject a submissive role, hooks emphasized that the enforcement of gender expectations is harmful and damaging to men, who are violently repressed if they deviate from norms of domination and invulnerability. Therefore, truly fighting patriarchy does not merely involve allowing women to access similar privileges to men (as long as they are willing to behave as men), because this continues to enshrine the superiority of traditionally male traits and devalue the feminine. In contrast, countering patriarchy involves uplifting the power and value of traits traditionally associated with femininity, such as vulnerability, sensitivity, caretaking, and so on. Dismantling patriarchy, therefore, means challenging misogyny, which hooks defined as "the hatred of women" which "helps to maintain the structure of male dominance” (1994, p. 3). Misogyny can live in the psyches of both women and men, who have been socialized to think that women and femininity are inferior.

We locate our attempt at challenging misogyny in order to disrupt patriarchy within Bem’s theory of gender schema: “a social-cognitive theory about how people in society become gendered from an early age and the impact of this gendering on their cognitive and categorical processing throughout the lifetime.” Bem argued that from a young age, children are developing frameworks based on gender expectations that they use to “categorize information, make decisions, and regulate their behavior” (Starr, 2017, p. 567). Through a lens that examines gender schema through the construction of a patriarchal society, traditional gender schemas can be seen as reinforcing the view that men are dominating and women are weak and inferior. We
seek to challenge the creation of these schemas in young children by presenting literature that both validates and values traditionally feminine traits as displayed by both men and women, as well as broadening possibilities for both genders.

**Review of Literature**

How does patriarchy show up in school settings, how is it enforced, and how can it be undermined? There is a great deal of research on the pressures that patriarchy, and the specific gender roles deemed acceptable within it, places on children in schools, and the lasting consequences the internalization of these values can have. We hope to add to a growing body of research that seeks to disrupt patriarchy and its pressures in the classroom, liberating students to form an authentic identity without the need to conform to a particular gender schema, as well as from the many negative consequences that arise from misogynistic conditioning for people of all genders.

**How do children learn gender?**

Across the United States, many expectant parents plan "gender-reveal" parties, i.e., parties in which they establish whether a fetus is biologically male or female. While revelations can range from cutting into a cake to popping balloons to shooting glitter out of cannons, each one of these hinges on the appearance of either the color pink or blue (Guignard, 2015). These colors stand in for the baby's sex, a representation of gender expectations before the child is even born.

While these parties may seem trivial, they speak to the societal imperative to begin segregating boys from girls as soon as possible, which lasts throughout life (Thorne & Luria 1986; Bem, 1981; Paechter, 2003). Indeed, biological sex is the first marker of identity that we human beings acquire in society. We immediately become members of "a particular community
of masculinity or femininity practice” (Paechter, 2003). Communities of practice are groups of people who share some kind of societal practice (e.g., a gendered identity, a profession, etc.). These communities are constantly reformed and reconstructed by members of that community as they live out a communal experience, and yet individuals new to the community must undergo a process of learning the rules of the current existing community (Lave & Wenger, 1991). This process is true of children learning the norms of masculinity and femininity in their cultures. While there are many similarities in the construction of masculinity and femininity around the world as separate and, in many ways, opposing identities, each localized community of practice has specific rules the child must learn to perform gender “correctly.”

The significance of prescribing a gendered identity at birth has large consequences for the psychological development of a child. As we begin to experience the world around us, we develop schema—ways to organize knowledge—to more quickly assimilate or reject new information (Piaget, 1952). Gender is one schema that children use to order their experiences and the world around them from a very young age (Bem, 1981). This schema does not just result in a preference for a certain color or toy, though studies have noted those preferences extensively (Thorne & Luria, 1986; Myers & Raymond, 2010; McIntyre, A et al., 2007). It also results in beliefs about whether or not an individual gets to be powerful or dominant in society (Paechter, 2003). Children even develop different behaviors from birth due to the gender to which they have been assigned (Ruble & Martin, 1998).

Judith Butler recognized that identity is instituted through “a stylized repetition of acts” and that “gender is in no way a stable identity” (1988). While scholars are careful to separate biological sex from sexuality from gender, many do also recognize that the body is “a set of possibilities to be continually recognized” (Merleau-Ponty, 1962). Sex is determined by
biological factors and gender by social-cultural ones, and yet the physical body is used by other members of society to determine expectations of behavior (Paechter, 2003).

**The construction of young femininity**

When young girls enter into the “community of feminine practice” in mainstream American culture, what rules and expectations are they taught to follow? How does this affect the life choices, mental health, and relationships of girls and women?

E J R David, the author of *Internalized Oppression*, argued that as women learn and take on their gender role, they are simultaneously internalizing an ideology that disadvantages them in relation to men. David wrote, “Even though the gender role system is dehumanizing for both females and males, robbing each group of valuable human qualities, the two resulting roles are complementary in a way that disadvantages females. The roles encourage men to dominate and women to submit to domination, women to give away their power and men to take it from them” (2013).

David identified six different practices of internalized sexism:

1. Powerlessness—whereby women believe themselves to be more limited and less capable than they actually are.
2. Objectification—whereby women come to think of themselves as bodies seen from the outside.
3. Loss of self—whereby women fail to recognize, or sacrifice, their own needs and desires.
4. Invalidation—whereby women discount their own feelings and thoughts, specifically when they don’t match male standards.
5. Derogation—whereby women use criticism as a form of gender role policing.
6. Competition between women—whereby other women take the blame for the limited resources and hardships imposed by sexism. (p. 199)

Contrary to the idea that sexism is largely irrelevant today, recent studies show that the devaluation of women is still making its way into the psyches of children as they first enter elementary school. A 2017 study suggests that from the ages of 5-7 girls go through a dramatic change in how much they associate brilliance with their own gender. 5-year-olds of both genders
tended to favor their own gender when asked about who is “really, really smart,” but by age 7 girls joined boys in believing that boys are significantly more likely to be brilliant than they are (Strauss, 2017). These perceptions last into adulthood for both men and women. One study showed that people are less likely to refer a woman to a job when the job description references a need for higher intelligence than an identical job that didn’t mention intelligence. The study also found that when children aged 5-7 years old were told to pick team members from a group of unfamiliar children, they were significantly less likely to choose girls than boys when they were also told the game required being “really, really smart,” to succeed (Bian, 2018). It seems clear that one of the things we teach children about girls is that they are inherently not as likely to be very intelligent.

In addition to viewing brilliance as a masculine trait, girls are socialized to over-value their looks and how they appear to others. David pointed to studies showing that women often conflate their body image with their self-image, meaning that they are not able to have a self-concept that exists separately from the way they feel their looks are perceived by others (2013). This kind of self-objectification has been linked to the high rates of eating disorders and depression among girls. Girls are seven times more likely to be depressed than boys and nine times more likely to have an eating disorder (“Guidelines…Girls and Women”, 2007).

A focus on desirability can impact relationships from a young age. In one study that meant to broach a wide range of experiences from girls’ lives, researchers found that most of their conversations with girls revolved around boys, and a heteronormative expectation of having crushes on boys (Myers & Raymond, 2010). In a yearlong observation of both boys and girls in elementary schools, researchers concluded that emotional intimacy was a key aspect of developing a feminine persona (Thorne & Luria, 1986). Interestingly, both of these studies
showed that heteronormativity, which might be thought to provide a link between boys and girls, was used to keep them apart. The expectation increased with age that boys and girls can't just be friends without a romantic interest, and thus boys and girls participated more and more within contexts of gendered segregation to avoid teasing from peers.

Internalized beliefs continually affect the actions of women and girls. A 2005 study found that women who had been exposed to a commercial that displayed unfavorable stereotypes of women were significantly less likely to take on a leadership role in the following task. However, when the examiners included in their instructions that they have found no difference in gender on the particular task, the effect of watching the commercial disappeared (Davies, 2005). Just as these studies show we continue to socialize girls to feel inferior in some ways to boys, this study offers us the hope that if we counter those expectations actively, girls will not feel bound by these gender expectations and instead will act according to their more authentic selves.

Of course, some gender role stereotypes encourage women to behave in ways that are protective of their mental health and positive in their lives. Women are conditioned to be more caring and empathetic with others and to emphasize the communal over the individual (Fiske, Cuddy, & Glick, 2007). Research suggests that this leads women to feel less “existential isolation,” the sense that one’s perspective and experience is not validated or related to by others in one’s life (Helm, Rothschild, Greenberg, & Croft, 2018).

This research highlighted the need to introduce children to narratives of girls and women that counter the six practices of internalized sexism. Studies show that in recent years, as our cultural understanding of what it means to be a woman changes, women are taking on more agentic traits, traditionally considered to be a masculine domain, by viewing themselves as more assertive, independent, achievement-oriented, self-efficient (Diekman & Eagly, 2000). Much of
the literature for children intended to combat sexism, as well as much of the rhetoric in mainstream discourse, centers around the ability and right of women to display traditionally masculine traits of strength, independence, high-achievement, etc. We argue that lifting up the value and importance of pro-social feminine traits, and broadening the acceptance of who is able to embody them, is crucial to countering misogyny and patriarchy in our society. The following section on boys and the constraints of manhood provides further insight into why this emphasis is so important.

**What it means to be a boy**

bell hooks asserted that in order to truly challenge gender oppression, we must equally contend with the damage that patriarchy does to men as to women. Patriarchy harms men by shaming them, from a young age, when they display traits outside of the gendered role deemed acceptable in a patriarchal society for males. Research supports this assertion: beginning in preschool, boys receive the most social backlash for violating gender norms if they display traits considered "feminine," significantly more so than girls displaying traditionally masculine traits (Sullivan, Moss-Racusin, Lopez & Williams, 2018; Renold, 2001; Chu, 2014). In a study that followed boys from preschool to kindergarten for two years, Judy Chu detailed many painful encounters young boys had with realizing that they were too "soft" and needed to toughen up. The study found that boys created new identities that could shield them from the ridicule of their peers (2014). Socialization also happens more subtly; a 2014 study showed found parents talk more about emotions with four-year-old daughters than four-year-old sons, showing how our expectations of what children will or should want to discuss can inform how we treat them (Aznar, 2014).
One of the central ways in which traditional masculinity has been constructed in our society has been through its “antifemininity,” or opposition to the feminine (Kimmel, 2012). Research suggests that boys who internalize the importance of stereotypically masculine gender roles display more depressive symptoms, have a lower quality of friendships, and possess lower self-esteem (Gupta, et al., 2013; Santos, Way, Ruble, & Scott, 2010). Adherence to masculine norms also correlates with instances of bullying in schools, while stress relating to conforming to masculine norms has been shown to increase acts of sexual violence among adolescent boys (Gini & Pozzoli 2006; Reidy, Smith-Darden, Cortina, Kernsmith & Kernsmith, 2015). Men who value anti-femininity as a part of their masculine identity are also much more likely to be homophobic and to feel a need to prove their heterosexuality through negative attitudes toward femininity and homosexuals (Falomir-Pichastor, Berent, & Anderson, 2019). In 2011, the American Psychological Association released recommendations on working with men and boys that summarized the challenges men and boys face in light of masculine norms that are expected of them. They found that the more men endorse traditional masculinity, “marked by stoicism, competitiveness, dominance and aggression,” the more likely they are to engage in risky health behaviors such as heavy drinking, tobacco, poor diet, and not seeking medical care. Men with more flexible attitudes toward gender were much more likely to seek help and avoid risky behaviors (“APA Guidelines…Boys and Men,” 2018).

These difficulties compound when they intersect with other layers of oppression. For example, racism that African-American men face, combined with masculine expectations of stoicim and providing for a family, can lead to higher rates of depression and hypertension from chronic stress (Matthews, Hammond, Nuru-Jeter, Cole-Lewis, & Melvin, 2013).
Given that an inflexible and traditional definition of masculinity correlates with sexual violence and risky health behavior, it is imperative that we find ways for young boys to expand their possibilities for gender expression. The research is clear: men who believe it would be shameful for them to display feminine traits are more likely to commit violence against not just themselves, but also women and other men. Our interventions, therefore, need to include the uplifting of feminine traits, such as vulnerability, care-taking, care for appearance, and show examples of people of all genders exhibiting these traits.

Many researchers and educators express concern for the current “crisis” faced by boys in school, who are more likely to be suspended, to show low engagement in school, to drop out or high school and not attend or complete college than girls (Clark, Lee, Goodman & Yacco, 2008; Yang, Harmeyer, Chen, & Lofaso 2018). Given the negative mental health and relational consequences of rigid masculinity, it seems possible that broader gender expression could be an ameliorating factor in this trend.

**Beyond the binary**

We cannot in any comprehensive way reject the idea that being a “boy” or a “girl” should limit who a person is or how they define themselves without also acknowledging that “being yourself” may even mean re-defining what gender a person feels represents them, or deciding they don’t identify with either. Although most studies regarding gender have ignored non-binary or transgender individuals, that is starting to change as mainstream culture has begun to accept this identity. A small but growing field of study demonstrates that children as young as preschool age may decide they identify as a different gender than the one assigned at birth (Fast, 2018).

Transgender individuals in our culture confront a difficult choice: being transgender is dangerous for both children and adults, but so is denying one’s true gender identity to fit into
society’s expectations. Transgender children in school have much better physical and mental health outcomes when they are able to be open about their gender identity, rather than suppressing it, but also have increasingly negative outcomes if they face bullying and a lack of acceptance from their community (Kosciw, Palmer, & Kull, 2015). The risk for homicide among transgender women of color in the United States is alarmingly high, which is consistent with the theory that patriarchy asserts that the feminine is lesser, and therefore men who display feminine traits are deserving of the most brutal punishment, as well as reflective of systemic racism that makes the lives of people of color more precarious and exposed to violence (Dinno, 2017).

Despite widespread bias and stigma, a 2011 study estimated that .06% of the United State’s population identified as transgender at that time (Flores, Herman, Gates, & Brown 2016). Disrupting the patriarchy in our classrooms will necessarily mean celebrating differences in gender identity and the fluidity with which gender operates, rather than viewing gender-binary violations as worthy of punishment. Not only is the health and happiness of non-binary or trans-children just as important as all other children, interventions that legitimize their existence will also greatly benefit other students by inherently creating an environment that sees gender roles as flexible and formed, rather than limited, by our own authentic selves.

**Disrupting patriarchy in the classroom**

Researchers have attempted to disrupt the patriarchy in classrooms by challenging or critically examining gender stereotypes and expectations with students and staff. New media and literature for children also strives to achieve these goals. Exposing children to literature that challenges harmful stereotypes and engaging children in follow-up discussion is a strategy that researches have commonly used to challenge homophobia, racism, and other forms of bias in elementary schools (Martino 2016; Mosso-Taylor 2013; Tschida 2014). However, many of these
studies are done on how teachers feel about the topic during the intervention of reading but have not actively studied the effect this practice has on children. Several studies have displayed progress when children or adolescents are taught to confront or intervene when sexist comments or sexual violence are taking place with training that involves role-playing potential situations and ways of intervening (Coker et al., 2017; Lamb et al., 2009). “The Bullying Project” study showed that introducing children to literature that modeled intervention in bullying did produce pro-social results in elementary school children and reduced participation in bullying activities (Wang, 2015). Other researchers have started conversations about gender stereotypes and normalized counter-stereotypical behavior through reading counter-stereotypical literature (Hughes, & Seta, 2003; DePalma, 2016; Strategy, 2018). Such studies have shown that these literature-based interventions can influence children to be more open to counter-stereotypical behavior when it comes to gender, with boys acting feminine as the least likely to be acceptable, even after the intervention (Coker et al., 2017; Lamb et al., 2009).

We sought to build on this body of research by using similar techniques of counter-stereotypical literature and roleplay while analyzing new variables related to the relationships between genders, the amount of aggressive conflict in the room, and definition of self. We drew resources from a study implemented in elementary schools in Europe, which used literature to start conversations around gender diversity and stereotypes (Strategy, 2018). We drew from their list of suggested books and used strategies from their pre-and-post activities, where they asked children what words they associated with “boy” and “girl.” Our study investigates whether exposure to counter-stereotypical gender narratives created a safer environment for emotional vulnerability both within and between genders in a lower-elementary and primary setting.
In sum, we asked to what extent would storytelling and discussion countering gender stereotypes reduce conflict, increase cooperation, and expand self-definition beyond traditional gender boundaries in an elementary and primary classroom.

**Methodology**

Our intervention consisted of reading stories to our classes that demonstrated counter stereotypical and anti-misogynistic narratives. We included narratives that normalized boys or masculine characters behaving in ways considered traditionally feminine, such as a little boy dressing up as a mermaid in *Julián is a Mermaid* or a boy who wears a dress to school in *Bill’s New Frock*. We also included narratives that suggested that gender is fluid and is an act of personal expression, not a mandate of biology, such as *Who Are You?: The Kid’s Guide to Gender Identity* and the graphic novel *The Witch Boy*. We also chose stories that showcased mixed-gender friendships and people of various genders supporting others who choose not to stay within their traditional gender roles. We chose some books that showed girls acting outside of their stereotypes, while not including books that show girls who embody more stereotypically masculine traits as superior to other girls. We made sure our chosen books showed diverse racial representation. Appendix A contains the complete list of the books we read and the books we considered.

We handled the intervention of reading stories slightly differently in the two classrooms. In the elementary class, the guide read a book once a week during the routine time for group read-aloud to the whole class, while in the primary the guide invited small groups to listen to a story during the morning work cycle. The guide in the primary chose one book per week and read to small groups until most of the class had been exposed to the story. At the end of the story,
the lead guides asked questions like, “What did you think of the story?” and “Was the main character treated fairly?” and took observation notes during the discussion.

We collected two types of data: observations recorded in tally marks for five weeks and self-reports gleaned from an activity that we did before and after the intervention. The activity consisted of a worksheet where children decided which of the 18 words and phrases available could be used to describe them and which could be used to describe “someone they’d like to be friends with.” We took the words and phrases from a list of words found to be associated with either boys or girls by the general population, such as “likes wearing dresses,” “beautiful,” or “handsome;” Appendix B shows the full set of words. We went through each list, first asking the children which words they would associate with themselves, then asking which they would associate with a friend, circling the words that they chose as associative. We did this activity before beginning our readings and after our five weeks of reading stories. Our goal was to see how much a child’s self-conception fell along traditional gender lines and whether they might feel freer to identify with things outside of the norm after hearing counter-stereotypical stories. We also wanted to discover whether they would feel more comfortable having friends of other genders or who didn’t comply with a certain gender norm after the intervention. Lastly, we wanted to see if there was any significant change in how students felt about the qualities “sensitive” and “emotional,” qualities often considered feminine and weak, after reading anti-misogynistic stories that show respect for traditionally feminine traits.

We each observed for 10 minutes every day and kept tallies for behaviors observed within two categories: escalated conflict between genders and gender cooperation. Appendix C shows this observation tally sheet. We placed tally marks next to the student code if we observed certain behaviors under these categories. Under “Gender Cooperation,” for example, we tallied
next to a student if we saw them working in a mixed-gender group or having a conversation with a person of a different gender. In the “Escalated Conflict” category, we tallied for pushing, shouting, shoving, and unkind words. We observed in different settings for the primary and elementary classrooms. In the elementary class, where children generally work in groups, we tallied during work time. Children in the primary generally work individually; for this reason, we collected data from the primary students during their recess, observing groups of play rather than working groups. The guide in the primary classroom took tallies during the first ten minutes of recess, while the elementary guide sat to the side for ten minutes in the morning work period to observe and tally.

We took data on gender cooperation because we thought a child’s choice to work, play, or have conversations with a child of a different gender was a sign of increased respect and value for the other person. Our hope with reading the stories would be that barriers between genders based on lack of understanding and respect would diminish and allow for more connection across gender lines. We took data related to conflict because our research showed that men who have internalized traditional gender roles of strength and power as important to their identity as a man are more likely to be violent and aggressive towards others. We wanted to see if even in a small period of time, exposure to narratives of boys who are not confined to traditional gender roles reduced the need for posturing and displays of dominance in the classroom, and therefore led to less conflict.

**Analysis of Data**

Our pre- and post-intervention activity contained 18 words or phrases, split evenly between traits considered feminine and those considered masculine. We recorded the children’s answers and split them into categories based on their gender, then took an average of how many
feminine traits and how many masculine traits the girls and boys chose for themselves. Then, we asked them to consider the same traits and whether they would like to have a friend with those traits. We were interested in determining the degree to which children would feel comfortable choosing words that didn’t align with the stereotypical norms for their gender, and how much this might change over the course of our intervention. We were also interested in the traits they could imagine in a friend, to see how linked friendship was to gendered traits for them and to see if that changed post-intervention. Below are the tables showing the data we took from the activity pre-intervention:

Pre-intervention: Elementary Class

<table>
<thead>
<tr>
<th></th>
<th>Self Traits</th>
<th>Traits Desired in a Friend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average number of feminine traits chosen</td>
<td>Average number of masculine traits chosen</td>
</tr>
<tr>
<td>Girls</td>
<td>4.825</td>
<td>4.375</td>
</tr>
<tr>
<td>Boys</td>
<td>2.769</td>
<td>5.077</td>
</tr>
</tbody>
</table>

*Table 1. Pre-intervention, traits chosen in the elementary class*

When asked about traits they identify with themselves, the girls at the elementary age on average chose feminine traits with only a slightly higher frequency than masculine traits, whereas the boys at the elementary age chose almost twice as many masculine traits for themselves than feminine traits. Elementary girls chose on average a very similar number of masculine and feminine traits as they chose to describe themselves, with less than one whole word difference between each self and friend for traits with the same gender connotation in the elementary.
Pre-intervention: Primary Class Self Traits

<table>
<thead>
<tr>
<th></th>
<th>Self Traits</th>
<th>Traits Desired in a Friend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average number of feminine traits chosen</td>
<td>Average number of masculine traits chosen</td>
</tr>
<tr>
<td>Girls</td>
<td>7.846</td>
<td>6</td>
</tr>
<tr>
<td>Boys</td>
<td>7.4</td>
<td>6.8</td>
</tr>
</tbody>
</table>

*Table 2. Pre-intervention, traits chosen in the primary class*

In the primary class, boys chose feminine traits at a higher rate than masculine traits to describe themselves. Overall, primary children chose more traits to describe themselves than did elementary children. Girls selected on average about one more masculine trait to describe a friend than they did themselves, and boys chose on average one more masculine and one more feminine trait to describe a friend than they did themselves. Primary girls and boys both chose feminine traits at a higher rate than masculine traits to describe someone they would like to be friends with.

In the elementary class, we specifically asked children to name classmates with whom they enjoyed working and/or playing, and recorded the genders of these classmates. Table 3 shows the number of average friendships that elementary boys and girls reported with classmates.

Pre-intervention: Elementary friendships reported by gender

<table>
<thead>
<tr>
<th></th>
<th>Average number of female friendships</th>
<th>Average number of male friendships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>4.75</td>
<td>0.4375</td>
</tr>
<tr>
<td>Boys</td>
<td>0.231</td>
<td>3.293</td>
</tr>
</tbody>
</table>

*Table 3. Pre-intervention, elementary friendships*
The elementary children reported very few examples of friendships across gender before the intervention began.

Comparing the initial data of the primary and elementary classes also shows clear differences between the way the age groups responded (See Figures 1 and 2).

**Figure 1.** Pre-intervention, girls compared by class

**Figure 2.** Pre-intervention, boys compared by class
Primary students clearly felt comfortable identifying with many more traits than elementary schools and had a much smaller preference for traits associated with their own gender. Primary children also chose more traits as desirable in a friend with a less dramatic preference for traits associated with their own gender.

**Behavior Observations**

We took daily tallies of both conflict and cooperation between genders during 10-minute observation windows. We used tally sheets to record certain behaviors (Appendix C) and tracked the number of people involved in either the conflict or cooperation and their genders. We calculated the average number of people daily involved in conflict or cooperation with children of another gender (See Figures 3 and 4).

![Elementary Conflict and Cooperation](image-url)

*Figure 3. Elementary conflict and cooperation between genders*
Figure 4. Primary conflict and cooperation between genders

We did not observe many instances of conflict between gender in our observation periods, and the instances of cooperation fluctuated throughout the intervention. Interestingly, in the elementary class, all children were observed participating in a mixed gender working group or conversation with a child of another gender at least once during the intervention. Mixed gender play groups were common among preschool children, from pushing each other on the swing, to chasing each other around the playground, to hanging from the monkey bars together. Some mixed gender friend groups consistently played together almost every day at recess, while other children change play partners regularly.

Post-Intervention Results

We did the same activity with the children after the intervention in which we asked them to select traits from the exact same 18 words or phrases to describe themselves and those they desired in a friend. Many elementary students said the activity was a bigger challenge the second time around, as they didn’t really care what traits a friend might have. As one child said, “I don’t
care what my friend is like, as long as they’re nice to me.” Many primary students had this approach both before and after the intervention.

Tables 6 through 10 show traits the children chose after the intervention for themselves and for a friend.

Figures 3 through 7 show charts that compare the results before and after the intervention. This data is represented in the graphs and tables below:

Post-intervention: Elementary Class

<table>
<thead>
<tr>
<th></th>
<th>Self Traits</th>
<th>Desired Friend Traits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average number of feminine traits chosen</td>
<td>Average number of masculine traits chosen</td>
</tr>
<tr>
<td></td>
<td>Average number of feminine traits chosen</td>
<td>Average number of masculine traits chosen</td>
</tr>
<tr>
<td>Girls</td>
<td>4.563</td>
<td>4.625</td>
</tr>
<tr>
<td></td>
<td>5.313</td>
<td>5.375</td>
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<tr>
<td>Boys</td>
<td>2.846</td>
<td>5.769</td>
</tr>
<tr>
<td></td>
<td>3.462</td>
<td>6</td>
</tr>
</tbody>
</table>

*Table 6. Post-intervention, traits chosen for self in the elementary class*

*Figure 5. Elementary girls, comparison pre- and post-intervention*
The largest difference in elementary girls’ responses pre and post-intervention was in the increase in masculine traits deemed desirable in a friend, which jumped by just over one trait. They also on average chose on average 0.4 more feminine traits as desirable in a friend. The differences in self-identification were smaller but showed a decrease in self-identification with feminine traits in self and an increase in masculine traits in self, showing a leveling out to almost exactly the same average number of traits chosen in both feminine and masculine categories, with a difference of only 0.1 between the two.

![Figure 6. Elementary boys, comparison pre- and post-intervention](image)

The elementary boys showed greater identification in every category, with the largest increase being in the number of masculine traits they identified with an average increase of .7. There was also an increase of about .5 in both feminine and masculine traits desired in a friend.
Post-intervention: Primary Class

<table>
<thead>
<tr>
<th></th>
<th>Self Traits</th>
<th></th>
<th>Traits Desired in a Friend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average number of feminine traits chosen</td>
<td>Average number of masculine traits chosen</td>
<td>Average number of feminine traits chosen</td>
</tr>
<tr>
<td>Girls</td>
<td>8.182</td>
<td>6.091</td>
<td>8</td>
</tr>
<tr>
<td>Boys</td>
<td>6.6</td>
<td>8</td>
<td>8.2</td>
</tr>
</tbody>
</table>

*Table 7. Post-intervention, traits chosen for self in the primary class*

*Figure 7. Primary girls, comparison pre- and post-intervention*

Girls in the primary classroom did not show large changes in the self-report activity between pre and post-intervention. The biggest growth, of .33 traits, was in the number of feminine traits the girls identified with.
Primary boys actually identified with fewer feminine traits by .8 after the intervention, and with 1.2 more masculine traits on average. The changes between traits desired in a friend were very small, with .2 fewer feminine traits desired and .6 more masculine traits desired. In a sense, this had the opposite effect of what we desired, but on the other hand, the differences were quite small. There are also significantly fewer boys in the class than girls, seven out of twenty-five students with three female teachers, so perhaps the discussions about boys and girls helped some boys to feel more comfortable identifying as masculine within such a feminine environment.

Post-intervention activity: Elementary friendships reported by gender

<table>
<thead>
<tr>
<th></th>
<th>Average number of female friendships</th>
<th>Average number of male friendships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>5.25</td>
<td>0.813</td>
</tr>
<tr>
<td>Boys</td>
<td>2.462</td>
<td>4.077</td>
</tr>
</tbody>
</table>

Table 10. Post-intervention, elementary friendships
Figure 9. Elementary friendships by gender, comparison pre- and post-intervention

The elementary children named a greater average number of children as friends or working partners. The largest increase was in the number of friendships with girls that boys reported, jumping from an average of 0.2 female friends per male student to 2.5. Students also reported more friends of their own gender on average after the intervention.

**Qualitative Observation Notes**

After we read stories about children displaying traits counter to gender stereotypes, we took informal observations of what the children said in class discussions. Children were quick to point out instances of inequality in stories, such as when a character is told she can’t play the part of Peter Pan because she is both a girl and African-American (in Mary Hoffman’s Amazing Grace). Students of both genders contributed to the discussion, lamenting that the classmates were treating the main character unfairly, but appreciating that the character believed in herself.

Students also had many opinions about Bill’s New Frock, by Anne Fine. The main character, Bill, is dressed by his mother in a pink frock for school one day and is treated differently all day long. The story shows how being treated like a girl can carry large advantages
and disadvantages, as well as lead to very different expectations. They talked about how they would feel if they showed up to school and were suddenly treated very differently than they expected.

As we began to read *Julián is a Mermaid*, by Jessica Love, one 6-year-old boy piped up to say, “Boys can’t be mermaids!” An 8-year-old girl next to him immediately corrected, “Yes, they can.” The boy shrugged and had no further comments.

In the primary classroom, discussion after the books was limited and open-ended questions often got responses completely unrelated to the gender politics of the story. However, throughout the study, students repeated language they heard in the stories to each other and reminding each other that boys and girls can be who they want to be. In the book *Pink is for Boys* by Robb Pearlman, each color is described as being for both genders, with the least expected gender going first; for example: “Pink is for boys. And girls.” It is then followed by a page with other things the color is “for,” such as “…and bows and flowers!” When we got to purple, the pages read: “Purple is for boys. And girls. And unicorns!” The second page had a big picture of a purple unicorn. One of the girls in the class blurted out: “Well, unicorns are mostly for girls.” There was a pause, and then, without prompting she corrected herself: “…and boys.” The rest of the children nodded.

The primary children seemed very willing to adapt ideas they held about gender to be more inclusive. Observations of comments from primary students throughout the weeks included, “Boys can have long hair. Boys can have whatever hair they want.” Children seemed to be internalizing the idea that boys and girls can do things they might not have previously expected.
Conclusion

The data we collected in this intervention shows marked increases in several areas. Elementary boys chose a greater number of both feminine and masculine traits to describe themselves as well as others and named a greater number of friendships. Elementary girls showed an increase in all factors, except for a slight decrease in the number of feminine traits with which they would describe themselves. Primary girls showed an increase in all traits except for a very slight decrease in the number of masculine traits desired in a friend. Primary boys showed an increase in the number of masculine traits both for themselves and for a friend, with a decrease in the number of feminine traits for themselves and for a friend. Notably, there were only 5 primary boys included in the research, which was the smallest group.

In both classes, there was a far greater number of instances of cooperation between genders than conflict, though neither class showed an obvious trend for either behavior.

The qualitative data showed the students interested in a desire for equity between the genders, and aware of inequality both in the current world and shown in stories. Many students showed openness toward gender expression, especially with regard to what boys and girls can and cannot be depending on their gender.

The data shows that the intervention was successful in increasing friendships between genders and widening many students' minds about what traits are possible for themselves. Many students also expressed greater openness toward what they would like in a friend, saying that it mattered more to them how the friend treated them than who the friend was. The descriptor that children picked nearly unanimously as desirable in a friend after the intervention was “caring,” a trait more likely to be associated with femininity.
Action Plan

Our findings emphasize, first and foremost, the fact that children are becoming aware of gender norms and expectations during their primary years, which only become more solidified as they grow into their elementary years. The flexibility with which primary children defined themselves as compared to the elementary school children was striking. This leads us to conclude that children are learning about gender whether we teach about it intentionally or not. Given the research on how damaging strict internalized gender expectations can be, whether to the mental health of men, the women who are close to them, or to transgender youth and adults, it is imperative that we examine the question of how to best help children to explain and shape the gender norms they see around them.

Our data collection showed some shifts in the flexibility with which students viewed themselves and others after our intervention. However, the experience of both the researchers lead us to believe that our intervention was creating greater shifts than our data showed. If not leading to an immediate and dramatic shift in self-concept and cooperation, we believe it did lead to a sense of moral consensus in our classrooms that gender would not define what a child should or should not do, and that being bullied on the basis of not fitting gender expectations is unfair. These conclusions come from our own observations of the conversations that developed around gender over the course of the study. We feel that the fact that dramatically more boys in elementary listed girls as friends after the intervention is an important indication of the respect that develops when patriarchal narratives are challenged. The children developed not just an abstract sense of justice, but a feeling of greater connection and comfort with children of the other gender.
For both educators, conducting this research significantly impacted our practices as teachers. Researching gender norms and expectations made us more aware of the way gender might shape our interactions with children and therefore able to consciously try to work with children without enforcing harmful gender expectations. For example, one researcher realized that while she always offered hugs to children before they went to nap, there were several children she never offered hugs to because she had categorized them as “not wanting hugs.” After beginning her research, she realized that these students were all boys, and started asking if they wanted hugs, to which, to her surprise, they said yes. If we can overcome these implicit biases we hold as educators that boys are less sensitive and less affectionate, we can prevent ourselves from sending the message that those qualities are not expected of them.

In addition, after seeing the powerful impact the stories had on the children, and how interested they were in the topic, the researchers felt energized to find counter-stereotypical literature to read to the class in other areas, with stories that make visible and celebrate characters of diverse disability status, race, religion, size, and family composition. Children were excited to discuss these meaningful topics and had clearly already been building schemas and assumptions around these categories, without necessarily having access to narratives created by the people who occupy these demographics. If we can give children access to humanizing narratives as they are still developing their internal categories, we believe we can be acting more fully on the promise of Montessori education to build a more peaceful world by building a more peaceful child.

We think the implications for student learning could grow larger as students get older. When boys and girls hesitate to work together and see each other as friends, they miss out on many opportunities to learn from each other. This research was inspired by the researcher’s
observation, described in the introduction, that by fourth-grade, gender norm enforcement among boys was a serious distraction from learning, as well as an unwillingness from boys to work with girls. The fact that lower elementary boys were more likely to name girls as friends after the study and to identify with traditionally feminine traits promises that exposing children to counter-stereotypical and anti-misogynistic gender narratives could improve classroom dynamics, behavior, and overall student learning.

Further study on resisting patriarchy in the classroom may benefit from finding different data points to study. Researchers could ask students explicitly for their ideas around gender expectations and justice and see if attitude changes occur. Elementary school teachers could examine what the impact of explicit instruction around sexism and gender inequality has on student attitudes and self-conception. Similar research could be done around other oppressive systems such as white supremacy, to see if reading literature that challenges mainstream views can alter behaviors and attitudes around these systems as well. All research about the most effective ways to counter oppressive systems in the classroom is worthwhile and can be transformative for both researchers and students.
References


doi:10.1371/journal.pone.0195503


Appendix A

Breaking Gender Barriers Book List

The following list is representative of the types of books we used to read to students. We read aloud five books and had others available in the class library for individual reading. We adapted our list from the “Breaking the Mould: challenging gender stereotypes” study implemented by the National Teachers Union of the United Kingdom, which can be found here:


10,000 Dresses (Marcus Ewert – ISBN 978-1583228500)

Amazing Grace (Mary Hoffman – ISBN 978-1845077495)


The Boy In A Dress (David Walliams – ISBN 978-0007279036)


The Different Dragon (Jennifer Bryan – ISBN 978-0967446868)

Dogs Don’t Do Ballet (Anna Kemp – ISBN 978-1847384744)

Girls Are Best (Sandi Toksvig – ISBN 978-1862304291)

It’s a George Thing! (David Bedford – ISBN 978-1405228053)


The Odd Egg (Emily Gravett – ISBN 978-0230531352)


Pirate Girl & (Cornelia Funke – available in A Princess,

The Princess Knight A Knight and One Wild Brother –(ISBN 978-0545042413)

Princess Pigsty (Cornelia Funke – ISBN 978-1905294329)

Red Rockets and Rainbow Jelly (Sue Heap – ISBN 978-0140567854)
The Sissy Duckling (Harvey Fierstein – ISBN 978-1416903130)


The Turbulent Term of Tyke Tiler (Gene Kemp – ISBN 978-0571230945)


Who Are You?: The Kid’s Guide to Gender Identity (Brook Pessin-Whedbee—978-1785927287)

Julian Is a Mermaid (Jessica Love—ISBN 978-0763690458)

The Gender Wheel: A Story about Bodies and Gender for Every Body (Maya Gonzalez—978-1945289057)

The Witch Boy (Molly Ostertag—ISBN 978-1338089516)
Appendix B

Breaking Gender Barriers Through Literature: Opening and Closing Activity

All students participated in an opening and closing activity. At the start of the study, we sat with each student in the class, read the directions at the top of the page, and then read each word to them and asked them to circle the words/phrases they choose. For students who could not read, we read the words aloud and circled the words that they chose for themselves. In both circumstances, we paused after reading each word and moved on when they decided to choose the word or not. We repeated the activity with each student at the end of the study.

The words were chosen from a survey done in the study “Backlash against gender-stereotype violating preschool children” (Sullivan, Moss-Racusin, Lopez & Williams, 2018). Through an internet survey given to adults, they identified words that are gender-stereotypical for boys and girls, as is represented in the following table. We selected nine words/phrases from each gender category (in bold), avoiding any with obviously negative connotations:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>$d$</th>
<th>Characteristic</th>
<th>$d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoys wearing skirts and dresses</td>
<td>-2.59</td>
<td>Plays with trucks</td>
<td>2.06</td>
</tr>
<tr>
<td>Likes princesses</td>
<td>-2.35</td>
<td>Likes to pretend to be a soldier</td>
<td>1.96</td>
</tr>
<tr>
<td>Loves pink</td>
<td>-2.13</td>
<td>Handsome</td>
<td>1.74</td>
</tr>
<tr>
<td>Wears Tutus</td>
<td>-2.03</td>
<td>Likes superheroes</td>
<td>1.61</td>
</tr>
<tr>
<td>Likes to play with dolls</td>
<td>-1.48</td>
<td>Likes to play with tools</td>
<td>1.37</td>
</tr>
<tr>
<td>Pretty</td>
<td>-0.61</td>
<td>Loves to get dirty</td>
<td>1.16</td>
</tr>
<tr>
<td>Gentle</td>
<td>-0.55</td>
<td>Dirty</td>
<td>0.988</td>
</tr>
<tr>
<td>Caring</td>
<td>-0.55</td>
<td>Rowdy</td>
<td>0.93</td>
</tr>
<tr>
<td>Emotional</td>
<td>-0.5</td>
<td>Has unbrushed hair</td>
<td>0.76</td>
</tr>
<tr>
<td>Sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has a big appetite</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Messy</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has bruised knees</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adventurous</td>
<td>0.959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wears clothes that don’t match</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes hits others</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn’t wait turn</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrupts others</td>
<td>0.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refuses to pick up</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likes playing outside</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Positive $d$ indicates characteristic was rated as more typical for boys and a negative $d$ indicates characteristic was rated as more typical for girls. Bold indicates that the characteristic was prescriptive for that gender and/or proscriptive for the opposite gender.
Appendix C
Information on Figures and Tables

Breaking Gender Barriers: Daily Observations
Tally of Escalated Conflict

<table>
<thead>
<tr>
<th>Student Code</th>
<th>Student gender</th>
<th>Physical fighting (hitting, kicking)</th>
<th>Pushing</th>
<th>Unkind words</th>
<th>Shouting</th>
<th>Other (describe in notes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Tally of Gender Cooperation

<table>
<thead>
<tr>
<th>Student Code</th>
<th>Student gender</th>
<th>Participated in a mixed gender working group</th>
<th>Had a conversation with a person of another gender</th>
<th>Other (describe in notes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Notes

Gender key: b=boy, g=girl, n=nonbinary, tb=transgender boy, tg=transgender girl