

Nos. 20-1001, 20-1023

**UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT**

BONNIE PELTIER, as Guardian of A.P., a minor child; ERIKA BOOTH, as Guardian of I.B., a minor child; and PATRICIA BROWN, as Guardian of K.B., a minor child

Plaintiffs-Appellees-Cross-Appellants,

v.

CHARTER DAY SCHOOL, INC.; ROBERT P. SPENCER; CHAD ADAMS; SUZANNE WEST; COLLEEN COMBS; TED BODENSCHATZ; and MELISSA GOTT in their capacities as members of the Board of Trustees of Charter Day School, Inc.; and THE ROGER BACON ACADEMY, INC.,

Defendants-Appellants,

v.

THE ROGER BACON ACADEMY, INC.,

Defendant-Cross-Appellee.

On Appeal from the United States District Court for the Eastern District of North Carolina, Case No. 7:16-cv-00030-H-KS, Hon. Malcom J. Howard

BRIEF OF AMICI CURIAE SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT, SOCIETY FOR THE PSYCHOLOGICAL STUDY OF SOCIAL ISSUES, COGNITIVE DEVELOPMENT SOCIETY, AND SOCIETY FOR RESEARCH ON ADOLESCENCE IN SUPPORT OF PLAINTIFFS-APPELLEES-CROSS-APPELLANTS AND AFFIRMANCE

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INTERESTS OF AMICI CURIAE

The Society for Research in Child Development, the Society for the Psychological Study of Social Issues, the Cognitive Development Society, and the Society for Research on Adolescence respectively submit this brief as amici curiae in support of plaintiffs-appellees-cross appellants.¹

Amici curiae are professional organizations and associations, comprised of thousands of scientists, researchers, scholars, and other professionals and members, that focus on research concerning child development, including psychological, cognitive, and social aspects of developmental science.

The Society for Research in Child Development (“SRCD”) is a professional research organization established in 1933 by the National Research Council of the National Academy of Sciences. With a membership of more than 5,500 scientists representing various disciplines and professions, SRCD is a respected source of scientific knowledge about human development. SRCD’s core mission is to advance the developmental sciences and promote the use of developmental research to improve human lives. An integral part of SRCD’s mission is to research, understand, and enhance child development. SRCD has extensively reviewed and analyzed

¹ Pursuant to Rule 29(a)(4)(E), amici affirms that no counsel for a party authored this brief in whole or in part and that no person other than amici, its members, or its counsel made any monetary contributions intended to fund the preparation or submission of this brief. All parties consented to the filing of this brief.

research studies examining the effects of gender-differentiated school policies (i.e. policies that impose different rules or treatment based on gender), including policies and practices perpetuating gender stereotypes, on children.

The Society for the Psychological Study of Social Issues (“SPSSI”) is a professional association founded in 1936. SPSSI has a membership of nearly 3,000 psychologists, social scientists, allied scholars, and policy professionals. SPSSI is a trusted source of research and education on the psychological aspects of critical social issues and psychological science. SPSSI encourages evidence-based policy-making, and it has served as a nongovernmental organization with consultative status at the United Nations since 1991. SPSSI members have long researched and studied the psychological impacts of gender discrimination and stereotyping on children, including within educational contexts.

The Cognitive Development Society (“CDS”) is a professional organization founded in 1998. CDS has 840 members, of which 87% are based in the United States and includes primary investigators and researchers working in educational institutions and universities, graduate students, and post-doctoral scholars. CDS promotes and represents the common professional interests of developmental psychologists, students, practitioners, and other professionals who engage in the study of change and continuity in the intellectual process that supports mental life and psychological well-being. CDS’s primary focus is the cognitive

development of infants, children, and adolescents, including cognitive developmental processes related to gender and the impacts of gender stereotyping and gender discrimination on children's self-concepts and concepts of others.

The Society for Research on Adolescence ("SRA") is a community of researchers whose goals are to advance understanding of adolescence and enhance the well-being of youth in a globalized world. SRA promotes high-quality research that considers the biological, psychological, and sociocultural aspects of development in context. SRA aims to lead and shape scientific and public discourse on youth and adolescence and to guide parenting, schooling, programs, and policies. In order to achieve these goals, SRA fosters the professional development and growth of its members and is relevant, visible, diverse, and global in perspective.

INTRODUCTION AND SUMMARY OF ARGUMENT

Amici address a narrow but important issue in this case: the effects that gender labels and gender-differentiated policies and practices can have on children—and on girls in particular—in school settings. Contrary to the Charter Day School’s arguments, developmental research suggests that policies and practices like the girl skirt requirement perpetuate and reinforce harmful gender stereotypes—such as that girls are fragile, should be treated differently than boys, and have an inferior place in society. And they impose significant burdens on female students.

As the plaintiffs’ brief explains, the Supreme Court and this Court consistently strike down similarly harmful and burdensome gender-based classifications as unlawful sex discrimination. *United States v. Virginia*, 518 U.S. 515, 533 (1996); *Knussman v. Maryland*, 272 F.3d 625, 636 (4th Cir. 2001). It is now settled that gender “classifications may not be used, as they once were, to create or perpetuate the legal, social, and economic inferiority of women.” *Virginia*, 518 U.S. at 534 (internal citation omitted); see *Nevada Dep’t of Human Res. v. Hibbs*, 538 U.S. 721, 736 (2003) (“stereotypes about women’s domestic roles . . . create[] a self-fulfilling cycle of discrimination”). And “[g]ender classifications that appear to rest on nothing more than conventional notions about the proper station in society for males and females have been declared invalid time and again by the Supreme Court.” *Knussman*, 272 F.3d at 636.

Charter Day School's girl skirt requirement fails the Supreme Court's and this Court's requirements. The record demonstrates that the school's policy was designed to foster stereotyped views of women and girls. The school's founder acknowledged that skirts help boys distinguish boys from girls, which is important because "females are to be treated courteously and more gently than boys." JA413-14. And his reason why: girls are a "fragile vessel that men are supposed to take care of and honor." JA414. Nor were these isolated comments. The Charter Day School defended the girl skirt requirement by arguing that it "help[ed] the children 'act more appropriately' towards [the] opposite sex" and provided "visual cues that signify sex distinction" to foster "respect between the two sexes." JA1549-50; Defendants' Memo. ISO MSJ at 40, D.Ct. Dkt. No. 159; *see also*, JA2742. For that reason, among others, the district court correctly recognized that the girl skirt policy hails from a bygone era and ignores the "changing community standards that have led to the near eradication of prohibitions on girls wearing pants." JA2740-41.

Further, the girl skirt requirement imposes significant burdens solely on girls. In addition to the harms that the district court recognized (e.g., unable to play as freely during recess, needing to be conscious of how they sit, distracting from learning, being subject to cold temperatures in the winter) (JA2743), developmental research shows that gender classifications—particularly ones that emphasize harmful male/female stereotypes—can have serious adverse effects on academic,

mental, and social development. Children, particularly those in school settings, are highly susceptible to gender-differentiated policies and practices. And the effects of these policies are not fleeting; research shows that they can have lifelong consequences.

ARGUMENT

I. DEVELOPMENTAL RESEARCH SUGGESTS THAT GENDER-DIFFERENTIATED POLICIES AND PRACTICES CAN TRIGGER BIASES AND STEREOTYPES IN CHILDREN IN SCHOOL SETTINGS

As the district court rightly recognized, the girl skirt requirement differentiates between students based on their sex. *See* JA2739 (“[the uniform policy] requires girls to wear skirts, and, on its face, treats girls differently than boys by not allowing them to wear pants.”). The Charter Day School, however, argues that such distinctions have minor effects on children. *See* School Brief 51 (“[F]emale students suffer minimal, if any, burdens from the Uniform Policy.”). Yet child development research demonstrates otherwise. Researchers have found that even less overt gender distinctions than the girl skirt requirement trigger long-lasting biases and stereotypes in children. And research shows that children are susceptible to harmful gender distinctions in classroom settings.

A. Emphasizing Gender Labels With Children Creates And Reinforces Harmful Gender Biases And Stereotypes

Child development researchers have found that the repeated use of gender labels (i.e. referring to and distinguishing children as “boys” or “girls”), how they are used, and how they are perceived greatly shapes children’s understanding of what it means to be a girl or a boy. Gender labels imply differences in how children should interact, dress, behave, and fit into society. Even relatively modest gender-differentiated policies can greatly influence children’s beliefs and interactions with the other gender, foster biases, and drive children to conform to harmful gender stereotypes.

Child development researchers have found that increasing the use of gender labels can lead to children forming two types of biases. One is an “in-group bias”—a preference for others like themselves (e.g., boys preferring interactions with other boys over girls). The other is an “out-group bias”—that is, a dislike of the “other” group (e.g., boys disliking interactions with girls). *See, e.g.,* Lacey J. Hilliard & Lynn S. Liben, *Differing Levels of Gender Salience in Preschool Classrooms: Effects on Children’s Gender Attitudes and Intergroup Bias*, 81 *Child Development* 1787 (2010).

In fact, even inconsequential, randomly assigned group labels can create these biases in children. In one recent study, for instance, preschoolers were randomly divided into two groups based on the color of a coin that they blindly drew from a

bucket. The children were then given color-coded markers that represented their assigned group. The study observed that the children developed an in-group bias—they categorized each other based on assigned group color and demonstrated preferences for members of their color group. *See* Nadja Richter, et al., *The Effects of Minimal Group Membership on Young Preschoolers' Social Preferences, Estimates of Similarity, and Behavioral Attribution*, 2 *Collabra* 1 (2016); *see also*, Meagan M. Patterson & Rebecca S. Bigler, *Preschool Children's Attention to Environmental Messages About Groups: Social Categorization and the Origins of Intergroup Bias*, 77 *Child Development* 847, 856 (2006) (finding that “preschool children, like older children, develop ingroup-biased attitudes,” which were influenced by “teachers’ use of the [color] groups to label children and organize classrooms”).

These effects are often more pronounced when gender labels are used to group or differentiate children. When children are increasingly exposed to gender group labels, they begin to identify with their assigned gender group, develop gender-based opinions about their group and other groups, form preferences, and alter their behaviors based on those gender groupings. *See, e.g.*, Rebecca S. Bigler & Lynn S. Liben, *A developmental intergroup theory of social stereotypes and prejudice*, in *Advances in Child Development and Behavior* (R.V. Kail ed., 2006) (analyzing studies that examined the emergence of stereotypes in children based on the use of

group labels, including gender). As one example, developmental research shows that, as children become more aware of gender categories, they can form preferences for dressing in stereotypical feminine or masculine ways. *See, e.g.,* May Ling D. Halim, et al., *The Roles of Self-Socialization and Parent Socialization in Toddlers' Gender-Typed Appearance*, 47 *Archives of Sexual Behavior* 2277 (2018). One study found that 68% of three- and four-year-old girls insist on dressing in female-stereotyped clothing (the “Pink Frilly Dress” phenomenon), regardless of the context or feasibility to do so. *See* May Ling Halim, et al., *Pink Frilly Dresses and the Avoidance of All Things “Girly”*: *Children's Appearance Rigidity and Cognitive Theories of Gender Development*, 50 *Developmental Psychology* 1091 (2014); *see also*, M Anais Martinez, et al., *Gender: Awareness, Identity, and Stereotyping*, Reference Module in Neuroscience and Biobehavioral Psychology 1, 4 (2019) (discussing developmental research on gendered dress and behavior in children).

Not surprisingly, researchers have found that using gender group labels with children can lead to—and reinforce—gender biases, stereotypes, and reinforce distinctions between gender groups. *See, e.g.,* Hilliard & Liben, *supra*. And gender biases and stereotypes often go beyond influencing who children play with or how they dress—they can have far more insidious effects. The seemingly innocuous differential treatment of boys and girls can not only lead to differences in behaviors, but also have harmful consequences for children.

Researchers also note that, over time, children become aware of “status differentials” and come to the conclusion by middle childhood that “jobs performed by men have higher status than those performed by women . . .” Lynn S. Liben, et al., *Pink and Blue Collar Jobs: Children’s Judgments of Job Status and Job Aspirations in Relation to Sex of Worker*, 79 *J. of Experimental Child Psychology* 346, 359 (2001); see Stacey Teig & Joshua E. Susskind, *Truck Driver or Nurse? The Impact of Gender Roles and Occupational Status on Children’s Occupational Preferences*, 58 *Sex Roles* 848 (2008). These stereotypical views can become entrenched over time. See, e.g., May Ling Halim, et al., *From Pink Frilly Dresses to ‘One of the Boys’: A Social-Cognitive Analysis of Gender Identity Development and Gender Bias*, 5 *Social and Personality Psychology Compass* 933, 937 (2011) (“[A] substantial number of children in middle childhood are aware of gender discrimination, and this awareness increases with age.”); Cindy Faith Miller, et al., *The Role of Gender Stereotypes in Children’s Preferences and Behavior*, in *Child Psychology: A Handbook of Contemporary Issues*, 293, 299 (2d ed. 2006) (“[R]esearch suggests that occupational stereotypes are learned around kindergarten and that attribute stereotypes emerge[] around age 5 and may continue to develop into adolescence.”).

B. Children Are Vulnerable To Gender Labels And The Harms They Cause In School Settings

As discussed above, even using incidental gender labels can have profound effects on child development. Those effects are likely compounded when gender labels become school policies that dictate teachers' and children's practices—like the Charter Day School's girl skirt policy. Child development research shows that children are particularly susceptible to gender-differentiated practices in the school environment. And how gender labels are used in schools can have a profound impact on children's understanding of gender, their views and preferences of gender groups, and can trigger and reinforce gender biases and stereotypes. It can also reinforce perceived distinctions between gender groups. *See, e.g., Hilliard & Liben, supra.*

A number of studies have found that, by highlighting gender in classrooms, teachers can inadvertently reinforce gender biases and stereotypes. In one study, researchers randomly assigned elementary school students into one of three classrooms, each with its own distinct condition: (1) a "gender" condition where sex-segregated seating assignments with color-coded name tags were used, (2) a "color" condition where children were assigned to a color group (e.g., red group vs. green group), or (3) a "control" condition where teachers only referred to students by their names. *See* Rebecca S. Bigler, *The Role of Classification Skill in Moderating Environmental Influences on Children's Gender Stereotyping: A Study of the Functional Use of Gender in the Classroom*, 66 *Child Development* 1072

(1995). After four weeks, more gender stereotyping was evident in Group 1 (where teachers used male and female groups to categorize their classrooms) than in the color and control groups. For example, comparing pre- and post-study test results showed that students in Group 1 had greater gender stereotyping of occupations—they were more likely to rate some occupations as appropriate for “only men” or “only women.” *Id.*

Another study found similar results: in it, preschool teachers used gender-specific language and categorizations in certain classrooms over a two-week period, such as lining children up by sex, posting separate boys’ and girls’ bulletin boards, and using gender-specific language. *See Hilliard & Liben, supra.* The children were interviewed before and after the study and were observed during their normal classroom play periods. *Id.* at 1790-91. Several measures were used before and after the study to assess gender attitudes, peer play, and personal interests. To assess gender attitudes, for example, children were shown pictures of activities or occupations and asked if men/boys, women/girls, or both should perform each one. After just two weeks, the students in the gender-differentiated classrooms showed significantly increased gender stereotypes, less positive ratings of other-sex peers, and decreased play with other-sex peers in comparison to children in classrooms where teachers avoided organizing their classrooms based on gender group labels. *Id.* at 1794-97.

II. DEVELOPMENTAL RESEARCH SUGGESTS THAT GENDER-BASED POLICIES AND PRACTICES NEGATIVELY AFFECT ACADEMIC ACHIEVEMENT, CONFIDENCE, MOTIVATION, AND MENTAL HEALTH

As discussed above, developmental research has found that subjecting children to gender labels and gender distinctions often leads to harmful gender biases and stereotypes, particularly in school settings. This is a burden that disproportionately falls on girls. In particular, policies and practices like the girl skirt requirement can lead to what child development researchers call “stereotype threat”—a condition in which the use of a stereotype about a stigmatized group, like women, is emphasized, which makes it more likely that the negative stereotype will be fulfilled and perpetuated. *E.g.* Pascal Huguet & Isabelle Régner, *Stereotype Threat Among Schoolgirls in Quasi-Ordinary Classroom Circumstances*, 99 *J. of Educational Psychology* 545, 546-47 (2007) (defining and discussing developmental research on stereotype threat). Thus, a situation that reinforces stereotypes about women’s ability, skills, or roles creates a threat condition—decreasing the likelihood that the stereotype is overcome. This can lead to adverse academic, social, and mental health consequences, including further perpetuation of negative stereotypes, as further described below.

A. Decreased Academic Achievement, Confidence, And Motivation

Developmental science shows that, when their gender group or negative stereotypes associated with their gender group are highlighted or emphasized in the

classroom, girls are more likely to perform similarly to those stereotypes. Girls have reported lower confidence, motivation, and interest in learning after exposure to gender stereotypes. See, e.g., Franzis Preckel, et al., *Gender Differences in Gifted and Average-Ability Students: Comparing Girls' and Boys' Achievement, Self-Concept, Interest, and Motivation in Mathematics*, 52 *Gifted Child Q.* 146, 146 (2008) (“However, in spite of earning equally good grades in mathematics as boys, girls report lower mean levels of academic self-concept, interest, and motivation.”). Take, for example, the stereotype that boys are better than girls at math. This stereotype continues to have real-world consequences on academic achievement: “girls still report lower self-efficacy and self-perceptions in math and science, often greatly underestimating their abilities.” Martha M. Bleeker & Janis E. Jacobs, *Achievement in Math and Science: Do Mothers' Beliefs Matter 12 Years Later?*, 96 *J. of Educational Psychology* 97, 98 (2004) (finding that mothers' early beliefs/predictions were significantly related to children's later math-science achievement and career choices); see also, Campbell Leaper & Christia Spears Brown, *Sexism in Schools*, in *Advances in Child Development and Behavior*, 189, 213 (2014) (concluding that sexism in schools can undermine academic achievement).

Indeed, researchers still see the effects of this false stereotype in classrooms. In one study, middle school students were randomly divided into two groups and

given an identical math test. For one group, the test was called a “memory game,” and for the other, it was titled a “geometry test.” *See* Huguet & Régner (2007), *supra*. In the “memory game” group, the girls outperformed the boys. *Id.* at 550. But for the “geometry test” group, the girls did worse than the boys. *Id.* The researchers concluded that gender-based stereotypes influenced the results: the girls did worse simply because they believed they were doing math. *Id.*

Research shows that even girls who hold counter-stereotypic views are nonetheless affected by harmful gender stereotypes about math. In another study, students were divided at random into two mixed-gender subgroups and were given an identical test that was described as either measuring their ability in “geometry” or “drawing.” *See* Pascal Huguet & Isabelle Régner, *Counter-stereotypic beliefs in math do not protect school girls from stereotype threat*, 45 *J. of Experimental Social Psychology* 1 (2009). The students’ stereotypic beliefs were also measured as part of a larger questionnaire on “academic motivation.” *Id.* at 7. The results of the study showed that “[g]irls who denied the negative gender stereotype suffered from it nonetheless when they simply believed (even mistakenly) that the task they were going to take measured geometry skills.” *Id.* at 11.

Even in situations where gender stereotypes do not result in comparably lower test scores or grades, gender stereotypes can still have harmful effects on girls’ views of their own academic abilities and confidence. *See id.* (“The very fact that girls

underestimated their own ability in geometry (but not in drawing) while obtaining similar math/geometry grades as boys strengthens the idea that ST [i.e. stereotype threat] was operating.”). That the Charter Day School’s female students may perform somewhat better than boys on standardized math tests (School Brief 12) is, therefore, inconclusive without a direct comparison to the same female student group’s performance in the absence of a gender-stereotyped policy. The female students could very well perform *even better* than they currently do absent the School’s gender-stereotyped policy. *See generally*, Preckel, *supra*, at 156 (“Females tend to estimate their mathematical competence lower than their male counterparts do—and *the gifted females in our study were no exception, in spite of fact that they earned equally good math grades as the gifted boys.*”) (emphasis added); Huguet & Régner (2007), *supra*, at 545, 550 (finding stereotype threat effects on girls who excel in math: “There is ample evidence today in the stereotype threat literature that women and girls are *influenced* by gender-stereotyped expectations on standardized math tests.” (emphasis added)); Huguet & Régner (2009), *supra*, at 11 (“ST [i.e. stereotype threat] is found here in middle-school girls from the general population, and who were similar to boys in their math grades, indicating that for teachers ST is indeed not necessarily visible at the surface.”).

Similarly, researchers have found that girls consistently do worse than boys in STEM (science, technology, engineering, and mathematics) tests after being

exposed to a gender-based stereotype threat. See Katherine Picho, et al., *Exploring the Moderating Role of Context on the Mathematics Performance of Females Under Stereotype Threat: A Meta-Analysis*, 153 *J. of Social Psychology* 299, 324 (2013) (meta-analysis of 17 years of research on stereotype threat finding that, “on average, females under ST [i.e. stereotype threat] performed nearly a quarter of a standard deviation below their non-ST counterparts”).

Researchers have noted that this finding has long-term consequences. Girls exposed to gender-based stereotype threats may become less inclined to pursue careers in STEM. As one article explains, there is a “long history of research showing that, compared to boys and men, girls and women are less likely to pursue or persist in STEM careers, particularly those in technology and engineering.” Emily F. Coyle & Lynn S. Liben, *Affecting Girls’ Activity and Job Interests Through Play: The Moderating Roles of Personal Gender Salience and Game Characteristics*, 87 *Child Development* 414, 424 (2016); see also, Campbell Leaper & Christia Spears Brown, *Sexism in Childhood and Adolescence: Recent Trends and Advances in Research*, 12 *Child Development Perspectives* 10, 12 (2018) (summarizing the effects of gender biases on academic achievement: “Many girls may avoid certain STEM subjects and careers they might find fulfilling” and “[g]ender biases also contribute to later gender inequities in occupational status and pay—STEM careers, such as engineering and computer science, are among the

fastest growing and highest paying jobs in the United States and other industrialized nations.”); Picho, *supra*, at 326 (finding that stereotype threat effects “could significantly hinder entry into graduate programs in science disciplines.”). The facts on the ground support this conclusion: the Bureau of Labor Statistics in U.S. Department of Labor reports that, while 44.3% of full-time wage and salary workers were women in 2016, only 25.2% of workers in computer and mathematical occupations were women. See Bureau of Labor Statistics, U.S. Department of Labor, *Women in architecture and engineering occupations in 2016*, The Economics Daily (Mar. 10, 2017), https://www.bls.gov/opub/ted/2017/women-in-architecture-and-engineering-occupations-in-2016.htm?view_full.

More generally, the school’s rationale for the policy reflects another form of gender stereotypes known as “benevolent sexism,” which refers to attitudes that venerate or bestow affection on women who embrace stereotypical gender roles and reinforces women’s perceived subordinate place in society. See Peter Glick & Susan T. Fiske, *The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism*, 70 *J. of Personality and Social Psychology* 491 (1996). Benevolent sexism arises, in part, from gender role differentiation and protective paternalistic beliefs (such as the belief that limiting women’s access or roles is necessary to protect and serve their best interests). “By offering male protection and provision to women in exchange for their compliance, benevolent sexism recruits women as unwitting

participants in their own subjugation, thereby obviating overt coercion.” Rachel A. Connor et al., *Ambivalent Sexism in the Twenty-First Century*, in *The Cambridge Handbook of the Psychology of Prejudice*, 295, 295, 298 (C.G. Sibley & F.K. Barlow eds., 2017).

Nearly two decades of research suggest that benevolent sexism plays a key role in reinforcing gender inequality, and “the research also amply demonstrates benevolent sexism’s negative effects, even though it seems subjectively favorable and fosters discrimination with a smile, couched as help, provision, or protection. Further, benevolent sexism has been shown to be especially effective in undermining women’s resistance to inequality.” *See, e.g.*, Connor et al., *supra*, at 295, 312.

B. Harm To Mental Health

Gender stereotype threats have other consequences: developmental research shows that girls who are exposed to and believe more strongly in stereotypical gender roles—such as being “fragile” and in need of gentle treatment—are at greater risk for depression, low self-esteem, disordered eating, and risky sexual behaviors.

One study examined the mental health effects on eighth grade girls when they internalized certain gender stereotypes, such as those related to body objectification—an issue germane to the girl skirt policy. The authors found “powerful evidence that early adolescent girls who internalize conventional femininity ideologies, particularly regarding body objectification, have lower

self-esteem and higher depressed mood.” D.L. Tolman, et al., *Looking Good, Sounding Good: Femininity Ideology and Adolescent Girls’ Mental Health*, 30 *Psychology of Women Q.* 85, 91 (2006); see Patricia C. Broderick & Constance Korteland, *Coping Style and Depression in Early Adolescence: Relationships to Gender, Gender Role, and Implicit Beliefs*, 46 *Sex Roles* 201, 206-09 (2002) (finding that adolescents who internalized gender stereotypes are more prone to gender-typed coping styles associated with prolonged depression episodes).

Influence by, and conformance to, female gender stereotypes—including what girls versus boys should wear—is related to girls’ increased vulnerability to developing eating disorders and body image problems. For example, researchers have examined whether eating disorders could be associated with rigid adherence to feminine gender roles in situations where women’s body image is threatened (“body image threat”). See D.M. Martz, et al., *The Relationship Between Feminine Gender Role Stress, Body Image, and Eating Disorders*, 19 *Psychology of Women Q.* 493 (1995). They found that “gender role stress is significantly higher in women with existing eating disorders” and that “stress related to the feminine gender role may

predispose some women to the development of body image problems and eating disorders.” *Id.*, at 506.²

These increased risks of psychological harms show that schools should be working toward reducing and eliminating the prevalence of gender stereotypes—not doing the opposite by promoting and perpetuating them in official school policies.

C. Distinct And Even Stronger Negative Effects On Children From Underrepresented Groups

Policies and practices like the girl skirt requirement can magnify harms for children from ethnic and racial minorities. For example, researchers have found that African American girls not only have to deal with gender stereotypes, but also race-based stereotypes, which create unique compounded experiences and vulnerabilities. *See* Rebecca Epstein, et al., *Girlhood Interrupted: The Erasure of Black Girls’ Childhood*, Georgetown Law Center on Poverty and Inequality (2017) (finding that adults viewed African American girls between the ages of 5 and 14 as less innocent, needing less nurturing, protection, and comfort, and knowing more

² Research has also shown that exposure to gender-based stereotypes and feeling the need to conform to them can have harmful effects on girls’ sexual health. *See, e.g.*, Nicola Curtin, et al., *Femininity Ideology and Sexual Health in Young Women: A Focus on Sexual Knowledge, Embodiment, and Agency*, 23 *Int’l J. of Sexual Health* 48, 56 (2011) (finding that college women who had been exposed to gender stereotypes “endorsed more traditional gender roles [and] showed decreased sexual health knowledge, and lowered confidence in their ability to advocate for themselves sexually.”).

about adult topics and about sex than their Caucasian peers). These perceptions can disproportionately influence ethnic/racial minority girls' beliefs about their true abilities and potential. While children are already particularly susceptible to gender stereotypes, developmental research shows that girls with double minority status (e.g., gender and ethnicity)³ are even more vulnerable to gender-based stereotype threats, and that forcing conformance to gender stereotypes on these girls can compound and create additional harms. *See* Christia Spears Brown & Campbell Leaper, *Latina and European American Girls' Experiences with Academic Sexism and their Self-Concepts in Mathematics and Science During Adolescence*, 63 *Sex Roles* 860, 862 (2010) (“[D]ouble-minority status may lead girls in minority ethnic groups to be more sensitive to all forms of discrimination—both ethnic discrimination and gender discrimination...”).

Other studies demonstrate that Latina girls may be particularly vulnerable to gender-based stereotype threats. One recent study examined the effects of academic sexism on middle school and high school Latina girls' self-perceived math and science abilities. *See id.* The students were given a survey that “included questions

³ While gender is not statistically a “minority,” researchers have noted that it is “useful to retain the term” because women “are underrepresented in pursuits related to negative gender stereotypes . . . [such as] negative math stereotypes.” Patricia M. Gonzales, et al., *The Effects of Stereotype Threat and Double-Minority Status on the Test Performance of Latino Women*, 28 *Personality and Social Psychology Bulletin* 659, 669 n.1 (2002).

about participants' (a) demographic background such as age, ethnicity, and mother's and father's highest level of education, (b) self-concepts and grades about math and science, and (c) perceptions of academic sexism." *Id.* at 863. The results showed that hearing discouraging comments about their abilities in math, science, or computers was negatively associated with girls' self-perceived competence in those areas, and that this effect occurred more strongly among Latina girls. *See id.* at 867; *see also*, Gonzales, et al., *supra*, at 659-70 (examining gender-based and ethnicity-based stereotype-threat effects on mathematical and spatial performance in Latino and white college students). These findings suggest that exposing double minority girls to gender stereotype threat conditions can have even stronger negative effects on STEM-related academic performance and career opportunities.

Similarly, emphasizing gender stereotypes can have harmful effects on the mental health of sexual and gender minority (e.g. LGBTQ+) children, who may be more susceptible to gender stereotyped practices and policies. As children become more aware of socially defined categorical differences between boys and girls, they can face an unyielding pressure to conform to gender stereotypes. For sexual and gender minority children, the pressure to conform can have harmful effects on their well-being. *See, e.g.*, Jennifer L. Yunger, et al., *Does Gender Identity Influence Children's Psychological Well-Being?*, 40 *Developmental Psychology* 572 (2004). For example, research shows that pre-adolescents who felt that they were less similar

to other members in their gender group (i.e. low gender typicality) and felt high pressure to conform to gender stereotypes had greater internalizing problems (e.g., anxiety, depressive episodes). *See* Priscilla R. Carver, et al., *Gender Identity and Adjustment in Middle Childhood*, 49 *Sex Roles* 95, 98 (2003). In another study, elementary and middle school children were given (1) a “Self-Concept Questionnaire,” which assessed global self-worth, self-perceived peer social competence, gender typicality, gender contentedness, felt pressure, and intergroup bias, and (2) a “Peer Nomination Inventory,” which assessed certain aspects of social behavior, including internalizing problems, victimization, externalizing problems, agentic traits, and communal traits. *See id.* at 100-01. The results showed that gender atypical children “not only voiced distress over their peer relations but indeed were perceived by peers as depressed, anxious, self-deprecating, and victimized . . . [which] was magnified when children reported strong pressure for gender conformity.” *Id.* at 105 (emphasis added).

CONCLUSION

Developmental research suggests that gender-differentiated policies and practices can have serious adverse effects on academic, mental, and social development. The district court’s judgment for plaintiffs should be affirmed.

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Respectfully submitted,

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