

No. 94-1941

---

---

IN THE

Supreme Court of the United States

OCTOBER TERM, 1994

---

UNITED STATES OF AMERICA,

*Petitioner,*

—v.—

COMMONWEALTH OF VIRGINIA, *et al.*,

*Respondents.*

---

ON WRIT OF CERTIORARI TO THE UNITED STATES  
COURT OF APPEALS FOR THE FOURTH CIRCUIT

---

BRIEF *AMICI CURIAE* IN SUPPORT OF PETITIONER BY THE AMERICAN  
ASSOCIATION OF UNIVERSITY PROFESSORS; THE CENTER FOR WOMEN  
POLICY STUDIES; THE PROGRAM ON GENDER, SCIENCE AND LAW; STANLEY  
ARONOWITZ, PH.D.; STEPHANIE J. BIRD, PH.D.; PATRICIA CAMPBELL, PH.D.;  
BLYTHE MCVICKER CLINCHY, PH.D.; MARY CRAWFORD, PH.D.; FAYE J.  
CROSBY, PH.D.; KAY DEAUX, PH.D.; CYNTHIA FUCHS EPSTEIN, PH.D.;  
MICHELLE FINE, PH.D.; CAROL GILLIGAN, PH.D.; MARY S. HENIFIN, M.P.H.,  
J.D.; RUTH HUBBARD PH.D.; VILMA HUNT, B.D.S., M.A.; ANNE S. KASPER,  
PH.D.; PENELOPE KEGEL-FLOM, PH.D.; EVELYN FOX KELLER, PH.D.;  
VALERIE E. LEE, ED.D.; ZELLA LURIA, PH.D.; MAUREEN PAUL, M.D., M.P.H.;  
DIANE S. POLLARD, PH.D.; SUSAN REVERBY, PH.D.; JO SANDERS; BERNICE  
SANDLER, ED.D.; ELLEN WAHL; LESLIE WOLFE, PH.D.

---

MICHAEL OLIVAS  
ANN H. FRANKE  
American Association of University  
Professors  
1012 Fourteenth Street, N.W.,  
Suite 500  
Washington, D.C. 20005-3465  
*Of Counsel*

JOAN E. BERTIN  
(*Counsel of Record*)  
Program on Gender, Science and Law  
Columbia University School of  
Public Health  
60 Haven Avenue, B2-219  
New York, New York 10032  
(212) 304-5282

EDWARD D. HASSI\*  
SHARI L. ROSENBLUM\*  
OMID ZAREH\*  
Coudert Brothers  
1114 Avenue of the Americas  
New York, New York 10036-7703

*Attorneys for Amici Curiae*

---

---

## TABLE OF CONTENTS

	Page
Table of Authorities . . . . .	(ii)
Interest of <i>Amici Curiae</i> . . . . .	1
Summary of Argument . . . . .	1
<b>ARGUMENT . . . . .</b>	<b>3</b>
<b>I. VMI'S SEX-BASED ADMISSION POLICY         VIOLATES EQUAL PROTECTION. . . . .</b>	<b>3</b>
A. VMI's Policy of Exclusion Is Based on Impermissible Generalizations and Stereotypes. . . . .	4
B. The Generalizations Offered By VMI Are Inaccurate and Misleading. . . . .	10
C. There Is No Constitutionally Sufficient Rationale To Justify a Continuing Exclusion of Women. . . . .	15
<b>II. THE LOWER COURTS RELIED ON         PALPABLY INSUFFICIENT EVIDENCE         TO JUSTIFY CONTINUING SEX         DISCRIMINATION. . . . .</b>	<b>20</b>
<b>CONCLUSION . . . . .</b>	<b>29</b>

## TABLE OF AUTHORITIES

### FEDERAL CASES

	<u>Page</u>
<i>Craig v. Boren</i> , 429 U.S. 190 (1976) . . . . .	3,15
<i>Daubert v. Merrell Dow Pharmaceuticals</i> , 113 S. Ct. 2786 (1993) . . . . .	2,21
<i>Dothard v. Rawlinson</i> , 433 U.S. 321 (1977) . . . . .	5,19
<i>International Union, UAW v. Johnson Controls</i> , 499 U.S. 187 (1991) . . . . .	17
<i>J.E.B. v. Alabama ex rel. T.B.</i> , 114 S. Ct. 1419 (1994) . . . . .	passim
<i>Mississippi Univ. for Women v. Hogan</i> , 458 U.S. 718 (1982) . . . . .	2,3,4,17
<i>Muller v. Oregon</i> , 208 U.S. 412 (1908) . . . . .	2
<i>Orr v. Orr</i> , 440 U.S. 268 (1979) . . . . .	3,15
<i>Personnel Adm'r v. Feeney</i> , 442 U.S. 256 (1979) . . . . .	17
<i>Reed v. Reed</i> , 404 U.S. 71 (1971) . . . . .	3,15
<i>Roberts v. United States Jaycees</i> , 468 U.S. 609 (1984) . . . . .	3
<i>Schlesinger v. Ballard</i> , 419 U.S. 498 (1975) . . . . .	19
<i>United States v. Commonwealth of Virginia</i> , 55 F.3d 90, 93 (4th Cir. 1995) (Motz, J., dissenting) . . . . .	16
<i>United States v. Commonwealth of Virginia</i> , 44 F.3d 1229, 1241 (4th Cir. 1995) (VMI II) . . . . .	5,17,19
<i>United States v. Commonwealth of Virginia</i> , 766 F. Supp. 1407 (W.D.Va. 1991) . . . . .	passim

<i>United States v. Commonwealth of Virginia</i> , 852 F. Supp. 471 (W.D.Va. 1994) . . . . .	5,6,23
<i>United States v. Commonwealth of Virginia</i> , 976 F.2d at 896 . . . . .	19
<i>Wengler v. Druggists Mut. Ins. Co.</i> , 446 U.S. 142 (1980) . . . . .	17

#### **TRANSCRIPTS OF PROCEEDINGS**

<i>United States v. Commonwealth of Virginia</i> (W.D. Va.) (90-12602) . . . . .	passim
--	--------

#### **CONSTITUTION, STATUTES AND RULE**

<i>U.S. Const.: Equal Protection Clause</i> . . . . .	passim
<i>Fed.Rules Evid. Rules 702-703, 28 U.S.C.A.</i> . . . . .	2

#### **BOOKS & ARTICLES**

Alice Kessler-Harris, <i>Out to Work</i> (1982) . . . . .	3
Anthony Bryk, Valerie Lee & P.B. Holland, <i>Catholic Schools and the Common Good</i> (1993) . . . . .	25
Carol Gilligan, <i>In a Different Voice: Psychological Theory and Women's Development</i> (1982) . . . . .	12,24
Cornelius Riordan, <i>The Case for Single-Sex Schools, in U.S. Dept. of Educ. Single-Sex Schooling: Proponents Speak</i> (1993) . . . . .	27
Cynthia Fuchs Epstein, <i>Deceptive Distinctions: Sex, Gender, and the Social Order</i> (1988) . . . . .	12

Daniel Offer, <i>The Psychological World of the Teenager: A Study of 175 Boys</i> (1969) . . . . .	24
Earl Babbie, <i>The Practice of Social Science Research</i> (4th Ed. 1986) . . . . .	22
Elizabeth Fox-Genovese, <i>Feminism Without Illusions: A Critique of Individualism</i> (1991) . . . . .	10
Astin, Alexander, <i>Four Critical Years: Effects of College on Beliefs, Attitudes, and Knowledge</i> (1977) . . . . .	28
J.S. Hyde & M.C. Linn, <i>The Psychology of Gender</i> (1986) . . . . .	13
Judith Baer, <i>The Chains of Protection (1978)</i> . . . . .	3
Kay Deaux and Mary Kite, <i>Thinking About Gender, in Analyzing Gender: A Handbook of Social Science Research</i> (Hess & Ferree eds., 1987) . . . . .	10
Kay Deaux & Mary Kite, <i>Gender Stereotypes in Psychology of Women: A Handbook of Issues &amp; Theories</i> (Denmark & Paludi eds., 1993) . . . . .	11,12,13
Lani Guinier, Michelle Fine and Jane Balin, <i>Becoming Gentlemen: Women's Experiences at One Ivy League Law School</i> , 143 U. Pa. L. Rev. 1 (1994) . . . . .	26
M. Boutilier & L. SanGiovanni, <i>Women and Sports: Reflections on Health and Policy, in Women, Health, and Healing: Toward a New Perspective</i> (Lewin & Olsesen eds., 1985) . . . . .	14,27

M. Elizabeth Tidball, <i>Educational Environments and the Development of Talent</i> , U.S. Dept. of Educ., <i>Single-Sex Schooling: Proponents Speak</i> (1993) . . . . .	27
Marian Lowe, <i>Social Bodies: The Interaction of Culture and Women's Biology</i> , in <i>Biological Woman: The Convenient Myth</i> (Hubbard, et al., eds., 1982) . . . . .	2
Mary Brown Parlee, <i>Women, Peace and The Reproduction of Gender</i> , in <i>On Peace, War and Gender: A Challenge to Genetic Explanations</i> (A.H. Hunter ed. 1991) . . . . .	12,13
National Research Council, National Academy of Sciences, <i>Women's Work, Men's Work: Occupational Segregation on the Job</i> (Reskin & Hartmann eds., 1986) . . . . .	20
R.W. Hale, <i>Differences and Similarities Between the Sexes, in Caring for the Exercising Woman</i> (Hale ed., 1991) . . . . .	13
Stephen J. Gould, <i>The Mismeasure of Man</i> (1981) . . . . .	2
T.D. Fahey, <i>Endurance Training, in Women and Exercise: Physiology and Sports Medicine</i> , 2nd Ed. 80 (Shangold & Mirkin eds., 1994) . . . . .	13
Valerie Lee, <i>Single-Sex Schooling: What Is the Issue?</i> , in U.S. Dept. of Educ. <i>Single-Sex Schooling: Proponents Speak</i> (1993) . . . . .	27
W.D. McArdle, <i>Essentials of Exercise Physiology</i> (1994) . . . . .	14

	<u>Page</u>
Alice Eagley, <i>The Science and Politics of Comparing Women and Men</i> , 50 Am. Psych. 145 (1995) . . . . .	10
Emanuel Jimenez & Marlaine Lockheed, <i>Enhancing Girls Education Through Single-Sex Education: Evidence and a Policy Conundrum</i> , 11 Educ. Eval. and Policy Anal. 117 (1989) . . . . .	26
Herbert Marsh, <i>Public, Catholic Single-Sex, and Catholic Coeducational High Schools: Their Effects on Achievement, Affect, and Behaviors</i> , 81 J. Educ. Psych. 320 (1989) . . . . .	27
Lee & Bryk, <i>Effects of Single-Sex Secondary Schools on Student Achievement and Attitudes</i> , 78 J. Educ. Psych. 381 (1986) . . . . .	25
Myron Genel, <i>Gender Differences in Growth and Maturation: Are These Relevant for Athletic Competition?</i> 4 J.Women's Health 425 (1995) . . . . .	14
Valerie Lee, et al., <i>Sexism in Single-Sex and Coeducational Independent Secondary School Classroom</i> , 67 Sociol. of Educ. 97 (1994) . . . . .	25
Valerie Lee & Helen Marks, <i>Sustained Effects of the Single-Sex Secondary School Experience on Attitudes, Behaviors, and Values in College</i> , 82 J. Educ. Psych. 578 (1990) . . . . .	25

### Interest of *Amici Curiae*

*Amici curiae*<sup>1</sup> are scientists, scholars, educators and professional organizations with an interest in the scientific issues raised in this case.<sup>2</sup> The research conducted by some *amici* was explicitly relied upon by the parties and the courts below. *Amici* are appearing in this proceeding to discuss the scientific issues addressed by the lower courts and their relevance to the legal questions presented.

### Summary of Argument

Virginia Military Institute,<sup>3</sup> a state-supported all-male school, excludes otherwise qualified female students solely because of their sex. The question before this Court on cross-petitions for a writ of *certiorari* is whether that admissions policy violates the Equal Protection Clause and, if so, whether the violation can be cured by the creation of a separate single-sex program for women.

VMI has sought to justify its single-sex status by relying on purportedly scientific evidence relating to alleged physiological and psychological differences between the sexes and the purported benefits to males from single-sex education at VMI. Even if these claims were accurate, however, they would be insufficient as a matter of law, because sex-based classifications that rely on stereotypes violate equal protection even if some statistical support "can be conjured up." *J.E.B. v. Alabama ex rel. T.B.*, 114 S. Ct. 1419, 1427 n.11 (1994). Likewise, in defense of the remedial plan, VMI offers "the very stereotype the law condemns." *Id.* at 1426. None of the interests asserted by VMI provides the "exceedingly persuasive" rationale necessary to justify a policy that

---

<sup>1</sup> This brief is filed on behalf of Petitioner. The parties have consented to the filing of this brief, and their letters of consent have been filed pursuant to Rule 37.3 of the Rules of this Court.

<sup>2</sup> Individual statements of interest appear in an Appendix to this brief.

<sup>3</sup> Respondents are referred to herein collectively as "VMI."

explicitly relies on stereotypes and perpetuates historical patterns of discrimination: it is not relevant if "the benefited class profits from the classification," nor can there be a legitimate interest in providing men with a college "composed of members of a particular...gender." *Mississippi Univ. for Women v. Hogan*, 458 U.S. 718, 731 n.17 (1982); *J.E.B.*, 114 S. Ct. at 1430 (O'Connor, J. concurring), 1434 (Kennedy, J. concurring). Point I.

To avoid the plain import of the law, the lower courts relied on tenuous theories about alleged sex-based differences and the purported benefits of single-sex education for men. These propositions were often advanced by witnesses with no apparent expertise, whose testimony lacks necessary indicia of scientific validity and evidentiary reliability. See Fed. Rules Evid. Rules 702-703, 28 U.S.C.A.; *Daubert v. Merrell Dow Pharmaceuticals*, 113 S. Ct. 2786 (1993). The record oversimplifies highly complex areas of research and misinterprets scholarly research, including that of Carol Gilligan and Valerie Lee, *amici curiae* herein. Such "proofs" are clearly inadequate to justify discrimination, both in themselves and as a matter of law. Point II.

## ARGUMENT

Assertions about differences between the sexes have historically been advanced to rationalize social arrangements that have disadvantaged women. For example, the "craniology" movement of the nineteenth century sought to "prove" that intelligence was a function of brain size, to establish male intellectual preeminence over women and justify the denial of educational and employment opportunities for women.<sup>4</sup> In *Muller v. Oregon*, 208 U.S. 412, 421 (1908) (Bradley, J., concurring), the Court deferred to the "abundant testimony of the medical fraternity," finding that women's biological vulnerability justified

---

<sup>4</sup> Marian Lowe, *Social Bodies: The Interaction of Culture and Women's Biology*, in *Biological Woman: The Convenient Myth* 100-06 (Hubbard, et al. eds., 1982); Stephen J. Gould, *The Mismeasure of Man* (1981).

limiting their hours of work.<sup>5</sup> The history of the legal and social disenfranchisement of women demonstrates the seemingly timeless appeal of pseudo-scientific and oversimplified arguments about "women's nature" to rationalize sex discrimination. Women's constitutional right to equal access to state educational opportunities should rest, not on problematic theories about purported sex-based biological and psychological differences, but rather on the enduring principles expressed in the Equal Protection Clause.

### **I. VMI'S SEX-BASED ADMISSION POLICY VIOLATES EQUAL PROTECTION.**

The overriding purpose of the Equal Protection Clause is to guarantee inclusion of historically disenfranchised segments of the population within the political, social and economic fabric of American life. The goal of inclusion is so significant that this Court has recognized a compelling interest in governmental efforts to eradicate sex discrimination, even when a negative impact on the right of freedom of association is asserted. *E.g., Roberts v. United States Jaycees*, 468 U.S. 609, 628 (1984). In modern equal protection jurisprudence, this Court has never endorsed the perpetuation of historical discrimination against women, or sanctioned the claim, pressed by VMI, that males are entitled to exclusive access to a valuable state benefit because they have historically monopolized it.<sup>6</sup>

---

<sup>5</sup> As a result, women were disqualified from a variety of lucrative jobs. Alice Kessler-Harris, *Out to Work* (1982); Judith Baer, *The Chains of Protection* (1978).

<sup>6</sup> This Court has rejected sex-based classifications even when used to advance otherwise valid purposes. *E.g., Reed v. Reed*, 404 U.S. 71 (1971) (administrative and cost concerns); *Craig v. Boren*, 429 U.S. 190 (1976) (preventing traffic accidents); *Orr v. Orr*, 440 U.S. 268 (1979) (assisting needy spouses "a legitimate and important objective"). The only relevant exception does not apply here: when such a classification "intentionally and directly assists members of the sex that is disproportionately burdened" and "compensate[s] for discriminatory barriers faced by women." *Hogan*, 458 U.S. at 728-29.

explicitly relies on stereotypes and perpetuates historical patterns of discrimination: it is not relevant if "the benefited class profits from the classification," nor can there be a legitimate interest in providing men with a college "composed of members of a particular...gender." *Mississippi Univ. for Women v. Hogan*, 458 U.S. 718, 731 n.17 (1982); *J.E.B.*, 114 S. Ct. at 1430 (O'Connor, J. concurring), 1434 (Kennedy, J. concurring). Point I.

To avoid the plain import of the law, the lower courts relied on tenuous theories about alleged sex-based differences and the purported benefits of single-sex education for men. These propositions were often advanced by witnesses with no apparent expertise, whose testimony lacks necessary indicia of scientific validity and evidentiary reliability. See Fed. Rules Evid. Rules 702-703, 28 U.S.C.A.; *Daubert v. Merrell Dow Pharmaceuticals*, 113 S. Ct. 2786 (1993). The record oversimplifies highly complex areas of research and misinterprets scholarly research, including that of Carol Gilligan and Valerie Lee, *amici curiae* herein. Such "proofs" are clearly inadequate to justify discrimination, both in themselves and as a matter of law. Point II.

## ARGUMENT

Assertions about differences between the sexes have historically been advanced to rationalize social arrangements that have disadvantaged women. For example, the "craniology" movement of the nineteenth century sought to "prove" that intelligence was a function of brain size, to establish male intellectual preeminence over women and justify the denial of educational and employment opportunities for women.<sup>4</sup> In *Muller v. Oregon*, 208 U.S. 412, 421 (1908) (Bradley, J., concurring), the Court deferred to the "abundant testimony of the medical fraternity," finding that women's biological vulnerability justified

---

<sup>4</sup> Marian Lowe, *Social Bodies: The Interaction of Culture and Women's Biology*, in *Biological Woman: The Convenient Myth* 100-06 (Hubbard, et al. eds., 1982); Stephen J. Gould, *The Mismeasure of Man* (1981).

limiting their hours of work.<sup>5</sup> The history of the legal and social disenfranchisement of women demonstrates the seemingly timeless appeal of pseudo-scientific and oversimplified arguments about "women's nature" to rationalize sex discrimination. Women's constitutional right to equal access to state educational opportunities should rest, not on problematic theories about purported sex-based biological and psychological differences, but rather on the enduring principles expressed in the Equal Protection Clause.

### **I. VMI'S SEX-BASED ADMISSION POLICY VIOLATES EQUAL PROTECTION.**

The overriding purpose of the Equal Protection Clause is to guarantee inclusion of historically disenfranchised segments of the population within the political, social and economic fabric of American life. The goal of inclusion is so significant that this Court has recognized a compelling interest in governmental efforts to eradicate sex discrimination, even when a negative impact on the right of freedom of association is asserted. *E.g., Roberts v. United States Jaycees*, 468 U.S. 609, 628 (1984). In modern equal protection jurisprudence, this Court has never endorsed the perpetuation of historical discrimination against women, or sanctioned the claim, pressed by VMI, that males are entitled to exclusive access to a valuable state benefit because they have historically monopolized it.<sup>6</sup>

---

<sup>5</sup> As a result, women were disqualified from a variety of lucrative jobs. Alice Kessler-Harris, *Out to Work* (1982); Judith Baer, *The Chains of Protection* (1978).

<sup>6</sup> This Court has rejected sex-based classifications even when used to advance otherwise valid purposes. *E.g., Reed v. Reed*, 404 U.S. 71 (1971) (administrative and cost concerns); *Craig v. Boren*, 429 U.S. 190 (1976) (preventing traffic accidents); *Orr v. Orr*, 440 U.S. 268 (1979) (assisting needy spouses "a legitimate and important objective"). The only relevant exception does not apply here: when such a classification "intentionally and directly assists members of the sex that is disproportionately burdened" and "compensate[s] for discriminatory barriers faced by women." *Hogan*, 458 U.S. at 728-29.

### **A. VMI's Policy of Exclusion Is Based on Impermissible Generalizations and Stereotypes.**

Rather than affirm the constitutional priority of inclusion, the lower courts affirmed the exclusion of those who, they admit, are qualified but for their sex. They reached this extraordinary result in reliance on stereotypes and generalizations that concededly do not apply to all women. At the liability trial, VMI's witnesses testified that women are physically weaker;<sup>7</sup> that they are more emotional and cannot take stress as well as men;<sup>8</sup> that they are less motivated by aggressiveness and suffer from fear of failure; and that more than a hundred physiological differences contribute to a "natural hierarchy" in which women cannot compete with men.<sup>9</sup> While acknowledging "some contribution to ballet," one witness expressed the view that women excel over men only in their "joint mobility" and their ability to produce and nurse babies.<sup>10</sup> Other witnesses testified to psychological and developmental differences between men and women, in particular men and women's alleged "different ways of knowing," women's "ethic of caring" and men's "ethic of justice."<sup>11</sup> These and other assertions about sex-based differences, with women's deficiencies assumed if not stated, were embraced by the trial court and formed the basis for the remedial plan. *United States v. Commonwealth of Virginia*, 766 F.Supp. 1407, 1412-13, 1434, 1439-40 (W.D.Va. 1991) ("VMI I").

<sup>7</sup> *United States v. Commonwealth of Virginia, et al.*, (W.D.Va.) (90-01260-R). Transcript of Proceedings, April 11-14, 1991 (liability) (hereafter "Tr.") at 519-22 (Toffler), 902-06 (Davis).

<sup>8</sup> *Id.* at 810-11 (Bissell).

<sup>9</sup> *Id.* at 931-33 (Davis).

<sup>10</sup> *Id.* at 932, 939-40 (Davis). Much of the testimony on these issues is inherently unreliable. See Point II, *infra*. While insufficient to prove the truth of the assertions, this testimony exposes the stereotypes at the core of VMI's practices and the proposed remedial plan.

<sup>11</sup> *Id.* at 376-78 (Conrad), 686 (Richardson).

The remedial plan likewise "recognizes...that 'men and women are different....' [and] seeks to utilize educational methodologies that are appropriate to women...."<sup>12</sup> Under the plan, the Virginia Women's Institute for Leadership ("VWIL") at Mary Baldwin College ("MBC") is proposed as a means to avoid admitting women into VMI. It is not intended to address the needs of women who seek entrance to VMI, nor is it anticipated that it will be "equal" to VMI in any material respect; rather, VMI and VWIL are said to be "comparable" in terms of "leadership" training.<sup>13</sup> "If VMI marches to the beat of a drum, then [VWIL] marches to the melody of a fife...." *United States v. Commonwealth of Virginia*, 852 F.Supp. 471, 484 (W.D.Va. 1994) ("VMI II").

VWIL will differ from VMI on every relevant measure: curriculum (what is offered); pedagogy (how it is offered); and educational consequences (post-graduate measures). VMI's "extreme adversative" education is characterized by a highly disciplined, authoritarian and hierarchical model of instruction and leadership.<sup>14</sup> The program purports to meet the developmental needs of "relatively undisciplined"<sup>15</sup> adolescent males who "come in with [an] inflated sense of self-efficacy that must [be] knocked

<sup>12</sup> *United States v. Commonwealth of Virginia* (4th Cir. Nos. 94-1667, 94-1717) (remedy) Joint Appendix (hereafter "J.A."), Vol. I at 43 (quoting *United States v. Commonwealth of Virginia*, 976 F.2d 891, 897 (4th Cir. 1992)).

<sup>13</sup> J.A. Vol.II at 620-1 (Tyson), 738 (Richardson). Concededly, the two schools cannot be "comparable" in terms of history, tradition, or prestige, as recognized by the court below. *United States v. Commonwealth of Virginia*, 44 F.3d 1229, 1241 (4th Cir. 1995) ("VMI II").

<sup>14</sup> J.A. Vol. II at 623-24 (Tyson), 598 (Wilson), 671 and 673 (Riesman).

<sup>15</sup> *Id.* at 666 (Riesman).

down."<sup>16</sup> VWIL, in contrast, is intended for "shy, self-distrustful young women"; it will be "supportive and encouraging. And [will promote] cooperative leadership, not chain-of-command,"<sup>17</sup> because "we really don't need to beat upityness [sic] and aggression and all of that out of young women."<sup>18</sup> The model for VWIL is "the young woman who went to a large coeducational high school...and was about to give up on the possibility that she could compete with young men....",<sup>19</sup> she is said to need a "sense of self-efficacy and competence."<sup>20</sup> Unlike VMI with its substantial curriculum in science and engineering, VWIL will not offer engineering courses, a physics major, or a Bachelor of Science degree.<sup>21</sup>

The generalizations and stereotypes on which the plan relies are clear. Heather Wilson, MBC Dean of Students, testified:

The VMI model wasn't adopted [for VWIL] because young men and young women of 18 come to college, having had different experiences in their lives. I can't even tell you when it starts except that I know that a friend of mine is [a] clinical psychologist [and] has a four year old daughter who she is trying to raise very carefully....Her four year old's favorite movie is Aladdin....In the movie Aladdin, and this is representative of what young children are taking

<sup>16</sup> *Id.* at 598 (Wilson).

<sup>17</sup> *Id.* at 677-79 (Riesman).

<sup>18</sup> *Id.* at 572 (Fox-Genovese).

<sup>19</sup> *Id.* at 574 (Fox-Genovese).

<sup>20</sup> *United States v. Commonwealth of Virginia* (W.D.Va) (90-01260-R) Transcript of Proceedings Feb. 9-12, 14-15, 1994 (remedy) (hereafter "Tr. II") at 299 (Fox Genovese); J.A. Vol.II at 453-54 (Lott) and 623 (Tyson).

<sup>21</sup> J.A. Vol.II at 491-93 (Lott).

in, the princess, even though she has a large tiger at her command, has to wait to be rescued by Aladdin.

Children[s'] stories are filled with things like this....[W]omen internalize these messages; they should take the passive role not the active role....<sup>22</sup>

Wilson repeatedly offered generalizations and anecdotes, instead of evidence:

young men [in fraternities] will paddle their pledges; they will brand them; they will make them consume alcohol and will make them eat disgusting things....Young women [in sororities] will give flowers, write poems....<sup>23</sup>

David Riesman, another VMI witness, offered a potpourri of inaccurate overgeneralizations:

...[W]omen at the present so often flounder [with regard to] [s]patial things, geometric things, topology, math and physics, and leadership itself...."

\*\*\*

When the boys have a chance to run on the school track, [t]hey run and they run and they run and they run....

When girls have a chance to go up on the track, they don't stick at it long.

\*\*\*

One reason I suspect [women] don't do as well in verbal tests, they don't read as many sports stories as boys do.

\*\*\*

...In the rat system [at VMI] one has one's buddies to

<sup>22</sup> *Id.* at 595-97. Anecdotes like this provide no basis for a generalization about girls. Some girls may reject messages from movies; others may have chosen to see "Aliens" instead of "Aladdin ."

<sup>23</sup> *Id.* at 599.

endure it with one, and one is *being what boys are supposed to be*, brave, physically hardy, unafraid.<sup>24</sup>

Riesman testified that women who are "less self-distrustful" will also benefit from VWIL, because they need to be

reminded that their leadership styles, while impressive, have also the hazard of being oppressive...[and that they should] depend more on persuasion or on cooperation, more on connectedness.<sup>25</sup>

Richardson conceded that "[t]here is not in the VMI paradigm a place for the woman leader who excels and does *those things that women are expected to do....*"<sup>26</sup>

Carol Lewis Anderson, a member of the MBC Board of Trustees, described "an education that suits a woman's style of learning":

I will give you...just a few issues. One is that it not be confrontational and crude and mean. The toilet bowl is a good expression of *what is not suitable for women.*

One that is encouraging...not one that is challenging in abusive ways.

\*\*\*

...Men apparently...and my husband will attest to this from fraternity hazing that he has friends with whom he [w]as hazed who will be friends for life...because they experienced something together that was so horrible that it brought them together.

<sup>24</sup> *Id.* at 684-85 and Tr.II at 538, 546 (emphasis added).

<sup>25</sup> J.A. Vol. II at 682 (emphasis added).

<sup>26</sup> *Id.* at 741-42 (emphasis added).

Well, women bond, too, but *women bond from experiences that are wonderful.*<sup>27</sup>

The record is thus replete with classic, time-worn generalizations picturing women as passive, men as aggressive; women as peaceful, men as violent; women as cooperative, men as competitive; women as insecure, men as confident. The record is sprinkled with references to what males and females *should* do and *should* be, reflecting not only stereotypical notions about the proper roles of men and women but also the plain intent to create two institutions that encourage, if not require, students to conform to the stereotype for their sex.

Even proponents of the remedial plan ultimately conceded that alleged differences are *not* the result of innate differences, are *not* experienced by all members of the same sex the same way, and are, by definition, sometimes inaccurate generalizations. James Lott, MBC Dean of Students, testified that there "are no inherent differences in the way men and women learn,"<sup>28</sup> and Riesman testified that he has "known and...worked with many women who do not fit this picture at all."<sup>29</sup> Lott acknowledged that the adversative method is not "inherently or innately inappropriate" for women.<sup>30</sup> He also acknowledged that VWIL would not be appropriate for women who seek admission to VMI.<sup>31</sup>

Elizabeth Fox-Genovese, a historian who testified in support of the plan, analogized such women - who seek to go to VMI - to Myra Bradwell. She characterized their "high roller

<sup>27</sup> Tr. at 450-52 (emphasis added).

<sup>28</sup> J.A. Vol.II at 440-41; and *see id.* at 474 (Lott), 624 (Tyson).

<sup>29</sup> *Id.* at 681.

<sup>30</sup> *Id.* at 472; *see also id.* at 521, 525-26.

<sup>31</sup> *Id.* at 540-42 (Lott). *See also id.* at 668 (Riesman), 578-79 (Fox Genovese).

ambition" as being "as much fancy as it is reality." In Bradwell's day, she claimed, "women that wanted to support themselves became nurses, teachers, librarians...." VWIL, she suggests, is intended to discourage women from such "high roller ambition" as the desire to attend VMI or "climb Everest because it is there."<sup>32</sup>

### **B. The Generalizations Offered By VMI Are Inaccurate and Misleading.**

The scientific record on questions of sex differences...is shaky at best. Examples of bias are numerous.... There are without doubt some behavioral differences between women and men. Yet the size of these differences is often smaller than purported and their appearance is often highly dependent on context.<sup>33</sup>

While it is undoubtedly true that there are average differences between the sexes, even VMI concedes and the trial court recognized that many individuals of both sexes do not conform to the "average" for their sex. Nonetheless, VMI succeeded in convincing the trial court that, because these generalizations had some ostensible statistical support, they were not stereotypes.<sup>34</sup> This conclusion is insupportable. In the professional literature, the "issue of stereotype accuracy really has two parts: first, the accuracy of the hypothetical average as a

<sup>32</sup> *Id.* at 578-79.

<sup>33</sup> Kay Deaux and Mary Kite, *Thinking About Gender, in Analyzing Gender: A Handbook of Social Science Research* 97 (Hess & Ferree eds., 1987). Even observers of average differences do not claim a causal relationship between sex and specific behaviors or dispute the substantial overlap between the sexes. See Alice Eagley, *The Science and Politics of Comparing Women and Men*, 50 Am. Psych. 145 (1995). See also Elizabeth Fox-Genovese, *Feminism Without Illusions: A Critique of Individualism* 254 (1991) ("the vast majority of our social roles result from social choices, not from the dictates of biology...").

<sup>34</sup> E.g., 766 F. Supp. at 1434 and J.A. Vol.II at 572 (Fox-Genovese).

description of the total population; and second, the fit of the general category to the individual case."<sup>35</sup> Even stereotypes that are accurate with regard to the "total population" can still be inaccurate with regard to individuals within the population:

The more pernicious aspect of stereotypes lies in the application of the general category, however imperfectly defined, to the case of the individual. Given the wide within-sex variation in virtually every trait or behavior associated with gender stereotypes, overgeneralization is axiomatic.<sup>36</sup>

Gender stereotypes represent "very general categories...refer[ing] to approximately half of the world's population."<sup>37</sup> They often have little predictive value:

[A]t most, scientists can hope to discover generalizations that are true of 'some women' and 'some men'.... And then, of course, the research is concerned with discovering, for example, which men are more aggressive than which women. Asking general questions about males and females, men and women (where 'all men' or 'all women' is implicit)...[thus] serves to obscure the very substantial ways in which class, ethnic background, education, and a whole host of other social experiences

<sup>35</sup> Kay Deaux & Mary Kite, *Gender Stereotypes in Psychology of Women: A Handbook of Issues & Theories* 113 (Denmark & Paludi eds., 1993) [hereinafter *Gender Stereotypes*].

<sup>36</sup> *Id.* See also Webster's Third New International Dictionary (Unabridged) (1986), which defines a stereotype as "...something conforming to a fixed or general pattern and lacking individual distinguishing marks or qualities; especially a standardized mental picture held in common by members of a group and representing an oversimplified opinion...(Emphasis added).

<sup>37</sup> Deaux & Kite, *Gender Stereotypes*, *supra*, at 115.

result in differences and similarities....<sup>38</sup>

Stereotypes have a "prescriptive character...channeling the activities and choices individuals make and, in some instances, reinforcing the distinctions between women and men."<sup>39</sup> In other words, they become self-fulfilling prophesies. They also represent categorical thinking, which in turn invites invidious comparison:

Men [are] typically seen as stronger and more active, characterized by high needs for achievement, dominance, autonomy, and aggression. Women, in contrast [are] believed to be more concerned with affiliation nurturance and deference.<sup>40</sup>

Stereotypes thus foster prejudice by causing people to "see things that are not there while ignoring things that are....These misperceptions, in turn, can serve to confirm the expectancies that a person has about members of stereotyped groups and ultimately perpetuate those stereotypes."<sup>41</sup>

<sup>38</sup> Mary Brown Parlee, *Women, Peace and The Reproduction of Gender*, in *On Peace, War and Gender: A Challenge to Genetic Explanations* 106 (A.H. Hunter ed. 1991).

<sup>39</sup> Deaux & Kite, *Gender Stereotypes*, *supra*, at 112. See also Cynthia Fuchs Epstein, *Deceptive Distinctions: Sex, Gender, and the Social Order* 84 (1988) ("discrimination results from the expectations people have of others who belong to groups believed to possess certain traits").

<sup>40</sup> Deaux & Kite, *Gender Stereotypes*, *supra*, at 114. See also Carol Gilligan, *In a Different Voice: Psychological Theory and Women's Development* 17 (1982) ("the qualities deemed necessary for adulthood - the capacity for autonomous thinking, clear decision-making, and responsible action - are those associated with masculinity and considered undesirable as attributes of the feminine self").

<sup>41</sup> Deaux & Kite, *Gender Stereotypes*, *supra*, at 111 (reference omitted).

There are no psychological, behavioral or cognitive traits in which males and females do not overlap, and in most cases the area of overlap is larger than the area of difference.<sup>42</sup> In addition to misleading testimony about perceived psychological, behavioral and cognitive differences, VMI also presented a vast amount of testimony about alleged physical and physiological differences, much of which the trial court embraced.<sup>43</sup> For example, the trial court cited average differences between the sexes in body fat and aerobic capacity.<sup>44</sup> Body fat, like many characteristics, varies among individuals: even if the proportion of body fat for the "average" woman is 25%, for female gymnasts it is 15.5%, for sprint swimmers 14.6%, and for distance runners 15.2%-16.9%.<sup>45</sup> The conclusion that women have "[o]n the average...10% more body fat [which] imposes a burden on some kinds of physical performance," *VMI I*, 766 F. Supp. at 1433, does not accurately describe some women, and fails to account for the advantage body fat confers in some activities. For example, women have an advantage in long-distance swimming because body fat provides

<sup>42</sup> Rhoda Unger & Mary Crawford, *Women and Gender* (2nd Ed.) (forthcoming 1996). Sex differences can only be understood if both central tendency (averages) and variability (range and distribution) are considered. Comparing the range and distribution for each sex demonstrates the extent of overlap between the sexes. *Id.* See also J.S. Hyde & M.C. Linn, *The Psychology of Gender* (1986).

<sup>43</sup> This evidence is apparently relevant to VMI's rigorous physical education program. However, VMI's goal is to produce "leaders," not athletes, and students are not selected based on their athletic ability, as demonstrated by the fact that almost half of the entering cadets do not meet the physical fitness standard. Tr. at 316-17 (King).

<sup>44</sup> *VMI I*, 766 F. Supp. at 1432-33.

<sup>45</sup> See T.D. Fahey, *Endurance Training, in Women and Exercise: Physiology and Sports Medicine*, 2nd Ed. 80 (Shangold & Mirkin eds., 1994); R.W. Hale, *Differences and Similarities Between the Sexes, in Caring for the Exercising Woman* 32 (Hale ed., 1991).

greater buoyancy and cold resistance.<sup>46</sup>

Even with regard to aerobic capacity, the significance of apparent differences is unclear: "there appears to be very little difference in ability to supply adequate oxygen to the tissues...indicat[ing] that this is not an area of significant difference between males and females."<sup>47</sup> Evidence of other physical differences is equally hard to interpret and apply. For example, assessing strength by measuring the ability to lift an object onto the tailgate of a truck favors males because greater height provides an advantage in such a task.<sup>48</sup> Physical ability can be measured in other ways to display women's strengths,<sup>49</sup> and comparisons could focus on women who are likely to apply to VMI, who might not conform to average data: "female and male athletes are more similar to one another than they are to non-athletic members within their own sexes."<sup>50</sup>

In sum, the concept of sex difference in this record is used

<sup>46</sup> W.D. McArdle, *Essentials of Exercise Physiology* 111-12 (1994) ("[T]he record for an English Channel swim of 7 hours 40 minutes is held by a [woman]...the men's record [is] 8 hours 12 minutes.").

<sup>47</sup> Hale, *supra*, at 31, 34.

<sup>48</sup> The trial court found differences in the ability to lift an object to the height of the tailboard of a military truck and the ability to do push-ups. *VMI I*, 766 F. Supp. at 1433. Males also tend to have an advantage doing push-ups because of their lower center of gravity.

<sup>49</sup> See Myron Genel, *Gender Differences in Growth and Maturation: Are These Relevant for Athletic Competition?* 4 J. Women's Health 425 (1995) (measures of athletic performance that highlight "speed, agility and endurance" show smaller sex differences than those that emphasize strength; "some people have predicted that women's [long-distance running] times will exceed those of men in the next century").

<sup>50</sup> M. Boutilier & L. SanGiovanni, *Women and Sports: Reflections on Health and Policy, in Women, Health, and Healing: Toward a New Perspective* 209 (Lewin & Olsesen eds., 1985).

ambiguously and unscientifically in several respects: anecdotes are substituted for scientific measurement of representative samples of the population; variability (range and distribution) is ignored; and averages, which are central tendencies, are improperly used to predict the performance of individuals. Some women are tall, some men are short; some men are passive, some women are aggressive. Knowing that on average men are taller than women will indicate nothing about an individual's height; knowing a person's height does not reveal his or her sex. The remedial plan, an embodiment of stereotypical thinking, would ignore this reality, preferring instead to impose a "standardized mental picture" of each sex, even though it represents an "over-simplified opinion" that "see[s] things that are not there while ignoring things that are."

### **C. There Is No Constitutionally Sufficient Rationale To Justify a Continuing Exclusion of Women.**

As shown above, VMI advances, as the justification for its discriminatory practice, "'the very stereotype the law condemns.'" *J.E.B.*, 114 S. Ct. at 1426 (citation omitted). VMI's position mirrors a classic pattern:

much of the testimony...ignores individual differences among members of each sex and reads like 'ancient canards about the proper role of women'....The witnesses claimed that women...are not strict disciplinarians; that they are physically less capable...; that [others] take advantage of them...while male[s]...are strong father figures who easily maintain discipline....

*Dothard v. Rawlinson*, 433 U.S. 321, 343-44 (1977) (Title VII case) (Marshall, J., concurring in part and dissenting in part) (citation omitted). The Court has consistently rejected the contention that sex-based differences in the average justify discrimination based on sex. *See, e.g., Reed*, 404 U.S. 71 (more men than women likely to be qualified to administer estates); *Craig*, 429 U.S. 190 (more men than women drink and drive); *Orr*,

440 U.S. 268 (more women than men require alimony).<sup>51</sup> In each of these cases, the statistics used to support the sex-based classification were inadequate to prove "that gender alone is an accurate predictor." *J.E.B.*, 114 S. Ct. at 1427.

Only last term this Court observed that it is irrelevant "if a measure of truth" underlies a stereotype; stereotypes are forbidden "even when some statistical support can be conjured up for the generalization." *J.E.B.*, 114 S. Ct. at 1427 n.11. In *J.E.B.*, the Court rejected the "quasi-empirical claim that men and women have different attitudes...." While acknowledging the fact that "the two sexes are not fungible," this Court nonetheless repudiated reliance on "gross generalizations." *Id.* at 1424, 1427 (citation omitted). This is because the Constitution protects the

rights of individuals, not groups....‘Government must treat citizens as individuals, not simply components of a racial [or] sexual...class.’

*Id.* at 1434 (Kennedy, J., concurring) (citation omitted).<sup>52</sup> Even assuming some real physical and biological differences between the sexes, it does not follow that such differences justify excluding

<sup>51</sup> VMI's claim that recruitment, "marketing" and fiscal considerations justify the remedial plan is unpersuasive under these precedents. The demand for both military school and single-sex education is quite small, J.A. Vol.II at 627 (Tyson), 676 (Riesman), and co-education might well increase demand. There is nothing in the record to indicate how many students choose VMI *because* it is single-sex, and how many attend *in spite of* that fact. Students might well select VMI to take advantage of the prestige and career opportunities it confers on graduates. *See United States v. Commonwealth*, 55 F.3d 90, 93 (4th Cir. 1995) (Motz, J., dissenting).

<sup>52</sup> The trial court relied on testimony that educational programs should be designed to meet the needs of the "average" student, not the "exception." *VMI I*, 766 F. Supp. at 1434. While this might be true for non-discriminatory programs, it fails to account for the obligation of public institutions to satisfy equal protection standards.

women from access to valuable state-supported benefits:

[I]f the statutory objective is to exclude or "protect" members of one gender because they are presumed to suffer from an inherent handicap or to be innately inferior, the objective itself is illegitimate.

*Hogan*, 458 U.S. at 725. The claim that the alleged pedagogical benefit to men justifies discrimination ignores the Court's admonition that it is irrelevant "whether the benefited class profits from the classification." *Id.* at 731 n.17.

None of the reasons advanced by VMI to justify exclusion of women survives constitutional scrutiny.<sup>53</sup> In *J.E.B.*, this Court considered the constitutionality of gender-based peremptory challenges in jury selection.<sup>54</sup> The state asserted that a "special" interest in "establishing the paternity of a child born out of wedlock" justified the practice, 114 S. Ct. at 1426 n.8, because men and women might be expected to react differently to such claims. The Court, however, concluded that the "only legitimate interest [the state] could possibly have" was the interest in "securing a fair and impartial jury." *Id.* Even though "the peremptory...helps produce fair and impartial juries," *id.* at 1431

<sup>53</sup> Three possible interests have been identified: the "intrinsic value" of single-sex education, the education of "citizen soldiers," and educational diversity. *VMI II*, 44 F.3d at 1246 (Phillips, J., dissenting). All, however, are "after-the-fact rationalizations." *Id.* at 1247.

<sup>54</sup> Like *J.E.B.*, this case involves explicit sex-based conduct. Compare *Personnel Adm'r v. Feeney*, 442 U.S. 256 (1979) (veterans' preference disproportionately disadvantaged female civil servants, but male and female veterans qualified on the same basis) with *Wengler v. Druggists Mut. Ins. Co.*, 446 U.S. 142, 150 (1980) (intentional discrimination exists even where the classification is intended "'to favor [women], not to disfavor them'"). The assertion of a purportedly benign or neutral *reason* does not transform a sex-based barrier into a neutral practice. See also *International Union, UAW v. Johnson Controls*, 499 U.S. 187 (1991).

(O'Connor, J., concurring), "the Constitution guarantees a right only to an impartial jury, not to a jury composed of members of a particular race or gender." *Id.* at 1434 (Kennedy, J., concurring).

This analysis suggests that the "only legitimate interest [the state] could possibly have" here is an interest in providing quality education for qualified students. The right to an impartial jury enjoys considerably more constitutional protection than any claim to state-supported higher education, and the state's interest in promoting that right is substantial. Yet even this interest was insufficient to justify sex-based jury selection. Unlike the right of litigants to a fair and impartial jury, there is no "right" to single-sex higher education; if litigants have no right to insist on the composition of the jury, students have no right to a college "composed of members of a particular race or sex." If the state has no legitimate interest in discriminating on the basis of sex among potential jurors - even if some litigants arguably benefit (because the process may create a more impartial jury), the state can assert no cognizable interest in discriminating on the basis of sex among potential students - even if some students may arguably benefit.

Though the state's asserted interest in *J.E.B.* was plainly valid and designed to enhance a constitutionally protected right, it did not suffice to justify sex discrimination that would perpetuate stereotypes and "reflect and reinforce patterns of historical discrimination." 114 S. Ct. at 1428. The history of peremptory jury challenges belonged to a tradition of exclusion of women -- from jury service, law and civic life generally:

When state actors...[rely] on gender stereotypes, they ratify and reinforce prejudicial views of the relative abilities of men and women....[T]hese stereotypes have wreaked injustice in so many other spheres of our country's public life....[S]tereotypes about the group's competence or predispositions...have been used to prevent them from...pursuing their chosen professions, or

otherwise contributing to civic life.

*Id.* at 1427 & 1428 n.14. VMI's policy, "driven unchanged since its origins by a stereotyped view of the proper role and capabilities of women in society," *VMI II*, 44 F.3d at 1248 (Phillips, J., dissenting), reflects women's historical exclusion from military academies, many aspects of military service, and a range of job opportunities that incorporated a military-style culture, such as police and corrections officers. See, e.g., *Schlesinger v. Ballard*, 419 U.S. 498 (1975) (noting history of discrimination against women in the military). VMI's policy thus "serves to ratify and perpetuate invidious, archaic, and overbroad stereotypes about the relative abilities of men and women...." *J.E.B.*, 114 S. Ct. at 1422.

Other invidious stereotypes are reflected in the lower court's conclusion that co-education would lead to "jealousy and resentment," that "deliberate harassment" would affect women in unacceptable ways, and that "cross-sexual confrontation and interaction" would create "additional elements of stress and distraction."<sup>55</sup> Indeed, "one of the most insidious of the old myths about women [is] that women, wittingly or not, are seductive sexual objects...[whose] presence might provoke sexual assault. It is women who are made to pay the price in lost...opportunities." *Dothard v. Rawlinson*, 433 U.S. at 345 (Marshall, J., concurring in part and dissenting in part). This rationale for sex discrimination is also historically familiar:

Reformers around the turn of the century argued [against] permitting the sexes to work side by side... because [women's] presence tempts men or because corrupt men will exploit innocent and vulnerable women....This concern reflects the belief in women's sexuality as an autonomous

---

<sup>55</sup> *VMI I*, 976 F.2d at 896; see also 766 F. Supp. at 1435 ("adolescent males benefit from being able to focus exclusively on the work at hand, without the intrusion of any sexual tension").

force over which neither they nor the men with whom they work have control.<sup>56</sup>

Even if it were true that "cross-sexual...interaction" creates a "distraction," there is no basis to conclude that women should be penalized and their educational opportunities sacrificed to facilitate men's ability to concentrate.

The plan, if approved, would "cure" sex discrimination in admissions to a highly prestigious, well-endowed institution that offers educational opportunities from which women have traditionally been excluded, by continuing to withhold the very benefits sought, and by offering instead access to an all-women's college modeled on conventional behavioral norms for women that is concededly inappropriate for the very women who seek entrance to VMI. VMI's unbroken tradition of discriminating against women, like the "long history" behind sex-based peremptory jury challenges, provides no defense; here, as there, the result is "doctrinally compelled." *J.E.B.*, 114 S. Ct. at 1428 nn. 12, 15

## **II. THE LOWER COURTS RELIED ON PALPABLY INSUFFICIENT EVIDENCE TO JUSTIFY CONTINUING SEX DISCRIMINATION.**

The lower courts' legal conclusions were thus fatally flawed. Even taken at face value, VMI's claim that its policy is based on "scientific" evidence is unavailing. Even if that were not the case, however, this record would provide no basis for an exception to equal protection principles. Much of the testimony on which the lower courts relied is inherently unreliable because of the failure to insure that expert testimony met the standards for admissibility required by Rules 702 and 703 of the Federal Rules of Evidence:

---

<sup>56</sup> National Research Council, National Academy of Sciences, *Women's Work, Men's Work: Occupational Segregation on the Job* 40 (Reskin & Hartmann eds., 1986).

In a case involving scientific evidence, *evidentiary reliability* will be based on *scientific validity*....Faced with a proffer of expert scientific testimony, then, the trial judge must [undertake]...a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and...properly can be applied to the facts at issue.

*Daubert v. Merrell Dow Pharmaceuticals*, 113 S. Ct. at 2795 & n.9, 2796. The trial judge observed none of these precautions.

Witnesses who testified at the liability stage about alleged psychological and developmental differences between men and women, had no apparent expertise in the psychology of gender.<sup>57</sup> An expert qualified to testify about exercise physiology and physical education was permitted to offer opinions about women's motivation, aggressiveness, and "fear of failure," without evidence of expertise in these areas.<sup>58</sup> A VMI graduate, a fact witness who pursued a career in the Army, opined that women are more emotional than men and cannot endure stressful situations as well.<sup>59</sup> He possessed no apparent expert qualifications.

Witnesses at the remedy phase commonly cited personal experiences and anecdotal evidence to support generalizations about male and female characteristics. The *voir dire* of Dean Wilson revealed she had no expertise on "the psychology of gender" or the "development of college age women."<sup>60</sup> Over objection, she was accepted as an expert on "student development."<sup>61</sup> She was

<sup>57</sup> Tr. at 376-78 (Conrad), 686 (Richardson).

<sup>58</sup> *Id.* at 931-40 (Davis). He also expressed opinions as to the relative merits of the skills he attributed to each sex. *See id.* at 939.

<sup>59</sup> *Id.* at 910 (Bissell).

<sup>60</sup> J.A. Vol. II at 588.

<sup>61</sup> *Id.* at 591.

permitted to testify to hearsay and anecdotes about sex-based behavioral and personality characteristics and to express her opinion on their implications for educational programs. Riesman testified that his knowledge of "the fate of women's colleges" derived from meetings with college presidents and from reading press clippings sent to him by a friend.<sup>62</sup>

Elizabeth Fox-Genovese, a historian, was previously director of a women's studies program at a coeducational institution and has never taught at a single-sex college. She has no training in psychology and no apparent expertise with regard to research on single-sex education.<sup>63</sup> She was permitted to testify to a conversation with a Mary Baldwin student, which provided support for her opinion about the remedial plan, although there is no evidence that this student was representative of any particular group. The court rejected the government's objection, stating "this is the way Dr. Fox-Genovese conducts her research by interview....Of course, this is the basis of her opinion. It doesn't necessarily mean what the young woman said is true."<sup>64</sup> There is no evidence that Fox-Genovese does research by interview, that she is trained in this social science research method, or that "the facts or data [on which she relied are] of a type reasonably relied upon by experts in the particular field in forming opinions." Fed.Rules Evid. Rule 703. To the contrary, anecdotal information is considered highly suspect.<sup>65</sup>

The trial court's findings about sex-based differences and

<sup>62</sup> *Id.* at 696-97.

<sup>63</sup> *Id.* at 550-60. The testimony was general, vague, and largely unsupported; the reference to Valerie Lee's research is inaccurate. See *id.* at 565 and pp. 26-29 *infra*.

<sup>64</sup> *Id.* at 564.

<sup>65</sup> Overgeneralizing from anecdotes is a classic methodological error. See Earl Babbie, *The Practice of Social Science Research* 10-11 (4th Ed. 1986).

the value of single-sex education at VMI rest on anecdotes and speculation expounded by witnesses who were not properly qualified as experts and who were permitted to express opinions that were not properly supported.<sup>66</sup> This testimony, often admitted over objection, was used to reach conclusions about psychological and physiological characteristics of males and females and educational methods suitable to those characteristics, and to conclude that college-age males benefit from single-sex education.

Specifically, testimony that males and females develop differently, have different learning styles, and have different psychological and educational needs was a critical building block toward the conclusion that single-sex education is pedagogically justifiable for men. Much of this testimony relied on the research and writing of Carol Gilligan.<sup>67</sup> Gilligan's research and theories were used to support the claim that an educational program geared specifically to meet men's developmental and educational needs is effective and provides unique benefits for both the men who attend and for society at large, and that introducing women into this kind of setting would be counterproductive for women and would

<sup>66</sup> The trial court relied heavily on both Riesman and Fox-Genovese. See, e.g., *VMI II*, 852 F. Supp. at 480-81. Curiously, the Court discounted the testimony of Alexander Astin, although VMI relied heavily on his work, see J.A. Vol. I at 276-79, 281-83, on the ground that he favors the "elimination of sexism and racism" and believes in the "public-private distinction." 852 F. Supp at 479. The court did not question Fox-Genovese's objectivity, although she "very much admire[s]" Mary Baldwin, J.A. Vol. II at 463; or Tyson's objectivity, although her institution stands to gain financially from the creation of VWIL, 852 F. Supp. at 499; or Bissell's objectivity, although he is a VMI alumnus.

<sup>67</sup> See Defendants' Proposed Findings of Fact and Conclusions of Law ¶235 at 42, ¶248 at 44, ¶286 at 51, *United States v. Commonwealth of Virginia, et al.* (W.D.Va.)(Civ. Action No.90-0126-R) and Defendants' Trial Ex. 73, *Materials Regarding Single-Sex Education*, designated Ex.130A on remand. She was also cited in the testimony of Riesman and Richardson. Blythe McVicker Clinchy, *amica* herein, the co-author of *Women's Ways of Knowing* is also cited.

deprive men of an unique and valuable opportunity. However, nothing in Gilligan's work provides support for these propositions. The fact that she observed certain differences that are associated with (but not caused by) gender also does not support the conclusion that men should be separated from women for educational purposes.

The testimony in this case misconstrues the purpose and import of Gilligan's work, in particular her acclaimed book, *In A Different Voice: Psychological Theory and Women's Development* (1982). There, she addressed a problem she observed in her research on psychological development: that women's descriptions of their experiences and responses to experiences did not conform to descriptions of "normal" human development reflected in classical psychological theory articulated by Freud, Erikson, Piaget, and Kohlberg. While these classical theorists concluded there was something wrong with women, Gilligan concluded that there was something wrong with psychological theory.

According to Gilligan's analysis, classic psychological theory suffered from two flaws. First, the theory attached affirmative value to certain characteristics culturally defined as "masculine," such as separation, detachment, subordination of relationships, and abstract thinking, while ignoring universal human characteristics culturally defined as "feminine," such as attachment and interdependence. Secondly, the theory was premised on incomplete factual data because virtually all of the studies cited in support had been conducted exclusively on males.<sup>68</sup> The research was thus tainted by a fundamental sampling error that rendered its conclusions suspect.

The observations about psychological development patterns that are generally associated with gender in *In a Different Voice* are not based on any premise of inherent differences between the sexes, but on the basis of their different opportunities and

---

<sup>68</sup> See, e.g., Daniel Offer, *The Psychological World of the Teenager: A Study of 175 Boys* (1969).

experiences. The book states: "the different voice I describe is characterized not by gender but by theme....the contrasts between male and female voices are presented here to highlight a distinction between two modes of thought and to focus a problem of interpretation rather than to represent a generalization about either sex."<sup>69</sup> There is too much variation within each sex to argue that psychological differences result from "real" differences between the sexes. It is incontrovertible, for example, that qualities such as aggression and empathy are not sex-based -- women can be aggressive and men can be empathetic.

VMI also relied on the work of Valerie Lee.<sup>70</sup> Her research provides scholarly support for the proposition that single-sex education at the secondary school level provides benefits for young *women* on many educational outcomes, including achievement, attitude and behaviors.<sup>71</sup> However, the efficacy of single-sex education is shown in a plethora of studies to be gender-specific and restricted to young women. These studies speculate that a cause for their findings is that females experience forms of discrimination in education that males do not experience.<sup>72</sup> Single-sex education thus benefits females, who choose it, since in these

<sup>69</sup> Gilligan, *In a Different Voice*, *supra*, at 2:

<sup>70</sup> J.A. Vol. II, pp. 298-99, Defendants' Ex. 130A contains references to Lee's work. Fox-Genovese also cited Lee ("schools such as Mary Baldwin make their greatest contribution to students who are less than very [affluent],...they do introduce them to ambition ....This is borne out by...Valerie Lee and her coworkers..."). J.A. Vol. II at 565.

<sup>71</sup> See Anthony Bryk, Valerie Lee & P.B. Holland, *Catholic Schools and the Common Good* 225-41 (1993); Lee & Bryk, *Effects of Single-Sex Secondary Schools on Student Achievement and Attitudes*, 78 J.Educ.Psych. 381 (1986); Valerie Lee & Helen Marks, *Sustained Effects of the Single-Sex Secondary School Experience on Attitudes, Behaviors, and Values in College*, 82 J. Educ. Psych. 578 (1990).

<sup>72</sup> Valerie Lee, et al., *Sexism in Single-Sex and Coeducational Independent Secondary School Classroom*, 67 Sociol. of Educ. 97 (1994).

settings this gender-specific disadvantage is reduced or eliminated. Programs for young women succeed for reasons that do not apply to men.<sup>73</sup>

These data provide no support for the efficacy of single-sex education for young men. In fact, the very studies that demonstrate a positive effect for women fail to show such an effect for men; they find no statistically significant or consistent difference between males with single-sex and coeducational experience in terms of achievement, attitude or behavior. Thus, "...the classroom effects for male and female students are quite different. Coeducational classrooms appear to enhance male achievement, whereas single-sex classrooms appear to enhance female achievement."<sup>74</sup> Not only is there an absence of data to support the conclusion that single-sex education benefits males, some studies even demonstrate a negative effect. In a recent observational study on gender bias in education, Lee documents both a higher incidence of sexism in all-male settings and fewer occasions in which instances of equity were observed.<sup>75</sup> In a report on single-sex education prepared by the Department of Education, Lee reviewed the principal findings from that study: "the most serious incidents of sexism we observed were in all-boys' classes with male teachers....we saw females regarded as sex objects, both in writing, in classroom displays, and in class discussion." She concludes that the "research did not indicate that, in general, all-male environments were especially healthy ones for

<sup>73</sup> As a legal matter, programs designed for women and girls are justifiable, if at all, on the ground that they counteract the consequences of the discrimination many females still experience. See Lani Guinier, Michelle Fine and Jane Balin, *Becoming Gentlemen: Women's Experiences at One Ivy League Law School*, 143 U. Pa. L. Rev. 1 (1994).

<sup>74</sup> Emanuel Jimenez & Marlaine Lockheed, *Enhancing Girls Education Through Single-Sex Education: Evidence and a Policy Conundrum*, 11 Educ. Eval. and Policy Anal. 117, 125 (1989).

<sup>75</sup> Lee, *supra*.

adolescents in terms of sex equity."<sup>76</sup>

Advocates of single-sex education concede that the results of studies on the effects of single-sex education for men "are generally null or negative."<sup>77</sup> Other scholars contend that their research demonstrates that coeducation provides greater benefits to students of *both sexes* than does single-sex education.<sup>78</sup> On both sides of the professional debate about the relative merits of single-sex versus coeducation for young *women*, experts concede the absence of data demonstrating the efficacy of single-sex education for *men*: "The data are consistent with the conclusion that ....most productive [colleges] for men are coeducational."<sup>79</sup>

The fact that positive outcomes are sometimes associated with single-sex education does not establish single-sex as the cause of those outcomes. Lee identifies other structural and organizational characteristics of girls' schools that may account for their success, rather than gender homogeneity *per se*. These characteristics include "communal school organization [which] has powerful positive effect on the engagement and commitment of

<sup>76</sup> Valerie Lee, *Single-Sex Schooling: What Is the Issue?*, in U.S. Dept. of Educ. *Single-Sex Schooling: Proponents Speak* 43-44 (1993).

<sup>77</sup> Cornelius Riordan, *The Case for Single-Sex Schools*, in U.S. Dept. of Educ. *Single-Sex Schooling: Proponents Speak* 48 (1993). Riordan contends, however, that the data apply only to males who are part of the majority culture, not to minority males.

<sup>78</sup> Herbert Marsh, *Public, Catholic Single-Sex, and Catholic Coeducational High Schools: Their Effects on Achievement, Affect, and Behaviors*, 81 J. Educ. Psych. 320 (1989).

<sup>79</sup> M. Elizabeth Tidball, *Educational Environments and the Development of Talent*, U.S. Dept. of Educ., *Single-Sex Schooling: Proponents Speak* 58 (1993). Even the trial court concluded that "coeducation [would provide] a better training program from the perspective of the armed forces, because it would provide training dealing with a mixed-gender army." 766 F. Supp. at 1441.

students and teachers" and smaller size, "which helps foster a communal environment."<sup>80</sup> Alexander Astin, author of *Four Critical Years: Effects of College on Beliefs, Attitudes, and Knowledge* (1977), observes that the "admission of women by colleges that formerly admitted only men has not substantially altered their unique effects on student development .... Therefore, I must conclude that it was not single sex status *per se* that yielded the positive effects observed for single sex colleges for men....."<sup>81</sup>

The record and the professional literature fail to support VMI's claim that any educational success is attributable to its single-sex environment, as opposed to the quality of its facilities, its faculty-student ratio or other factors. VMI's claim that discrimination is "scientifically" justifiable is contested by some of the very experts VMI cites. Its reliance on unsupported theories about purported sex-based differences and hypothetical "average" women cannot conceal the fact that real women are as qualified to attend VMI as the men who have for so long enjoyed exclusive access.

---

<sup>80</sup> Lee, *What Is the Issue?* *supra*, at 42-43.

<sup>81</sup> Johnson v. Jones (D.S.C.) (Civ. Action No. 2:92-1674-2) (Affidavit dated January 8, 1993 at p. 6, ¶12).

## CONCLUSION

Wherefore, *amici* respectfully request that the Court hold that VMI's policy of excluding women violates the Equal Protection Clause.

Respectfully submitted,

JOAN E. BERTIN  
(*Counsel of Record*)  
Program on Gender, Science and Law  
Columbia University  
School of Public Health  
60 Haven Avenue, B2-219  
New York, New York 10032  
(212) 304-5282

EDWARD D. HASSI \*  
SHARI L. ROSENBLUM \*  
OMID ZAREH \*  
Coudert Brothers  
1114 Avenue of the Americas  
New York, New York 10036-7703

Attorneys for *Amici Curiae* \*\*

MICHAEL OLIVAS  
ANN H. FRANKE  
American Association of University Professors  
1012 Fourteenth Street, N.W., Suite 500  
Washington, D.C. 20005-3465

*Of Counsel*

November 16, 1995

\* Admission pending in New York.